Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020
# Contents

Key areas of work vi
Foreword xi
Acknowledgements xii
Introduction 1

## April 2020

<table>
<thead>
<tr>
<th>Country</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iraq</td>
<td>4</td>
</tr>
<tr>
<td>Mali</td>
<td>6</td>
</tr>
<tr>
<td>Pakistan</td>
<td>9</td>
</tr>
<tr>
<td>South Africa</td>
<td>12</td>
</tr>
<tr>
<td>Ukraine</td>
<td>15</td>
</tr>
<tr>
<td>Yemen</td>
<td>21</td>
</tr>
</tbody>
</table>

## May 2020

<table>
<thead>
<tr>
<th>Country</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>26</td>
</tr>
<tr>
<td>Cambodia</td>
<td>32</td>
</tr>
<tr>
<td>Indonesia</td>
<td>36</td>
</tr>
<tr>
<td>Malawi</td>
<td>47</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>51</td>
</tr>
<tr>
<td>Somalia</td>
<td>56</td>
</tr>
<tr>
<td>Syrian Arab Republic</td>
<td>61</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>64</td>
</tr>
<tr>
<td>Turkey</td>
<td>68</td>
</tr>
</tbody>
</table>

## June 2020

<table>
<thead>
<tr>
<th>Country</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>74</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>81</td>
</tr>
<tr>
<td>Islamic Republic of Iran</td>
<td>85</td>
</tr>
<tr>
<td>Maldives</td>
<td>90</td>
</tr>
<tr>
<td>Namibia</td>
<td>97</td>
</tr>
<tr>
<td>Republic of Moldova</td>
<td>101</td>
</tr>
<tr>
<td>Sao Tome and Principe</td>
<td>105</td>
</tr>
<tr>
<td>Tunisia</td>
<td>108</td>
</tr>
</tbody>
</table>
Responding to the COVID-19 pandemic: 
WHO’s action in countries, territories and areas, 2020

<table>
<thead>
<tr>
<th>Country</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uzbekistan</td>
<td>112</td>
</tr>
<tr>
<td>Viet Nam.</td>
<td>116</td>
</tr>
<tr>
<td>West Bank and Gaza Strip</td>
<td>123</td>
</tr>
</tbody>
</table>

**July 2020**

<table>
<thead>
<tr>
<th>Country</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh.</td>
<td>130</td>
</tr>
<tr>
<td>Barbados</td>
<td>138</td>
</tr>
<tr>
<td>Botswana</td>
<td>145</td>
</tr>
<tr>
<td>Ghana</td>
<td>149</td>
</tr>
<tr>
<td>Jordan</td>
<td>153</td>
</tr>
<tr>
<td>Kenya</td>
<td>159</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>163</td>
</tr>
<tr>
<td>Nepal</td>
<td>168</td>
</tr>
<tr>
<td>Niger</td>
<td>174</td>
</tr>
<tr>
<td>Pacific islands</td>
<td>179</td>
</tr>
</tbody>
</table>

**August 2020**

<table>
<thead>
<tr>
<th>Country</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Kingdom of Bhutan</td>
<td>186</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>194</td>
</tr>
<tr>
<td>Lebanon</td>
<td>201</td>
</tr>
<tr>
<td>Malaysia</td>
<td>208</td>
</tr>
<tr>
<td>Morocco</td>
<td>215</td>
</tr>
<tr>
<td>Myanmar.</td>
<td>222</td>
</tr>
<tr>
<td>North Macedonia</td>
<td>229</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>234</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>239</td>
</tr>
<tr>
<td>Democratic Socialist Republic of Sri Lanka</td>
<td>245</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>257</td>
</tr>
</tbody>
</table>

**September 2020**

<table>
<thead>
<tr>
<th>Country</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>264</td>
</tr>
<tr>
<td>Guatemala</td>
<td>273</td>
</tr>
<tr>
<td>Mongolia</td>
<td>281</td>
</tr>
<tr>
<td>Romania</td>
<td>288</td>
</tr>
</tbody>
</table>
Thailand .................................................. 293
Togo ....................................................... 299
WHE/EURO Hubs ...................................... 308

October 2020
Kazakhstan ............................................... 314
Lao People’s Democratic Republic .................. 318
Nigeria ..................................................... 325
Senegal .................................................... 332
Sudan ....................................................... 339
Trinidad and Tobago .................................... 346
Cox’s Bazar ............................................... 353

November 2020
Republic of Korea ....................................... 360
Dominican Republic .................................... 367
Gambia .................................................... 375
Philippines ................................................. 381

December 2020
Albania ..................................................... 386
Egypt ....................................................... 394
Greece ..................................................... 403
Panama .................................................... 411
Rwanda .................................................... 418
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Key areas of work

The first three areas of work (early action, capacity building and WHO guidance), are taking place in all countries.

Early action

Capacity building

WHO guidance

Leveraging previous emergency experience and existing structures

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
<th>Country</th>
<th>Number</th>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>32</td>
<td>Republic of Korea</td>
<td>360</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cox’s Bazar</td>
<td>353</td>
<td>Rwanda</td>
<td>418</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>149</td>
<td>Sierra Leone</td>
<td>51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>163</td>
<td>Sri Lanka</td>
<td>245</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lebanon</td>
<td>201</td>
<td>Timor-Leste</td>
<td>64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niger</td>
<td>174</td>
<td>Ukraine</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>325</td>
<td>Yemen</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>381</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Partnerships

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
<th>Country</th>
<th>Number</th>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>26</td>
<td>North Macedonia</td>
<td>229</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td>194</td>
<td>Pacific islands</td>
<td>179</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>367</td>
<td>Pakistan</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gambia</td>
<td>375</td>
<td>Panama</td>
<td>411</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>403</td>
<td>Republic of Korea</td>
<td>360</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iraq</td>
<td>4</td>
<td>Romania</td>
<td>288</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jordan</td>
<td>153</td>
<td>Rwanda</td>
<td>418</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>318</td>
<td>Senegal</td>
<td>332</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lebanon</td>
<td>201</td>
<td>Somalia</td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mali</td>
<td>6</td>
<td>Sudan</td>
<td>339</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mongolia</td>
<td>281</td>
<td>Timor-Leste</td>
<td>64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niger</td>
<td>174</td>
<td>Viet Nam</td>
<td>116</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>325</td>
<td>Yemen</td>
<td>21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### UN collaboration/One UN

<table>
<thead>
<tr>
<th>Country</th>
<th>Code</th>
<th>Country</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>26</td>
<td>Niger</td>
<td>174</td>
</tr>
<tr>
<td>Botswana</td>
<td>145</td>
<td>North Macedonia</td>
<td>229</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>81</td>
<td>Sao Tome and Principe</td>
<td>105</td>
</tr>
<tr>
<td>Cox’s Bazar</td>
<td>353</td>
<td>Sierra Leone</td>
<td>51</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>264</td>
<td>Somalia</td>
<td>56</td>
</tr>
<tr>
<td>Ghana</td>
<td>149</td>
<td>Sri Lanka</td>
<td>245</td>
</tr>
<tr>
<td>Guatemala</td>
<td>273</td>
<td>Sudan</td>
<td>339</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>314</td>
<td>Togo</td>
<td>299</td>
</tr>
<tr>
<td>Lebanon</td>
<td>201</td>
<td>Tunisia</td>
<td>108</td>
</tr>
<tr>
<td>Malawi</td>
<td>47</td>
<td>Uzbekistan</td>
<td>112</td>
</tr>
<tr>
<td>Mali</td>
<td>6</td>
<td>Zimbabwe</td>
<td>257</td>
</tr>
<tr>
<td>Nepal</td>
<td>168</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Information management and surveillance

<table>
<thead>
<tr>
<th>Country</th>
<th>Code</th>
<th>Country</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>130</td>
<td>Republic of Moldova</td>
<td>101</td>
</tr>
<tr>
<td>Barbados</td>
<td>138</td>
<td>Romania</td>
<td>288</td>
</tr>
<tr>
<td>Colombia</td>
<td>74</td>
<td>Rwanda</td>
<td>418</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>81</td>
<td>Sao Tome and Principe</td>
<td>105</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>367</td>
<td>Saudi Arabia</td>
<td>239</td>
</tr>
<tr>
<td>Ghana</td>
<td>149</td>
<td>Senegal</td>
<td>332</td>
</tr>
<tr>
<td>Guatemala</td>
<td>273</td>
<td>Sierra Leone</td>
<td>51</td>
</tr>
<tr>
<td>Indonesia</td>
<td>36</td>
<td>Somalia</td>
<td>56</td>
</tr>
<tr>
<td>Iraq</td>
<td>4</td>
<td>South Africa</td>
<td>12</td>
</tr>
<tr>
<td>Islamic Republic of Iran</td>
<td>85</td>
<td>Thailand</td>
<td>293</td>
</tr>
<tr>
<td>Kenya</td>
<td>159</td>
<td>The Kingdom of Bhutan</td>
<td>186</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>163</td>
<td>Trinidad and Tobago</td>
<td>346</td>
</tr>
<tr>
<td>Mongolia</td>
<td>281</td>
<td>Tunisia</td>
<td>108</td>
</tr>
<tr>
<td>Morocco</td>
<td>215</td>
<td>Turkey</td>
<td>68</td>
</tr>
<tr>
<td>Myanmar</td>
<td>222</td>
<td>Ukraine</td>
<td>15</td>
</tr>
<tr>
<td>Nepal</td>
<td>168</td>
<td>Uzbekistan</td>
<td>112</td>
</tr>
<tr>
<td>Nigeria</td>
<td>325</td>
<td>Viet Nam</td>
<td>116</td>
</tr>
<tr>
<td>North Macedonia</td>
<td>229</td>
<td>WHE/EURO Hubs</td>
<td>308</td>
</tr>
<tr>
<td>Pacific islands</td>
<td>179</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>9</td>
<td>Zimbabwe</td>
<td>257</td>
</tr>
</tbody>
</table>

### Infodemic management and risk communication

<table>
<thead>
<tr>
<th>Country</th>
<th>Code</th>
<th>Country</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Côte d’Ivoire</td>
<td>81</td>
<td>Nigeria</td>
<td>325</td>
</tr>
<tr>
<td>Gambia</td>
<td>375</td>
<td>Panama</td>
<td>411</td>
</tr>
<tr>
<td>Islamic Republic of Iran</td>
<td>85</td>
<td>Republic of Moldova</td>
<td>101</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>314</td>
<td>Sao Tome and Principe</td>
<td>105</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>163</td>
<td>Saudi Arabia</td>
<td>239</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>318</td>
<td>Senegal</td>
<td>332</td>
</tr>
<tr>
<td>Lebanon</td>
<td>201</td>
<td>Sri Lanka</td>
<td>245</td>
</tr>
<tr>
<td>Malaysia</td>
<td>208</td>
<td>Trinidad and Tobago</td>
<td>346</td>
</tr>
<tr>
<td>Maldives</td>
<td>90</td>
<td>Viet Nam</td>
<td>116</td>
</tr>
<tr>
<td>Morocco</td>
<td>215</td>
<td>West Bank and Gaza Strip</td>
<td>123</td>
</tr>
<tr>
<td>Myanmar</td>
<td>222</td>
<td>Yemen</td>
<td>21</td>
</tr>
<tr>
<td>Namibia</td>
<td>97</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Whole-of-society

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>26</td>
<td>Myanmar</td>
<td>222</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>130</td>
<td>Namibia</td>
<td>97</td>
</tr>
<tr>
<td>Barbados</td>
<td>138</td>
<td>North Macedonia</td>
<td>229</td>
</tr>
<tr>
<td>Cambodia</td>
<td>32</td>
<td>Pakistan</td>
<td>9</td>
</tr>
<tr>
<td>Colombia</td>
<td>74</td>
<td>Panama</td>
<td>411</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>194</td>
<td>Philippines</td>
<td>381</td>
</tr>
<tr>
<td>Cox’s Bazar</td>
<td>353</td>
<td>Republic of Korea</td>
<td>360</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>367</td>
<td>Republic of Moldova</td>
<td>101</td>
</tr>
<tr>
<td>Gambia</td>
<td>375</td>
<td>Rwanda</td>
<td>418</td>
</tr>
<tr>
<td>Ghana</td>
<td>149</td>
<td>Senegal</td>
<td>332</td>
</tr>
<tr>
<td>Greece</td>
<td>403</td>
<td>Somalia</td>
<td>56</td>
</tr>
<tr>
<td>Guatemala</td>
<td>273</td>
<td>South Africa</td>
<td>12</td>
</tr>
<tr>
<td>Islamic Republic of Iran</td>
<td>85</td>
<td>Sri Lanka</td>
<td>245</td>
</tr>
<tr>
<td>Jordan</td>
<td>153</td>
<td>Thailand</td>
<td>293</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>314</td>
<td>Timor-Leste</td>
<td>64</td>
</tr>
<tr>
<td>Kenya</td>
<td>159</td>
<td>Togo</td>
<td>299</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>163</td>
<td>Trinidad and Tobago</td>
<td>346</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>318</td>
<td>Turkey</td>
<td>68</td>
</tr>
<tr>
<td>Lebanon</td>
<td>201</td>
<td>Ukraine</td>
<td>15</td>
</tr>
<tr>
<td>Malaysia</td>
<td>208</td>
<td>Viet Nam</td>
<td>116</td>
</tr>
<tr>
<td>Maldives</td>
<td>90</td>
<td>WHE/EURO Hubs</td>
<td>308</td>
</tr>
<tr>
<td>Mongolia</td>
<td>281</td>
<td>Zimbabwe</td>
<td>257</td>
</tr>
<tr>
<td>Morocco</td>
<td>215</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Travel

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>145</td>
</tr>
<tr>
<td>Cambodia</td>
<td>32</td>
</tr>
<tr>
<td>Colombia</td>
<td>74</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>194</td>
</tr>
<tr>
<td>Malawi</td>
<td>47</td>
</tr>
<tr>
<td>Niger</td>
<td>174</td>
</tr>
<tr>
<td>Pacific islands</td>
<td>179</td>
</tr>
</tbody>
</table>

### Humanitarian

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>4</td>
</tr>
<tr>
<td>Greece</td>
<td>381</td>
</tr>
</tbody>
</table>

### Health workforce

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>26</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>194</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>81</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>264</td>
</tr>
<tr>
<td>Gambia</td>
<td>375</td>
</tr>
<tr>
<td>Greece</td>
<td>403</td>
</tr>
<tr>
<td>Guatemala</td>
<td>273</td>
</tr>
<tr>
<td>Mali</td>
<td>6</td>
</tr>
<tr>
<td>Namibia</td>
<td>97</td>
</tr>
<tr>
<td>North Macedonia</td>
<td>229</td>
</tr>
<tr>
<td>Republic of Moldova</td>
<td>101</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>245</td>
</tr>
<tr>
<td>Sudan</td>
<td>339</td>
</tr>
<tr>
<td>West Bank and Gaza Strip</td>
<td>123</td>
</tr>
<tr>
<td>Case management</td>
<td>Argentina</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Local supplies and products</td>
<td>Argentina</td>
</tr>
<tr>
<td></td>
<td>Botswana</td>
</tr>
<tr>
<td></td>
<td>Jordan</td>
</tr>
<tr>
<td>Public health social measures</td>
<td>Argentina</td>
</tr>
<tr>
<td></td>
<td>Jordan</td>
</tr>
<tr>
<td></td>
<td>Malaysia</td>
</tr>
<tr>
<td>UHC and access to services</td>
<td>Argentina</td>
</tr>
<tr>
<td></td>
<td>The Kingdom of Bhutan</td>
</tr>
<tr>
<td>Maintaining essential health services</td>
<td>Argentina</td>
</tr>
<tr>
<td></td>
<td>Bangladesh</td>
</tr>
<tr>
<td></td>
<td>Cambodia</td>
</tr>
<tr>
<td></td>
<td>Colombia</td>
</tr>
<tr>
<td></td>
<td>Costa Rica</td>
</tr>
<tr>
<td></td>
<td>Côte d’Ivoire</td>
</tr>
<tr>
<td></td>
<td>Cox’s Bazar</td>
</tr>
<tr>
<td></td>
<td>Ethiopia</td>
</tr>
<tr>
<td></td>
<td>Ghana</td>
</tr>
<tr>
<td></td>
<td>Greece</td>
</tr>
<tr>
<td></td>
<td>Indonesia</td>
</tr>
<tr>
<td></td>
<td>Kazakhstan</td>
</tr>
<tr>
<td></td>
<td>Malawi</td>
</tr>
<tr>
<td></td>
<td>Morocco</td>
</tr>
</tbody>
</table>
COVID-19 has changed the world dramatically and affected the lives of almost everyone on the planet. The pandemic has had devastating effects not only on health but on societies and economies. But not all countries have responded equally, and not all countries have been affected equally. About half of all cases and deaths have occurred in just five countries, and almost two thirds of cases and deaths are in 10 countries.

From the very start of the pandemic, WHO has been working hand in hand with leaders, policy-makers, managers, health workers, researchers, civil society, communities and development partners to prepare and respond.

WHO’s COVID-19 response builds on lessons learnt from previous outbreaks, including of Ebola virus disease, Zika virus disease, measles, yellow fever, SARS, MERS, H1N1 and others. It also builds on the significant investments in polio eradication that have established substantial infrastructure and human and financial resources in many countries in Africa and the Eastern Mediterranean. And we have by no means been alone; WHO has worked with hundreds of multilateral and bilateral partners, researchers and scientists, funds and foundations, civil society and communities.

Often, WHO’s work does not make headlines, although it does make a real difference to the lives of people around the world.

This publication brings together stories from more than 70 countries, providing a snapshot of WHO’s work with countries in response to COVID-19. It highlights successes, lessons learnt and challenges that countries continue to face.

I hope this publication will give the global community a deeper understanding of WHO’s support for countries and will contribute to making the world safer for generations to come.
Acknowledgements

This publication is the result of many hours of interviews, collection of data, drafting and editing by colleagues from WHO country, regional offices and headquarters. Over 250 people (WHO staff and consultants) have contributed to this work, and valuable input of everyone was important and appreciated.
Introduction

COVID-19 has brought unprecedented changes into our lives. For many, WHO’s daily work to promote health, keep the world safe, and serve the vulnerable is invisible. But it makes a vital difference to the lives of billions of people around the world.

The publication consolidates a set of more than 70 rich case studies on WHO’s work in countries, territories and areas to support governments across a wide spectrum of COVID-19 response during March-December 2020. The stories and pictures in this publication showcase challenges that countries have faced, WHO’s contribution to finding national and regional solutions for tackling COVID-19 pandemic and opportunities for strengthening collaboration with other health, development and humanitarian national and international partners.

The work on collecting these qualitative case studies was undertaken under the guidance of WHO senior management and in close collaboration with WHO leadership and teams at the country level, members of the Country Support Unit Network and staff from WHO Health Emergencies Programme.
IRAQ

Key areas:

With support from the World Health Organization (WHO), Iraq acts quickly and decisively, putting people’s health first with promising results

COVID-19 in Iraq

Swift action from the Government of Iraq, acting with WHO and partners, has ensured that COVID-19 is being brought under control. With 1602 cumulative cases and 83 deaths (as of 22 April 2020), the country’s daily cases peaked in early April and death rates are now plateauing. As of the third week of April, owing to close technical cooperation and new guidance of WHO, the country has started to cautiously adjust its public health and social measures.

Iraq shares more than 1400 km of its borders with two heavily affected countries: Turkey and the Islamic Republic of Iran. Having experienced years of humanitarian crises, Iraq’s health system is fragile, and there are many vulnerable people living in camps. With COVID-19 overwhelming even strong health systems in developed countries, Iraq’s only choice was a rapid and coordinated response to the pandemic. The solid public health response supported by WHO was effective; by 22 April 2020, not one case of COVID-19 had appeared among refugees and internally displaced people living in camps. Furthermore, hospitals had never reached capacity, even during the peak of the epidemic in early April.

Containing COVID-19 in Iraq

As a trusted partner, WHO has worked closely with the Prime Minister’s Office and the Ministry of Health in all aspects of the response. Also, WHO has coordinated the work of partners on the ground to develop, implement and direct funding towards the country’s comprehensive Strategic Preparedness and Response Plan. From the first detected case on 24 February 2020, and in line with WHO’s recommendations, Iraq has carried out active surveillance in the form of testing, contact tracing and isolation of suspected cases. Iraq put in place travel restrictions for severely affected countries, and mitigation measures throughout the country. On the advice of WHO and learning from global experiences of high COVID-19 transmission at mass gatherings, Iraq engaged with religious leaders and either halted or significantly reduced the size of several holy pilgrimages – a difficult but necessary action to put people’s health first under extraordinary circumstances.
Mobilizing resources and coordinating procurement

To meet the demand for critical supplies and resources, WHO is working with United Nations (UN) partners on the ground – including the UN Children’s Fund (UNICEF), World Food Programme and others – towards coordinated procurement efforts. Signalling Iraq’s capacity for innovation in the face of global supply shortages, Basrah University, in collaboration with WHO, has started to manufacture its own virus transport medium (VTM) and nasal swabs. So far, more than 1620 VTM and 3200 nasal swabs have been produced and delivered to health directorates in the southern part of the country. This new production, along with reverse transcriptase polymerase chain reaction (RT-PCR) kits provided by WHO, has helped to increase the testing of suspected cases. Together, WHO and Basrah University have set an overall goal of supplying the quantities needed countrywide. Disinfectants and sterilization material, including hand-rub gel, have also been produced locally, with support from WHO and the Government of Iraq.

Moving forward: next steps in Iraq

As Ramadan begins and the country starts to cautiously adjust its public health and social measures, WHO will continue to work closely with the government and all partners to keep COVID-19 contained. Supporting data collection, monitoring and analysis will be an ongoing focus for WHO, to ensure that the country’s leaders can take the best, evidence-based and data-based decisions as the response continues – and to ensure that the public, the media and the world remain accurately informed.
Mali

Key areas:

A truly United Nations provides multi-faceted support to the Government of Mali for a rapid response to COVID-19 while continuing to strive for peace, stability and development in the country

Health challenges in Mali

Mali is facing the COVID-19 crisis amid several other significant challenges. After decades of instability, a 2015 peace accord1 to stabilize the country is still being implemented, and there is extreme insecurity in central and northern Mali, with frequent acts of terrorism. This affects the country’s socioeconomic development and people’s human rights. The rates of poverty and vulnerability are high, not least among the 280 000 internally displaced people. Because of a weak health system, its location in sub-Saharan Africa and other factors, Mali already has a significant risk of outbreaks of communicable diseases; some parts of Mali are only just recovering from a yellow fever outbreak in December 2019 and an outbreak of Congo-Crimean haemorrhagic fever in February this year.

The United Nations working “as one” to tackle COVID-19

The United Nations presence in Mali is one of the largest in the world. It consists of 21 different resident agencies, funds and programmes as well as the Multidimensional Integrated Stabilization Mission in Mali (MINUSMA), which was established by the Security Council in 20132 to support political and security processes in stabilization of the country, reestablishment of State authority and the promotion and protection of human rights.3 Collectively, the United Nations in Mali comprises almost 19 000 staff and personnel, including 13 000 military, 5600 civilians and 1560 employees of agencies.

To prepare for, prevent and respond to the spread of COVID-19 in Mali, the full machinery of the United Nations (agencies, funds and programmes and MINUSMA) has come together “as one” in an unprecedented way. Under the leadership of the Special Representative of the Secretary-General, the Designated Officer, Mr Annadif Mahamat (acting as Crisis Manager), and the Deputy Representative of the Secretary-General and Resident Humanitarian Coordinator, Ms Mbaranga Gasarabwe (acting as Outbreak Coordinator), all mandates and work are aligned to ensure coordinated technical, operational and financial support to the Government of Mali.

We need solidarity. We are both pleased and grateful that the United Nations in Mali is helping us with this multifaceted support. In the name of the Government and the people of Mali, I thank you.

Michel Sidibé, Minister of Health and Social Affairs

6 April statement during the signing of Memoranda of Understanding to formalize joint United Nations support to Mali

---

A United Nations-wide country governance structure under the Crisis Manager and Outbreak Coordinator has been established for seamless coordination and clarity of the roles and responsibilities of the United Nations entities. A crisis management team has been established, comprising the United Nations coordination team, humanitarian groups (including nongovernmental organizations) and MINUSMA. A further seven working groups have been established to analyse, monitor and rapidly find solutions to ensure alignment among United Nations agencies, including in areas such as logistics and procurement, financing of the response, information systems, human resources and security. Rapid decisions are facilitated by twice-weekly meetings chaired by the Outbreak Coordinator, who refers to the Crisis Manager when necessary.

WHO leadership in the United Nations response

Under the leadership of the WHO Country Representative, Dr Jean-Pierre Baptiste, WHO has been instrumental in the “one United Nations” response. WHO leads in all technical aspects, providing evidence, guidance and standards for the work and decisions of the integrated and multisectoral United Nations crisis management team.

In support of a coordinated national response, WHO also participates in or leads several groups working on different aspects of the response. For instance, WHO (on behalf of the United Nations) co-chairs the health sector aid coordination group with Canada and coordinates the health cluster, comprising humanitarian response partners (including implementing nongovernmental organizations) and the Government. WHO is also part of an expert technical committee established by the Prime Minister’s Office to coordinate surveillance. With WHO support and guidance, Mali has comprehensive national response plans to COVID-19. The response to date has focused on preparation and prevention of the spread of COVID-19, which appears to have prevented large-scale community transmission. As of 4 May, there had been 563 confirmed cases (limited to clusters of outbreaks) and 27 deaths.

Distribution of supplies to regions of Mali

Mali’s approach, supported by WHO and United Nations partners, is both national and regional. Each region has a locally adapted plan. To operationalize the plans, United Nations agencies, funds and programmes and MINUSMA have allocated US$ 11 million to the response and have assumed leading roles according to their comparative advantages. For example, UNDP ensured that hand-washing stations were available at the 19 000 polling stations during elections on 19 April; UNFPA is supporting contact-tracing; UNICEF is leading in risk communication and community engagement; and MINUSMA is intensifying security in the country. While WHO leads in all technical matters, it also supports operational aspects of the response, including procurement and supply with the World Food Programme (see photo below).

WHO has ensured that all 10 regions of Mali can respond appropriately by advocating for full funding from the central Government to finance each region’s response plan and by ensuring the full capacity of all regional rapid response teams and testing and treatment facilities. Access to the regions can be difficult logistically and with respect to security, and WHO and other agencies rely heavily on close collaboration with MINUSMA and aviation authorities in field missions and for distribution of supplies.
WHO also works with Professor Samba Sow, Director-General of the Centre for Vaccine Development in Mali and former Minister of Health, who has been appointed special envoy for the COVID-19 response by the WHO Director-General. Professor Sow will lead WHO “solidarity trials” in Mali to contribute to global initiatives to find effective therapeutics to fight COVID-19.

Protecting the health of United Nations personnel in Mali

The United Nations mission in Mali not only serves the Government and people of Mali but must also ensure the health and security of its 19,000-person team. Under the corporate guidance of the United Nations in New York City and with the technical guidance of WHO, the mission in Mali has put in place comprehensive business and integrated continuity plans and established an integrated medical team for its staff and personnel. Personnel who return to duty from outside Mali are asked to isolate themselves routinely for 14 days. A transit centre has been converted and fully staffed and equipped to national standards to receive and care for staff with COVID-19. Teleworking has been organized, and services for staff well-being and counselling have been established in Bamako and regions.

Moving forward: forging effective collaboration for peace and development in Mali

Although COVID-19 is posing many significant additional challenges to the Government of Mali and the United Nations family working there, some see it as an opportunity to forge more effective, coherent collaboration for the longer term. Throughout and after COVID-19, there is still a long way ahead to achieve peace and development in Mali.
PAKISTAN

COVID-19 reveals chronic vulnerability in Pakistan’s health system but creates an opportunity for large-scale, coordinated control of the pandemic and for building a health system for the future

COVID-19 in Pakistan

Since early January, WHO has been working with the Ministry of National Health Services, Regulation and Coordination and all line ministries in Pakistan at both federal and regional levels to contain and mitigate the COVID-19 outbreak. The response to COVID-19 started even before the first case was detected, when WHO met Government officials, the donor community and partners and provided technical guidance on preparedness and response to the public health effect of COVID-19.

Pakistan, with a population of over 223 million, is the fifth most populous country in the world, and the outbreak of COVID-19 presents a potentially devastating threat. WHO supported some of the earliest modelling of COVID-19 in collaboration with the National Health Services Academy and the London School of Hygiene and Tropical Medicine, resulting in predictions of the country’s potential case load. One model predicted that Pakistan would register 196 000 cases of COVID-19 of which 9800 would be critical. As of 21 April, the virus had spread throughout the country, with 9216 confirmed cases and 192 deaths. Over 105 districts are affected; the two most affected provinces are Punjab and Sindh.

Responding to COVID-19 in Pakistan: mobilizing funds and engaging stakeholders

Using the model predictions, the Government developed the Pakistan Preparedness and Response plan, with technical support from WHO. The total cost of the plan is US$ 595 million, of which the World Bank and the Asian Development Bank have each provided US$ 200 million; other donors are joining. On 23 April, the WHO Director-General attended the official launch of the Plan.
As the key technical partner, WHO helped to establish and participates in all technical working groups in the country to address the key issues, including isolation of confirmed cases, case management and testing. To ensure adaptation of global guidance to the national situation and context, WHO assembled a “think tank” of diaspora and local Pakistani public health experts, who meet regularly and advise the Government and partners on the response. A mission of WHO experts from the Eastern Mediterranean Regional Office travelled to the country to conduct an assessment and make recommendations, and they continue to provide daily technical advice to WHO Country Office staff.

Supporting distribution of supplies and assessment of hospitals

At an operational level, WHO was the sole provider of personal protective equipment (worth US$ 400 000) in the early stages of the outbreak. WHO also provided thermo-guns for screening at points of entry, including all major airports, and set up COVID-19 information desks in three airports, providing public health information and assistance to the public and airport and airline staff during the early phases of the response.

With funding from donors, WHO established a dedicated infection prevention and control team and conducted assessments in 100 priority hospital facilities to advise them on measures for improving readiness for COVID-19. A further 100 assessments will be completed shortly. Supplies for infection prevention and control are being procured, and more than 1500 health workers have been trained virtually.

To increase testing capacity, WHO procured and distributed 15 PCR machines for point-of-care testing and has provided technical assistance to leverage the country’s impressive tuberculosis treatment infrastructure to increase testing by a further 2000 tests per day. Tuberculosis centres are being equipped with N95 masks and other personal protective equipment for front-line workers. To protect vulnerable immunosuppressed tuberculosis and HIV patients, the centres are using couriers to deliver 3-months’ supplies of medicines to patients.

Collaboration with the Ministry of Health in maintaining health services

WHO is supporting and advising Pakistan on maintaining essential services, with guidance and recommendations for different clinical settings, establishment of toll-free numbers and more ambulance services. Within the Strategic Preparedness and Response Plan, WHO is working with the Government to innovate and harness technology to reach people with essential services; for instance, telemedicine is being introduced in 100 hospitals.

To coordinate the national response, WHO supported establishment of an operational cell, chaired by the Ministry of Health, in January, and a strategic health operations centre was set up to monitor the situation in all provinces and provide rapid support. WHO has provided equipment and supported establishment of a situation room at the Ministry of National Health Services Regulation and Coordination to serve as a platform for online data for evidence-based decisions for curtailing and ensuring a robust response to COVID-19.
Liaising with donors and other countries

To coordinate the work of the large number of international partners and donors in Pakistan, WHO provides weekly briefings to groups of more than 50 donors and partners; it has now briefed ambassadors from over 25 countries on the country situation and needs. To leverage the collective efforts of the United Nations, WHO leads a weekly meeting of the crisis management team, which comprises the United Nations Resident Coordinator and key United Nations agencies that are supporting the response. WHO is raising money for its work locally, including US$ 2.6 million from the United Kingdom Department for International Development and US$ 140 million from the United Nations Office for the Coordination of Humanitarian Affairs, with more in the pipeline. WHO’s Country Office still requires a predicted US$ 8 million more to provide the necessary support.

Challenges ahead in the response to COVID-19 in Pakistan

According to the WHO Representative, the three greatest challenges are as follows.

Ensuring an appropriate mitigation (physical distancing) strategy
Pakistan’s sociocultural context of large extended families and crowded living conditions, coupled with the holy month of Ramadan when many people attend mosques for prayer, are challenges for stopping the spread of a virus such as COVID-19. WHO, with the Ministry of National Health Services, Regulation and Coordination, the Prime Minister and the President, communicate regularly with all segments of society, including prominent religious leaders, and call on them to ensure actions to stay safe: regular hand hygiene, physical distancing and staying home to pray.

Scaling up testing to ensure proper treatment and public health measures
WHO is working with the National Institute of Health to increase testing capacity from the current rate of 6000 to 10 000 tests per day by the end of this week and to 20 000 per day by the end of next week. For a population of 223 million, however, even more testing is necessary.

Ensuring that weak health systems have adequate capacity to care for sick COVID-19 patients while maintaining the provision of other essential health services
Over 217 health facilities in Pakistan have been converted to COVID-19 isolation wards, and new facilities are being erected. The Expo Centre in Punjab for instance was converted into a health facility with 1000 isolation beds and 50 high-dependency beds within 9 days.

The COVID-19 pandemic is placing significant pressure on the already weak health system in Pakistan and exacerbating the vulnerability of populations. With a high prevalence of disease, poverty and malnutrition, urgent action is necessary to mitigate the effects of the pandemic on the health and nutrition of the most vulnerable populations by investing in health systems across the country.
SOUTH AFRICA

Key areas: 🇳🇦 🇰🇷 🇽🇦 🇧🇷 🍏

WHO supports South Africa’s decentralized responses in COVID-19 in most affected provinces

**Highlights**

The first case of COVID-19 in South Africa was reported on 5 March 2020; as of 5 May 2020, 7,572 confirmed cases from 268,064 tests and 148 COVID-19-related deaths have been recorded.

COVID-19 is providing hard lessons about the need for subnational technical cooperation. With clusters of outbreaks concentrated in certain districts and provinces, and in the context of South Africa’s decentralized health system, WHO has redeployed its Country Office staff and consultants to provide a provincial-level response. Multidisciplinary teams have been deployed to the most affected provinces.

As the technical lead for providing evidence-based guidance, WHO country teams are challenged by the need to rapidly contextualize and adapt the evolving global evidence WHO produces into practical guidance for use on the ground.

Working across government levels for a more effective response to COVID-19

COVID-19 has disproportionately affected the provinces in South Africa. WHO is deploying the Country Office staff and locally recruited consultants to work with provincial authorities in the most affected provinces. When the state of national disaster was declared following evidence of community transmission in different provinces in mid-March, WHO swiftly redirected its country staff to COVID-19 incident management and took a unique approach to effectively support the decentralized health systems of the country – by deploying multiple teams of WHO staff and experts to the provinces to enable direct and locally contextualized support. “It was clear that, if we only work at the central level, we would not understand what’s happening on the ground and we won’t make impacts in those affected areas”, said Dr Owen Laws Kaluwa, WHO Representative in South Africa.

Since then, multiple teams with over 20 WHO staff and consultants have been sent to the severely affected provinces and have stayed there for several weeks so far – in Gauteng, Western Cape, Eastern Cape, Kwazulu Natal and, most recently, Free State. WHO teams are based in the provincial “war rooms”, which are the main command centres of the provincial health authorities, providing day-to-day technical support for urgent issues on the ground. One notable contribution was that WHO supported the entire process of COVID-19 data, from collection to data cleaning, management and reporting. This process has not been easy, as many health facilities are still using paper-based records rather than electronic systems. However, WHO epidemiologists played a key role in daily updating of the epidemiological information and reporting from provinces to the national statistics database.
Providing contextualized guidance and support

The most frequently required support was to provide operational guidelines and standard operating procedures that are locally contextualized and ready for use by frontline health workers, such as quarantine measures, testing, use of personal protective equipment and mass screening at the community level. This type of work often needed a deep level of understanding of the local situation, as well as timely decision-making based on expert knowledge. To respond to all the questions on the ground and to grow and maintain their expert knowledge, WHO teams have had to rapidly review and synthesize all the COVID-19 related data, evidence and guidance being generated at the global and regional level. Often, this work faced challenges of insufficient amount and depth of available information and guidance on specific issues on the ground. To more quickly and effectively apply these to field-level issues, “we need more advanced and targeted guidance rather than generic ones”, said Dr Busisiwe Msimanga-Radebe, WHO HIV/AIDS officer and team lead in Free State province.

As public health measures are not merely a health issue, but also a political and social one, the WHO team has actively collaborated with multisectoral stakeholders to address unique health and social contexts. In Gauteng province, for example, WHO is now working with the authorities to protect the vulnerable prison population by supporting 20 locally recruited nurses in helping to screen and test over 40 000 inmates and staff working in 26 correctional facilities across the province, to minimize the risk of spreading COVID-19 in these closed settings.

Maintaining essential health services and integrating the COVID-19 response into health systems

Despite the focus on the COVID-19 response, there are also concerns about maintaining routine public health protection, such as the extended programme of childhood immunization and tuberculosis (TB) and HIV/AIDS programmes. While responding to COVID-19 at provincial level, WHO experts are continuing to provide technical assistance at the central level to ensure continuation of services and supplies of essential medicines, such as developing guidelines on testing and treatment of HIV/AIDS and TB in COVID-19 isolation centres.

The WHO team in Gauteng is working hard to ensure that routine immunization is not forgotten. Although people are being told to stay at home, WHO teams always advocate for the continuation of routine immunization, as well as providing vaccinations for children with missed doses, who may be found in quarantine facilities, homeless shelters and other environments to mitigate against outbreaks of vaccine-preventable illnesses such as measles.
Lessons on stronger engagement at subnational level and unified teamwork

While WHO usually supports the national ministry of health, the experience in South Africa shows that WHO can build and maintain links with provinces to intervene effectively in the event of an emergency like the COVID-19 pandemic. WHO teams have noted that other agencies, such as the United States Centers for Disease Control and Prevention, already had a focal point at the provincial level and could engage much earlier and more effectively. In decentralized health systems like South Africa’s, “our response should be decentralized as soon as possible, from national level to provincial level, even to district level”, said Dr Nkateko Mkhondo, WHO TB officer and team lead in Kwazulu Natal Province.

Since the epidemic has happened in the country, for more than a month at the time of writing, WHO teams have been working around the clock in the provinces, far from their homes and families. Despite these personal hardships, WHO staff are highly motivated and committed to combating the epidemic on the ground. “Now we are unified for one common purpose”, said Dr Mercy Kamupira, WHO surveillance officer and team lead in Gauteng Province.
UKRAINE

Key areas: 

WHO’s support for the COVID-19 response in Ukraine amid other health emergencies, an ongoing humanitarian crisis and major health sector reforms

Overview of health challenges in Ukraine

The COVID-19 pandemic has coincided in Ukraine with several major ongoing health, development and humanitarian challenges, which the United Nations (UN) agencies, including WHO and other partners, are helping the Ukrainian Government and people to tackle. Active conflict in eastern Ukraine since 2014 has left 3.4 million people requiring humanitarian assistance and protection, and in 2018–2019, Ukraine suffered one of the worst measles outbreaks in the world with almost 60 000 cases recorded in 2019. At the same time the country is proceeding with major health financing reforms and strengthening primary health care. Several of the country’s other health challenges and its demographic characteristics render people particularly vulnerable to COVID-19. Thus, Ukraine has among the highest rates of HIV infection in Eastern Europe and high rates of noncommunicable diseases (NCDs). Heart disease, diabetes, cancer and chronic lung diseases together account for 84% of all deaths in the country. Ukraine’s large elderly population (23% of people are aged over 60 years) adds a further element of vulnerability. In the conflict-affected Donetsk and Luhansk regions of eastern Ukraine, routine as well as emergency health care is extremely limited. Health facilities and equipment have become severely degraded after years of insecurity and poor maintenance; there is a shortage of medicines, medical supplies and health workers.

WHO’s role in Ukraine

Established in 1994, the WHO Country Office in Ukraine is now led by Dr Jarno Habicht as the WHO Representative and consists of over 50 staff and consultants, including experts in the fields of health systems and policy, HIV/AIDS and tuberculosis control, immunization and vaccine-preventable diseases, mental health and NCDs, emergency preparedness and response, communications and administrative support. Based in Kyiv with various field offices throughout the country and operating closely with other UN agencies and health development partners,

---


4 According to the State Statistics Service of Ukraine as of 1 January 2020.


WHO has been an objective and trusted partner to successive governments at both the policy-making and operational level. WHO has always sought to provide the best available evidence and technical support in order to help strengthen the country’s health system and tackle its unique health challenges.

The COVID-19 response and its challenges

Preparations were made early on, in January 2020, to enhance the Ukrainian authorities’ capacity for implementation of the International Health Regulations and to improve emergency preparedness, with technical assistance provided by WHO. The authorities succeeded in acting early and proactively to halt the spread of COVID-19 in Ukraine. On 12 March, when there were three confirmed cases in the country, Ukraine began implementing quarantine procedures, closed schools and cancelled mass gatherings. The Government has gradually increased the restrictions since then, and the country is now largely in lockdown, with non-essential businesses and borders closed.

Both through its existing health programmes and through the provision of targeted technical assistance, WHO has played a critical role in supporting Ukraine’s response to COVID-19. In close collaboration with the Ministry of Health and the Ukrainian Public Health Centre (UPHC), WHO has supported the development, updating (mid-April) and systematic implementation of a comprehensive country preparedness and response plan that takes into account the national context and the evolving situation. In addition, there is regular coordination between the Government, the UN system and international partners. Mobilizing an additional US$ 10 million for WHO’s operations in Ukraine to respond to short-term needs, the WHO Country Office, working closely with the Regional Office for Europe and WHO headquarters in Geneva, has launched a comprehensive support programme, covering all key areas of the health response.

Communicating COVID-19 risks effectively and engaging the community

As a trusted source of timely and reliable information, WHO is taking every opportunity to communicate effectively on COVID-19 – with the public in general and with specific key population groups, such as health workers, caregivers, older people, children, and people with disabilities and underlying health conditions. This outreach takes the form of interviews with the WHO Representative on national television and in newspapers, official statements (for example, on physical distancing during religious holidays) and comprehensive social media campaigns. The communication efforts are coordinated with other partners, such as the United Nations Children’s Fund (UNICEF), and scaled up through partner networks across the country in order to reach local communities. In non-government-controlled areas of eastern Ukraine, some 230 000 WHO posters have been distributed, with the support of UN agencies and local nongovernmental organizations, in health and social care facilities and public spaces so as to spread the word about key public health risks and appropriate countermeasures.

Strengthening national capacities for surveillance, case investigation and rapid response

Since the beginning of the pandemic, WHO has supported the rapid dissemination and adaptation to the national context of its global guidelines on surveillance, case investigation and rapid response. WHO is also assisting the Ministry of Health and the UPHC in enhancing and adapting the existing surveillance system for COVID-19, and it is facilitating a research project on the first cases diagnosed in Ukraine whose objective is to improve understanding of the disease’s epidemiological features. Since March, WHO has been producing daily situation reports in collaboration with the Ministry of Health and the UPHC for dissemination to national, regional and international partners.
Expanding COVID-19 testing capacities to ensure the rapid detection, isolation and treatment of cases

The first confirmed case of COVID-19 in Ukraine was detected on 3 March 2020 in the western region of Chernivtsi and, as of 10 May, the outbreak has reached all parts of Ukraine, with 15,232 confirmed cases, including 391 deaths. To strengthen the country's laboratory capacities for testing, WHO has procured and donated RNA extraction kits for 1400 preparations, one-step reverse transcriptase–polymerase chain reaction (PCR) kits for 24,250 reactions, and two biosafety cabinets. However, testing has been, and remains, a major challenge: the Ukrainian health authorities have faced public criticism for not testing enough, and this has limited the effectiveness of the public health response as a whole.

With the support of WHO, UNICEF and the United States Centers for Disease Control and Prevention, the Ministry of Health and the UPHC have gradually decentralized testing and expanded the testing criteria. A national action plan for further scaling up laboratory testing is being finalized. Testing is now available in the main laboratory of the UPHC and also through the regional laboratory network and at private laboratories. In support of the national strategy, WHO has launched a PCR testing capacity inventory tool to assess the capacity for expansion across Ukraine on the basis of a whole-of-government approach that integrates all existing capacities from both health and non-health sectors, including hospital laboratories, HIV-network, veterinary laboratories, the National Academy of Sciences of Ukraine (together with the specialized national academies for medical sciences and agrarian sciences) and the Ministry of Defence. At the same time, WHO continues to support capacity-building for laboratories that are already performing PCR tests by identifying trainers and centres where laboratory technicians can learn about testing techniques, biosafety and quality control.

Stepping up the number of tests remains a priority and it is also a prerequisite for assessing the situation before deciding whether public health measures and social restrictions may be safely eased in the future.

Improving case management for patients with respiratory symptoms and ensuring a safe environment for patients and health care workers through infection prevention and control

In early March 2020, when the first cases were confirmed in the Chernivtsi region, WHO delivered more than 7000 protection kits to the Chernivtsi Regional Hospital, including respirators, plastic gloves, goggles and protective clothing. In early April, a joint flight of WHO and the International Committee of the Red Cross in an aircraft provided by the Government of Ukraine arrived from Geneva with a humanitarian cargo consisting of over 65,000 essential items of personal protective equipment (PPE) donated to the Ministry of Health by WHO to support front-line health care workers with the pandemic response. WHO delivered more than 20,000 of these items to designated COVID-19 facilitates in non-government-controlled facilities in the Donetsk and Luhansk regions along with four ventilators to support care for critical patients. A continuation of its programme to support the humanitarian response in conflict-affected eastern Ukraine, WHO's assistance has also included donations of oxygen supply systems, pulse oximeters, critical care ventilators, patient monitoring equipment, defibrillators and other essential supplies to both government- and non-government-controlled hospitals in that part of the country.

However, these donations may just be a drop in the ocean, given the scale of the country's needs. For the COVID-19 pandemic has highlighted the inadequate conditions at Ukraine's State hospitals and revealed shortages of virtually everything – from PCR testing equipment and supplies to ventilators and personal protective gear. In early May 2020, at least 15% of the people infected with COVID-19 in Ukraine were doctors and nurses.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Government inventories suggest that only 20% of the PPE required by the country to protect health workers is available. While continuing to do everything it can through the global supply chain, which is itself under strain, WHO is advocating local production of essential PPE where possible.

Apart from procurement, WHO is providing several other types of support to protect health workers and ensure that facilities are equipped to deal with the pandemic. Together with the UPHC, WHO has conducted training-the-trainers courses on the use of PPE in health care settings. Moreover, WHO is collaborating with the Ukrainian Red Cross Society to provide on-site training, based on WHO technical guidelines, to all staff in the 200 hospitals throughout Ukraine that have been designated COVID-19 treatment centres. WHO has also provided guidance on the strengthening of existing infection prevention and control (IPC) measures at these hospitals. To help protect front-line workers in all health settings, WHO has developed a package of information and education materials in Ukrainian (both digital and print format) on PPE use.

In eastern Ukraine, WHO as part of the Health Cluster has supported the Rapid Health Facility Assessment, under the REACH initiative, of 473 government-controlled health care facilities at the prehospital, primary, secondary and tertiary levels. The assessment has allowed policy-makers and stakeholders to modify the response and upgrade facilities accordingly.

In April, WHO conducted two online seminars on IPC and clinical management for more than 1000 clinicians from all over Ukraine, presenting current practices and sharing the latest guidance. Further training on IPC for all health workers will be delivered through a series of webinars during May and June. To improve care for COVID-19 patients, WHO is printing and distributing to health facilities copies of Ukrainian-language versions of the toolkit Clinical care for severe acute respiratory infection; the guidance document Prehospital emergency medical services (EMS): COVID-19 recommendations; and the manual Severe acute respiratory infections treatment centre. WHO also welcomed the interest of the Government in joining the Solidarity Trial for the development of COVID-19 treatments, and has shared the guidelines and protocols required to support this international initiative.

Maintaining equitable access to essential services across the country and in conflict-affected areas

No health, humanitarian or development partner understands the enormous health challenges that the country is facing better than WHO – and likewise the importance of maintaining access to essential services during the COVID-19 pandemic to prevent significant levels of avoidable illness and mortality from other causes. WHO has provided health authorities at the national and regional levels with guidance, tools and budget-monitoring support to ensure the continuity of services, including mental health, tuberculosis, HIV/AIDS and immunization services. Having quite recently (in 2019) completed a review of Ukraine’s health financing reforms in collaboration with the World Bank,7 WHO is now providing technical advice and support to the Government as it revises the health budget to take into account the financing of COVID-19 services – including the development of comprehensive service packages and provider payment mechanisms – while ensuring continued financing of other essential health services. To support policy-makers in taking decisions on the provision of primary health care in Ukraine, WHO has launched a rapid COVID-19 primary health care survey (the first of its kind to be led by WHO in Europe). Designed to study the experience of providing care for COVID-19 patients, the survey’s preliminary results are expected to be made available in May. In the conflict-affected Donetsk and Luhansk regions, WHO and its network of humanitarian partners continue to monitor the health needs of the population using a special mapping tool.

7 For details of this report, see footnote 3 above.
Promoting support for mental and psychosocial well-being during the outbreak

Building on its work in recent years to address mental health as a priority issue in Ukraine, WHO has ramped up the support it provides in view of the additional mental and psychosocial impact that the COVID-19 crisis is expected to have. WHO has developed recommendations for the Ministry of Health on how to protect and foster the mental well-being of health care workers, and supported the establishment of a dedicated task force to address COVID-19 in long-term mental health facilities. Moreover, WHO has developed a training course for health care workers and humanitarian response partners entitled “Mental health and psychosocial support during the COVID-19 outbreak, response and recovery”, which is now ready to be scaled up to the national level. WHO has also adapted a children’s story, My hero is you, into Ukrainian to help children cope with some of the difficulties associated with COVID-19. To address the enormous need for mental health support in government-controlled areas of the conflict-affected Donetsk and Luhansk regions, WHO focused its efforts in April on strengthening cooperation with the Mental Health and Psychosocial Support Technical Working Group of the Ministry of Health and the Group’s co-chairing agencies (the International Medical Corps, Médecins du Monde and Première Urgence Internationale). Workshops are being held in eastern Ukraine on developing a coordinated approach to the provision of mental health support for this vulnerable population.

Coordinating a broad, multisectoral set of stakeholders

As in any emergency – especially one of this nature and scope – optimizing the response to COVID-19 relies on the full coordination and cooperation of stakeholders, and the harnessing of their various talents, expertise, resources and political, technical and strategic advantages. As the key technical partner on the ground, WHO has supported the Government in taking a coherent approach to tackling COVID-19 across all sectors and at the national and subnational levels; it has also facilitated coordination between the Ukrainian authorities, the UN system and national and international stakeholders and donors.

As part of efforts to fully operationalize a national public health emergency operations centre and a COVID-19 call centre run by the UPHC, WHO has donated information technology and telecommunications equipment that will support data analysis and accurate call processing. Moreover, to facilitate coordination between the central Government and regional (oblast) governments, WHO is supporting the implementation of a new software tool, to be rolled out in May 2020, for monitoring the health system response across Ukraine. The tool is an extension of the COVID-19 Health System Response Monitor (HSRM), which compares how countries are responding to the pandemic. Information on Ukraine from March onwards, supplied by the WHO Country Office, is available in the HSRM.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Whenever and wherever needed, WHO engages with all sectors and groups in society to provide relevant technical guidance. For instance, guidance on food safety developed jointly by WHO and the Food and Agriculture Organization of the United Nations (FAO) was translated into Ukrainian for use by the country’s food industry to ensure the integrity of the food supply. Similarly, WHO provided religious leaders and faith-based communities with guidance translated into Ukrainian on measures that needed to be taken in the context of COVID-19 to ensure that people remained safe during the important religious holidays celebrated throughout April and May. A number of other UN agencies have translated and distributed WHO interim guidance through their networks, including guidance on such areas as prison health.

Under the leadership of the UN Resident Coordinator and with WHO support, the UN Country Team – which comprises 16 specialized agencies, funds and programmes – has been converted into a COVID-19 crisis committee with various working groups covering such areas as procurement, medical response and risk communication. Since February 2020, WHO has been providing the UN Country Team, the Humanitarian Country Team, donors and the diplomatic community with regular briefings on the situation in the country, including the progress made and the challenges encountered. Weekly meetings have taken place since April with members of the Health Cluster to step up collaboration on addressing health-related needs in conflict-affected eastern Ukraine.

Several high-level meetings and briefings have been held with Prime Minister Denys Shmyhal and Deputy Prime Minister Vadym Prystaiko, among other government officials, during which the UN Resident Coordinator and the WHO Representative, along with partners such as the World Bank and the European Union, have discussed with them the country’s COVID-19 situation and response strategy. WHO and the United Nations Development Programme have also provided technical assistance on COVID-19-related procurement to the Deputy Prime Minister’s Office, which has subsequently arranged for the WHO-coordinated purchase of vital supplies to meet the needs of the COVID-19 response. As the country begins to look to the future, WHO continues to provide technical guidance to national decision-makers on the policy considerations that they should take into account when adjusting public health and social measures.

The wider context: Ukraine’s reforms to achieve universal health coverage

The COVID-19 pandemic has required a rapid shift in focus to the immediate urgency of protecting people, but WHO is not losing sight of the bigger picture. Although major reforms are gradually being undertaken, the Ukrainian health system is one of the most fragile among the post-Soviet European States, characterized as it is by organizational and financial inefficiency and insufficient capacity to meet the population’s health needs.

COVID-19 hit Ukraine shortly before the hospital network reform, that is, the second phase of the country’s package of ongoing reforms to modernize its public health care system. After the overhaul of primary care undertaken in the first phase, the second phase includes putting in place a State-guaranteed benefit scheme for specialized care and scaling up the Affordable Medicines programme: these reforms were originally intended to take place in 2020. With a view to supporting possible efforts to mitigate the long-term economic impact of COVID-19 on Ukraine and on the progress of its important health reforms, the WHO Representative, Dr Jarno Habicht, is already considering a recovery plan and has initiated a budget space analysis to assess how the pandemic will affect the country’s economic growth and the Government’s ability to raise revenues for health financing.


Even if a vaccine and treatment for COVID-19 were developed tomorrow, recovering from the economic and social effects of the pandemic will take time

Dr Jarno Habicht
WHO Representative
YEMEN

Key areas:  

A country in crisis, where humanitarian assistance is already facing massive constraints, Yemen could be hit harder by COVID-19 than anywhere else in the world

Yemen’s heightened vulnerability to COVID-19

After six years of war, the humanitarian crisis faced by Yemen is in its magnitude and severity unlike any other the world has seen. Nearly 80% of the population require some form of humanitarian assistance; 10 million people are a step away from famine, while an additional 7 million are malnourished. The country’s population has some of the lowest levels of immunity in the world and is under constant threat from outbreaks of a variety of diseases, including cholera, dengue and West Nile virus fever. In view of these vulnerabilities and the country’s collapsed health system, WHO and humanitarian partners fear that Yemenites who contract COVID-19 may become more severely ill than people in other countries.

WHO’s technical support for the COVID-19 response: procurement and capacity-building

Although the number of confirmed COVID-19 cases in Yemen remains low – owing in large part to limited or no reporting of cases and minimal facilities for testing – WHO continues to work with partners and the local authorities on taking all possible precautionary measures to mitigate the potential impact of the virus. Thus, WHO moved quickly to secure scarce resources from global markets, procuring and transporting to Yemen more than 6700 testing kits (an additional 32 400 kits are scheduled to arrive in the coming weeks). Moreover, it has been providing front-line staff with guidance and training.1

A total of 333 specially trained rapid response teams have been established to date in every district of the country (tapping into existing cholera response capacity) to help with screening at points of entry, contact tracing and, where appropriate, isolating suspected cases. WHO’s goal is to triple the number of such teams over the next few weeks. Six laboratories are now equipped to perform COVID-19 testing, and two more are expected to come online shortly. WHO is also helping to upgrade the 38 hospitals across the country designated for COVID-19 treatment by providing on-site training for health workers on COVID-19 critical care and supplying the necessary high-tech equipment. WHO has so far procured and delivered 520 intensive care unit beds and 208 ventilators to hospitals; a second shipment of twice this size is on its way.2 Additional efforts to strengthen preparedness for a second and potentially a third wave of COVID-19 include making rapid diagnostic tests available through cooperation with global partnerships and initiating seroprevalence studies. To deliver this support, WHO

---

2 Ibid.
and partners must work effectively with the authorities in both the north and south of Yemen. Ensuring that critical supplies reach their destination is unfortunately often hampered by travel restrictions and safety concerns due to the ongoing war in large swaths of the country.

Risk communication and community engagement for COVID-19 prevention

With airports and borders closed, quarantine procedures in place at points of entry, schools and some mosques shut temporarily, and public gatherings limited, there is a great need for robust risk communication and community engagement to prevent panic and ensure that people are informed about how to protect and look after themselves. Supported by WHO, the United Nations Children’s Fund (UNICEF) is in charge of the risk communication and community engagement pillar of the response strategy. More than 9000 community volunteers have been mobilized to conduct active case finding and contact tracing, and also to engage intensively with communities and households through traditional media, mosques and social media channels. WHO is itself also reaching out to the whole of society – via radio, television, media briefings and various social media platforms – in order to share the latest information on the situation and promote public health measures that are based on best practices.

While the communication channels are well established, ensuring that the population heeds public health warnings (such as the advice to stay at home or to observe physical distancing) is a challenge, as so many people face far more obvious threats than COVID-19. Despite repeated appeals for a ceasefire by the United Nations Secretary-General3 and the international community, Yemen’s war rages on, resulting in millions of people suffering displacement, injury, sickness and hunger.

As part of large-scale COVID-19 preparedness and response efforts in Yemen, WHO together with the health authorities has provided ambulances, medical equipment, ventilators, medical supplies and disinfectants to the Al Hayat Hospital in Mukalla and to the isolation treatment centre at the Sayoun General Hospital, both in Hadhramaut Governorate. Photo credit: WHO Yemen

---

The role of the United Nations in helping Yemen to prepare for and respond to COVID-19

Under the leadership of the Resident and Humanitarian Coordinator for Yemen, Ms Lise Grande, the specialized agencies and programmes of the United Nations (UN) system are working together in full force, under difficult and often dangerous circumstances, to support a coordinated response to COVID-19. As the senior UN official in the country, her advocacy has been instrumental, not least in facilitating a dialogue between WHO and the national authorities at the highest level (the Prime Minister, line ministries such as the Ministry of Foreign Affairs and the Ministry of Public Health and Population, and the Supreme Security Council), which are playing a key part in the response.

Additionally, an innovative public–private partnership has been forged between the UN and a group of multinational companies led by the Yemeni Hayel Saeed Anam Foundation and including Tetra Pak, Unilever, the Yemen Private Sector Cluster and the Federation of Yemen Chambers of Commerce and Industry. The International Initiative on COVID-19 in Yemen (IICY), as this partnership is known, seeks to assist with channeling critical medical supplies to the country so as to curb and mitigate the spread of the virus. WHO intends to work closely with the IICY partners to provide, through UN channels, further support to local communities, front-line health workers, and clinical and scientific experts.

WHO’s engagement with donors

To ensure that key donors to Yemen’s humanitarian development response remain fully up to date on the situation in the country and on the strategy being applied to address its needs, the WHO Representative, Dr Altaf Musani, leads a weekly call with multilateral, bilateral and other partners. Several of WHO’s long-standing partners are ramping up their support to enable WHO to intensify its preparedness and response efforts. Thus, the World Bank’s International Development Association recently announced that it would provide US$ 26.9 million to WHO; a further US$ 10 million has been generously pledged by Saudi Arabia, US$ 20 million by the Islamic Development Bank and US$ 2.37 million by Germany. This critical funding will cover some of the immediate needs, including the activation of isolation units, but much more will be needed over the coming months.

Projections based on models (developed by several universities) of the evolution of the COVID-19 pandemic in the Yemeni context suggest that up to 16.5 million people could become infected, leading potentially to more than 274,000 cases requiring hospitalization and 35,000 deaths, if public health measures to contain and suppress transmission of the virus are not implemented in good time. The operational costs of dealing with such a scenario would be higher in Yemen than in most other countries owing to the fragile setting, which entails higher supply chain management costs and considerable security risks. The Yemen-wide National COVID-19 Preparedness and Response Plan – which was prepared by the authorities in both Sana’a and Aden, with the support of WHO, other UN agencies and donors – has established an initial funding requirement of US$ 76 million for the next seven months, of which US$ 60 million is needed for WHO to be able to adequately support national preparedness, mitigation and containment measures. Response activities will require much more additional funding.


Moving forward: the challenges lying ahead in Yemen

The new threat posed by the COVID-19 pandemic has coincided with the beginning of the rainy season, which is typically accompanied by several other threats, notably flash floods and an increased risk of transmission of cholera, dengue and diphtheria – all compounded by the severe financial constraints faced by the humanitarian development agencies working in Yemen. Several of the major grants received by WHO are coming to an end, and some traditional donors have decided to withhold further funding for humanitarian operations until the work of the UN agencies and their humanitarian partners ceases to be obstructed by the warring parties. This means that WHO will have no choice but to scale down or even suspend several of its activities in the country, including the cholera response programme, the Minimum Service Package (to strengthen access to, and availability of, health services), and the treatment of children suffering from severe acute malnutrition. In addition to WHO’s programmes, 31 of the UN’s 41 major humanitarian programmes in Yemen will have to either reduce or shut down their activities in April unless funding is urgently received.6

ARGENTINA

Prioritizing for a swift and effective COVID-19 response despite economic fragility and substantial inequalities

Argentina: a complex socioeconomic context

A vast upper-middle-income country of Latin America, Argentina has a population of 44 million, a well-qualified human resource capacity and abundant natural resources. Despite this, there are substantial structural inequalities: it is estimated that 36% of the citizens are living in poverty.¹

Periods of high inflation, deficit and debt load have taken their toll. In 2019, inflation was greater than 50% and the economy slid into deep recession. After successfully negotiating a loan of US$ 56 billion from the International Monetary Fund in 2018, the Government was obliged to introduce austerity measures, including a significant reduction in public spending, and to operate with restricted access to international financial markets.²

Argentina’s COVID-19 preparedness and response efforts: acting swiftly and decisively

Despite the fiscal challenges, Argentina’s newly elected Government acted swiftly and decisively in mid-December 2019 when the first COVID-19 cases were imported. There was rapid detection, isolation and care for infected persons, together with contact tracing and quarantine of contacts. Work was quickly undertaken to scale up the health system in anticipation of more cases. The national authorities took early, bold decisions regarding public health measures, including the closure of borders, schools, public spaces, and businesses as part of a comprehensive lockdown to slow the spread of COVID-19. Simultaneously, social protection measures were increased in an effort to mitigate the severe socioeconomic consequences of a lockdown lasting more than two months, especially among populations in vulnerable situations.

The first COVID-19 case was detected on 3 March 2020, at which time the country had already prepared for its arrival. Nevertheless, by 20 May, Argentina was experiencing community transmission and had 8371 confirmed COVID-19 cases, including 303 new cases in the previous 24 hours³. By 4 June, 19 268 cases had been confirmed, resulting in an incident rate of

² https://www.reuters.com/article/us-argentina-imf/imf-increases-argentina-financing-deal-to-56-3-billion-idUSKCN1N02GK
³ https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200520-covid-19-sitrep-121.pdf?sfvrsn=c4be2ec6_4
Argentina

43 per 100 000 of which 949 were reported in the previous 24 hours; 36% of these cases were attributed to community circulation, primarily in 3 of 24 jurisdictions: the City of Buenos Aires, the Province of Buenos Aires and the Province of Chaco.

With the technical cooperation of PAHO/WHO, Argentina worked quickly to scale up testing. There is now a network of 338 public and private laboratories conducting PCR tests, reaching a testing rate of 4000 per 1 000 000 population by 4 June. While the overall positivity rate of samples is 13%, in the city of Buenos Aires it is 36% and in the Province of Buenos Aires it is 26%, reflecting significant ongoing transmission in these jurisdictions. In all, 10% of all confirmed cases are among health workers. The median age of confirmed cases is 40 years, whereas the median age of fatal cases is 75 years. Overall, the case fatality rate is 3%, but this increases considerably with age, reaching 30% among persons aged over 80 years.

Despite a flattening of the curve during certain weeks, there was an overall upward trajectory of cases, primarily in the city of Buenos Aires and its greater metropolitan area, which extends into the Province of Buenos Aires, currently representing 95% of all cases and almost 50% of the population. In these two jurisdictions by 4 June, 50% of the cases detected were from informal urban settlements or slums while 14 of the 24 jurisdictions were already reporting zero cases and others were reporting zero community transmission. Several of the jurisdictions with zero cases or no community transmission have recently begun a phased approach to relax certain public health measures so as to restart socio-economic activity.

The health system is highly fragmented, making control measures challenging but not impossible. The swift decisions of national and subnational authorities at the highest levels, coupled with intense action at local levels, have thus far prevented an explosive increase in cases that would have overwhelmed the health system. Such actions bought time to increase capacity of the health system, establishing 12 modular hospitals in collaboration with UNOPS in strategic locations and dedicating additional space in the existing health infrastructure. As of 4 June, the number of intensive care beds available for patients with severe disease had not been exceeded by the number of patients needing them.

To date, the response may be characterized by five early Government actions that considerably slowed transmission. These are: (1) strong and clear leadership at the highest political levels taking decisive and early actions through a consultative process that included public health experts, business communities, trade unions, governors, opposition parties, and opinion leaders, among others; (2) an evidence-based approach, with particular reliance on interim guidance from PAHO/WHO contextualized to their own situation while leveraging their own significant technical capacities and capabilities; (3) effective communication with the public including periodic presidential announcements to inform communities in advance about possible forthcoming measures, such as closures of schools, so that the population was more prepared when

---

4 https://www.youtube.com/watch?v=K_xNuVYGdvq&list=PLwad1oRGFEgCiP4Xyab68PBXGuJeWITE&index=7
5 https://www.argentina.gob.ar/salud/coronavirus-COVID-19/sala-situacion
measures were actually implemented; (4) enhanced social protection measures, including expansion of existing
cash-transfer programmes to help the most vulnerable populations and prevent potential social tensions due to
lockdown measures; and (5) an adaptive strategy that involved learning by doing in a very dynamic, uncertain
situation, adjusting constantly to the collateral effects of the measures and also learning from experiences else-
where. These actions may explain the high degree of community engagement in complying with the initial public
health measures, although now the Government is under pressure to find a way to lift these measures due to
severe socioeconomic hardship.

Role of PAHO/WHO in the COVID-19 response

Technical cooperation: interim guidance, needed equipment and diagnostic materials, and
capacity-building and sharing of experiences through virtual webinars

With a long history of close collaboration with the
Ministry of Health at central and provincial levels, and
in the context of a recent change in Government,
Argentina’s PAHO/WHO Country Office has served
as a neutral and objective partner providing evi-
dence-based advice, continuity and institutional mem-
ory to reinforce the Government’s preparedness and
response efforts. Furthermore, an important role of
PAHO/WHO was the rapid sifting of the abundant and
evolving WHO/PAHO interim guidance and tools, and
the accompanying efforts to translate the most rele-
vant resources into the Argentine context in support of
the Government’s development of national protocols
and decision-making.

In the early phases of the pandemic, PAHO/WHO intensively supported the health authorities in rapidly building
laboratory capacity, enabling the country to stay ahead of the curve in its testing capacity in order to effectively
track transmission and take action. In doing so, the existing influenza surveillance platform was strengthened to
detect and confirm COVID-19 cases.

Given Argentina’s highly decentralized health system, there are variations among the 24 subnational jurisdictions
with respect to their preparedness and response capacity to COVID-19. As such, PAHO/WHO also played a role
at the subnational level across the 24 provinces in delivering numerous evidence-based webinars on key topics
such as epidemiological analysis and mathematical modelling, contact-tracing, health system preparation, health
and safety and management of health workers, infection prevention and control, case management, bioethics,
public health measures, mental health, gender-based violence, maintaining essential health services and encour-
aging local innovation. Technical materials and webinar recordings are posted on the PAHO/WHO Argentina
website, which is frequently updated and constantly accessed by the public.7 Several of these webinars also
included an interchange of experiences with other countries. Furthermore, more than 6000 people took courses
on various aspects of COVID-19 available on the PAHO Public Health Virtual Campus.

In addition, the Country Office has worked continuously with the Government and other UN agencies and finan-
cial institutions to procure needed supplies and equipment through the global COVID Supply Chain System as
well as essential services, such as vaccines, through the PAHO Revolving Fund, and essential medicines through
the PAHO Strategic Fund.

7 www.paho.org/arg/coronavirus
Investment in communication for a stronger COVID-19 response

PAHO/WHO has invested considerable time and energy in communication directly with the public to help keep communities informed and engaged on matters related to COVID-19. This has been through regular and active participation in TV and radio interviews as well as timely and cutting-edge written pieces on matters such as mental health, safe return to work, food safety and security, international health regulations and migration, infection prevention and control in vulnerable contexts such as informal urban settings, geriatric centres, psychiatric hospitals and prisons, and the rationale behind various public health measures. This work was sometimes done in collaboration with other UN colleagues and entities such as the UN Resident Coordinator, UNOPS, FAO and IOM. In addition, to amplify accurate reporting and combat misinformation, PAHO/WHO leveraged its existing collaboration with the media community and forged new ones, holding briefings and training for journalists to build capacity in public-health-oriented journalism, increase understanding of COVID-19, and engage them as key players in the response efforts.

Maintaining essential health services

PAHO/WHO has been providing technical cooperation in the maintenance of essential health services, especially at the primary level of care and particularly for maternal and child health, mental health and continued care for chronic diseases such as hypertension, diabetes, HIV and TB. The issues of hypertension and diabetes are of concern, given their 40% and 13% prevalences respectively in adults. An interruption of services could result in a major shadow epidemic of cardiovascular events and other complications. PAHO/WHO is also working with health authorities to understand and eliminate barriers to accessing such services, including a hesitation to seek care due to fear of getting infected with COVID-19. This highlights a unique and timely opportunity for Argentina to strengthen the role of telemedicine in its health systems and services.

Vaccination services have also been a concern, given the immediate need to vaccinate against influenza in time for the peak season in winter, to continue routine vaccination services which experienced a decline in the previous years, and to address the ongoing measles outbreak since 2019. PAHO/WHO has been providing urgent and direct assistance to address vaccine supply issues through urgent purchases in the PAHO Revolving Fund and financing additional human resources to help vaccinate susceptible populations, especially in areas affected by the measles outbreak. PAHO/WHO will remain an important partner in maintaining essential health services, with an emphasis on building strong primary health care for maximum efficiency, effectiveness, equity and resilience against future health emergencies.

Successful containment in the Province of Córdoba

With testing rates three times higher than the national average and full implementation of isolation of cases and quarantine of contacts, Córdoba has demonstrated “best practice” in Argentina with respect to its preparedness and response to COVID-19. Through its sophisticated mapping and monitoring of COVID-19 cases and contacts, health workers and the health system, including monitoring of bed occupancy and performance indicators and operations coordinated by the Emergency Operations Centre, the Province was able to contain three outbreaks of COVID-19.

By 1 June 2020, the Ro of COVID-19 in Córdoba had been lowered to 0.9 and the epidemiological curve had started to descend.

“I am certain that Córdoba’s attitude—of being responsible, of practising solidarity—this attitude of the people of Córdoba, is what will guarantee that our Córdoba will overcome this pandemic”

—Juan Schiaretti, Governor of Córdoba

---

8 Found in section “Entrevistas a la Representante de OPS/OMS en Argentina, Dra. Maureen Birmingham” of www.paho.org/arg/coronavirus
11 https://www.youtube.com/watch?time_continue=249&v=DhXvPJ8lyw&feature=emb_title
12 https://www.argentina.gob.ar/sites/default/files/biv_478_1.pdf
Interagency cooperation in the fight against COVID-19

The United Nations Country Team (UNCT) has been active in supporting COVID-19 efforts in Argentina. For example, UNHCHR and PAHO/WHO are involved in the human rights and health of persons in closed settings or deprived of liberty. UNICEF and UNESCO have been highly active with the Government on the effects of school closures and distance learning, including the mental health and well-being of children during the lockdown. UNICEF has also provided direct support to civil society groups in informal urban settings highly affected by COVID-19. UNOPS worked intensively with the Ministry of Public Works in the rapid establishment of modular hospitals and the purchase of needed equipment. UNDP also purchased needed equipment and supplies for the COVID-19 response. ILO, UNOPS and PAHO/WHO are supporting safety in the workplace as work gradually resumes in certain sectors, and ILO is particularly focused on the impact of COVID-19 on the workforce, especially informal workers. UN-Women has regularly convened the Ministry of Women, Gender and Diversity at national and subnational levels along with other members of the UNCT and key partners in the “Spotlight Initiative” to address the rise in gender-based violence during the lockdown. UNFPA, UNICEF and PAHO/WHO have collaborated on advocacy efforts and promotional materials to ensure access to essential services, such as those for maternal and child health as well as sexual and reproductive health. UNAIDS and collaborating agencies have provided support to populations in situations of vulnerability due to the pandemic and practical measures to ensure continued access to HIV medicines. IOM and UNHCR have been providing direct support to promote the rights and protection of migrants and refugees, facilitating their introduction into the workforce when possible, and strengthening protection and needed supplies in shelters and at the border in the context of COVID-19. The United Nations Information Centres were repurposed to directly support PAHO/WHO early on in its communication efforts. This led to an intensification of media monitoring and messaging through social media and the development of a UN/WHO/PAHO “spot” for screens in the extensive subway system in the Greater Metropolitan Area of Buenos Aires, covering personal hygiene and actions to prevent COVID-19 (https://youtu.be/5VpSTAPVHpM).

Looking ahead to the recovery phase, UNDP has taken the lead in drafting an early analysis of the socioeconomic impacts of the pandemic, while UNCT is developing its UN framework for both the immediate socioeconomic and humanitarian response to COVID-19. UNEP is promoting a green recovery and microenterprise that also creates more resilience against climate change, and ECLAC is looking at innovation and technology as a potential motor for economic recovery. More than ever, COVID-19 is stimulating a high degree of collaboration among the agencies, funds and programmes of the UN system with a view to containing the pandemic and recovering from its very profound socioeconomic impact.
Next steps for Argentina: COVID-19 and beyond

Despite great strides in managing the effects of the COVID-19 pandemic, Argentina still has a long road ahead to contain it and gradually lift social distancing measures to return to a “new normal”. This will require further scaling up of active case-finding and isolation as well as more intensive contact-tracing and quarantine to aggressively drive down the epidemic curve while maintaining strong engagement of the community to do its part in prevention. This is particularly urgent because of the pressure to relax the extensive social distancing measures that have caused significant socioeconomic hardship.

Importantly, the pandemic has laid bare the structural inequalities and chronic, longstanding underinvestment in health systems of the Region of the Americas, and the strong link between healthy populations and healthy economies. Despite the pandemic’s devastating consequences, it may represent an important turning point leading to adequate investment in building the necessary health infrastructure and public health architecture to ensure healthy populations, health security and resilience against future pandemics and other health shocks. PAHO/WHO will continue its technical cooperation with Argentina to learn from its experience, work towards socioeconomic recovery and build on its considerable human resource capacities and other assets. In this way progress can be made towards a healthy, productive population that has universal access to essential health services and resilience to face future health threats, so that no one is left behind.
CAMBODIA

Key areas:

How historical investments in health emergency preparedness, strong Government leadership and trusted collaboration with WHO helped to achieve early success in responding to COVID-19

Highlights

• Cambodia acted quickly to detect and respond to the initial COVID-19 cases and to stop local transmission, and is doing everything possible to be more prepared for the risk of a potential second wave.
• The country’s preparation owed much to its investment in health security.
• WHO had a trusted relationship with the Government and good coordination with partners.

Situation to date and key achievements

Since the beginning of the COVID-19 outbreak the world has been watching and learning from Cambodia’s successful response to the pandemic. As of 8 June 2020 there had been only 126 confirmed cases, no deaths and no infections of health workers. Since extinguishing several clusters of cases in mid-April, the country has experienced sporadic cases imported from other countries.

There are only 0.76 COVID-19 cases per 100,000 people, which is lower than in many other countries in the Region, and there has been no mortality. This is a remarkable achievement for a lower-middle-income country with limited resources.

Three key factors allowed success in the initial response: – continued investment in health security and health emergency preparedness, strong Government leadership, and trusted working relationships between the Government, WHO and technical partners.

Decade-long preparedness has limited spread of the disease

A key factor in the success of the response to COVID-19 is preparedness involving the core public health systems and capacities to address outbreaks and health emergencies. Health security has been a priority for Cambodia over the last decade. With the support of WHO and partners, important investments have been made to improve the health security system. Emphasis was placed on core systems of various surveillance mechanisms to detect and respond rapidly to any infectious health threat and other acute public health events.

Cambodia has developed its health security system in a phased manner, starting from establishing event-based surveillance, rapid response teams (RRTs), and enhancing the health workforce through field epidemiology training. The country implemented event-based surveillance and indicator-based surveillance, real-time database and risk assessment, and strengthened the capacity of the national public health laboratory. As a Member State in the WHO Western Pacific Region, Cambodia received support in building and strengthening its health security systems as guided by the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED III).
Cambodia’s existing surveillance and response systems contributed to the rapid response that occurred after COVID-19 was first identified in the country. Within four days of returning from China on 27 January, the detection, confirmation, isolation and treatment of the first case was completed.

Upon receiving initial warnings from WHO, the Ministry of Health (MOH), and especially the Cambodia CDC, activated the various elements of the surveillance and response system to identify people with respiratory symptoms and a history of travelling. The early warning and response system collects weekly aggregated information on seven syndromes, including respiratory infections, from all public health facilities in the country. Additionally, a national free hotline has been established whereby anyone can call to report suspected events in the community; the RRTs are responsible for follow-up. During the first three months of the COVID-19 pandemic, five clusters of local transmission were identified and contained, thanks to contact tracing by the CDC/MOH surveillance team, which revealed that hundreds of people could have been exposed.

In response to the massive return of migrant workers from Thailand, screening and quarantine measures have been introduced. Quarantine measures have also been implemented for managing garment workers or company employees taking leave during the Khmer New Year.

**Strong Government leadership**

The Government made the fight against COVID-19 its priority. From day 1, the Prime Minister took numerous proactive measures and additional funds were obtained by cutting down on non-essential measures. The entire Government is highly committed and focuses its efforts on COVID-19. With the support of WHO and partners, the MOH developed its National Master Plan for COVID-19 through a multisectoral approach.

In March 2019, the Government launched an Inter-Ministerial Commission to Combat COVID-19, headed by the Prime Minister. The Commission sets national policies and strategies, leads the implementation of the strategic plan for the prevention, control and management of COVID-19, and responds to political, economic and social matters at all levels. A multiministerial committee to combat COVID-19, chaired by the Minister of Health, was also established to oversee the implementation, monitoring and evaluation of the Master Plan among other things.
The National Master Plan has four strategic objectives: to reduce and delay transmission, to minimize serious disease and reduce associated deaths, to ensure ongoing essential health services particularly during epidemic peak periods, and to minimize social and economic impacts through multisectoral partnerships. WHO provided intensive support in all priority areas: incident management and planning, surveillance and risk assessment, laboratory, clinical management and health care services, infection prevention and control, non-pharmaceutical public health measures, risk communication, points of entry and operational logistics.

The MOH established a high-level working group and other working mechanisms to coordinate the COVID-19 response and prepare for large-scale community transmission, including scenario planning, advising on key public health measures, and relaxing or strengthening non-pharmaceutical interventions (NPIs). The WHO Representative, Dr Li Ailan, serves as a technical advisor providing various WHO recommendations.

**Cambodia not only successfully responded to the outbreak on its territory but also accepted the docking of the Westerdam cruise ship and the 2257 persons on board, taking into consideration several factors including the needs of passengers and humanitarian considerations. The Government allowed the passengers to disembark once the following measures had been implemented: all passengers filled in a health declaration form and sample analysis was performed for passengers who reported symptoms; once all samples came back negative the passengers were allowed to disembark.**

WHO provided technical and operational support to the MOH to strengthen the public health response, such as conducting public health risk assessments to inform risk management based on the information available and the current understanding about the new virus, and advising on public health measures at the international points of entry. WHO also facilitated sharing and situation awareness among the Member States, in line with the International Health Regulations (IHR) 2005 and coordinated international efforts to support the MOH’s public health response, in close collaboration with the US CDC, Pasteur Institute in Cambodia, and other key partners.

**Political commitment for global solidarity – Westerdam cruise ship**

A strong collaborative approach between the different partners is key to a successful response to the pandemic; WHO, the US CDC and the Pasteur Institute are the main technical partners of the MOH and work together to manage initial cases and contact tracing. WHO communicated with and coordinated the different partners, including utilizing existing mechanisms with Health Partners Groups (HPGs), development partners lunchnd the UN Country Team (UNCT), in which WHO is the lead technical agency. Together with partners, WHO is committed to work in a united front to enhance preparedness and response, prepare for a potential widespread outbreak, mitigate social and economic impacts and coordinate resource mobilization and technical support. The pandemic was also an opportunity for WHO to start new partnerships, such as operational coordination with NGOs.

Cambodia has had a successful response to the initial cases and took advantage of this window of opportunity to enhance its preparedness. In controlling the first wave, Cambodia bought time to continue preparing its response to COVID-19 and is now better prepared for a larger-scale outbreak possibly involving community transmission.
The National Master Plan has four strategic objectives: to reduce and delay transmission, to minimize serious dis-
seases, risk communication, points of entry and operational logistics. WHO provided intensive
advice to the MOH’s public health response, in close collaboration with the US CDC, Pasteur Institute in Cambodia, and
other key partners.

The National Master Plan is built on three stages of
scenario-based planning, where stage 3 is large-scale
community transmission. Currently, Cambodia remains
in stage 1. Cambodia is not fully ready for a stage 3
response. A stage 3 emergency would put an excessive
burden on the health system, including the health work-
force. With the advice and support of WHO, RRTs have
been expanded, and other sectors and volunteers are
being trained for contact tracing. WHO is supporting
the country to be more prepared for possible large-scale
community transmission by surging public health work-
force capacity and improving electronic health informa-
tion systems, as well as equipping health systems with
the clinical capacity to accommodate a possible high
patient load.

The Government and WHO have worked together to source PPE masks, laboratory testing kits and ventilators and
to identify hospitals and resources. Additional initiatives are currently in progress such as a contact tracing app or
enhancing GoData. In addition to the Pasteur Institute in Cambodia, the National Institute of Public Health (NIPH) is
also being strengthened for laboratory testing and has increased its capacity to respond to demand if needed.

WHO is also working closely with the MOH to conduct field missions, providing tailored support to improve local
preparedness for COVID-19 response as well as non-COVID-19 health services.

Beyond COVID-19, Cambodia continues the provision of essential health
services and commits to health system transformation

While COVID-19 is the clear priority of today, Cambodia has many health challenges that it continues to face and
COVID-19 may bring new opportunities to reprioritize health. Cambodia is currently on the right path towards
malaria elimination despite the COVID-19 pandemic. WHO, the National Malaria Control Programme and other
partners launched a Malaria Intensification Plan for hard-to-reach populations in 2018, addressing increased ma-
laria incidence and improving prevention and malaria case management. Thanks to very successful interventions,
there were no malaria-related deaths in 2018 and 2019. Measles outbreaks have been occurring, increasing the
risk of children contracting the disease. To avert this situation and ensure continuous routine immunization ser-
vice, the WHO Country Office has tried to keep the essential staff working on high-priority health programmes
such as malaria elimination and measles outbreak control, ensuring that no other public health emergencies occur
and leaving no one behind.

Before the pandemic, Cambodia had been working towards greater decentralization of the health system to in-
crease the delegation of administrative functions and resources from national to subnational level, and to improve
efficiency. This transformation has the potential to make the system more accountable and responsive to community
needs. The COVID-19 pandemic offers an opportunity to continue the transformation, building on an enhanced and
resilient health system while engaging local communities and ensuring social protection through health financing.
INDONESIA

Key areas: 🏥_sequences, 🌐_world, 📚_books, 🎯_target, 🧴_cleaning

Protecting the masses: WHO’s health leaders and technical experts support every aspect of the COVID-19 response as the pandemic uncovers chronic shortfalls in the health system

As one of the world’s most disaster-sensitive countries, Indonesia is no stranger to mobilizing an emergency response. However, despite the past management of the severe acute respiratory syndrome (SARS) outbreak (2003), the Boxing Day tsunami (2004) and the avian flu outbreak (2006), Indonesia’s systems were not fully prepared to deal with COVID-19.

Preparing for public health emergencies in Indonesia

The World Health Organization (WHO) has been a longstanding partner of the Government of Indonesia in implementing activities to improve national and subnational capabilities and capacities to detect and respond to emerging infectious diseases (EIDs), including zoonosis from the initial avian influenza outbreaks in 2003. Since 2015, activities have been designed using the One Health approach, working with both the animal and human health sectors. WHO supported Indonesia’s Ministry of Health (MoH) to develop influenza epicentre and pandemic contingency planning, and tabletop exercises in 26 of the 34 provinces as part of EID preparedness.

In 2017, Indonesia underwent a joint external evaluation (JEE) of International Health Regulations 2005 (IHR) core capacities. Since then, the recommendations from the JEE have informed capacity-building initiatives and have formed the basis for the National Action Plan for Health Security (NAPHS 2020–2024). A major challenge is the lack of mechanisms to link the Early Warning and Alert Response System (EWARS) with laboratory diagnosis and data collection, management and reporting, through an integrated and uniform system between surveillance, laboratories and hospitals. Moreover, EWARS reporting is currently limited to primary health care centres, with hospitals not yet part of the system. In this context, and as the world’s fourth most populous country, global academic and news media reports have watched with interest and concern over predictions that Indonesia could be one of the countries of Asia most severely affected by the COVID-19 pandemic.

The President of Indonesia has recognized that the COVID-19 pandemic has uncovered problems in the country’s overall health care system

“He only have 1.2 [hospital] beds per 1000 residents, far behind other countries such as India with 2.7 beds per 1000 residents, China with 4.3 beds per 1000 people and Japan with the highest number of hospital beds per 1000 people at 13.”

“What about the labs, its equipment and its manpower? Or the ratio of health workers, doctors, specialists, nurses? We need to calculate everything.”

“We’ve now seen the importance of health security for the future.”

His Excellency, Joko Widodo, President of Indonesia
Speaking at the National Development Planning Conference, 30 April 2020
Driven by these same concerns, WHO's most senior leaders working at the three levels of the organization – Dr Tedros, WHO Director-General; Dr Singh, WHO South-East Asia Regional Director; and Dr Paranietharan, the WHO Representative in Indonesia – acted early and in unison in their warnings, calls to action and messages of solidarity to the Government of Indonesia (see Fig. 1 for a timeline of key leadership actions). As the epidemic curve continues to rise in Indonesia, this narrative focuses on the role that WHO has played (and continues to play) under each of the main pillars of the WHO Strategic Preparedness and Response Plan for COVID-19 in support of the government. It describes the comprehensive set of interventions at policy, technical and operational level, led by WHO’s 29-person Incident Management Team on the ground (backed up by the WHO Regional Office and WHO headquarters), as well as ongoing work with partners within the United Nations (UN) system and beyond towards a coordinated response.

This case study also highlights challenges, gaps and needs, and is a call to action for Indonesia’s partners to continue to scale up their support and solidarity. WHO is extremely grateful to Japan, Australia’s Department of Foreign Affairs and Trade and the United States Agency for International Development (USAID) for generously funding its COVID-19 operations, with US$ 7.5 million, US$ 4.1 million and US$ 700 000, respectively. Based on an assessment of needs (as at 20 May 2020), WHO estimates that a further US$ 34 million is urgently needed to maintain its intensive support to Indonesia.

**COVID-19 planning, risk and needs assessment in a highly decentralized public health system**

At the provincial level, in late February to early March 2020, WHO led an expert mission to five provinces, to assess preparedness and provide recommendations for action. Since then, WHO has been participating in regular, interactive videoconferences organized by the MoH and the National Board for Disaster Management (BNPB) with the provincial health authorities, to discuss the latest evidence and implementation of COVID-19 guidelines, and to advise on any challenges that provinces might be facing.

In the early phases of the outbreak, WHO collaborated with the Indonesian Epidemiology Association (PAEI), to support the development of transmission scenarios based on the country context. In close collaboration with the MoH, the BNPB and the Ministry of National Development Planning (Bappenas), WHO coordinated the drafting of a National Response Plan for COVID-19 in early April. The plan – signed and endorsed on 20 April 2020 by the Head of the Centre for Health Crisis Management of the MoH – aims to drive a coordinated, whole-of-society approach that includes critical preparedness and response actions.

In line with the National Response Plan for COVID-19, provincial health authorities are being encouraged to develop and implement response plans at province and district level. These plans involve multiple public sectors, communities and the private sector, among others, to ensure joint implementation and monitoring at all levels.

WHO is one of the organizations promoting the WHO Essential Supplies Forecasting Tool (ESFT) to forecast essential supplies. The Indonesian Hospital Association (PERSI) has started to use the tool, and WHO has worked with provinces to increase capacity on the use of the COVID-ESFT. In addition, WHO and United Nations Children’s Fund (UNICEF) field staff were trained to be able to support provinces directly, with the help of a manual provided in Indonesian language, and several virtual meetings and webinars that explain the use of the tool.
Partner engagement for coordinated support to Indonesia’s COVID-19 response

Recognizing the country’s susceptibility to floods, landslides, tsunamis, volcanos, earthquakes and disease outbreaks, in 2014, the Government of Indonesia adopted the UN “cluster approach” in key areas such as health, education, infrastructure, economy and logistics, to ensure that humanitarian agencies in the country can respond effectively in times of emergency and save lives.

On 25 March 2020, the Centre for Health Crisis Management of the MoH held a virtual health cluster meeting involving WHO and other UN agencies, as well as nongovernmental organizations (NGOs), to discuss the response activities and determine clear responsibilities for each agency to support the government in addressing COVID-19. Since then, WHO has been collaborating with the UN Office for Coordination of Humanitarian Affairs (OCHA) and the Resident Coordinator’s Office on the development of a 6-month, UN-wide Multi-Sector Response Plan for COVID-19, which was finalized on 7 May 2020. The plan will help to coordinate the UN’s 22 specialized agencies, funds and programmes in their immediate response to COVID-19, and in their early recovery interventions. Under the leadership of the UN Resident Coordinator, WHO also joined a task force for contingency planning for the UN in Indonesia, and has provided briefings during three virtual townhall meetings for over 500 staff of all UN agencies, to provide an overview of the UN preparedness and situation updates, and to answer questions from staff.

Throughout April 2020, WHO established weekly meetings and videoconferences with key development partners and donors, including the Asian Development Bank, Australian Department of Foreign Affairs and Trade, the Canadian Embassy, the European Union delegation, USAID, the US Centers for Disease Control and Prevention (CDC), UNICEF, the World Bank and the World Food Programme. At the invitation of USAID, WHO also participated at the USAID partners meeting, which included Indonesia GHS (Global Health Security), Johns Hopkins University, UNICEF, and the Infectious Disease Detection and Surveillance (IDDS) project of USAID GHS. WHO’s role in these forums is to brief partners on the latest COVID-19 situation, the response activities underway, and key needs and gaps, to ensure coordination and reduce duplication in the collective support for Indonesia’s COVID-19 response. The aim of the development partner meeting is to coordinate ongoing interventions, exchange information on the evolvement of the situation throughout the country, and ensure that partners have a common approach on technical subjects.

Strengthening laboratories and surveillance systems at the national, provincial, facility and community level for early identification of transmission clusters and collection of data for decision-making

For every country – and particularly one with a population the size of Indonesia’s – being able to find, track and isolate every confirmed and suspected case of COVID-19 is at the heart of an effective public health response. Ensuring well-functioning laboratories and a surveillance system that extends down to community level has been WHO’s driving objective in supporting Indonesian health authorities to combat COVID-19.

1 Other task force agencies include OCHA, the UN Department for Safety and Security, UN Information Centres and the Resident Coordinator’s Office.
Surveillance

At the policy level, WHO is translating emerging and evolving guidance (e.g. definition and reporting of confirmed and suspected cases and deaths, along with priority testing and contact tracing strategies) for the national context and language. Where relevant, WHO is partnering with other agencies in the field to ramp up the dissemination of necessary surveillance guidance. For instance, the International Federation of Red Cross and Red Crescent Societies (IFRC) is a key partner in community-based surveillance, whereas USAID and CDC are essential for the development of the national technical guidance on subjects such as quarantine and isolation for those with mild disease symptoms.

Turning policy into action, WHO is supporting the training of health staff in hospitals and primary care centres, of provincial field surveillance officers across 34 provinces and of lay members of the public who are now working as volunteers in surveillance throughout the country’s 75000 villages (see Box 1). WHO is providing technical assistance to the MoH for field investigation of COVID-19 suspected cases and contact tracing. In Jakarta, WHO has supported the implementation of Go.Data (a new outbreak investigation tool for data collection) in six selected hospitals. In a further seven vulnerable provinces, WHO is working directly with local health authorities to strengthen surveillance. In collaboration with the Directorate of Surveillance in the MoH, WHO participates in weekly virtual meetings with surveillance officers from province and district levels, to strengthen the use of EWARS, to improve early detection of local COVID-19 outbreaks.

Laboratories

Well-functioning laboratories are an important component of surveillance systems. Since March 2020, the MoH has been progressively expanding its laboratory network for COVID-19 testing to include regional, public and private, hospital, clinic-based, and microbiology and virology laboratories. As of 21 May 2020, there were 103 laboratories in the COVID-19 network, and WHO has focused on several key actions to ensure that these laboratories become fully functional as they come on board. These actions include needs assessments and gap analysis (with recommendations for action), the adaptation and dissemination of guidance on all aspects of testing for COVID-19, training of laboratory staff (877 staff in total as of 6 May 2020 – see Box 1), the procurement and supply of tests and supplies, monitoring and reporting on the progress in scaling up of testing in relation to estimated needs, and continually exploring new ways to ramp up testing capacity (e.g. using existing HIV and tuberculosis laboratory infrastructure).

WHO PROCURED VITAL LAB SUPPLIES

Between February and May 2020, five shipments of essential testing supplies were delivered, enabling 75 000 additional tests, along with a shipment of PPE including gloves, gowns, surgical masks and goggles to protect health workers.

GENEROUSLY DONATED BY THE REPUBLIC OF KOREA

Real-time PCR test kits donated worth US$ 500 000. The kits, delivered on 26 April 2020, are enough to test 32 200 specimens.

2 Lampung, North Kalimantan, North Maluku, Papua, South Sulawesi, West Nusa Tenggara and West Papua.
Despite the progress, testing remains a key challenge. Following public criticism for having one of the lowest testing rates per capita, on 13 April 2020, Indonesia’s President called for an increase to at least 10,000 polymerase chain reaction (PCR) tests per day, and in late May he called for an increase to 20,000 per day. The number quickly doubled from 954 tests to 2069 tests in the 10 days following the President’s first announcement; however, by 8 June, the number of daily tests (6988) still fell well short of what is needed for a country with a population of 270 million, and many people with COVID-19 remained undetected, as indicated by the testing positivity rate (11.5% as of May 2020).

Data for decision-making

To keep the government, development partners and the news media abreast of developments across the country, and to support government decision-making, since March 2020, WHO has been collaborating with the MoH to develop and disseminate comprehensive situation reports on a weekly basis. To keep the world informed of developments in Indonesia, and with WHO support, the MoH started to electronically submit weekly COVID-19 surveillance data to WHO’s IHR portal as of 20 April 2020. This global surveillance system provides a mechanism for all Member States to report cases of COVID-19 to WHO in a timely manner, to monitor the pandemic and its severity over time and place, and to inform national, regional and global risk assessment to guide decision-making for preparedness and response.

Ensuring appropriate clinical management of COVID-19 and infection prevention and control in health and community settings

Since March 2020, the Government of Indonesia has been progressively increasing the allocation of health facilities for the referral and care of COVID-19 patients. As of 6 May 2020, a total of 755 hospitals across the 34 provinces had been designated as COVID-19 referral hospitals, with a combined capacity of more than 166,000 beds.

To ensure that the facilities and health workforce are equipped to deal with COVID-19, WHO’s focus has been to rapidly translate and disseminate the latest iterations of global best practice guidance to health care workers nationwide. In doing this, WHO collaborates with professional networks, provincial/district health offices, PERSI and the Indonesian Society for Infection Control. The guidance developed covers everything from case management and infection prevention and control (IPC), to safe waste management and supporting the mental health of health workers. As shown in Box 1, this sharing of information has been accompanied by an immense virtual training effort. Almost 6000 doctors, nurses and other health workers and managers working in hospitals and primary care centres have received training related to their work in COVID-19.

**IMPROVED COVID-19 CASE MANAGEMENT**

At 24 May 2020, 24.3% of people had recovered, compared with 6% in early April 2020, as a proportion of confirmed cases (as of 24 May 2020, Indonesia)

Indonesia is the largest archipelago in the world, comprising five major islands and about 30 smaller groups of islands. In this logistically challenging context, there is a need to ensure the adequate supply of essential personal protective equipment (PPE), diagnostic test kits, medicines and biomedical equipment, and that human resources for health are available where needed across the country. To meet these needs, WHO is coordinating with the Centre for Health Crisis Management of the MoH, the Ministry of National Development Planning, BNPB, PERSI and provincial-level health authorities to roll out the WHO COVID-ESFT, which estimates the needs of essential supplies in each province based on their respective clinical attack rates.
On 1 April 2020, using the COVID-ESFT, the MoH completed the mapping of essential health equipment and health care workers, identifying health care workers across the 34 provinces for mobilization for the pandemic response if required. At the same time, WHO’s “oxygen capacity” survey tool was disseminated through PERSI, to determine the capacity of health care facilities to provide for critically ill patients with severe respiratory distress. Based on these findings, WHO has been able to share recommendations to key stakeholders and partners concerning the country’s critical supply needs.

The increasing rates of patients recovering from COVID-19 offer some early positive indications of improved case management in Indonesia. However, reports from the Indonesian Medical Association that at least 22 doctors, six dentists and 10 nurses have died from COVID-19 (as of 13 April 2020) are of great concern. Although WHO has worked hard on training and translating its online courses (IPC and eProtect) into Indonesian, and producing materials for health facilities on the safe and rational use of PPE, the reality is that hospitals across the country still lack sufficient PPE to protect their workers.

Another key concern is the management of potentially hazardous health care waste in health facilities, and the MoH has highlighted an urgent need for mobile incinerators and autoclaves in Java, Kalimantan, Sulawesi and Sumatra. WHO and the UN Development Programme (UNDP) are working together to meet the request; four mobile incinerators and four autoclaves were expected to be shipped in mid-July 2020.

At the community level, generally poor sanitation and hygiene conditions, along with significant rates of malnutrition among children, are important underlying concerns in the context of COVID-19. WHO has engaged with local and international NGOs, as well as provincial government and community groups, in workshops to highlight the role of safe water, sanitation and health (WASH) in controlling COVID-19 at the community level.

In collaboration with the MoH, UNICEF, the Ministry of Social Affairs, the Ministry of Environment and Forestry, the BNPB and NGOs, WHO is exploring mechanisms to rapidly improve people’s access to safe sanitation, water supply and handwashing facilities at the community level. If successful, this will have far-reaching and long-term benefits for people’s health and development, even after COVID-19 is controlled. For example, unclean water is a major cause of diarrhoea, which is the leading cause of child mortality in Indonesia.
Box 1. In the initial 3 months of the COVID-19 pandemic, WHO delivered an astounding 66 days of virtual training, across Indonesia, on all aspects of the response

>5800 doctors, nurses, other health workers and health facility management (at primary care and hospital level) trained in COVID-19 case management and service delivery, surveillance and laboratory practices, IPC, waste management and mental health care for patients and health workers in the context of COVID-19

>42 chief editors from 16 national media channels, journalist associations, the national MoH, provincial-level spokespersons (including religious leaders) and other partners trained in risk communications for COVID-19

200 heads of disease control and prevention units at district, provincial and central level, and port health offices trained in COVID-19 surveillance and contact tracing

>1700 community COVID-19 volunteers from across the country trained in community surveillance and action

>877 laboratory technicians trained in protocol for COVID-19 PCR testing and biosafety and security, and 18 senior laboratory technicians from nine provincial laboratories undertook advanced training (as of 20 May 2020)

>350 key decision-makers (MoH, provincial health officers, port health officers and others) trained in response planning – including forecasting needs, and development and implementation of provincial response plans (including large-scale social restrictions)

>300 stakeholders working with international and national NGOs, community groups, local government and professional bodies trained in community-level interventions in the context of COVID-19, including water and sanitation, nutrition and mental health

>25 research staff from 22 hospitals are participating in the Solidarity Trial on randomization of study participants and website reporting

57 clinical and management staff at Jakarta’s prison referral hospital trained in establishing a surveillance system, PCR testing, case management, IPC, water safety, waste management and environmental cleaning in health facilities

>1500 health workers and stakeholders trained in the Strategy for Sustaining Routine Immunization Services during the pandemic as a top priority (run as part of World Immunization Week activities and in collaboration with the MoH, the Indonesian Pediatric Society and UNICEF)

(includes training delivered during the period 4 March – 11 May, unless otherwise specified)
Maintaining essential health services amid the COVID-19 response and social measures

All over the world, COVID-19 is disrupting essential health services. Recently, WHO, GAVI (the Vaccine Alliance) and UNICEF warned3 that up to 80 million children around the world – in rich and poor countries alike – may be missing out on life-saving immunization services, putting them at risk of diseases such as diphtheria, measles and polio. According to national MoH data, this also appears to be the case in Indonesia. For instance, the number of children missing out on their full three doses of Pentavalent4 rose from 319 000 in the first quarter of 2019 to 546 000 in 2020, with hundreds of thousands more children missing other routine vaccinations. Services for communicable diseases have also been disrupted – for example the monthly new cases of tuberculosis detected dropped from an average of 44 100 to 9300. To ensure the continuity of essential health services alongside the pandemic response, WHO is working closely with the MoH and other partners such as UNICEF to coordinate stakeholders across the country via webinars. The aim is to address challenges and find solutions to maintaining essential health services, such as programmes for maternal health, immunization, tuberculosis and noncommunicable diseases. Ensuring a robust supply chain of medicines is a big part of this initiative. Using WHO’s MedMon tool, a rapid assessment of the availability and affordability of essential medicines in health facilities in the context of COVID-19 has been undertaken.

Vaccine preventable diseases

Following on from national awareness-raising activities during World Immunization Week (24–30 April 2020), WHO supported the development of new national guidance for continuing immunization services during the COVID-19 response. The new guidance was endorsed in mid-May by the National Technical Advisory Group on Immunization, and the Indonesian Pediatric Association (IDAI), and was disseminated to all provinces and districts. The guidance emphasizes the continuation of immunization services, with the addition of strict infection prevention measures. Adapting to the new realities, health care workers are now making appointments with parents by phone, to avoid overcrowding during clinic hours; also, they have been equipped with appropriate PPE and extra handwashing facilities.

In addition to maintaining services, WHO is supporting Indonesia to ramp up surveillance for polio (acute flaccid paralysis), measles, rubella and diphtheria, integrating this with COVID-19 surveillance efforts wherever possible, to monitor outbreaks of all disease through coordinated efforts.

Malaria and dengue

Based on WHO guidance released in early April, and coinciding with World Malaria Day on 25 April, the MoH has also developed and disseminated a new protocol for continuity of malaria diagnosis, treatment, surveillance and vector control in hospitals and primary care centres. Guidance on the continuation of dengue control programmes has also been disseminated to all provincial health offices; it mandates that the provinces with the greatest burden of dengue (Jakarta, Lampung and West Java) step up surveillance and conduct differential diagnosis for each confirmed dengue case when there are other clinical signs of COVID-19.

---

4 Pentavalent vaccine protects against five major diseases: diphtheria, tetanus, pertussis (whooping cough), hepatitis B and Haemophilus influenzae type b (DTP-hepB-Hib).
Ensuring mental health and psychosocial support in the context of COVID-19

Since mid-March, WHO has been working in close collaboration with the MoH to address the mental health needs of different populations in the context of COVID-19. These populations include older adults, people with disability, children, adults in quarantine, frontline workers, managers and the community. WHO shared the Inter-Agency Standing Committee briefing note on Mental Health and Psychosocial Support (MHPSS) during COVID-19 in Indonesian, and helped to facilitate national stakeholder consultation to map the mental health needs, identify interventions required for specific groups and assess specific groups’ access to the services.

Following this, WHO supported the drafting of national guidance on MHPSS during COVID-19. The guidance was soft launched on 26 April 2020 through a webinar convened by the Directorate General of Disease Prevention and Control in the MoH, and was attended by province and district health offices, local and international NGOs, and various sub-directorates within the MoH. Subsequently, the MoH and the Indonesian Psychological Association (HIMSI) have started providing mental health service facilities through a COVID-19 call centre for people experiencing discomfort or anxiety during the pandemic.

Providing systematic and far-reaching COVID-19 risk communications – and messages of solidarity

Teaming up with other UN agencies in Indonesia, WHO has led an aggressive COVID-19 communications campaign. In addition to the rapid translation and dissemination of volumes of up-to-date guidance and more than five online courses (see Box 1 for the government, WHO has made use of the local media, social media and other stakeholders (including religious and community leaders) to reach, inform and engage people across the country. At the outset of the pandemic, WHO trained journalists on COVID-19 and, in April 2020, collaborated with UNICEF on stakeholder communications training (see Box 1).

WHO’s media statements have covered key issues of interest to the public; for example, the “dos and don’ts of mask usage”, risk factors for vulnerable people and safe Ramadan practices in the context of COVID-19. Furthermore, WHO’s Indonesia website is constantly updated with translated information on everything from coping with stress during COVID-19 to food safety. The platforms Instagram and Twitter are used to regularly engage the public and inform them on situational developments and key health messages. Also, in mid-April, the UN launched a social media campaign in Indonesia, driven by the messages of the UN Secretary-General and WHO’s Director-General, calling for solidarity and hope to defeat the pandemic.

Embracing Indonesia’s role in global research and vaccine development

Indonesia has joined the WHO-led international clinical Solidarity Trial to examine the potential effectiveness of different drug regimens to treat COVID-19. In support, WHO worked with Indonesia’s National Institute of Health Research and Development (NIHRD) in its application for national research ethics approval and the recruitment of 22 hospitals into the trial. On 23 April 2020, the first patient from Indonesia – and the WHO South-East Asia Region – was enrolled in the WHO Solidarity Trial, which compares four arms of treatment: chloroquine or hydroxychloroquine, lopinavir/rotinavir, lopinavir/rotinavir with interferon beta-1a, and remdesivir. WHO is providing support to NIHRD and principal investigators in participating hospitals for the randomization system, scaling up the enrolment of patients, website reporting and help in sharing the lessons learned.

At the end of April 2020, the WHO Regional Office for South-East Asia facilitated the participation of the Indonesian manufacturer PT Bio Farma in an initial meeting for vaccine manufacturers (including from India and Thailand) and national regulatory authorities from the region. The Indonesian company shared a plan and timeline for COVID-19 vaccine development, and work is ongoing to support rapid evaluation and deployment of high-quality, safe and effective candidate COVID-19 vaccines.
What’s next for Indonesia?

With large-scale social restrictions in place since 31 March 2020, the country’s economy and businesses are suffering; this has affected millions of workers, with at least 2.8 million people losing their jobs. As in most countries, there is a desire to reignite the economy and allow people to return to work; however, on 16 May, President Joko Widodo announced that he will not yet ease the large-scale national social restrictions. Instead, the government aims to keep residents both productive and safe in a “new normal” with COVID-19, while gradually allowing more businesses to open with added health precautions to prevent further transmission.

The health authorities in all 34 of Indonesia’s provinces rely on WHO’s guidance and support to know when and how to safely begin adjusting these public health and social measures. The decision to ease social restrictions at the provincial level is based on a complex set of factors that include not only the scientific evidence, epidemiological risks and public health capacities, but also economic factors, human rights, food security and community perceptions and adherence. WHO’s country office is working closely with the WHO Regional Office for South-East Asia and the German Development Bank (KfW) to trial a new tool for mapping and monitoring key indicators related to easing social restrictions. The work and dialogue with 34 provincial health officers through videoconferencing will continue to support decision-making as the situation evolves.

During the first few months of the pandemic response in Indonesia, important gaps in the health system became apparent, which has led the Government of Indonesia to plan a major health system reform. The pillars envisaged in the reform include strengthening health promotion and preventive functions, increasing telemedicine services, increasing mobile/flying service delivery in remote areas, redistributing the health workforce, digitizing service data in health posts (posyandus) and community health centres (puskesmas), and reforming health financing. WHO will provide comprehensive technical expertise towards this important reform.

Moreover, WHO will provide technical assistance towards the integration of COVID-19-related public health measures into national health policies, strategies and plans. One of the key elements will be the strengthening of event-based surveillance and technical support for the transition towards a public health laboratory network.

---

5 According to data from the Employees Social Security System (BPJS Ketenagakerjaan), as of 13 April 2020.
### Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

**Fig. 1 Leadership Interventions in Indonesia’s COVID-19 Response (Jan-May 2020)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Jan</td>
<td>WHO declares COVID-19 a Public Health Emergency of International Concern (PHEIC)</td>
</tr>
<tr>
<td>1 Feb</td>
<td>Indonesian President Joko Widodo announces the first two confirmed cases of COVID-19</td>
</tr>
<tr>
<td>11 Feb</td>
<td>WHO’s Director-General Dr Tedros sends a letter to the President of Indonesia with key recommendations for action and an assurance of WHO’s continued support</td>
</tr>
<tr>
<td>Enc Feb/-Mar</td>
<td>WHO’s Headquarters and Regional Office joint mission to support WHO country staff in field visits to 5 provinces to assess the early warning and response system and provide technical assistance</td>
</tr>
<tr>
<td>2 March</td>
<td>WHO’s Country Representative, Dr Parانيetharan repurposes his office establishing an Incident Management Team of 29 core members to support every aspect of Indonesia’s COVID-19 response</td>
</tr>
<tr>
<td>Early March</td>
<td>Dr Tedros personally calls President Widodo to discuss Indonesia’s response and WHO’s cooperation for urgently scaling up</td>
</tr>
<tr>
<td>10 March</td>
<td>The President announces national social distancing measures encouraging working, studying and worshipping at home and postponing mass gatherings</td>
</tr>
<tr>
<td>11 March</td>
<td>President Widodo advises the public to skip the yearly tradition of mudik, where people travel back to their hometown for the festival of Eid</td>
</tr>
<tr>
<td>1 March</td>
<td>Indonesia allocates almost USD 25 billion for healthcare spending, social protection, tax incentives, and credit for businesses and economy recovery programmes</td>
</tr>
<tr>
<td>13 March</td>
<td>Media reports about a spike in Jakarta burials in March 2020 prompt further investigation on COVID-19 related deaths</td>
</tr>
<tr>
<td>15 March</td>
<td>Indonesia forms a COVID-19 Operational Taskforce, under the head of the National Board for Disaster Management (BNPB) and other relevant Government agencies.</td>
</tr>
<tr>
<td>31 March</td>
<td>President Widodo declares a national disaster requiring regional governments to follow central government policies and orders a scale up to 10,000 PCR tests per day</td>
</tr>
<tr>
<td>1 Apr</td>
<td>President Widodo approves Jakarta’s large-scale social restrictions amidst growing transmission</td>
</tr>
<tr>
<td>2 Apr</td>
<td>The Ministry of Health approves Jakarta’s large-scale social restrictions amidst growing transmission</td>
</tr>
<tr>
<td>2 Apr</td>
<td>WHO Regional Director Dr Singh meets with health ministers in the region calling for countries to take a whole of society approach</td>
</tr>
<tr>
<td>3 Apr</td>
<td>WHO Regional Director Dr Singh meets with health ministers in the region calling for countries to take a whole of society approach</td>
</tr>
<tr>
<td>7 Apr</td>
<td>President Widodo declares a national disaster requiring regional governments to follow central government policies and orders a scale up to 10,000 PCR tests per day</td>
</tr>
</tbody>
</table>
Malawi

Key areas:

WHO’s support during COVID-19: designed for the unique challenges of the country

Even before the President of Malawi announced the first cases of COVID-19 on 2 April, he had declared a state of disaster (by Presidential order on 20 March 2020), and social distancing was put in place, mass gatherings were limited, and schools, colleges and universities were closed; borders were closed except for transit of essential goods and services. A national COVID-19 strategic preparedness and response plan had been prepared in collaboration with WHO.

On 7 May, the President appointed a special Cabinet committee on COVID-19, chaired by the Minister of Health and comprising ministers and top Government officials. The Committee was later replaced by a Presidential task force with members from Government, nongovernmental organizations (NGOs) and civil society.

Health sector coordination

WHO co-chairs a “health donor group” with the United Kingdom Department for International Development, which has met every 2 weeks since COVID-19. In this role, WHO ensures that the group addresses strategically important items. The group allows open debate among health sector partners, and WHO provides technical policy advice on relevant agenda items. Within the Government, WHO co-chairs a health cluster meeting with the Chief of Health Services, which discusses donor contributions and identifies any gaps in the response plan.

The United Nations and NGOs in Malawi have adapted and adjusted the priorities of funded programmes in light of COVID-19 and have reprogrammed at least US$ 8.3 million. WHO worked with the United Nations Resident Coordinator and the United Nations Country Team to launch an emergency flash appeal for Malawi to boost the health response to COVID-19 while at the same time maintaining essential services and goods, providing safety nets for the most vulnerable and at-risk communities and avoiding inequality. The emergency appeal served as a basis for the national COVID-19 preparedness and response plan launched by the Government on 8 April 2020, which called for US$ 194 million to address the pandemic.

Key challenges

COVID-19 reached Malawi in a highly politicized context, with the Constitutional Court annulling the results of the 2019 election and ordering fresh elections, set to take place in June. With perceived low levels of public trust and in a context where more than half the people live in poverty,1 the Government and its partners faced unique challenges in engaging the public to defeat COVID-19.

Blockage of the lockdown

As part of its response, the Government announced a 21-day lockdown from Saturday 18 April; however, the High Court temporarily blocked the Government from implementing the lockdown after protests and a petition by a

---

coalition of human rights groups calling for more consultation to prevent harm to the poorest and most vulnerable members of society. The High Court granted an injunction for 7 days, pending judicial review, and the decision on a lockdown was later referred to the Constitutional Court.

Influx of returnees and deportees

Another challenge has been the large influx of (mainly undocumented) returnees and deportees, arriving mainly from South Africa. As of late May, some 1000 people had arrived by bus or plane, creating a logistical and public health challenge for authorities trying to protect the population from imported cases of COVID-19. Finding appropriate housing and security was a problem, and many people absconded from quarantine and confinement. Long delays in receiving testing results and false contact information limited contact-tracing and follow-up of suspected cases.

To address these challenges, WHO has worked closely with the emergency operations centre and other Government structures, provided guidance for standard operating procedures in preparation for returnees and deployed rapid response teams to ensure their smooth reception and management between their points of entry and their communities. WHO also coordinated collaboration among immigration authorities and laboratory and surveillance teams to ensure a comprehensive database for following up contacts and cases in their districts. WHO also supported assessment of sites for use as temporary quarantine centres while the returnees were waiting for laboratory results. When the first groups of returnees absconded, WHO worked with communities to raise their awareness of the challenges and to improve the facilities for subsequent returnees.

Countering false rumours

While WHO provided technical assistance for risk communication and community engagement, the plan was not fully coordinated, resulting in incorrect information and messages about the COVID-19 situation in Malawi. One was general public distrust in the authenticity of laboratory tests and whether there were in fact cases in Malawi. To counter these misconceptions, the Ministry of Health organized a press briefing on 24 April 2020, attended by the Minister of Health, the WHO Representative, Dr Nonhlanhla Rosemary Dlamini, high-level officials and the Country Director of the US Centers for Disease Control and Prevention, to reassure the nation that the tests were valid. In her speech, Dr Dlamini reaffirmed the commitment of WHO and the family of United Nations agencies to support the Government on all fronts in addressing the COVID-19 pandemic.

The media briefing was broadcast on national radio and television and in social media. WHO’s continued technical advice at policy level has improved risk communication and community engagement, and the Minister of Health has become the national COVID-19 spokesperson at regular press briefings.

“WHO is supporting Malawi with the implementation of the preparedness and response plan, including strengthening laboratory capacity. WHO has procured and supplied testing reagents and specimen collection swabs and assisted in the development of standard operating procedures for carrying out tests. WHO can validate the authenticity of the laboratory tests that are conducted for COVID-19 and can attest to the high standards that have been attained. Lab technicians have been trained locally and some outside the country. The training is ongoing to ensure that high standards are maintained at all times.”

The WHO Representative to Malawi, Dr Dlamini, making a statement on 24 April 2020 at a joint press briefing with the Minister of Health (far left) and the Country Director of the US Centers for Disease Control and Prevention (back) Photo credit: WHO Malawi
WHO technical and financial support

It was apparent at the weekly physical and virtual meetings that some affected districts were having difficulty in following up COVID-19 cases in self-quarantine and in contact tracing. To increase the capacity of district surveillance teams to collect samples, trace contacts, impose self-quarantine and report, WHO has provided modest financial support (approximately US$ 13 000 each) to placing surveillance officers in the health offices of the worst-affected districts, Blantyre and Lilongwe, and in the Public Health Institute of Malawi. In addition, the WHO Country Office has recruited a person to coordinate work on COVID-19 preparedness and response.

To ensure minimum basic hygiene to prevent the spread of COVID-19, WHO procured and distributed buckets and soap for hand-washing in 30 hard-to-reach health facilities in the 10 border districts. An additional 60 hand-washing sets were procured and distributed to Kamuzu Central Hospital and its disease isolation centre. WHO has also provided laboratory commodities to increase the capacity for COVID-19 testing, including laboratory reagents and testing swabs to the National Reference Laboratory. Currently, Malawi has 14 laboratories capable of testing for COVID-19 located throughout the country. Personal protective equipment was recently distributed to front-line health workers in the six districts of the Northern Region with WHO support, and WHO provided US$ 23 000 to the department of quality management to orient health workers in donning and doffing the equipment, with dissemination of the guidelines and training in use.

Repurposing and strengthening WHO country capacity

To support the Ministry of Health effectively, WHO activated an incident management system for the most critical functions, including every pillar of the country strategic response plan; country-level coordination, planning and monitoring; risk communication and community engagement; surveillance, rapid response teams and case investigation; activities at points of entry; national laboratories; infection prevention and control; case management; and operational support and logistics.

Learning and adapting

As COVID-19 is a new disease, continuous preparation and planning are necessary as new information about the virus becomes available and can be applied to the Malawi context. The national strategic preparedness and response plan was therefore revised at a workshop during the first week of June 2020, at which WHO technical staff and consultants made significant inputs.
Maintaining essential health services in the context of COVID-19

WHO Malawi has contextualized the new operational guidance from WHO to ensure the maintenance of essential health services. From the start of the pandemic, each essential programme developed its own response plan to ensure the continuum of care while keeping clinics safe. When WHO, as chair of the health donor group, was informed of possible suspension of routine national immunization services due to COVID-19, WHO immediately wrote to Malawi’s Secretary of Health to intervene, explaining the public health risks of suspension, and successfully convinced the Government to review its decision.

Health facilities in the 28 districts of Malawi still lack relevant equipment and supplies for the care of pregnant women during the antenatal, perinatal and postnatal periods. Although access to health services in districts has improved, the centres often have stock-outs of essential medicines and supplies for managing obstetric complications and a shortage of trained personnel to provide comprehensive and basic services in designated emergency obstetric care settings. These shortages are compounded by the shift in health financing towards COVID-19. While the Government has prepared 11 treatment centres across the country, there is no designated space to isolate pregnant women in antenatal, labour and delivery rooms, no comprehensive obstetric care services such as caesarean section and no postnatal care for newborn babies. The ability of health care facilities to provide a safe space for maternal care, including labour, deliveries and caesarean section, is likely to be compromised in the event of spread of the virus, including the availability of equipment and supplies.

To address this problem, WHO and other United Nations agencies secured US$ 1 million from the United Nations COVID-19 Response and Recovery Multi-partner Trust Fund for an emergency response for continuity of maternal and newborn health services. This will ensure coordinated support from WHO, UN Women and the United Nations Population Fund to the health care system in Malawi, so that pregnant women can access antenatal, labour, delivery and postnatal care during COVID-19.

In the revised plan for the 6 months from July to December 2020, the continuum of care and recovery are critical components. To ensure that the plan reaches district level, WHO will support districts in implementing and monitoring the delivery of routine services envisaged in the plan.
SIERRA LEONE

Key areas:

Rapid preparedness, political commitment and strong collaboration: lessons learned from Ebola helping Sierra Leone to fight COVID-19

Sierra Leone is a country with a history of significant hardship. The giant Cotton Tree that sits in the middle of the capital, Freetown, is hundreds of years old and marks a place where former slaves who landed in Sierra Leone held thanksgiving services for their deliverance to a free land. In the 1970s, the world’s third-largest gem-quality diamond was found in the country; diamond mining contributed to the civil war in the 1990s, which lasted 11 years, left over 50 000 people dead and ravaged the country’s infrastructure. In 2014–2015, the country was hit by the west African Ebola outbreak (which also affected Guinea and Liberia) and 14 124 people were infected, with 3956 deaths (case fatality rate 28%). In the context of COVID-19, Sierra Leone has the opportunity to demonstrate what was learned during Ebola; about how rapid emergency preparedness, coupled with political commitment, solidarity, donor support and strong collaboration, can save lives. Of course, there is a long way to go. The country is still heading up the epidemiological curve, with Sierra Leone now having the fifth-highest reported number of COVID-19 deaths in west Africa.

COVID-19 in Sierra Leone: data & policy

The country’s first confirmed case of COVID-19 was recorded on 31 March, when much of the rest of the world was struggling to contain the spread of the virus. The first confirmed case was a traveller from Europe who had gone through a 14-day institutional quarantine, as per Government policy. At the time of discharge from quarantine, the person tested positive for the virus. Thankfully, there was already polymerase chain reaction (PCR) testing capacity for COVID-19 in the country. Fast-forward by two months to 5 June 2020, and the country, numbering almost 8 million inhabitants, had 929 confirmed cases (13% of those tested) and 47 deaths.

From the onset of the pandemic, WHO has been working hand in hand with the Government and stakeholders to prepare for and respond to the spread of COVID-19 using the country’s three-stage plan: preparedness, readiness and full-blown response. On several occasions, at the invitation of the President, the WHO Representative, Evans Liyosi, has attended State House meetings to provide briefings on the situation and technical advice to guide decision-making; at times, openly debating and discussing challenges such as the sustainability of the country’s quarantine facilities. WHO is working with the Government on all three levels of the national response: the Presidential Task Force, the National COVID-19 Emergency Response Centre (NACOVERC) led by the Ministry of Defence and various technical pillars to ensure a harmonized approach to the COVID-19 response in line with the latest global evidence.
WHO Country Office on the front line

Under the leadership of the WHO Representative, the WHO's Country Office provides high-level strategic advice and technical assistance to support the Government in the implementation of the national preparedness and response plan. Well before the first case of COVID-19 was detected in Sierra Leone, WHO supported the Ministry of Health and Sanitation in conducting a nationwide assessment of points of entry, leading to the implementation of measures to control and strengthen surveillance at airports, seaports and border crossings.

WHO, the Ministry of Health and Sanitation and other partners evaluated national designated quarantine, treatment and isolation facilities and jointly set up new facilities within and outside the capital, Freetown. The sustainability of these quarantine facilities is an issue of concern as the numbers of confirmed cases rise; the Government has therefore taken WHO's advice to institute a policy of self-quarantine for exposed people instead, where possible, to reduce the burden on quarantine facilities.

With financial support from partners, WHO plans to decentralize its operations by opening five hubs across the country, thus further strengthening the Government's efforts to decentralize the COVID-19 response down to the subnational level, using the public health emergency operational centre framework. The decentralized WHO hubs will support districts in critical functions like coordination, surveillance and contact-tracing, data and information management, infection prevention and control (IPC), case management, continuity of essential health services, risk communication and community engagement. To ensure closer support for all 16 districts, each hub will support 3–4 districts. Each hub will be a functional office with around five personnel (coordinator, community engagement officer, IPC officer, data manager and driver) and they will be maintained for the foreseeable future.

Ensuring essential health services and local capacities

The country has one of the highest maternal mortality rates in the world; malaria is rampant and many children under 5 years die of vaccine-preventable diseases. COVID-19 threatens to destroy the fragile gains that were achieved after the Ebola response and which are now needed for providing essential health services. Consequently, WHO is also on the frontline to ensure the maintenance and delivery of essential health services in Sierra Leone. Even as many Country Office staff were diverted to supporting the COVID-19 response, a number of staff remained fully dedicated to supporting the Government in routine health management systems, referral mechanisms and the adaptation of WHO guidelines on COVID-19 to ensure continuity of care and stop the decline in health-seeking behaviour for essential health services. WHO advised on the adjustment of critical health programmes such as routine immunization for children, reproductive, maternal and neonatal child health, malaria and tuberculosis. However, mental health and psychosocial support services are scarce and represent one of the larger unaddressed COVID-19 challenges on which WHO and the Ministry of Health and Sanitation will continue to collaborate. WHO support was enabled through the generous support of donors – the
Training health workers is another key area of WHO’s support to Sierra Leone. WHO supported the Ministry of Health and Sanitation in training over 1600 health-care workers on surveillance (case investigation, contact-tracing, quarantine and points of entry), case management and IPC. More than 50 laboratory technicians have been trained in collection and transportation of samples. Since air traffic in and out of the country was almost non-existent, WHO trained 24 pharmacists from eight of the country’s 16 districts to produce alcohol-based hand rub locally. As a result of this DFID-supported initiative, hospitals are no longer dependent on imported hand rubs, as each site is able to produce 400 litres of the solution per day. A total of 20 000 litres will be produced by the end of July. WHO is also supporting assessments and management of personal protective equipment (PPE) in health facilities. WHO has been involved in the quantification of PPE needs, liaising with the WHO Regional Office for Africa and WHO headquarters to fast-track the distribution of supplies. The Country Office also worked with the World Food Programme to coordinate and facilitate the shipment of a huge consignment of PPE, including 50 000 surgical masks, 500 N95 masks, 20 000 examination gloves, 2400 disposable gowns, 400 safety goggles, 1800 face shields and 500 respirator masks – all donated by Jack Ma and Alibaba.

Lessons from Ebola outbreaks over the last decade in west Africa have taught public health responders about the great need to engage and inform the community, and reaffirm WHO’s firm commitment to leave no one behind. Given Sierra Leone’s history and health challenges, and people’s low levels of health literacy and sometimes limited trust in the health system, communities need to be actively engaged and informed on ways of staying healthy and preventing the spread of COVID-19 – even where many people remain asymptomatic. Trust in the Government and the health response is essential to ensure that people access the COVID-19 testing and treatment they need. In collaboration with the United Nations Development Programme (UNDP), WHO and other partners, the Ministry of Health and Sanitation organized training sessions for over 700 community mobilizers to tackle the issue of COVID-19-related stigma in Freetown’s slums.

With already limited financial resources, Sierra Leone is relying on WHO to advise on where to direct each precious cent. Using WHO forecasting tools, Sierra Leone has estimated the country’s needs for critical laboratories and IPC and case management materials and supplies. Besides facilitating the shipment of the supplies donated by Jack Ma and Alibaba, WHO played a critical role in negotiating the opening of the humanitarian corridor that enabled access to critical outbreak response supplies. The first passenger humanitarian flight landed at Lungi Airport on Tuesday 2 June – the first since the closure of the airport on 20 March 2020. Earlier on, in May 2020, the Country Office had received two large consignments on behalf of the Ministry of Health and Sanitation. These consignments were delivered with close to 19 000 swabs and viral transportation media tubes, 18 912 PCR extraction kits, 5000 items of medical disposable protective clothing, 28 000 medical masks, 3800 face shields, 2800 N95 respirators, 44 thermometers, four ventilators and 19 000 gloves.
Working “as one” with United Nations agencies and international partners

Fostering and convening of partners under the WHO health coordination umbrella has contributed significantly to a harmonized and unified response to COVID-19 so far. The United Nations country team, consisting of 22 United Nations agencies, funds and programmes and other international partners present in Sierra Leone, including DFID, United States Agency for International Development (USAID), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and Irish Aid, entrusted WHO with leading the overall health response to COVID-19. The representatives of USAID and CDC, DFID and the European Union regularly meet the WHO Representative and rely on WHO updates on the epidemiological situation to discuss sensitive issues and then offer support for the Government that meets the needs of the people of Sierra Leone. WHO regularly convenes the health development partners, a mix of multilateral and bilateral donors including representatives of nongovernmental organizations, to discuss strategic or technical topics on the COVID-19 response, and facilitates the link to the national response coordination. An online tool developed with support from CDC allows for increased coordination, accountability and transparency in the use of international aid in Sierra Leone. In the context of COVID-19, this tool remains a key resource to ensure coordinated support by partners for the Government.

What can we learn from the experience of Sierra Leone?

**Preparedness is key:** building on the experiences and emergency coordination infrastructure of the 2014–2015 Ebola response, WHO and the Ministry of Health and Sanitation wisely used the time before the first confirmed case of COVID-19 to revitalize and upgrade the country’s emergency preparedness procedures and operations structures. In particular, WHO supported the rapid strengthening of the national disease surveillance and response system, expanding its capacities at district level to withstand contagion. At the same time, WHO helped the Government to anticipate the need to continue the provision of quality essential health services in an adjusted setting.

**Political solidarity brings reciprocal benefits:** engagement of the highest levels of the country’s leadership is paramount, as COVID-19 affects everyone. WHO’s neutrality and convening power shaped the country’s strategic and technical response to COVID-19 and allowed WHO to broker bilateral support from donors and strengthen community outreach and engagement with crowded urban slums and informal settlements to break the chain of transmission. The WHO Representative continued engaging H.E. the President who has been very supportive, the Minister of Health and the national COVID-19 coordinator, who is also the Minister of Defence, in the national response to COVID-19.
**Strong collaboration leads to better health:** benefiting from WHO’s leading role as coordinator of the partners, Sierra Leone made use of available international technical expertise and human or financial resources from various partners to achieve greater impact in a joint and coordinated response.

**What lies ahead?**

The fight against COVID-19 is far from over. For the people of Sierra Leone, there may be an eerie familiarity to what is unfolding now, recalling the Ebola times. A slowdown in economic activity due to closed borders, vulnerability of some groups, fragility of the health system – and people’s trust in it – may disrupt the progress that has been achieved so far. COVID-19 is not just a public health emergency; the virus is also causing upheaval in the socioeconomic life of the country. WHO continues to stand by the Government of Sierra Leone by leading the health response to the pandemic and will help to tackle its wider effects through the new socioeconomic framework for recovery that is being developed.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

SOMALIA

Key areas: 🇸🇴

WHO Somalia: working with an expanded network of national and international partners to address COVID-19

Situation in Somalia to date

Somalia is one of the most fragile and vulnerable countries in Africa and has suffered protracted conflicts, longstanding war and political instability, all of which have weakened the health system in the country. Somalia has different, and sometimes complex, political entities, bringing another layer of complexity and operating environment to the work of WHO in the country. WHO often acts as a bridge between the federal Government and Somaliland for promoting health and well-being. Inaccessibility of some areas of the country, as well as compromised security, compounds the challenges faced by WHO in terms of delivering health services in these underserved areas. Additionally, Somalia has gone through several complex humanitarian emergencies in the recent past, including drought, flooding and famine, as well as several infectious disease outbreaks including poliomyelitis (polio), cholera and measles. Given the fragile and weak health system in the country, Somalia has struggled to contain and effectively respond to the COVID-19 outbreak on its own.

Since the first laboratory-confirmed case, reported on 16 March, cases have been reported and confirmed in remote areas, confirming that the virus is circulating widely in the whole country. A lack of a proactive testing strategy at the beginning of the outbreak has led to widespread clusters of cases. As of 8 June, Somalia has seen 2334 confirmed cases and 83 COVID-19-related deaths, with the numbers of daily cases not yet declining.

Country Office collaboration with the Office of the Prime Minister

As a result of internal administrative issues, the Federal Ministry of Health—while responding to the pandemic—dismissed some of its key senior level staff who were actively involved in overall response operation. As a result, the WHO Country Office lost its operational counterpart for discussion, support and strategy development.

Given the situation, the Prime Minister’s office, as part of a “whole-of-government” approach, began to lead the operational response to the COVID-19 outbreak and is thereby in direct dialogue with WHO for the response.

This shows that, as a trusted agency and leader, WHO has been able to step up and lead the response to COVID-19 in Somalia with counterparts at the highest political level. WHO has focused on four key areas: 1) coordination with partners and with federal and state ministries for health; 2) risk communication, in collaboration with the United Nations Children’s Fund (UNICEF); 3) surveillance, diagnostics and testing; and 4) case management. In addition, the humanitarian country team, United Nations country team and donors have requested WHO to present a situation analysis every second week to brief them on the evolving situation, including strategies and needs for mounting an effective public health response to interrupt transmission of the virus.

During the last week of March, all ministers of health from states were invited to Mogadishu to discuss their plans with the federal Government and WHO in order to create a consolidated plan. While this initiative faced challenges due to political differences, all federal states have continued to communicate their plans directly, with WHO support.

**With partners, WHO helped ramp up the testing capacity in Somalia**

At the beginning of the outbreak, Somalia did not have testing capacity for polymerase chain reaction (PCR) testing and sent samples to the Kenya Medical Research Institute in Nairobi; a laboratory supported by WHO, and the United States Centers for Disease Control and Prevention. WHO continued to ship samples for testing from different parts of the country, with many tests coming back positive. Given the obvious transmission of the disease in the population, and in order to isolate and treat cases quickly, WHO ramped up testing capacities and swiftly made three testing laboratories functional, in Mogadishu, Garowe and Hargeisa. By 30 April, the three molecular testing facilities for COVID-19 were operational.

This is an outstanding achievement for WHO and partners, and was made possible because of the urgency of the COVID-19 pandemic. United Nations agencies and international partners, particularly Italian Development Cooperation, the United Nations Humanitarian Air Service and the World Food Programme, stepped in to provide funds for PCR equipment and other laboratory supplies, as well as flights to ship the equipment. In addition, WHO brought in two virologists from Ethiopia on a special United Nations flight to boost the knowledge and capacity needed to run these laboratories. The Puntland Forensic Center, supported by the Swedish Government and the United Nations Population Fund (UNFPA) came forward to offer human resources to support testing for COVID-19. WHO plans to set up testing facilities in all the other states. Given the geographical vastness of the country, samples are currently being sent to the different testing locations by air.

![WHO supported establishment of three testing laboratories for COVID-19 in Mogadishu, Puntland and Somaliland in less than a month since first documented case](Photo credit: WHO Somalia)
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

WHO’s role in building capacity for contact-tracing, testing and treatment of COVID-19

WHO is the lead agency coordinating the COVID-19 preparedness and response efforts between the different partners and agencies. To this end, it has set up its own incident management support team and has helped to set up an emergency operations centre to improve coordination of the response as part of the national action plan for health security.

Given the instrumental role of case surveillance in identifying and tracing patients, the WHO Country Office has supported over 3500 community health workers who are visiting house-to-house, looking for cases and tracing contacts. A weekly monitoring of the situation has shown that the initiative was very efficient, with more than 30 000 households being visited by a community health worker every week. In addition, WHO has intensified its efforts in case management and training health-care workers in case management and infection control measures and has recently donated a number of critical hospital and medical supplies to Mogadishu’s main hospital for patient care. WHO is providing 15 additional isolation centres across the country by supplying personal protective equipment and medical supplies, and by training health-care workers. Given the limited resources of the Ministry of Health, WHO is providing budget support for health workers’ salaries to ensure that treatment is available for those who need it. Additionally, WHO is installing three oxygen plants, one in Somaliland and two in Mogadishu, as most of the cases are in these two cities. Several other agencies such the International Organization for Migration, UNFPA and the United States Agency for International Development (USAID) have also generously donated hospital supplies and personal protective equipment for health-care workers.

Despite the achievements in strengthening laboratory and surveillance capacities, many challenges remain due to societal norms and cultural issues where self-isolation, social distancing and quarantine have not been effectively implemented. COVID-19 testing is passive and done only for those coming to health facilities, with results taking around 10 days. While waiting for test results, people are moving freely in highly populated cities, increasing the active transmission of the virus. Stigma is also a key issue, with many symptomatic or potentially infected people hiding in fear of a positive diagnosis. This is compounded by lack of risk communication and community engagement from the Government.

As in most countries, COVID-19 is taking a toll on older adults, over 60 years of age (who make up 1–2% of the population). They make up a disproportionate number of cases (15%) compared with the rest of the population. Patients usually come to the hospital once severe respiratory symptoms have developed, making it more complicated to provide effective treatment. Health-care workers are also at high risk and account for approximately 15–20% of cases, causing panic and issues of stigma even in health settings.

To support the Somalian Government, WHO is working on several epidemiological studies to determine the extent of the infection. This will support data-driven decisions for operational response and ongoing discussions with the Government. Notably, while WHO is advocating for stricter public health measures as the numbers of cases increase, the Government would like to lift restrictions.

Using networks previously established for polio vaccination, WHO is ensuring access to inaccessible areas in the south of Somalia

WHO cannot directly travel to security-compromised areas in the country, and has therefore built trust in the local community, utilizing its established and widely accepted polio vaccination networks. In many areas, community health workers in the polio programme are able to reach the population; monitoring performance using real-time public domain software, entering the GPS location, then mobilizing COVID-19 rapid response teams to follow-up and investigate suspected cases. WHO coordinates this work in each state through focal points including a public health officer, a surveillance officer and polio surveillance officer.

In partnership with headquarters, the Regional Office for the Eastern Mediterranean and UNICEF, the Country Office has built a strong communication campaign

The COVID-19 outbreak in Somalia has necessitated a strong risk communication and community engagement campaign to disseminate key messages and ensure that the population remains informed about the situation, the measures they must take and those put in place by the Government.

WHO work in this regard began in Somalia in mid-February; with all key messages emanating from global and regional WHO guidance quickly translated and disseminated to the Ministry of Health. WHO and UNICEF in Somalia have also developed locally relevant messages and used them in training for community health workers. Further, to ensure coherence in messaging, all United Nations agencies share their messages with the WHO Country Office before sharing them with the population.

In the context of COVID-19, WHO has strengthened its relationship with donors while also building new partnerships

Since the start of the pandemic, WHO has taken a more integral role in informing and coordinating donors in Somalia. The WHO Representative responds to requests for briefings, technical advice and guidance to inform funding decisions to support priority areas of the Government-led response.

In Somalia, WHO is seen as the leader in the response to COVID-19, and partners rely on WHO situation reports and briefings to the Somali Health Sector Donor Group. The Country Office had not previously participated in this donor group, but it is now a regular member. WHO is able to influence the Group’s decisions, ensuring that funds are appropriately distributed and directed to high-priority areas, while avoiding duplication. WHO also stresses that funds to support essential care services, particularly in mental health, should continue to protect the health gains that have been achieved.
Among others, agencies like USAID are regularly coordinating with and seeking advice from WHO in providing funds to the federal Government for case management and laboratory testing. The World Bank Contingency Emergency Response Component of the Somalia recovery has been supported by WHO for project concept development and identification of priority areas – which WHO brokered in consultation with the Office of the Prime Minister. Prior to approving funds, the World Bank regularly consults and coordinates with WHO to ensure that critical gaps for the COVID-19 response are funded.

While COVID-19 has brought about new opportunities for WHO advocacy with partners for supporting the Government, the Country Office has expanded its own donor network, which now has more than 120 partners. A new relationship was built with the European Union in view of its commitment to support WHO globally. There is constant communication with the European Union delegation at an operational and technical level, in which the European Union seeks advice from WHO for its work in Somalia. This bilateral coordination mechanism is led by the WHO Representative and the Ambassador of the European Union to Somalia. As a result of this partnership, the European Union offers flight support to enable WHO to take full advantage of the “humanitarian air bridge” to transport emergency supplies throughout Somalia. But beyond COVID-19 the work ahead to address the health needs of Somalians will be immense. Recognizing this, the European Union Ambassador is exploring the possibility of including Somalia as a target country for European Union cooperation under the recently signed memorandum of understanding between WHO and the European Investment Board for the promotion of universal health coverage and health workforce development.
Key areas:

**Fighting the COVID-19 pandemic in a humanitarian crisis**

The Syrian Arab Republic is a country of fertile plains, high mountains and deserts and is home to diverse ethnic and religious groups. After nine continuous years of conflict, the country is divided. Most people (around 67%) live in Government-controlled territory, while about 20% live in the north-west under the control of non-State armed groups and other forces. The remainder of the population (about 12%) live in the north-east under the so-called Kurdish Self-administration. Since December 2019, 1 million Syrians have been displaced by the conflict, with dire needs for shelter, food, water, sanitation, hygiene and protection. The war and its deep political divisions have not only caused one of the worst humanitarian crises but have also disrupted all public health, nutrition and education services.1 Fighting the COVID-19 pandemic is a considerable challenge in this context.

**The COVID-19 situation and the Syrian Government’s response**

In February, even before the first confirmed case of COVID-19, the Syrian Government developed a multisectoral COVID-19 preparedness and response plan with support from WHO and began implementing public health measures, including closing schools, strengthening points of entry and testing and quarantining people returning on repatriation flights to limit the introduction of COVID-19. The Republic officially declared its first case of COVID-19 on 22 March, and, 2 days later, announced measures to reduce the risk of community transmission, including temporary workplace staffing policies, closing restaurants and places of entertainment and limiting public gatherings. The stringent public health measures were not, however, well received by the public and have been difficult to enforce, given people’s current living and social conditions. Nevertheless, the Ministry of Health successfully controlled two clusters of COVID-19 cases in Damascus and rural Damascus by isolating, tracing and quarantining contacts, which has slowed transmission so far.

As of 13 June, there were 170 confirmed cases and 6 deaths, rural Damascus being the most severely affected, with 38% of cases. More than half of all cases (58%) were traced to people returning on repatriation flights, but the source of exposure is unknown for many confirmed cases. With limitations on testing and local surveillance capacity and in the context of political divisions, accurate reporting is a challenge. For instance, a cluster of five confirmed cases reported in North-east Hassakeh and one death have not yet been included in national data.

Given the country’s extreme vulnerability and its lack of health system capacity, WHO and partners were on high alert as the Government began progressively to ease public health and social measures after the end of May, with the re-opening of shops, restaurants, mosques, universities and workplaces and resumption of domestic flights. Thousands of Syrians are expected to be repatriated following job losses, and illegal entry from neighbouring countries poses a challenge to already stretched quarantine facilities.

---

WHO’s engagement and technical cooperation to support the Syrian Arab Republic’s COVID-19 response

WHO supports and collaborates with the Government at the highest level, covering everything from policy advice to technical assistance and operational support. The new WHO Representative, Dr Akjemal Magtymova, arrived at the end of April at a time of international travel lockdown, by one of the last repatriation flights. WHO’s modus operandi is to coordinate a “whole of Syria” approach on a three-level coordination platform, bringing together: (i) the main WHO Country Office, located in the capital, Damascus; (ii) the WHO Gaziantep office in Turkey to address needs in north-west Syria; and (iii) WHO’s headquarters in Geneva and the Regional Office for the Eastern Mediterranean, which provide additional technical support and surge capacity when required and help to coordinate health partners in the Region.

To provide the Government with evidence for decisions, WHO is establishing epidemiological evidence on COVID-19 with a team of epidemiologists from the Regional Office, who will undertake data modelling to update the national response plan to inform WHO and other health, development and humanitarian partners about the country’s projected needs for financial and technical support in the medium term.

As a fundamental part of its public health response, WHO’s focus in the Syrian Arab Republic has been to strengthen the capacity of the Government for surveillance and detection of COVID-19 by equipping laboratories and training technicians and surveillance teams. WHO has thus assisted in the development of a COVID-19 testing strategy and is helping to extend testing capacity in four governorates and at the Central Public Health Laboratory by providing five PCR machines, with supplies, testing kits, reagents and personal protective equipment. The laboratory technical officer from the Regional Office provided training to staff at the Central Public Health Laboratory. The aim of the support is to increase testing capacity to 1000 tests a day, with gradual further extension. As of 13 June, however, only 6100 tests had been conducted throughout the country because of insufficient surveillance at primary health care level, incoherent implementation of the testing strategy and inadequate laboratory capacity. Testing locations have therefore been extended to include Latakia, Aleppo and Homs, in addition to central Damascus, and other locations are planned, including a laboratory in Qamishli Hospital in the north-east of the country, primarily to encourage testing and reporting of cases.

Furthermore, WHO has supported the Ministry of Health in active surveillance and active case finding during daily hospital visits. Currently, 125 hospitals are visited, both private facilities and those run by non-governmental organizations. WHO supported training of 111 rapid response teams, comprising 432 public health officers, for case investigation, contact tracing, sample collection and referral. WHO has provided the Ministry of Health and health sector partners (United Nations, Syrian Arab Republic Red Crescent Society, national institutions and local nongovernmental organizations) with essential supplies in high demand. To date, almost 1 million pieces of personal protective equipment for health care workers has been delivered, and also intensive care beds and 27 ventilators.

Despite these improvements, the severely weakened health system has already been stretched to capacity, even by the relatively small number of COVID-19 cases, and the closure of borders and restriction on movement among regions has added further complexity to ensuring the maintenance of essential health services, as many areas are very hard to access or inaccessible. WHO continues to advocate at the highest level for the Government of the country to care for its entire population by extending early detection to hard-to-reach areas.
In view of the epidemiological situation in the Syrian Arab Republic and neighbouring countries, WHO has cautioned against reopening the economy too soon. Current estimates indicate that the number of COVID-19 cases will increase, with major hot spots in densely populated areas such as Damascus and rural Damascus and highly vulnerable people in camps and settlements for internally displaced people in the north-east and north-west regions.

WHO’s support and collaboration with other agencies

As part of the United Nations family of agencies, funds and programmes, WHO works closely with the United Nations Country Team. As the lead technical agency in the COVID-19 response, WHO helps to define the needs (e.g. in securing procurement of essential personal protective equipment and equipment and supplies for laboratory, diagnostic and case management) and to define the roles of the different agencies according to their strengths and capacities to ensure coherent support to the Government.

WHO and UNICEF have collaborated extensively to improve risk communications and community engagement by conducting awareness training, providing more than 50 interim guidelines and disseminating more than 620,000 information, education and communication materials. WHO and UNICEF tailor messages to the Syrian people to ensure they are effective in increasing awareness of COVID-19 and promoting the necessary personal and community measures for infection prevention and control. WHO’s partnership with the United Nations High Commission for Refugees in supporting the growing numbers of refugees and displaced people will be vital as the number of people entering the country illegally and without work is likely to increase in the coming months.

New hope for the humanitarian response in the time of COVID-19

WHO and the World Food Programme lead supply chain issues in coordination with the offices of the United Nations Resident Coordinator and the Humanitarian Coordinator. Until recently, United Nations agencies have been able to transport aid (including medical supplies) from northern and other parts of Iraq to north-east Syrian Arab Republic through only one border crossing, from Rabia, Iraq, to al-Yarubiya. In May 2020, for the first time in 2 years, WHO received approval for a road shipment to Qamishli in the north-east, allowing delivery of more than 56 tonnes of supplies. After successful negotiations, the Ministry of Foreign Affairs also granted approval for three consecutive airlifts comprising 85 tonnes of medical supplies on 10–12 June from Erbil, Iraq, to Damascus.

With the support of the Syrian Arab Republic Red Crescent, WHO will distribute these supplies to an estimated 1.6 million people in need in the north-east. These achievements bring new hope and opportunities not only for the Syrian people but also for the humanitarian agencies and workers who support them.
Two hundred days since its first case and still no community transmission: early lessons from Timor-Leste’s COVID-19 response

It’s 4 a.m. on a Saturday morning. The village chief is contacted by a community member to inform him about an unregistered entrant from the neighbouring land border with Indonesia. After a preliminary enquiry, surveillance officials are promptly alerted to visit, interview and refer the person to a Government quarantine facility for assessment and COVID-19 testing, if needed.

This community vigilance typifies ways in which fragile health systems such as Timor-Leste’s are using innovative methods to complement case-based surveillance as the State machinery scrambles to scale up formal surveillance capacity rapidly in the face of an unprecedented crisis.

The following narrative examines how this small-island developing nation is using a combination of smart strategy (through an all-of-government approach) and solidarity and support (both nationally and internationally) to keep case numbers down and avoid community transmission of COVID-19. Following its first confirmed case on 21 March 2020, there were 29 cases, with zero mortality and no evidence of community transmission, in the next 200 days (until 10 October 2020). All but three cases were linked to clusters that are contained within Government quarantine centres.1 All confirmed cases have made an uneventful recovery. That all of this has been done within the constraints of a fragile post-conflict health system and with limited capacity for critical care management is a noteworthy achievement and offers useful early lessons for countries in a similar situation as they brace themselves for a surge in COVID-19 cases.

The seemingly insurmountable challenges

A fragile post-conflict health system

Timor-Leste is a young country, with its first Government having been elected in 2002. The last decade has witnessed steady progress in the health sector through reconstruction of health facilities, expansion of community-based health services and a rapid increase in the number of graduate doctors. There has been a sharp decrease in the incidence of malaria, and leprosy has been eliminated as a public health problem along with measles and maternal and neonatal tetanus.2

---

Despite these successes, challenges remain, and a surge in COVID-19 cases would rapidly overwhelm the nascent health system capacity, stretch the limited health workforce, deplete a chronically underfunded pharmaceutical and medical supply system, compromise service delivery for other essential health services and strain a limited health budget.

Lack of in-country testing

At the start of the pandemic, Timor-Leste did not have in-country laboratory testing for coronaviruses. All samples had to be sent to the Victorian Infectious Diseases Reference Laboratory in Melbourne, Australia. Owing to customs delays and logistical barriers, the result of the first test-run sample took 14 days to arrive. A lack of laboratory testing capabilities rapidly became the greatest risk to a timely and efficient pandemic response in Timor-Leste.

Minimal critical care case management

There is one intensive care unit in the entire country and only a few functional ventilators. More importantly, there is limited clinical expertise to manage critically ill patients on ventilators. With the current flight restrictions and lockdowns across neighbouring countries, the possibility of medical evacuation for patients requiring critical care has not been tested.

Fighting poverty while fighting COVID-19

About one third of the Timor-Leste population lives below the internationally defined poverty line. A World Food Programme review identified that over one third (36%) are chronically food-insecure, of whom 15% experience severe chronic food insecurity. As Mark Lowcock, United Nations Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, observed: “In the poorest countries we should be ready for a rise in conflict, hunger and poverty. The spectre of multiple famines looms.” Timor-Leste faces the daunting challenge of fighting a pandemic while also ensuring that its people do not face even greater food and financial insecurity.

The Timor-Leste response

Smart, staggered strategy

How do you surmount the challenges of a fragile health system in the face of a pandemic? For Timor-Leste, the solution included a smart, staggered immigration strategy combined with compulsory quarantine in Government-designated facilities to ensure better adherence with physical distancing and isolation.

Lessons learned

Over 100 days into the global crisis and Timor-Leste still has only a handful of contained clusters. Early lessons from Timor-Leste’s low case count include the following.

- Managing the return of persons entering the country, so that every person spends their 14-day quarantine at a Government-designated quarantine facility, ensures better compliance.
- Financial and consular support for citizens stranded overseas should be provided to increase public acceptance of entry restrictions.
- Community-based surveillance can play a significant role in supplementing official case-based surveillance.
- International solidarity with Timor-Leste has been key in the country’s fight to prevent community transmission of COVID-19 to date; from the bilateral technical, financial and logistical support received from Australia, United States of America, China, European Union, Republic of Korea, Japan and others, to New Zealand’s extraordinary generosity in agreeing to quarantine Timorese nationals.

Thousands of Timorese nationals work or study in countries experiencing significant local COVID-19 transmission, including China, Indonesia and Republic of Korea. To control the importation of cases, Timor-Leste initially restricted entry from the three international airports – Bali, Darwin and Singapore. However, the greater threat of importation is through illegal entry from the porous land border with neighbouring Indonesia, as the story above illustrates. In March 2020, the imminent return of thousands of Timorese students from Indonesia prompted the Government to restrict their return while providing them with a subsistence allowance, consular support and COVID-19 prevention advice. The Government also instituted mandatory quarantine for those who arrived before the borders closed. As isolation and physical distancing would produce low compliance in the close-knit and often overcrowded homes of Timor-Leste, quarantine was confined to Government-designated repurposed hotels. So far, the measure has been applied to over 2000 people. Given the low case count to date, this strict border control and Government quarantine policy has arguably been the single most effective COVID-19 mitigation strategy adopted by the Timorese Government.

As a result, Timor-Leste has bought precious time to strengthen its health system. Over a relatively short period of 4–6 weeks, the country has transformed itself from a country with no testing capacity, no isolation or quarantine facilities and severely limited surveillance capacity to one with in-country testing and an expanded testing strategy, functional designated COVID-19 facilities, staff who are being rapidly trained in infection control and case management, a gradual increase in stocks of personal protective equipment (PPE) and active surveillance capabilities.

Effective support from partners

While the Ministry of Health has led from the front, there has been great support from partners, including all three levels of WHO. The WHO Country Office has adapted COVID-19 guidance to the Timor-Leste context, provided testing kits and protective gear, trained health workers and emergency responders in case management, infection prevention and surveillance, used its convening power to collaborate with development partners and donors, supported the Ministry in developing national COVID-19 action plans and a monitoring framework and frequently conducts rapid field assessments to review COVID-19 preparedness and response.

"WHO’s role in supporting the Ministry of Health in responding to the COVID-19 pandemic has been both crucial and exceptional", said Narciso Fernandes, National Director, Policy, Planning and Cooperation, Timor-Leste.

Neighbouring governments, development partners, donors and nongovernmental organizations continue to play a key role too. In mid-February, the Government of New Zealand agreed to quarantine an initial cohort of Timorese students returning from Wuhan before their repatriation back to Timor-Leste. Other governments (including Australia, United States of America, China, Republic of Korea and Japan) are offering logistical and financial support. Donors are supplementing Government funds. International nongovernmental organizations contribute to community engagement and the capacity-building programme for health workers.
Solidarity for the vulnerable

Timor-Leste has been in lockdown since the end of April. Such measures impact adversely on livelihoods and the economy of low- and middle-income countries.9 As a response to this, the Government has provided a universal monthly cash transfer of US$ 100 for every poor household (for three months), put in place substantial financial incentives for frontline health workers and provided financial support for small and medium-sized businesses and farmers.10 As Fidelis Magalhães, Minister for Legislative Reforms and Parliamentary Affairs, observed: “In our view, the management of the crisis is not a simple choice between saving the economy and protecting people’s health […] they are not mutually exclusive, but instead mutually reinforcing”.11

So far, so good. But what next?

There is no evidence of community transmission yet. The strengthened surveillance and expanded testing strategy provides “ears on the ground” to pick up early signals. The imported clusters remain contained within quarantine centres. The Government has continued the state of emergency (since its introduction in March 2020) and with cases still rising in neighbouring Indonesia, there is potentially still a long way to go. The priority of the health sector is to implement a robust “test, treat, trace” policy, while rapidly scaling up capacity in isolation and quarantine facilities (including for incoming travellers) and ensuring provision of other essential health services such as routine immunization for children. While continuing to strengthen the health system response capacity, strategies outside the health sector also remain critical to mitigate the importation of cases and delay community transmission. Public health and social measures, such as increasing the availability of handwashing facilities, educating and engaging communities, continuing to manage incoming migrants (especially those entering the country informally via the land border with Indonesia) and ensuring food and financial security for families and firms, are critical.

10 Republic of Timor-Leste Decree Law N.º 15 /2020, 30 April 2020 and Decree Law N.º 16 /2020, 20 April 2020
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

TURKEY

Key areas: 🇹🇷 📈 📈 📈 📈 📈 📈

How collaboration between WHO and the Turkish Government shifted from building capacity for preparedness to an all out COVID-19 response

As a self-sufficient, upper-middle-income country with a strong track record of managing major natural disasters, an impressive local manufacturing capacity for medical equipment and medicinal products, Turkey was uniquely poised not only to control the spread of COVID-19 and mitigate its adverse impact within its own borders and the surrounding region, but also to set an example of global solidarity by providing key bilateral support to other nations.¹

The Turkish context and recent history of WHO’s collaboration with the country

The well-established support provided to Turkey by WHO, the United Nations (UN) and other humanitarian partners and donors under the WHO Refugee Health Programme – and also as part of cross border operations in north-western Syria and under the more recent WHO Health Security Programme – has enhanced the country’s emergency preparedness and sharpened institutional readiness. Moreover, this support has enabled the Government to expand services and capacities for the protection of some of the most vulnerable population groups, notably the 5.5 million migrants, including 3.6 million Syrian refugees, living in Turkey.

Drawing on the largest country-level budget among all WHO operations in the European Region, the main focus of WHO’s support to the Turkish Ministry of Health and partners since 2014 has been on coordinating the Health Cluster in north-western Syria (through the WHO emergency field office in Gaziantep) and the health sector partners in Turkey itself through the WHO Country Office in Ankara. Under these two humanitarian programmes, the response to one of the world’s greatest refugee crises has evolved from a protracted, complex emergency operation to a targeted effort to build up systems and improve their resiliency. Thus, under the WHO Refugee Health Programme, Syrian doctors, nurses and patient guides (bilingual translators) are trained to serve Syrian refugees through the Turkish national health system. They also receive continuing medical education in various specialized fields, including mental health, to ensure that migrant-friendly, quality and affordable health services are available to the entire Syrian refugee population in Turkey. This targeted programmatic intervention, based on a collaborative approach, has led to dramatic health improvements, saved lives and strengthened the resilience of millions of people to outbreaks such as the COVID-19 pandemic.

The pandemic emerged midway through the implementation of WHO’s three-year Health Security Programme (whose budget of €3 million is funded by the European Union (EU)), which meant that this capacity-building programme designed to address future health security threats could be put to immediate use. In line with the International Health Regulations (2005), the programme was launched to enhance national and provincial-level preparedness and response to priority health threats. Based on an all-hazards and intersectoral approach, it ensured that investments in technical capacities were made in good time. These have now paid off because Turkey was able to mount a formidable COVID-19 response. For instance, in 2019, well before COVID-19, Turkey updated its national pandemic influenza preparedness (PIP) plan in accordance with WHO recommendations. The updated plan was published as an annex to a presidential decree, and a PIP Scientific Consultancy Board was established. Provincial pandemic plans were subsequently drawn up by local authorities, and capacity building activities were initiated to implement these plans, including activities on risk communication. Furthermore, WHO supported a comprehensive laboratory capacity assessment and provided guidance on the adoption of EU equivalent regulations that Turkey could use to evaluate the level of risk, prioritize threats, strengthen its early warning and response system for communicable diseases, revamp the reporting systems and formalize intersectoral collaboration arrangements. All this was intended to ensure an effective and concerted response during a crisis.

In addition to these timely enhancements in its preparedness for health emergencies, Turkey has also been able to rely on a robust and expanding national disaster management system, in which health response functions can be discharged by over 18 000 Ministry of Health staff at the national and provincial levels as part of a multisectoral disaster response.

Fundamental technical assistance for Turkey’s COVID-19 response

Despite the country’s strong and expanding capacity to deal with health emergencies, the Ministry of Health requested WHO’s technical support for key areas of the COVID-19 response. In the early phases of the outbreak, the entire staff of the WHO Country Office, led by the WHO Representative, Dr Pavel Ursu, were reassigned to support the pandemic response by working on the technical areas and functions outlined in the WHO Emergency Response Framework. This ensured that a high-quality, comprehensive response could be organized to meet the growing needs and demands from the Ministry of Health, the UN system, partners and other stakeholders.

Since mid-January 2020, WHO has been consistently monitoring the rapidly evolving pandemic situation, both in Turkey and around the globe, and promoting information management, including the generation of epidemiological intelligence and insights, in order to guide decision-making at the Ministry of Health and its specially established Coronavirus Scientific Advisory Board. WHO continues to produce daily situation updates for local, regional and global audiences, and has launched a successful communication campaign in cooperation with other UN agencies to ensure that consistent, accurate and relevant expert advice reaches the public via television, the press and social media. WHO’s local social media channels are increasingly becoming a trusted source of information for people living in Turkey: the number of followers increased almost eightfold from 3500 before the start of the pandemic to a peak of more than 27 000 after March 2020, when COVID-19 was the most widely discussed topic on all platforms.

As part of the UN Country Team (UNCT), comprised of 14 resident specialized agencies, funds and programmes, WHO is leading all aspects of the technical guidance being provided to Turkey for its pandemic response – both in terms of programmes of work across the UN agencies and with respect to protecting UN staff under a business continuity plan. Every week, the WHO Representative and the UN Resident Coordinator co-chair a meeting with the heads of resident UN agencies to coordinate efforts.
Turkey’s leadership in the development of health technologies, medicines, vaccines, supplies and diagnostics

Seeking to harness the country’s large manufacturing capacity and to be at the vanguard of health technologies, the Ministry of Health requested WHO’s support in the areas of evidence-based medicine and decision-making, medicines, vaccines and diagnostics for COVID-19. Facilitated through the Country Office, WHO headquarters is supporting Turkey’s first ever application for accreditation of its in vitro diagnostic tests so that they can be placed on WHO’s list of products for emergency use. Collaboration is also under way to facilitate isolation of the novel coronavirus at Turkish institutes so that these can participate in international COVID-19 vaccine research. Turkey is eventually expected to become a major supplier of essential tests, personal protective equipment (PPE), drugs and more for the European region.

Maintaining essential services and adapting existing WHO technical cooperation programmes to respond to COVID-19

Despite having been restructured to support Turkey’s COVID-19 response in every possible way, the WHO Country Office is monitoring the evolving health situation on all fronts and providing sustained support through its existing programmes while adapting these as necessary to the new realities. For example, in its technical support for mental health, WHO has expanded its focus on the improvement of service quality to cover the most pressing needs identified in the context of COVID-19. In collaboration with the Ministry of Health, WHO has concentrated its work in that area on public awareness and advocacy, the development of guidelines and algorithms to support hotlines, online training programmes for health workers, the development of mental health promotion materials for long-term care institutions, and the implementation of supervisory support for community mental health clinicians.

Building on a long history of collaboration with the Ministry of Health in tackling noncommunicable diseases (NCDs), WHO has adapted its global technical guidance to the local context in order to mitigate the disproportionately higher risk posed by COVID-19 to older people and those with NCDs. New COVID-19-related guidance and materials provided to the Ministry of Health have been distributed across primary health care centres. Moreover, these materials have helped to inform the recommendations issued by the Ministry of Family, Labour and Social Services for people over the age of 65 years and people with chronic conditions, including those living in nursing homes. The interventions undertaken by that Ministry have included social care and support during lockdowns, assuring a three months’ supply of medication for patients with chronic conditions, and providing assistance with shopping and other errands. The adoption of robust containment and risk mitigation measures to protect the elderly, along with the authorities’ proactive stance in enforcing these measures, has helped to mitigate the COVID-19 risks for the more than 27 000 older people who are residing in Turkey’s over 425 elderly care centres. These measures included targeted curfews, extensive testing and medical check ups, a ban on new admissions to such centres and effective isolation arrangements for confirmed cases. The WHO Regional Director for Europe and the Turkish Minister of Health have agreed to produce a joint WHO–Ministry of Health report on the risk mitigation measures that have contributed to such low COVID-19 related mortality among older people in the country. The report will serve as a compendium of best practices and help to share the lessons learned with policy-makers in other coun-
tries.

The WHO field office in Gaziantep provides operational support for activities in north-western Syria through the coordination of partners and the delivery of medical supplies and equipment. In Turkey, WHO contributes to the operating costs of seven refugee health training centres, including the costs of consumables and medical supplies and the salaries of some personnel (such as psychosocial workers, dieticians, physiotherapists and facility staff). WHO also has the mandate to monitor the health status of refugees and migrants on both sides of the border and to report accordingly to the Ministry of Health and partners. In the context of COVID-19, WHO is working on the digitalization of all training – including medical, language and information system training – for Syrian health workers, and has raised US$ 1.5 million for the distribution of large amounts of PPE, disinfectant and other essential equipment to refugee health facilities in seven provinces. WHO is in constant touch with key donors, including the EU, Germany, Norway, Japan and the United States of America, on the evolving health needs of this vulnerable population group and has mobilized an additional US$ 5.5 million as part of a US$7 million appeal to ensure that adequate medical supplies continue to be available to meet these demands.

The need for reliable disaggregated data to combat COVID-19 effectively

WHO has been working with the Turkish health authorities for several years on the collection, analysis and sharing of relevant health-related data among partners in order to support evidence-based programming and to help with prioritizing interventions. Donors providing funding for refugee health services are increasingly requesting refugee-specific COVID-19 data that they can use to assess the impact of preventive, containment and mitigation measures. WHO has been advocating real-time reporting of COVID-19-related health data disaggregated by age, sex, refugee/migrant status and geographical location to enable such assessments and to help the Ministry of Health to identify COVID-19 hotspots so that transmission chains can be broken in good time.

Work is also under way with the European Observatory on Health Systems and Policies to review the available literature and other information sources, and to identify and share policy responses and data in support of timely and comprehensive reporting of the COVID-19 situation. In Turkey, as in all countries, WHO continues to advocate compliance with the International Health Regulations (2005), including the obligation of all States Parties to ensure timely reporting of data on outbreaks, especially those with cross-border potential. The unprecedented pace with which this pandemic has spread around the world has far outstripped Member States’ capacity to use WHO’s new International Classification of Diseases codes in order to record confirmed and suspected COVID-19 deaths. The consistent adoption and use of these codes in all clinical settings is particularly challenging. However, through the European Observatory on Health Systems and Policies, efforts will continue to improve the reliability and quality of health-related data in Turkey, including data on COVID-19.

Looking ahead to continued, strong collaboration between WHO and Turkey

With daily testing capacities now scaled up to meet demand, and the number of new confirmed cases per day dropping from the mid-April peak of 5000+ to 1000+ in May (a decrease of over 75%), Turkey has clearly turned the corner as far as its first wave of the pandemic is concerned. The country is planning for the phased and measured relaxation of mitigation measures with cautious optimism. However, monitoring and containing future outbreaks will require much greater attention to be paid to early warning and surveillance and to accurate and complete data reporting, backed by enhanced testing, tracing (quarantine/isolation) and treatment programmes. Under the Health Security Programme and other existing field operations, WHO will continue to provide technical support for Turkey’s COVID-19 response while promoting stronger cooperation between the health sector and other relevant sectors in order to ensure a comprehensive emergency response. Looking beyond COVID-19, WHO and Turkey are set to intensify their cooperation on health system development, health security and the Sustainable Development Goals.
Building on the close and successful collaboration to date, the Turkish Parliament recently approved the signing and ratification of a host State agreement whereby a new WHO European Centre for Preparedness for Humanitarian and Health Emergencies is to be established in Istanbul. The Centre will serve as an extension of the WHO Regional Office for Europe and will scale up WHO’s technical assistance aimed at strengthening core capacities for implementation of the International Health Regulations (2005) and the management of humanitarian and public health emergencies in Turkey and the European Region. This testifies to Turkey’s emergence as an important global public health partner and donor – a role it has already been fulfilling in its response to COVID-19.
COLOMBIA

Key areas:

Through a structured and coordinated response, Colombia seeks to leave no one behind in the fight against COVID-19

At the end of January 2020, as the new coronavirus began to spread throughout Europe, the Colombian authorities were aware that the disease would eventually arrive in the country and test its health system, which was already burdened by various historic, social and economic problems. These were likely to be exacerbated by the pandemic and to lead to tragedy.

The Government, led by President Iván Duque and the governors and mayors of the main cities, swiftly designed a strategy to respond to COVID-19 with monitoring and evaluation mechanisms and instruments such as the Unified Command Post. The participants in this high-level forum, where decisions are made to provide a unified response that leaves no one behind in the fight against COVID-19, include ministerial cabinet representatives, directors of national emergency entities, members of the Pan American Health Organization (PAHO/WHO) and other United Nations agencies, and representatives of academia and the private sector. This case study highlights the actions taken by Colombia to prepare for and respond to the pandemic with the support of PAHO/WHO and its partners, and demonstrates how a coordinated, science-based response contributes to saving lives.

Sociohistorical context

Colombia’s natural and cultural diversity and its distinct sociopolitical and historical context represent a challenge for the response to a pandemic. Various vulnerable populations must be protected from COVID-19 by the Government, including: the indigenous peoples of the Amazon jungles, the Guajira desert and the Andean area; Afro-Colombian communities settled in the challenging jungles of Chocó where it rains throughout the year; farmers who live between the three cordilleras that stretch from the Andes to the Caribbean plains; and the millions of Colombians who live in urban areas.

In addition, Colombia has recently ended an internal armed conflict that lasted more than half a century, caused human losses, displaced over 8 million people and left many territories destroyed and impoverished. Despite there being a persistent social debt centred around violence in the context of Colombia’s recovery, the country stands in solidarity with, and cares for, Venezuelans who comprise over 1.8 million of the country’s migrant population.

Supporting the response to COVID-19

Colombia, a pioneer in diagnostics and laboratories

To rise to the challenge of defeating the virus, Colombia’s surveillance system and the national laboratory network had to be strengthened and the capacity for health service delivery had to be doubled in terms of qualified health personnel and appropriate equipment. In addition, society as a whole had to be involved, since without the active
participation of citizens in hygiene and self-protection measures it would be impossible to stop the spread of the disease. To achieve all of this, Colombia needed both time and allies.

In view of these needs, the National Institute of Health has been standardizing its processes, following WHO guidance, since early February, to carry out COVID-19 testing and to coordinate with WHO’s Collaborating Centres in the Region of the Americas focusing on influenza-type viruses. In fact, Colombia, with technical support from PAHO/WHO, was the first country in Latin America to achieve such actions. It was also a pioneer in the Region in receiving advanced training in Go.Data from PAHO/WHO and in developing a pilot study on the first cases of influenza and COVID-19. The latter arrived in the country on 6 March 2020.

The country can now process 28,204 PCR tests daily in a network of 94 laboratories distributed across 30 Departments. Thanks to this, the country, supported by PAHO/WHO, has processed over 1.2 million tests. PAHO/WHO contributed specialized personnel, laboratory equipment, reagents, supplies and protective equipment to the value of over US$ 69,000 destined for epidemiological surveillance and advanced sampling among high-risk populations and health personnel.

PAHO/WHO support in epidemiological analyses

Every day since 29 March, a group of epidemiologists from Disease Prevention and Control and Risk Factors in PAHO/WHO’s Country Office has been preparing Situation Reports (SitRep) on the pandemic, including an overview of the Regional and global situation; SitRep number 100 was issued on 10 July. This easy-to-consult publication has become the preferred resource of national and local authorities as well as of organizations doing humanitarian work in the country. In addition to data on infections, recoveries and deaths, the report consolidates the most relevant information and presents it with a level of analysis that helps readers to understand the situation, delves into the key issues and enables the identification of priorities for technical and interagency cooperation.

A unified response and tailored approaches for territories

Facing COVID-19 together

The arrival of Sars-CoV-2 in Colombia coincided with the seasonal epidemic of influenza and rising outbreaks of dengue fever and malaria. Early action was therefore taken and on 25 March an obligatory mass quarantine was instigated. As the infection rate declined, within five weeks a flexible isolation phase began, involving gradual de-escalation, which in addition to reducing the impact on health and the speed of infection, sought to reduce the social and economic effects of the pandemic.

The Government received strong support from the United Nations team in the country. Under the co-leadership of PAHO/WHO, twenty-seven agencies, funds and programmes combined to provide a coordinated response in accordance with the nine pillars of action recommended by WHO, developing an immediate response plan for socioeconomic recovery. In addition, actions are being developed to provide a differential response to the most vulnerable, especially migrants, in collaboration with the 60 entities that make up the Humanitarian Country Team. The Ministry of Health and Social Protection and PAHO/WHO co-lead the health cluster within this group.
Leticia: Responding in an Amazon area

Aligned and coordinated strategic action has been the key to facing some of the most critical situations. For example, when the acceleration of COVID-19 occurred in the Amazon region and its capital, Leticia (region bordering Peru and Brazil with incidence rates similar to those in New York in May), the Ministry of Health and Social Protection (MHSP) worked to help local authorities develop a contingency plan. Subsequently, with the support of PAHO/WHO and other international cooperation partners, Colombia succeeded in increasing the number of diagnostic tests and active community contact-tracing, and in strengthening health personnel and protective equipment in hospitals. In addition, humanitarian aid was mobilized for the population, most of which is indigenous. Today, the outbreak is under control and actions are in place to prevent a second wave.

Cooperation with the Department of Cundinamarca

With 4310 cases and 97 deaths as of 14 July, Cundinamarca has been one of the Departments prioritized for permanent attention by PAHO/WHO. Since the beginning of the pandemic, the Ministry of Health of Cundinamarca has been supported in the development and adaptation of PAHO/WHO guidelines to respond to COVID-19. Epidemiological surveillance, laboratories, and infection prevention and control were also strengthened through the hiring of personnel and the delivery of reagents and personal protective equipment. In addition, humanitarian aid was provided to the municipality of Soacha, in conjunction with the country’s humanitarian team and civil society.

Bogotá: strengthening health services and political leadership

A coordinated response has also been needed in the capital, Bogotá, which is the most affected city in Colombia and is experiencing an acceleration in the number of cases (49 644 cases and 1123 deaths as of 12 July). Following a declaration of red alert for exceeding 80% ICU occupancy, the great challenge has been to prevent people from dying due to a lack of health care. Fortunately, today the city is more prepared. The testing capacity has been expanded from 200 to 6000 tests per day; the number of beds for the care of patients with COVID-19 has been increased from 200 to 1200; and joint efforts were being made to have 2000 beds by August. In addition, human capacity resources in health were expanded as much as possible, and city medical and care personnel were retrained to meet WHO recommendations.

Bogotá, with support and monitoring from the national Government, will implement a strategy of biweekly sectorized quarantines in order to keep 2.5 million people, a quarter of the population, in their homes, in a bid to cut the chain of transmission. In view of this, and in order to mitigate the social and economic impacts of these measures, deployment of monetary and humanitarian aid is planned for families in a state of poverty and high vulnerability, as well as relief for small and medium-sized enterprises, among others. In addition, the local administration will continue with health education in the streets to raise awareness among citizens and encourage them to observe preventive measures so as to avoid contagion and spread of the virus.

Overcoming this tough test requires the participation and solidarity of all sectors of society. President Iván Duque convenes the Unified Command Post and in this high-level forum he supports the measures proposed by Mayor Claudia López. These recommendations are supported by experts from the Ministry of Health and Social Protection, the National Institute of Health, and PAHO/WHO.
Reaching people in remote areas in collaboration with the Colombian Air Force

The Colombian Air Force has enabled the transfer of sick people from areas of difficult access to cities with hospital centres prepared to deal with positive cases of COVID-19. As a strategic partner, PAHO/WHO supports these humanitarian air operations with the delivery of personal protective equipment for the pilots and the delivery of capsules facilitating the safe transfer of patients.

Joining forces to help the most vulnerable in border areas

Caring for migrants returning to Venezuela

Since the beginning of the COVID-19 outbreak, the migrant and refugee population has faced numerous challenges including livelihoods loss, eviction and stigmatization. The situation has prompted the return of thousands of Venezuelans to their country, who have been exposed to the virus and have travelled around the country on foot with their belongings. In the border area, families have to wait several days in Colombian territory before being able to enter Venezuela, as only 300 returnees are allowed to pass through on three days a week. This has required the departmental and municipal authorities to strengthen the response. Many of the barriers to access to health services for migrants are overcome through coordinated actions by the health cluster, guided by MHSP and with technical support from PAHO/WHO, UNHCR and IOM in defining guidelines to improve health conditions in the shelters and address the humanitarian emergency.

For example, on the northern Colombian-Venezuelan border, the Tienditas Health Care Centre has been set up with the support of Migration Colombia, the Ministry of Foreign Affairs and the Interagency Group on Mixed Flows. The Centre carries out screening and epidemiological assessment, provides food assistance, delivers gender-sensitive and baby-specific hygiene kits, and cares for the pets of the migrant population. For example, “Tienditas Plan: Temporary Sanitary Stations” represents a collaboration with the United Nations. These stations act as temporary shelters for the care of returning migrants, reducing the risk of transmission of the virus. Diagnostic tests are performed for the timely detection of cases. In the event of positive cases, those affected are isolated and health care is provided. This allows for the collection of information on infected patients to take place, which can be made available and shared with the Venezuelan Government. The centres also provide migrants with access to general medical consultations, contraception, nutritional assessment, mental health care, vaccination, hygiene promotion and health measures. PAHO/WHO has staff in different territories in Colombia, notably in the border areas, to support the staff of the Ministries of Health in different actions to protect the health of migrants, develop joint initiatives to improve departmental response capacity, and ensure access to comprehensive and timely health services.

To protect Colombian Air Force pilots in charge of transporting patients with COVID-19 from remote locations to large cities, PAHO/WHO donated personal protective equipment and isolation capsules.

Photo credit: PAHO/WHO Karen González Abril
Cooperation between PAHO/WHO Offices in two countries

PAHO/WHO’s contribution has gone beyond national borders. The Organization’s Representatives in Colombia and Venezuela have facilitated dialogue between the Ministers of Health of the two countries for the development of joint actions to support the needs of migrants. Collaboration is not limited to dealing with the pandemic: so far this year, joint efforts have been made to address other emergencies, for example the shipment of anti-rabies vaccines from PAHO’s PANAFTOSA centre in Brazil to Venezuela.

Communications and mental health

Behaviour change communications

COVID-19 is affecting other areas of the country, such as the Caribbean region. Over the past three weeks, the city of Medellín, which had been a national example in the management of the pandemic, has seen an acceleration in the number of positive cases of COVID-19. It is a delicate moment, as national and local authorities have managed the pandemic with commitment and seriousness; their work requires to be complemented by citizens’ efforts.

In the absence of treatment or vaccines, communication has been an important tool for preventing the spread of COVID-19. Every day since 24 March, President Iván Duque has headed the ‘Prevention and Action’ broadcasting programme, which has served to ensure daily accountability to the population and to promote self-protection and responsible behaviour towards others. Meanwhile, mayors and governors have taken to the streets to educate their citizens. The PAHO/WHO Representative has participated on several occasions in the President’s programme.

With the aim of strengthening communication for health, PAHO has contributed to training for health promotion and communication professionals in local entities of various Departments. This training includes a review of the national epidemiological situation, a workshop on communication “without harm”, and another workshop on risk communication. As a result of this training, communication ‘laboratories’ have been set up to promote the active participation of communities and health personnel in the preparation of communication campaigns and materials, which are published in PAHO’s communication channels and social networks. The most successful publications have reached over 18 million people.

Photo in the Muisca chapter of Suba in the city of Bogotá. Adults over 70 years of age have been most affected by the COVID-19 pandemic. Protecting them has become a priority for Colombia.

Photo credit: PAHO/WHO Karen González Abril

In addition, since the beginning of the pandemic, PAHO, in partnership with the United Nations Information Centre in Colombia, has participated in the weekly programme Voces Unidas (United Voices), which is broadcast on Radio Nacional and its 54 stations covering 80% of national territory. The programme disseminates information on prevention and protection-related actions and considers the response of citizens and the situation in the country. It is published online and shared with 330 community, university and religious radio stations. The alliance has also resulted in the joint production of audio messages in Spanish and indigenous languages, which are shared in territories through megaphones in order to reach the most remote villages and leave no one behind.
Caring for mental health in an assertive response to the country’s needs

The pandemic, and drastic measures such as quarantine, have produced an increase in depression and domestic violence. The country has acted to address these situations. Telephone lines have been made available to citizens for case management, and educational campaigns have been designed to guide the population in managing anxiety, stress and other problems caused by the pandemic and its psychosocial and economic consequences. PAHO/WHO has worked with MHSP on these matters.

Between March and June 2020, mental health and psychosocial support actions have reached 5813 persons, mainly migrants and other citizens in situations of vulnerability (displaced persons, victims, indigenous people). The vulnerabilities are exacerbated by compulsory isolation. The work of PAHO/WHO is coordinated with that of MHSP on issues related to support, stress management, resilience, prevention of disorders, and assistance dealing with children and adolescents in the context of the pandemic. Additionally, information pieces have been designed for the public as a whole; especially for teams of health workers in order to prevent burnout, stress management, and anxiety, as well as to promote self-care, cohabitation, and sleep hygiene.

The effects of quarantine and isolation conditions, as well as the internal demand for labour, have been felt by the PAHO/WHO Country Office staff and brought to the attention of its mental health team. As a response, a strategy for staff mental health monitoring and follow-up was established and adaptations to work activities were put in place to enable staff to manage stress appropriately and thus to enable them to be able to effectively support the needs of the country. Likewise, the interagency work carried out through the Office of the UN Resident Coordinator has made it possible to work together on self-care and communication with all staff. These actions are essential in order to continue supporting the national plans established by Colombia and to ensure the acquisition and provision of diagnosis supplies and to support the hospital network and food security and to guarantee the rights of the most vulnerable populations.

Maintaining other essential health services during the pandemic

In addition to efforts to respond to the pandemic, MHSP, with technical support from PAHO/WHO, has made significant efforts to address other health needs.

Malaria: To create better conditions of equity and equality, the Regional Initiative for the Elimination of Malaria is being implemented in 12 municipalities in the Pacific Region where 75% of the country’s malaria cases occur. This public-private partnership, managed by the Inter-American Development Bank with the commitment of private partners and support from PAHO, seeks to eliminate malaria in the Pacific region. PAHO/WHO has a presence in the four Departments of Colombia’s Pacific region, providing technical cooperation on malaria. The Afro-Colombian population lives in these Departments.

HIV: In the framework of the interagency project on combined HIV prevention implemented with UNFPA and UNDP, PAHO/WHO is responsible for all biomedical interventions, such as the pilot PrEP and self-testing project. Under this project, alliances have been made, such as the recent one with an online home company that guarantees the timely and effective delivery of medicines to people who are undergoing preventive treatment or who have communicable diseases in Bogotá. People receive the medicines they need to continue treatment in their homes, taking into account the biosecurity measures established by the Government and reducing the risk of contagion. Similarly, in agreement with health institutions that serve vulnerable populations, a virtual care model for HIV has been implemented in order to monitor people in the pre-exposure prophylaxis cohort for which PAHO/WHO is responsible. This has enabled the implementation of the preventive strategy without suspending or delaying care.

Health for Peace (Salud para La Paz): The second phase of the interagency project Health for Peace (Salud para La Paz) was launched in 2019 to protect vulnerable communities in rural communities in 26 municipalities where the Territorial Training and Reincorporation Spaces are located and where there are historically high rates of violence and health inequities. This project seeks to strengthen local capacities to improve access to comprehensive primary health care services, with emphasis on sexual and reproductive health, mental health, prevention of consumption of psychoactive substances and child and nutritional health. The first phase of the initiative was successful: 39,773 people in areas far from urban centres were treated; 20,415 in 161 health missions carried out; medical attention was provided for 1682 pregnant women in specialties such as obstetrics, paediatrics, nutrition and psychology. The implementation of a second phase has begun, including actions for prevention and the care of COVID-19 patients.
Achievements during the pandemic and looking beyond COVID-19

This combination of strategies and partnerships, along with the dedication of health professionals, has allowed a slower growth curve to be maintained. At the time of writing there were 306 cases per million inhabitants. The national strategy has not only allowed an effective reproduction rate close to 1 but also the recovery of over 58,000 people. A stronger health system and self-protection by millions of citizens have undoubtedly been instrumental in saving lives.

While Colombia has concentrated its efforts on tackling the pandemic, it has also been forced to address other diseases that are growing silently in the shadow of COVID-19. For example, this year there have been outbreaks of dengue and malaria and an increase in sexually transmitted infections. In addition, Colombia has to prevent diseases such as measles, polio or seasonal influenza through immunization.

In all the support it gives Colombia, PAHO/WHO confirms its commitment to continued provision of technical cooperation with a view to achieving the health-related targets of the Sustainable Development Goals, leaving no one behind.
Leveraging on past experiences and moving forward innovations to respond to COVID-19

COVID-19 response in Côte d’Ivoire: lessons learnt from Ebola outbreak preparedness

WHO takes a leadership role in national and international coordination on COVID-19

On 29 June 2020, COVID-19 cases had doubled in the previous two weeks and the country had passed the 9000 cases mark. The first positive case was confirmed on 11 March, at which time the WHO Country Office was already well prepared. More than 96% of the cases were in the capital city, Abidjan. The pandemic had spread to 22 of the country’s 33 Regions. Of the confirmed COVID-19 cases, 66 people (less than 1%) had died. The WHO Country Office supported the activation of the Emergency Operation Centre and swiftly coordinated the dissemination of daily epidemiological updates on COVID-19. Daily sharing of COVID-19 data with the Regional Office and HQ was initiated with the support of two full-time data managers.

WHO’s leadership in supporting the COVID-19 response

WHO’s planning and preparation for COVID-19 leveraged on learning from the country’s preparedness and response in relation to the Ebola virus and began in January 2020, before the first COVID-19 case was reported. WHO began working with the Ministry of Health (MOH) to enhance surveillance at entry points into the country, which led to the identification of a suspected case – a young woman with symptoms arriving from China on 25 January – who was isolated at the airport. Because of the country’s lack of testing capacity for COVID-19, with the support of the WHO Country Office in coordination with the National Laboratory (Institut Pasteur Côte d’Ivoire), a sample was sent to the Institut Pasteur in Paris. A negative result was reported on 29 January.

At the end of January, AFRO identified Côte d’Ivoire as one of seven high-priority countries and by February the country had developed a COVID-19 preparedness plan. The Country Office received eight international consultants from the Regional Office to work on this plan. Their support covers: laboratory, surveillance, points of entry, infection prevention and control, logistics, case management and risk communication. In addition, the entire WCO was repurposed at the beginning of February, resulting in 15 staff being involved in COVID-19 capacity-building. Additionally, the UN Country Team (UNCT) mandated WHO to coordinate the recruitment of a medical doctor and a psychologist to be based in the Country Office to assist all UN employees and their dependents during the pandemic. All the UN Agencies contributed support for the salaries of the two staff for an initial period of six months.

The WHO Representative has been the outbreak coordinator for COVID-19 for the whole UNCT since February 2020. WHO’s leadership role in the coordination efforts was recognized by the EU Ambassador, who asked for a briefing to all the EU Representatives, in addition to the regular briefings being organized by WHO for the private sector, media, civil society and NGOs, as well as the national medical organizations based in the country. WHO
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

initiated weekly joint coordination meetings where all the teams involved in the operation came together and provided updates. These meetings included the participation of the Representatives of UNICEF, WHO, CDC, USAID and UNAIDS.

Recent flooding in Abidjan another cause for emergency response

In addition to COVID-19, Côte d’Ivoire is responding to other emergencies requiring international support. Recent floods in the capital are causing concern. Discussions are ongoing with UNRC and it is likely that further support will be requested from the UN. Under the leadership of the World Food Programme, WHO is working together with UNRC and NGOs such as the Ivorian Red Cross, which conducted a rapid assessment of the impact of the floods caused by torrential rain in Abidjan and estimated that 600 households had been affected. Hygiene kits and impregnated mosquito nets are being distributed to affected vulnerable households.

In its convening role and on behalf of the health partners the Government requested WHO to meet Chinese delegates during their visit to the country, in order to share experience regarding the response to the COVID-19 pandemic, the support provided by partners, and the remaining country challenges.

WHO and the role of community radio in raising community awareness

WHO has established Radio Santé Côte d’Ivoire, involving several community radio stations throughout the country. This platform, which began with 18 stations in 2018, now has more than 120 and is very active in raising community awareness about COVID-19. All the journalists involved in the local radio platform have benefited from an orientation session on the use of radio during public health emergencies. WHO has reinforced the capacity of local radio with laptops and professional recorders.

As part of an awareness-raising campaign, these radio stations have already contributed to the broadcasting of at least 6000 messages in seven local languages. Recent studies released by the Government have shown that local communication and awareness-raising activities have enabled 90% of people living in urban areas and 76% living in rural areas to become more aware of the COVID-19 pandemic and the corresponding protective measures. Radio Santé Côte d’Ivoire has contributed significantly to this result.

Addressing and analysing socioeconomic impacts of COVID-19

WHO supported the United Nations Socioeconomic Response Plan for COVID-19, which is aligned with the national health response plan for COVID-19. The Plan aims to mobilize financial resources and foster concerted and coordinated United Nations support for stemming the COVID-19 outbreak in Côte d’Ivoire. It considers the lessons learnt from the Ebola preparation and will revolve around three areas of intervention. The first area, in the immediate term, is an emergency response to population health needs, risk communication and access to water, hygiene and sanitation services. The second area of intervention will contribute to preventing and treating the socioeconomic impact of the epidemic in sectors such as education, nutrition, food security, child and woman protection, and social protection. This aim is to minimize the humanitarian consequences of the epidemic while respecting the international commitment “to leave no one behind” within the framework of the 2030 Agenda. Thus, while considering the gender perspective, special attention will be paid to the most vulnerable groups, in particular children and women, people with chronic illnesses, and people with disabilities facing particular risks. The total contribution of the UN Agencies to the national health response plan is estimated at US$ 20 million, including the WHO contribution of around $1.5 million. The third area of interven-
tion involves the recovery and strengthening of the resilience of populations, particularly households and vulnerable groups. Meanwhile, it is necessary to continue implementing the Sustainable Development Goals.

It is also important to conduct studies and analyses to assess and contain the socioeconomic impact of the COVID-19 epidemic. Under WHO leadership, three studies are being undertaken to examine the impact of COVID-19. One of them looks at the impact of the pandemic on the use of the essential health services and has demonstrated a reduction in vaccinations and prenatal consultations. The second study examines the general population’s behaviour and knowledge of COVID-19, and reveals that most communication messages on COVID-19 go through social media, one of the main communication channels used by the population. However, most fake news on COVID-19 is also disseminated through social media and has a negative influence on population behaviour. On the basis of this study, WHO will invest more on social media communications with corrective messages. The third study aims to understand the knowledge, attitude and behaviour of health workers regarding COVID-19. Information gathered through these studies will guide further decisions aimed at improving the response to COVID-19.

**WHO to expand screening and treatment facilities for COVID-19**

Confirmed and suspected cases of COVID-19 are mostly treated in Government-run facilities, the primary location being the Treichville University Teaching Hospital. However, WHO has worked with the Government to set up additional facilities for the testing and treatment of patients with COVID-19 and has authorized three private facilities for treatment in Abidjan (Polyclinics of Farah, PISAM and Hôtel Dieu). Individuals in the interior of the country who test positive are transferred to Abidjan for monitoring and treatment until the opening of decentralized COVID-19 treatment centres, which are being set up in six hubs at subnational level. The WHO Country Office also provided logistics support to establish 13 COVID-19 screening centres in Abidjan. The Country Office reinforced the surveillance system by increasing the capacity of rapid response teams and enhancing the contact-tracing of cases. WHO has recruited 150 contact-tracing officers. It is expected that each case will result in a minimum of 10 contacts.

WHO has mobilized partners (UNICEF, USAID, IRC and CDC) to implement a District-based approach for contact-tracing. This has significantly increased the number of contacts from one to seven per positive case reported.

The continuing community transmission of COVID-19 has led WHO to intensify advocacy for expanding COVID-19 laboratory capacity. There has been an increase from only one COVID laboratory (Institut Pasteur Côte d’Ivoire) in Abidjan to three additional laboratories in Abidjan (CEDRES, RETROCI and CIRBA) and six subnational laboratories in six provinces. The extension of COVID-19 laboratory capacity will raise the quality of surveillance and limit the spread of the disease.

**WHO drives a new e-learning initiative for COVID-19: a priority Government programme to expand health worker training**

The capacity of the health service is limited. Health workers, who are based across 113 Districts, do not receive adequate training and lack supportive supervision. When training is provided, workers are required to travel to
the main cities and stay there for between a week and 10 days, a time-consuming endeavour that affects health care delivery locally. Medical universities and teaching centres are also very limited in relation to needs. Nevertheless, WHO has leveraged an opportunity to improve innovative ways to train health workers and deliver care. Support was given for a training initiative on COVID-19 involving the use of various tools, including mobile phones. Although it was basic, 115 virtual sessions were organized to train 9723 public and private health workers between April and May. The training was structured on the WHO guidelines, was focused on the COVID-19 response pillars, and was delivered by 20 expert facilitators with support from UNICEF and USAID.

As a result of this successful initiative, WHO was invited by the Government to investigate how to reach health workers in remote regions in order to expand e-learning at the national level. Following high-level advocacy by WHO Country Office, the national authorities allocated US$ 400 000 to the Office to reinforce the e-learning system throughout the country. This amount was later supplemented by USAID. These funds enabled WHO to extend the e-learning platform from 28 to 113 Districts. The new IT equipment for e-learning was handed over to the Ministry of Health on 5 June. The new virtual training infrastructure, which is now integrated into the national health systems, is backstopped with WHO staff in the field. The return on investment is high as the platform will continue to be maximized and used to reach 12 000 community health workers after the pandemic is over in order to accelerate the SDG3 Agenda.

The COVID-19 pandemic has thus offered an opportunity to WHO Country Office to establish a successful e-learning system for reaching and training health workers across the country. This has also created a strong potential for providing new solutions in the future, including telemedicine, and for giving significant visibility for WHO’s leadership, capacity-building and partnership.

Towards 2030

The COVID-19 pandemic has challenged the MOH and WHO to act swiftly in COVID-19 preparedness and response, to work with partners to ensure and promote action that protects population health – with special attention to the needs of and impact on vulnerable groups – and to strengthen the country’s health system. Through collaboration with key stakeholders, support for the implementation of innovative programmes, and advocacy for health and well-being at the highest political levels, WHO and the MOH have strengthened the health sector's capacity to advance towards the achievement of SDG 3, among other things. The country will continue responding to immediate COVID-19 needs while supporting socioeconomic action to protect the most vulnerable.
A health system built on the concept of resilience meets COVID-19

Iran was one of the first countries after China to experience a rapid progression of COVID-19, with the pandemic affecting much of the country. The initial two cases, both of which were fatal, were reported on 19 February 2020. The rapid transmission of the virus led to an initial peak at the end of March 2020 with about 3200 laboratory-confirmed cases a day, resulting in a challenging situation for the population and authorities.

By 7 July 2020, there had been 245,688 laboratory-confirmed COVID-19 cases, with 11,931 deaths. At the beginning of July, Iran was declaring about 2600 new laboratory-confirmed cases daily, after a second peak had been observed in early June, reaching about 3600 daily laboratory-confirmed cases.

Iran designed its national response to build on the strengths of its primary health care system

In early February 2020, the Iranian President established a command structure with a national committee responsible for the COVID-19 response. A national plan was coordinated in which responsibilities were assigned to all levels of government across the sectors. Emphasis was placed on scaling up the intensive care unit (ICU) capacity with isolation units, and on optimizing laboratory networks for early case detection and contact tracing.

Iran’s health system has a unique structure, combining the different mandates of the Ministry of Health and Medical Education (MoHME). Established after the revolution, the MoHME has continued to combine medical education, research and health policy under the same umbrella. With a total of 63 medical universities across the country, Iran has a high level of specialist knowledge and expertise; thus, in the current geopolitical context, Iran has been able to build on a concept of resilient health systems that also provides a strong platform during the COVID-19 pandemic.

Building further on existing strengths, Iran designed its national response around its well-established primary health care (PHC) system. A process for early case detection was designed within the PHC system for both rural and urban settings, by introducing a unique electronic assessment with guided questions – above a certain threshold of answers, automatic text messages would invite patients to get tested at the nearest PHC facility.

The PHC facilities have a complete registry that includes demographic records and disease histories of the citizens in their catchment area. The registry makes it easier to identify vulnerable groups, including age groups that
Responding to the COVID-19 pandemic: Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Responding to the COVID-19 pandemic: Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

could be at risk of developing moderate to severe COVID-19 symptoms and thus may need hospital care. In turn, this allows for systematic outreach activities of community health workers to all households for early case detection, contact tracing and triage for hospital referral if necessary. The MoHME’s national flagship PHC strengthening programme, Each Home as a Health Post, started shortly before the COVID-19 pandemic. It is now being rolled out as a major component for improving COVID-19 health literacy among the general population, with particular focus on people most at risk.

Iran’s health system resilience and manufacturing capabilities proved invaluable during the COVID-19 crisis

Iran is facing social and economic hardship as a result of unilateral sanctions that have been in place since 2018; the sanctions affect all aspects of society, including the health sector. Since the early years of the Islamic Republic of Iran, health system resilience has been a strategic component for achieving universal health coverage in Iran, and it includes a strong in-country production capacity for essential health items. This proved to be invaluable during the COVID-19 pandemic, because Iran was able to produce its own personal protective equipment (PPE), and managed to scale up production in 6 weeks. Iran also developed its own COVID-19 test and is increasing its production of ventilators. The country’s strong research and development (R&D) platform – medical universities, government-supported knowledge hubs and rapid technology transfer from research to marketable products in the health sector – is now being used for the development of new medicines and vaccines with proven effectiveness for COVID-19 treatment and prevention.

Being one of the countries that adopted early lockdown measures, reopening the country came with its own challenges

The government declared partial lockdown of the country in mid-March 2020, requesting that people stay at home. The policy was later made more restrictive with the closure of shops and public spaces, and travel limitations between cities and provinces. Furthermore, identified cases and vulnerable people were asked to isolate at home, leading to a significant decline in laboratory-confirmed COVID-19 cases and deaths.

As one of the first countries to face a lockdown and to design a national plan to reopen the country, Iran did not have many examples to follow at that time. Also, the country was already challenged by the impact of unilateral sanctions, which have a substantial impact on the fiscal space to sustain the economy and support livelihoods, particularly of the poorer and otherwise disadvantaged populations. Thus, balancing social and economic hardship and the public health measures needed to control the COVID-19 pandemic was, and remains, a major task. The easing of restrictions began when the daily number of deaths began to fall in April 2020. Re-opening was phased in gradually and sequentially across provinces and districts as part of a national approach.

During reopening, public compliance with the rules is critical. Iran is proactively pursuing the commitment of all its citizens to help limit virus transmission. The government is continuously monitoring the compliance rate, which was close to 80% during the lockdown. Following the reopening, the MoHME is estimating a reduction in the compliance rate to about 20% or even less in some provinces, which is causing major concern and is leading to advocacy.

Plasma donation by a recovered COVID-19 patient at one of the public hospitals in Tehran.
Photo credit: Akbar Badkhani/WHO Iran
interventions from the highest level, including the President. Although controls over workspaces and other areas have been put in place by PHC facilities and health inspectors, it is challenging to monitor all areas of the country. As in other countries, the COVID-19 pandemic is highlighting health inequalities, because the risk of exposure and incidence of infection clearly has a social gradient, considering living, transport and working conditions.

Second peak of COVID-19 in Iran: new trends in the country

In early June 2020, Iran began to experience a second peak in the number of identified COVID-19 cases. This second peak was even higher than the number of cases observed during the first peak, and is related to two key factors: the reopening of the country, and increased testing capacity, which allows more suspected cases to be confirmed. Thus, the increase in cases does not come as a complete surprise. Interestingly, differences are being observed between the two peaks of the pandemic; in the second peak, the slope of the curve is taking longer to reach its maximum, which is allowing health services to scale up and accommodate for an increase in the number of patients. Another factor is that some of the 31 provinces had little transmission during the first peak of the pandemic, and they are now seeing a surge in cases (particularly in the south of the country, at the borders with Afghanistan, Iraq and Pakistan). Regional administrations are quick to respond to the escalation, identifying new cases rapidly and restricting the reopening of the affected provinces. The World Health Organization (WHO) Country Office (WCO) in Iran is fully supportive of the measures being taken, with the action-reaction at subnational level showing commitment and readiness.

The final key difference between the two peaks is the impact on ICU and hospitalization to date. During the first phase, 95% of laboratory tests were undertaken for patients already in hospital; in contrast, recently, up to 85% of the tests have been undertaken in PHC facilities via the national COVID-19 laboratory network, allowing early case detection and contact tracing, and resulting in a lower proportion of hospital admissions.

With an expected delay after the second peak which started in June, numbers of both ICU COVID-19 patients and deaths are gradually increasing, with the number of daily laboratory-confirmed COVID-19 deaths reaching a new high on 7 July 2020 (200 deaths). Growing numbers of restrictions are being re-introduced in many provinces, and more people wearing masks can be seen in Tehran since masks have become mandatory in closed settings and crowded spaces. More restrictions may soon be necessary if the hospital situation continues to become more critical.

New COVID-19 antibody tests are being used to measure exposure to the virus and provide a reflection of cumulative incidence in the population, which shows seroprevalence of up to 40% in some of the early hotspots. Further incoming seroprevalence data are now providing additional important information to the daily COVID-19 cases confirmed by polymerase chain reaction (PCR) tests. Although there are some concerns about the quality and methodology of the new antibody tests, all serosurvey data show a similar trend. According to an expert at the Pasteur Institute in Tehran, and a member of the national COVID-19 epidemiology committee, it is estimated that 15–16% of the population (i.e. about 15 million people) might have had the infection.
The role of WHO in a politically sensitive international context and collaboration with the Iranian Government

Iran was the first country of the WHO Eastern Mediterranean Region to experience a COVID-19 pandemic with substantial community transmission. When the pandemic began, the WCO in Iran, with the support of the WHO Regional Office for the Eastern Mediterranean, was immediately repurposed to respond, setting up an incident management team with a staff of 20. WHO was also asked to lead the United Nations (UN) Country Team coordination effort in Iran, incorporating other UN agencies to support the national health effort. WHO pushed for multisectoral components in the UN socioeconomic response framework and, working alongside the UN Resident Coordinator, engaged the Ministry of Foreign Affairs (MoFA).

After China, Iran was the second country globally to receive an international WHO expert mission to assess the situation. The WHO team, which also included experts from China and Germany, remained in the country for 10 days, visiting hospitals, laboratories and many sites involved in the multisectoral response. The mission members and the WHO Representative met with the Government of Iran daily to address urgent questions; the outcomes of these meetings often informed immediate decisions related to public measures and the national COVID-19 plan, which was finalized and launched during that time by the Minister of Health and Medical Education.

Following the international WHO expert mission, the WCO incident management team was due to receive international expert support through a well worked-out deployment plan. However, lockdown and flight restrictions in many countries – affecting transfers at many international airports – meant that no further support could fly to Iran. Hence, the WCO is operating with one international member of staff (the WHO Representative) and a highly motivated team of national staff, which has been doubled to accommodate the scale and scope of the work under the high demands of the MoHME.

The WHO Representative, Dr Christoph Hamelmann, who is the COVID-19 spokesperson for the UN in Iran, has introduced a daily COVID-19 update for the entire international community in Iran; this update is also being shared at a regional and global level. In addition to providing an epidemiological report, the update (in the form of a newsletter) focuses on issues such as mental health and COVID-19, working from home with children, physical activity during lockdown or keeping up other essential health services during the pandemic. It also includes an English translation of all important public announcements from the President, the Minister of Health and Medical Education, and other high-level authorities of the National COVID-19 Committee or other government agencies. As of 7 July 2020, 139 editions of the update have been published; it is sent every evening to all UN Country Team agencies and staff, ambassadors and their staff, government officials, medical universities, donors, and key WHO staff and global health community experts around the world.

The MoHME is not just actively counting on technical support from the WCO. As a demonstration of trust, the MoHME is providing the WHO Representative with important opportunities to address national and international media, to provide advice in important areas that are considered sensitive, and to work with MoFA to lead the coordination of the international health sector support.
Before the COVID-19 pandemic, the WCO in Iran was already undergoing a transformation

In 2019, Iran suffered serious and heavy flooding, affecting the entire country. At the time, WHO stepped up and led the health sector response, resulting in a doubling of the previous annual operational budget of US$ 3 million, and a successful track record of procurement of essential health goods, even under conditions of unilateral sanctions and geopolitical tensions. As of 7 July 2020, the WCO increased its operational budget to US$ 82 million, with funding from multiple donors mainly related to COVID-19. With this amount, which is likely to be substantially increased, Iran’s WCO has become the most successful country office in the WHO Eastern Mediterranean Region for COVID-19 resource mobilization, and one of the most successful globally. To accommodate the massive upscaling of operations and to ensure continued best quality and highest impact, the WCO has, with much foresight, completed a substantive transformation. This has included a doubling of the number of staff and the establishment of an additional office to accommodate the enlarged team, in full compliance with WHO COVID-19 workplace guidelines.

When unilateral sanctions against Iran were re-introduced in 2018, the WCO established the UN Procurement for Health Working Group (Pro-Health) as a subgroup of the WHO-led health pillar of the UN Development Assistance Framework in Iran. Pro-Health includes (as members) all UN Country Team agencies involved in health sector procurement, and (as observers) international nongovernmental organizations (NGOs) supporting health sector procurement in Iran. Under the leadership of the WCO, during the COVID-19 crisis, Pro-Health became the coordinating mechanism for all health-related COVID-19 procurement requested as support from the international community by the MoFA. The WCO developed a tool that updates on a real-time basis the requests from MoHME through the MoFA, and the delivery and pipeline of all UN agencies and international NGOs against these requests. The tool also shows the outstanding balances for any further procurements as additional funds become available, and provides a full update of all COVID-19 grants by donor and implementing agency. This Pro-Health COVID-19 matrix is being used by the Government of Iran for all updates of their requests, and the WCO is providing continuous support to the MoHME for forecasting and specifications, and to all UN agencies and international NGOs for the coordination of the actual procurements and distribution (also linked to the global UN COVID-19 supply chain mechanisms). This highlights an example of the pivotal role of WHO in ensuring the continuity of health supplies, and the trust WHO has built with the Government of Iran and with the international community in Iran and beyond.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

MALDIVES

Key areas:

Early action prevented mass community transmission of COVID-19 and ensured access to health services, but, with no tourism, people’s health may still suffer because of economic hardship ahead

Located in the Indian Ocean, the small paradisiac island nation of Maldives is best known globally as a tourist attraction, but the country has had to put tourism on hold in order to fight COVID-19. Though small in terms of land area and population (516,000 inhabitants), Maldives is one of the world’s most geographically dispersed countries in the world, comprising a long chain of 26 natural atolls and 20 administrative atolls. So far, confirmed cases have been limited to clusters in Malé, and, as of 7 July, only 12 COVID-19-related deaths had been recorded. What’s more, unlike in many other countries, the health authorities and partners in Maldives have managed to keep essential health services running while responding to COVID-19. If you ask WHO’s Representative to the Maldives, Dr Arvind Mathur, about the COVID-19 response so far, he will cite the very early, aggressive, whole-of-government, whole-of-society approach, rapid technical assistance for testing, surveillance and contact tracing and careful management of migrant workers moving within the country and the region. Underneath this effective emergency response is the strong Maldives health system, with its decades of investment in universal health coverage by the Government and its partners, including WHO. This case study shows the successes, challenges and lessons learnt so far in the response to COVID-19 of Maldives.

An early, aggressive, well-organized response by the Government and all of society helped Maldives to “stay ahead” of the virus.

As early as January 2020, as the world was waking up to the threat of COVID-19, WHO’s Country Office in Maldives was already regularly reviewing both the global situation and Maldives’ emergency response capacity. National authorities used WHO forecasting tools to predict the number of COVID-19 cases and the corresponding requirements in terms of human resources, essential medicines and equipment. In collaboration with the Ministry of Health, WHO conducted a risk assessment and prepared a national COVID-19 preparedness and response plan.

A health emergency coordination committee was established, with the Minister of Health as the Chair and the Deputy Director-General of the Health Protection Agency as the Incident Commander. The response was divided into seven focus areas – surveillance, laboratories, contact tracing, quarantine and isolation facility management, rapid response teams, data management and risk communication, which held daily meetings with representatives of other ministries and partners to discuss the country’s overall preparedness. Even before the first case of local transmission was reported in Malé, a national emergency operations centre was established under the Ministry of Defence, and the National Disaster Management Authority and the Health Protection Agency together coordinated a nationwide multisectoral operation to guard the population from COVID-19. A public health emergency was declared on 12 March.
To implement the national response plan and keep the Government abreast of the evolving situation, WHO continues to provide the latest technical guidance and briefings to various Government sectors and to the Technical Advisory Committee to support decisions on public health measures and to continue to scale-up preparedness and response capacity. Procedures for implementing the Government’s COVID-19 preparedness and response plan have been shared with all islands and atolls, and training is conducted with the help of island councils and via video calls. To ensure that accurate data are used to make decisions, tools and training have been used to establish the live Maldives Go.Data platform to monitor outbreaks and public health emergencies. With the technical support of WHO and the Ministry of Health, the Ministry of Foreign Affairs releases a daily circular to inform all missions and agencies resident in Maldives of the situation. The Ministry of Finance shares the country’s expenditure on preparedness and response for transparency.

Reaching beyond the health sector to the whole of society has been important to stay ahead of the virus. Some of the earliest actions were establishment of point-of-entry procedures and procurement of personal protective equipment for first-line responders. Community engagement was another focus, and, as early as January, WHO assembled a team of staff and consultants to help the Government reach its diverse citizens, migrants and tourists with accurate, multilingual messages about COVID-19. To ensure that citizens received rapid support and advice, the health protection agency established a hotline, as advised by WHO, which people could call to report COVID-19 symptoms. The Government has now established a comprehensive website on COVID-19 to provide the public with the latest information and advice.

Establishing timely, high-quality testing: the “game-changer” in averting community transmission

As Maldives had no testing capacity at the outset of the pandemic, specimens from the first suspected cases were sent to Pune, India, for testing. This resulted in delays of more than one week and hampered early detection for minimizing community transmission. Anticipating a rise in the number of cases, WHO and the Ministry of Health developed a national laboratory policy and strategy and trained laboratory staff in the testing protocol and quality assurance. The availability of test kits was assured to establish national capacity at the Indira Gandhi Memorial Hospital in the capital, Malé.

Building on existing PCR testing capacity for other diagnoses and WHO support, the Hospital laboratory was fully equipped with the technology and expertise to test for COVID-19 by the end of February 2020. The first confirmed case was identified on 7 March, and the country had built capacity to test more than 700 suspected cases per day within several weeks. Owing to an aggressive testing strategy and early preventive measures, the first confirmed case in the local population was recorded only on 14 April.

“WHO continues to be a prominent partner in supporting development of the health sector of the Maldives. Strengthening laboratories has been a key area of support. Recent support allowed the Maldives to do the first-ever COVID-19 test with a gold-standard test and to continue to extend testing capacity throughout the country. Its actions are notable and invaluable in this long-standing partnership”

H.E. Abdulla Ameen, Minister of Health for Maldives.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

In collaboration with the Ministry of Health, WHO has since supported establishment of testing capacity in the north and south of Malé and beyond, including in two regional hospitals on other atolls, where facilities and infrastructure have been upgraded in line with WHO guidelines, and technicians on these atolls have been trained. To further enhance testing capacity, the laboratory of the Maldives Police Forensic Services manages the logistics of sample transport among the islands. Since the onset of the pandemic, the Maldives National Defence Force has used its air and sea planes to transfer patients and samples, while ensuring prevention and control of infection and correct use of personal protective equipment. WHO has not only built testing capacity throughout Maldives but has also procured testing supplies to enable more than 50 000 tests in the country to date.

Building on existing WHO collaboration for comprehensive, responsive COVID-19 support

While testing has been a focus, WHO has also provided technical cooperation in other areas. In early February, support was provided for training more than 600 health care workers from regional and atoll health facilities in critical care, assisting in conceptualizing and planning isolation and quarantine facilities and support at Hulhumalé and Dharamavanthu hospitals in greater Malé and ensuring treatment and clinical management for severe cases. WHO delivered medicines, supplies, training and clinical guidelines to ensure that the Ministry of Health could establish a functional isolation facility in Hulhumalé, with a 20-bed intensive care unit.

In addition, WHO, UNICEF, the UNDP and UNFPA are collaborating to strengthen mental health and psychosocial support services through the Maldives Red Crescent and the National Mental Health Centre during the pandemic. A 24-h hotline has been set up in the National Emergency Operations centre to provide psychosocial support.

To ensure safe waste management at Hulhumalé and other facilities, WHO has provided technical guidance on health care waste management and has donated five autoclaves and autoclave consumables for use in isolation and quarantine facilities to disinfect materials used by affected people. This has been another key intervention to prevent transmission.

WHO has been supporting training of emergency first response teams in Maldives for several years, in at least 13 regions. In the context of COVID-19, WHO is supporting the Ministry of Health to provide further training on infection prevention and control for over 200 medical and health emergency staff involved in the response and has distributed over 500 sets of personal protective equipment comprising 450 protective goggles, hundreds of sanitizers and face shields, 25 000 gloves, 26 000 masks and 1000 surgical gowns (as of April 2020).
Managing COVID-19 effectively in a densely populated capital and with many mobile migrant workers

The capital Malé is home to a quarter of all the inhabitants of the country, while representing only about 2% of the land area. It is one of the most congested capitals in the world. Families that migrate to Malé from the atolls experience overcrowding and poor living conditions, as do most of the 60 000 migrant workers, who often live in overcrowded, unhygienic, poorly ventilated accommodation. Many COVID-19 cases have been detected among migrant groups, and the Government has relocated some 3000 Bangladeshi nationals to temporary accommodation outside Malé to ensure social distancing and healthier living conditions; they have repatriated 1500 unregistered Bangladeshi workers. While the return of workers to their home islands is meant to reduce the risks associated with overcrowding, they may inadvertently spread COVID-19.

A social sector working group has been established to enhance the regulatory framework governing expatriate workers and thus ensure that they have decent living conditions and to meet the needs (including health) of undocumented workers and of people who have lost their work because of COVID-19. To support the national authorities, WHO advocates for the health of migrant populations in its discussions with the National Emergency Operations Centre Technical Advisory Group and provides recommendations and country experiences. Working with the Maldives Red Crescent and the Ministry of Economic Development, WHO has helped to monitor crowded accommodation for migrants while they were being moved to transient housing. Special facilities were built for the isolation and quarantine of migrant workers according to WHO guidelines, ensuring appropriate infection prevention and control. WHO has advised on contact-tracing among mobile populations by rapid response teams and on screening of migrant populations for COVID-19 (75% have been screened to date). Samples are collected from people with COVID-19-like symptoms, who are isolated and quarantined as necessary. A study of antibody testing in the migrant population has been initiated to determine the reason for the high number of COVID-19 cases in the expatriate migrant population in the Maldives.

Maintaining essential health services

Maldives has made huge health gains in recent years due to sustained prioritization and investment in universal health coverage. Since 1977, life expectancy has increased by more than two thirds, from 47 to more than 75 years, and maternal mortality has decreased from 677 to 41 maternal deaths per 100 000 live births since the Millennium Development Goals were set in 1990. Many diseases, such as leprosy, polio, malaria, measles, lymphatic filariasis, neonatal tetanus and mother-to-child transmission of HIV, have been eliminated, and the expanded programme on immunization has reached 99% – yes, 99% – of people!

Preliminary unpublished results in June 2020 of a comprehensive WHO survey on the impact of the COVID-19 pandemic on 25 essential health services along the life-course indicate that, on average, countries report disruptions in half of the 25 essential services, whereas Maldives has reported partial disruption in only 5. Maldives has so far managed to safeguard its health gains by ensuring continuity, with no disruption of most essential services,

---

1 A situation analysis on migrant health is being prepared by the International Organization for Migration.
2 According to a spokesman for the National Emergency Operations Centre, reported here.
including routine immunization, reproductive, maternal and child care and HIV treatment. This has been achieved by task-shifting for health workers, triage of priorities, redirecting patients to alternative health care facilities, use of telemedicine and online consultations, finding novel methods for dispensing essential medicines and use of triage hotlines, community outreach and mobile medical teams.

Partial disruption has been experienced in areas such as dental, rehabilitation and cancer services and in detection and treatment of cases of tuberculosis and noncommunicable diseases because of changes in policies for elective care, people not seeking treatment and the effect of stay-at-home measures on the availability of public transport. As COVID-19 continues to affect every aspect of society and people’s well-being, WHO is working with the Government and partners in a social sector subgroup (including the President’s Office, several line ministries, the Health Protection Agency, private hospitals, UNFPA, UNICEF, nongovernmental organizations and civil society) to ensure that essential services continue to be available to meet the health needs of the population and particularly vulnerable people.

**The COVID-19 response and recovery in Maldives needs a collective effort.**

WHO, as the leading organization for health emergencies within the United Nations system and among international and domestic partners, led development of the COVID-19 support and response plan for Maldives in March and activated the United nations contingency plan for emergencies to ensure that the country had the necessary resources and support from the family of United Nations agencies in the country to deal with the pandemic as it evolved.

Foreign aid has played an integral role in the COVID-19 response in Maldives, with much-needed support in the form of grants from international financial institutions, bilateral partners and United Nations agencies for both the emergency response and economic recovery. In addition to its contribution of US$ 2 million for COVID-19, WHO has promoted and positioned Maldives for further emergency response funding from donors and partners. Within the small islands developing states initiative, the Multi-party Trust Fund of the United Nations Secretary-General and other mechanisms, WHO has helped Maldives to identify its needs and to prepare proposals for resources from development partners such as the World Bank, the Asian Development Bank, the International Monetary Fund, the Organization of Petroleum Exporting Countries, the International Finance Corporation, the European Union, the Embassy of the USA and the US Agency for International Development.

WHO leads the “Health and WASH” working group of the United Nations country team. In anticipation of possible problems of water quality and water supply, discussions were held with the Ministry of Environment, UNDP, the Green Climate Fund and the WHO Regional Office for South-East Asia. Additionally, WHO Maldives hosted the first “Health and WASH” working group meeting on 26 March to coordinate the activities outlined in the national preparedness and response plan.
Key areas of WHO’s technical support to the COVID-19 response in the Maldives

• Strengthening capacity of the Government to respond to COVID-19
• Establishing COVID-19 diagnosis in Malé and the periphery
• Providing critical logistics to reduce transmission and save lives
• Risk communication and reaching people with credible information
• Coordinating the United Nations country team response and mobilizing resources
• Ensuring maintenance of essential health services

The way forward

WHO will continue to support the response of the health sector to COVID-19, maintenance of essential health services and immediate socioeconomic recovery. In the coming months, WHO will advocate for and focus technical support on development of diagnostic capacity and infrastructure for COVID-19 at peripheral level, management of the supply chain and logistics for essential medicines and equipment throughout the vast archipelago, integration of information systems to ensure real-time data for monitoring health indicators, support for a potentially burnt-out, already stretched health workforce and mobilization of the necessary resources.
Key actions in the COVID-19 response in Maldives

**Early January 2020:** Supported the Ministry of Health in conducting risk assessments and drafted national guidelines for COVID-19 preparedness and response; built a team of consultants and staff to strengthen risk communication and provide continuous support.

**End January 2020:** Health Emergency Operations Centre and operational plan activated. Set up point-of-entry procedures and procured personal protective equipment for first-line responders.

**Early February 2020:** Established isolation facilities at Hulhumalé and Dharamavanthu hospitals; designated a floor of each hospital for severe cases.

**End February 2020:** Supported technology transfer for continuous COVID-19 laboratory testing. Provided information to migrants in several languages.

**7 March 2020:** First COVID-19 case reported in Maldives. The President, H.E. Ibrahim Mohammed Solih established and activated the multi-sectoral National Emergency Operation Centre. COVID-19 response plan activated.


**Early April 2020:** In a phone call with the Director-General of WHO, the President, H.E. Ibrahim Mohamed Solih described the current status of preparedness for COVID-19 and expressed appreciation for WHO’s contribution and assistance in resource mobilization. WHO facilitated Ministry of Health participation in a teleconference with the WHO Regional Director to describe its COVID-19 response. Outbreak response drills conducted in Malé. Rapid response teams trained in contact-tracing in the greater Malé region. Go.data tool introduced.

**Mid-April 2020:** Outbreak started in Malé on 16 April, and lockdown announced. Rapid response team mobilized to identify cases and contacts. Hospital emergency response plan in the greater Malé region activated. Online hospital consultations initiated. Immunization services continued during the lockdown.

**End April 2020:** Hulhumalé medical isolation facility established for nearly 300 COVID-19 patients, and additional isolation and quarantine facilities identified. WHO facilitated continued laboratory testing, ensured critical supplies for facilities and conducted capacity-building of the health workforce.

**Early May 2020:** WHO facilitated participation of a Ministry of Health team in the World Health Assembly, where Maldives committed itself to combat the COVID-19 pandemic. A clinical practice guideline for management of COVID-19, based on WHO guidance, launched by the Minister of Health. WHO extends support to protect vulnerable people and especially the elderly and people with disabilities.

**Early–end June 2020:** WHO extends assistance for plans for a three-phase easing of the lockdown as the curve shows signs of flattening. Technical assistance extended to the Ministry of Education to prepare a “back to school” campaign, including videos about disinfection and other measures. Ensured support for continued, enhanced laboratory testing both in Malé and regionally, with GeneXpert cartridges for testing in atoll hospitals.
**NAMIBIA**

**Key areas:**

A comprehensive COVID-19 response from the Government, WHO and partners keeps community transmission at bay and protects health services for the vulnerable.

**Current situation**

Namibia reported its first confirmed COVID-19 cases on 13 March 2020, and the Ministry declared the COVID-19 outbreak on 14 March 2020. By 6 July 2020, Namibia had had 539 sporadic confirmed cases and no recorded deaths. In the past 2 weeks, about 87% of the confirmed cases have been found in travellers held in routine quarantine facilities.

**Namibian Government responds rapidly to COVID-19, in collaboration with WHO**

A key factor in the success in containing the epidemic was prompt action by the Government, which had already received WHO support in strengthening its emergency preparedness and response through a joint external evaluation of its compliance with the International Health Regulations (2005). After a series of inspections and workshops, the evaluation was conducted in November–December 2016, and the National Action Plan for Health Security was finalized, which is yet to be launched.

When COVID-19 emerged, the Government showed strong leadership and ownership of the situation by activating a national health emergency coordination committee under the Ministry of Health and Social Services (MoHSS). The Government also introduced an incident management system and strengthened the functionality of the National Public Health Emergency Operation Centre, which has become the base from which all national COVID-19 responders operate. The Government brought together all government sectors, development partners, the private sector and civil society to prepare a multi-sectoral national response plan for COVID-19 in Namibia. The whole-of-government, whole-of-society response campaign was led by the Head of State, His Excellency Dr Hage Geingob, with the senior leadership of many ministries. The response campaign has several technical pillars: coordination and planning; risk communication and community engagement; surveillance, case investigation and rapid response; points of entry; national laboratory, infection prevention and control; case management, operations, logistics and procurement; and mental health and psychosocial support, security and provision of essential services. All the interventions are well coordinated and communicated for effective implementation.

The Government declared a state of emergency on 17 March 2020 and rapidly took several critical public health and safety measures. They opted for a phased approach to lockdown. Early measures included a ban on international travel, mass gatherings and mandatory quarantine measures. A lockdown was enforced in the regions of Khomas and Erongo, with closure of non-essential services and tightening of immigration control. From mid-April, these restrictions were extended nationwide after consultations with non-health sectors to ensure that labour and social protection was considered.
WHO provided data and information to the Government and the MoHSS for planning the country’s response to the pandemic. The Organization gave technical guidance to the health sector for decision-making and increased the Ministry’s capacity for coordination, surveillance, infection prevention and control, surveillance at points of entry, laboratory testing, logistics and case management. A team of experts from WHO and other partners was established to work with the MoHSS and Government in deciding on public health and safety measures to be submitted to the Cabinet and endorsed by the President. The measures are based on WHO guidance, tools, models and databases, and the experts include lawyers who advise on rapid promulgation of new public health and safety measures into law, backed by directives and guidelines for each ministry and sector. Communication and coordination of the response have improved during the past few months with the support of technical expertise.

While the pandemic appears to be under control in Namibia, the Government remains cautious about easing public health and social measures and continues to improve its readiness and response. On 5 June, the President commissioned two COVID-19 treatment units, one a nine-bed high-dependence unit with six beds for ventilatory intensive care and one 10-bed isolation facility. Both are situated at the Windhoek Central Hospital, and similar facilities are planned throughout the country. The building of these treatment centres is led by the case management pillar, supported by technical guidance from WHO and the US Centers for Disease Control and Prevention. Equipping facilities and development of public and private health workforce capacity for case management remain high priorities.

Nationwide testing strategy allows the country to contain the outbreak

During the early stages of the pandemic, testing was limited to suspected cases that strictly met the WHO’s case definition of a travel history or contact with a person with travel history, but not the third criterion of respiratory symptoms of unknown etiology. The initial low testing rate was a concern; however, the infrastructure did not allow a significant increase in the number of tests, and, while capacity was being built, samples were sent to the National Institute of Communicable Diseases in South Africa, a WHO collaborating laboratory. In Namibia, WHO established partnerships with the National Institute of Pathology and other Government institutions, such as the University of Namibia and veterinary services, to secure the support of laboratory staff for molecular testing. WHO has provided reagents and swabs to the National Institute of Pathology, and, in partnership with a private laboratory testing service, Pathcare, and other laboratories that have provided supplies, WHO has helped to increase national testing capacity. Currently, the National Institute of Pathology and Pathcare conduct COVID-19 testing in Namibia. Testing is also conducted at two points of entry. Indeterminate results are sent to the National Institute of Communicable Diseases in South Africa for confirmation.

When the number of COVID-19 cases increased rapidly from 32 to 196 in the 2 weeks up to 29 June 2020, most of which were in the harbour town of Walvisbay in Erongo Region, where 90% of Namibia’s COVID-19 cases were found as of 6 July 2020, the MoHSS and WHO conducted a campaign to test 2000 people at 10 selected sites and ensures that no case was missed. The number of tests per day increased from 20 on 13 March 2020 date to 450 on 7 July.

Namibia launches the “COVID-19 communication centre”

On 2 April, the Government, in collaboration with United Nations agencies, opened a COVID-19 communication centre to serve as a platform for each sector to communicate with the public on issues related to the guidelines for the COVID-19 lockdown. WHO contributed to themes for the health sessions and participated in some of them. WHO also provided training to the management of the communication centre in social distancing to reduce the risk of transmission. Press conferences are held daily, with a presentation from the Minister of Health, to ensure that the public remains fully informed of the evolving situation. The morning briefing addresses issues in non-health sectors, and the afternoon briefing provides information on the health sector response. Journalists are
given the opportunity to ask questions during the daily press conference and at a dedicated e-mail address. The press conferences are also used by the authorities to debunk rumours and correct misinformation.

To further support risk communication and community engagement, WHO works with other agencies in developing communications strategies, messages and materials for the general public and targeted communities. This support will be extended to sub-national levels to ensure that the whole country, especially vulnerable populations with limited access to technology and electricity, receive the right information.

WHO is leading the United Nations response to contain the outbreak in Namibia and secure supplies for front-line health workers

The WHO Country Office in Namibia has long-standing partnerships with the United Nations and other multilateral agencies and is providing guidance on the COVID-19 response plan, with WHO headquarters and the WHO African Regional Office. Since the first cases were diagnosed in the country, the Country Office has been reorganized to support the action plan. In April, it took urgent action to protect front-line workers by providing essential medical supplies, which were delivered in the first United Nations “solidarity” flight bringing vital medical supplies, facilitated by the World Food Programme. The donation included personal protective equipment for over 1000 health workers, with facial shields, masks, gloves, gowns, laboratory swabs and goggles. The donation, on 20 April, was accompanied by a live panel discussion on “Protection of the health force” at the COVID-19 communication centre and televised nationally by all media companies.

Capacity development of front-line health workers for COVID-19

Training front-line health workers and providing them with information are essential in addressing the COVID-19 pandemic. WHO and the MoHSS provided virtual integrated training during 2 weeks in May to prepare regions to respond effectively to the outbreak. Nearly 1000 people were trained, including members of regional and district outbreak preparedness and response teams, regional health emergency management and district health teams, emergency management committee members and staff from the Government, the United Nations, nongovernmental organizations and academia. WHO and the MoHSS conducted a simulation of case management and infection prevention and control at the intensive care unit for COVID-19 patients in the Windhoek Central Hospital. A second phase of training is planned, which will include simulations and further practical sessions.
Continuation of essential health services, including management of people living with HIV/AIDS and immunization

Ensuring the continuity of essential health services during the COVID-19 pandemic is a priority for WHO, particularly for people living with HIV/AIDS who are reluctant to visit health facilities because of the risk of infections, and those with other chronic diseases.

WHO is working with the Directorate of Special Programmes in the MoHSS and other partners to ensure the continuity of anti-retroviral therapy, with strict observation of infection prevention and control and social distancing. To decongest AIDS treatment facilities during the COVID-19 outbreak, differentiated service delivery models are being used, including dispensing for several months, delivery in primary health care, comprehensive community health services, community adherence groups, and establishment of new distribution points to increase accessibility and ensure social distancing.

WHO is collaborating with the Government to ensure that routine immunization services continue to be provided in the country.

Although there has been no outbreak of measles, national coverage in 2019 was 79% with a first dose of measles and rubella vaccine and 56% with the second dose, a drop-out of more than 20%. WHO and the Government therefore conducted an “African vaccination week” in Namibia. The decrease was due mainly to vaccine stock-outs and children not being brought back for the second dose. All districts began immunization activities at the beginning of June, with financial support from WHO and UNICEF, with integrated services such as nutrition assessment and vitamin A supplementation.

The WHO Representative in Namibia, Dr Charles Sagoe-Moses, stressed that health workers are critical to delivery on the promise of “leaving no one behind” and are part of global efforts to achieve the Sustainable Development Goals. They make vital contributions to achieving national and global targets for many health priorities, including universal health coverage, mental health and noncommunicable diseases, emergency preparedness and response, patient safety and the delivery of integrated, people-centred care.
On guard 24/7: WHO’s work to save lives and support socioeconomic recovery in the Republic of Moldova

Health is everyone’s business

The COVID-19 epidemic in the Republic of Moldova

In a country with a population of approximately 3.5 million, COVID-19 presents far more than an isolated health crisis. Confirmation of the first case on 8 March 2020 came as no surprise to the WHO Country Office, which was already supporting and guiding the country in preparedness and response.

The pandemic remains volatile and continues to affect all aspects of the country’s social and economic life. The number of new cases has continued to increase, and the epidemiological situation has evolved according to a well-known scenario: “zero”, imported cases, clusters and community transmission. As of 8 July 2020, 18 471 cases had been confirmed, and the number of deaths had reached 614, with a case fatality rate of 3.3%. The country has not yet experienced a second wave, although the number of cases increased in June after easing of restrictions from mid-May, indicating that enough social distancing and hygiene measures are in place.

WHO collaborates with the Ministry of Health and the Government in a strategic COVID-19 preparedness and response plan

The Government began planning for a public health emergency even before the pandemic was declared. WHO was collaborating with the Ministry of Health, Labour and Social Protection (Ministry of Health) before the first cases were registered, when regular emergency meetings began. Within this collaboration, the Ministry developed a strategic preparedness and response plan for COVID-19, led by WHO, with supportive communication with the Prime Minister and engagement and coordination at all levels of the Government and the United Nations Country Team.

WHO’s work in the country over the past 5 years has ensured the management of public health emergencies. This included working with both the Government and partners on a systematic approach to strengthening the health system through implementation of the International Health Regulations (2005) and capacity-building. A joint external evaluation of core capacity in 2018 involving all sectors ensured a common understanding of the role of health in preparedness, readiness and response to public health emergencies. This helped the country to prepare and organize an appropriate pandemic response, with the involvement of other sectors under the leadership of the Ministry of Health. WHO also encourages other ministries (such as education) to share responsibilities, including the development of business continuity plans for their sectors.

“Our main objective is to provide support to the Government almost on the spot and 24/7, despite the fact that we are a small office with just eight staff members.”

Igor Pokanevych, WHO Representative in the Republic of Moldova
The COVID-19 pandemic: transforming WHO’s relations with national and local government authorities

During the pandemic, WHO has extended its support to the Ministry of Health by providing public health information to a larger group of decision-makers. This includes sector-wide targeted interventions in education, points of entry, law enforcement and the IT industry – many of which are new stakeholders for WHO. This demanding but positive cross-Government approach is transforming the way in which the Country Office operates. For example, WHO may be required to collaborate with the Ministry of Defence in a planned video conference with NATO.

Political, social and economic pressure drove the decision to lift the lockdown imposed on 17 March, and easing of the lockdown on 15 May increased the demand for WHO guidance as the Government began to restart the country’s economic activity. At the request of the Ministry of Health, WHO prepared public health arguments to ensure that the Government plans and sector-wide targeted interventions were based on accurate understanding of the virus, the disease, its causes and possible preventive measures.

The Country Office is providing support at both national and local levels, working with the Ministry of Health not only on the overarching plan of action but also to initiate discussions with village mayors. Since the early stages of the outbreak, the Country Office has been coordinating workshops and webinars with local authorities, representing the first time that it has worked at local level during a public health emergency.

In accordance with its mandate, WHO conducted a technical mission to the Transnistrian region to assess the epidemiological situation of COVID-19 and the public health measures taken. The COVID-19 response has required health system coordination and mobilization of health professionals; however, the health care system on the left bank of the Dniester River remains weak, with few qualified health care workers and outdated infrastructure and equipment. Over 1254 cases had been registered in the Transnistrian region as of 6 July 2020, and WHO remains alert to a disproportionate impact of COVID-19 on the older population. As stated by the WHO Representative, “While WHO is a technical agency, our leadership role in humanitarian crises as the last-resort provider of health services has proven to be essential on left bank of the Dniester River”.

WHO and the United Nations Resident Coordinator: one team working to build donors’ commitment to the provision of essential health equipment and supplies

Leadership in supplying equipment

Since the arrival of the United Nations Resident Coordinator in February 2020, he has worked closely with the WHO Representative, attending several daily meetings as “one team”. Other agencies have participated in the discussions, and roles have been attributed among the agencies. By 23 March, WHO, the Resident Coordinator’s Office and the Ministry of Health had comprehensively assessed the requirements of the health system to respond to COVID-19. They identified large deficits in personal protective and health equipment (e.g. ventilators, oxygen concentrators), medicines and consumables. Concluded on 15 June, the COVID-19 response and recovery plan guides support for programmes with development and government partners (e.g. Norway, Sweden,
Switzerland, World Bank) and investment by the Ministry of Health. Poland, the European Union and WHO have committed themselves to provide personal protective and other equipment and supplies and medical devices.

Coordination of development partners during the pandemic

In order to provide policy advice and promote coordination among development partners and the Government, the WHO representative and United Nations Resident Coordinator attend the Commission for Extraordinary Situations of the Republic of Moldova and the National Extraordinary Public Health Commission. With the World Bank, they have organized six meetings of development partners, involving more than 90 representatives of embassies, international financial institutions, donors and United Nations agencies as well as senior officials from the ministries of health, finance and foreign affairs. Sessions are organized every 2 weeks as a single platform on which partners can communicate about the pandemic with Government officials. Weekly briefings are held by the WHO Representative for bilateral partners in order to build trust.

The Republic of Moldova is one of the first countries in which the United Nations Country Team prepared a specific COVID-19 response and recovery plan based on the United Nations framework. WHO’s coordination of this team and regular updates on COVID-19 have reinforced understanding that the pandemic is not just a health crisis. As a result, health is embedded not only in the plan’s “health first” pillar but also in the four other pillars. WHO and the Resident Coordinator’s Office estimated that the total cost of the plan would be US$ 38.4 million, of which more than US$ 35.5 million will be requested from developmental partners through the WHO Partner Platform.

WHO support for training health workers at high risk of infection during the pandemic

The Resident Coordinator’s Office, the International Organization for Migration, the United Nations Office on Drugs and Crime and WHO undertook a rapid assessment of the needs of front-line workers in non-health-related public agencies such as the police force, border police, penitentiaries and the Transnistrian region. An assessment of hospital readiness was also begun in March 2020. As of July 2020, approximately 16% of confirmed cases of COVID-19 had been found among health care workers, with 2071 doctors, nurses, medical assistants and other health staff infected since the beginning of the outbreak. Following the declaration of a state of emergency on 17 March, WHO worked with national experts to conduct 49 training sessions online, face-to-face and in-service on infection prevention and control, clinical case management for managers, medical staff (doctors, nurses) and non-medical staff from front-line COVID-19 hospitals in six designated facilities (first stage) for adults and children. Training was also provided to staff of the Chisinau municipality hospitals, which opened additional COVID-19 wards, and to staff at all seven regional hospitals and 28 district hospitals. Although health care workers were included in training, infection prevention and control should be strengthened further within institutions, with creation of a national committee and a national plan for the core components of infection prevention and control.
Case reporting and communication

Since declaration by WHO of a public health emergency of international concern, all COVID-19 cases are reported in the routine national surveillance system for communicable diseases according to the WHO case definitions: suspected, probable or confirmed. To effectively monitor the pandemic and to better inform the general population, an online platform was launched on 20 March to provide real-time data on cases, with the support of the United Nations Population Fund, WHO and the United Nations Resident Coordinator.

From the outset, communication has been one of the key areas for both the Government and WHO. Messages and information about public health behaviour have been shared through national partners, the media and social media channels as part of community engagement and nationwide awareness campaigns. For example, all national mobile networks sent out two SMS alerts about staying at home and maintaining physical distance. WHO, UNICEF and the Resident Coordinator’s Office supported the Ministry of Health in producing and printing a series of posters, flyers, billboards and stickers for the second phase of COVID-19 after relaxation of restrictions, including going to restaurants, barbers and fitness centres. The materials were disseminated through local public authorities, nongovernmental organizations and community leaders.

Ensuring continuation of vital health services such as immunization

Another major concern of the Country Office is to support the Ministry of Health in ensuring that other health priorities are not neglected. The country has seen fewer interruptions in the delivery of health services in hospital, as there is a high ratio of beds per 100,000 people. The Expanded Programme on Immunization was disrupted but restarted 2 months later. The Country Office has conducted a series of training courses on immunization service delivery and vaccination catch-up.

The Country Office is also preparing an assessment of continuation of essential health services to evaluate the broader effect of COVID-19, with WHO, UNICEF, UNFPA and UNAIDS. The results should support the Government in strengthening the health system to assume the burden not only of the pandemic but also delayed access to care.

WHO’s continued support throughout the pandemic and beyond

Like all countries around the world, the Government of the Republic of Moldova faces multiple challenges for mitigating the health, economic and social impacts of the pandemic and restoring health system resilience and macroeconomic and financial stability. WHO will continue to provide the Government with technical expertise, resources and networking to contain the pandemic, address immediate health-system needs and help to catalyse the support of developmental partners.
How Sao Tome and Principe prepared for the COVID-19 outbreak and began to contain it

The first case of COVID-19 in Sao Tome and Principe was reported on 6 April 2020, and the case count had increased to 710 by 24 June 2020. With a population of 200,000 people, the country has seen 13 COVID-19 deaths, and 40 health-care workers have tested positive for COVID-19. Currently, there are five patients at the Campagne hospital, including one in an intensive care unit (ICU).

Addressing pre-existing challenges for preparedness and response efforts

A joint external evaluation under WHO auspices in May 2019 was a key starting point in the country’s strategic agenda to strengthen the health system. The evaluation showed that the country’s level of preparedness, as measured against the International Health Regulations (2005) indicators, and the capacity of health systems readiness were very low, with the exception of the vaccination technical area, which had developed and sustainable capacity. It also revealed that the technical platform to record and process new cases was weak. Furthermore, existing polymerase chain reaction (PCR) laboratory capacities were inadequate. Thus, the country had to prepare strategically for the virus to enter the country and the epidemic to unfold at home.

Following the 30 January 2020 declaration of COVID-19 as a public health emergency of international concern and the announcement of the pandemic, WHO supported the Ministry of Health in setting up a commission to handle COVID-19 in Sao Tome and Principe. The commission reinforced coordination and preparedness for public health and socioeconomic issues.

Working with key partners and stakeholders

The WHO Country Office has been proactive in leading and helping the country to prepare the national contingency plan, in collaboration with the United Nations country team. In this task, WHO is working with the World Bank, the African Development Bank, the International Monetary Fund, the European Commission and the governments of many countries to support health system strengthening in-country, an endeavour that can continue beyond the response to COVID-19. Notably, WHO is putting its intersectoral work into practice by taking an active part in the socioeconomic needs assessment used by the United Nations country team to develop the socioeconomic response plan. The response to the outbreak presents a clear opportunity to improve multisec-
toral partnerships and strengthen the health system for better population health and health equity. Indeed, WHO is focused on making sustainable changes to build health systems that can meet the needs of the population.

The first measures implemented were enhanced surveillance at the airport and initial risk communication, back in February. On 4 March, the Government adopted the contingency plan and created an emergency fund for COVID-19. Between 17 and 20 March, the first emergency situation was declared, including restrictions on travel, quarantine measures and school closures. In May, by which time 161 cases had been confirmed as positive, the Government strengthened the lockdown measures; only essential services were open and wearing a mask was made compulsory. The Government acted with conviction to protect the health of the people.

A close collaboration between WHO and the Ministry of Health to respond to the outbreak

The lack of PCR laboratory capacity for COVID-19 diagnosis was the biggest challenge faced by the Country Office and Ministry of Health when the outbreak began. At the beginning of the outbreak, samples were sent to Equatorial Guinea, Gabon, Ghana and Portugal. WHO provided capacity-building in Sao Tome and Principe. By 11 June, the PCR equipment set up by WHO was operational, and a WHO expert was flown in to train local technicians in PCR techniques. Since then, 50 tests have been undertaken and, as of 24 June, PCR is the gold standard for testing for COVID-19 in Sao Tome and Principe.

WHO provided technical guidance to build a field hospital along with a medical team and logisticians to manage it, in partnership with an emergency medical team from Portugal mobilized by WHO. The field hospital has provided an additional 50 beds. To date, 46 patients have received care in the hospital and occupancy currently stands at 90%. The hospital counts three ICU beds with all the necessary equipment. Notably, before construction of the field hospital, the country had no ICUs and intensive care beds. In a long-term perspective, WHO and the Government also installed an ICU in the main hospital with four beds, including ventilators. Health-care workers have been trained, and this hospital is running well.

WHO is highly involved in capacity-building and staff training. During a four-day workshop, WHO trained the epidemiological surveillance teams, including community workers. In addition, a large-scale simulation exercise took place at the airport to prepare for passengers arriving by commercial flights. In this initiative, WHO and Ministry of Health epidemiological surveillance teams supported the airport staff in undertaking medical interventions, such as taking temperatures and setting up a local testing facility.
Challenges

As a small island developing State, Sao Tome and Principe does not have many partners in place and suffers from a shortage of health personnel. Its isolation also makes its situation particularly challenging.

Equipment, medical supplies and medicines were flown in from the embassy of Sao Tome and Principe in Portugal in May 2020, including medicines for COVID-19 treatment, essential services, 10 ventilators and laboratory equipment, with a PCR machine and reagents supplied by WHO. However, overall, a reduction in flights in and out of Sao Tome and Principe has started slowing down operations and preventing experts, supplies, reagents and additional support from entering the country.

The Ministry of Health and the Country Office received international and regional support. On 31 May 2020, a WHO mission with representatives of the Regional Office for Africa, including the acting WHO Representative, an incident manager, an epidemiologist and a laboratory specialist, arrived from Brazzaville, Republic of Congo, to support the Country Office in its fight against COVID-19. On the same day, a medical team from China with 12 specialists arrived in Sao Tome and Principe to support the local effort. The WHO team met the Chinese medical team to exchange information and experiences and take the opportunity to build a partnership. Despite the challenges of isolation, Sao Tome and Principe has been able to benefit from international expertise in its response to COVID-19.

Risk communication set up by WHO with experts providing support

Setting up risk communication was one of the first actions of the Government and WHO in response to the pandemic. Since February, communication sessions with the general public have taken place on television and radio to educate people about the prevention of COVID-19. The messaging focuses on the promotion of respiratory hygiene, hand washing, social distancing and how to behave when faced with someone displaying symptoms of an acute respiratory infection.

The Ministry of Health and WHO are actively participating and have attended meetings with the media, in addition to attending two public debates about stigma management and strategies for surveillance of at-risk populations.

Continuity of essential health services

As in many countries, the COVID-19 epidemic has affected both the delivery and the use of essential health services. Fewer people are attending health-care facilities. Among other support measures, WHO is providing medicines and consumables and is working closely with the United Nations Children’s Fund (UNICEF) to ensure the continuity of the Expanded Programme on Immunization. COVID-19 has affected some programmes in the country, and WHO has been involved in assessing the impact. BCG and yellow fever vaccines, including pentavalent vaccine, have been a concern. Joint efforts are being deployed with UNICEF to catch up with children who have not yet been vaccinated. This will be preceded by the vaccine campaign to be conducted along with the risk communication and community engagement team aiming to sensitize the population and prevent stigma related to reluctance to be vaccinated during the COVID-19 pandemic. As WHO continues to collaborate with the Ministry of Health on matters related to the COVID-19 epidemic and beyond, WHO is committed to supporting Sao Tome and Principe in all its capacity-building efforts.
TUNISIA

Key areas: 🚨 🚨 🚨 🚨 🚪

An example of successful early measures and effective response

Situation to date

The COVID-19 situation in Tunisia has so far been very much under control following a successful response to the pandemic. As of 6 July 2020, there have been 1205 reported cases (including 50 deaths); no patient is currently hospitalized with COVID-19. Within the last two months, most cases have been imported: the individuals in question have been placed in mandatory isolation in dedicated venues, such as hotels and student hostels.

The first case in Tunisia was diagnosed on 2 March 2020, and the number of cases peaked on 2 April at 48. It has since decreased and a shift in incidence has been observed, with local cases now outnumbering imported ones. The pandemic did not affect the whole country in the same way. Among Tunisia’s 24 governorates, the four governorates making up the greater metropolitan area of Tunis and the southern rural governorate of Kebili were the hardest hit.

Early public health measures to prevent overloading of the health system

The Government introduced public health measures early on that were effective in preventing the health system from being overloaded. Screening of travellers from affected countries started on 27 January 2020, and the public health strategy aimed at identifying, testing, treating and isolating cases and at tracing contacts was intensified in early March. Although there were only 39 cases in the country by 18 March, strict public health measures were nevertheless introduced to curb the spread of the disease. These measures included the closure of borders, schools, mosques, shops and offices and the imposition of a curfew. On 22 March, a complete lockdown was imposed; this has been gradually eased from 4 May onwards.

Most activities in the country have now resumed, including public worship in mosques and catering in restaurants. The opening of international borders on 27 June is a major challenge for Tunisia, as during the summer there will be large numbers of Tunisian émigrés returning to visit relatives, and tourists will also be entering the country again.

Meeting of His Excellency Mr Kais Saied, President of the Republic of Tunisia (right), and the WHO Representative, Dr Yves Souteyrand, 16 March 2020.
Photo credit: WHO Tunisia
Effective national response with the collaboration of WHO and the United Nations system

WHO was involved early on in the Government’s efforts to tackle COVID-19, contributing significantly to both preparedness and response. The preparedness phase focused on measures to prevent the introduction of the virus into Tunisia. On 25 January 2020, the WHO Representative together with the Minister of Health visited the country’s main airport, where the screening of arriving passengers was being introduced as a first measure against COVID-19.

As the pandemic accelerated, the Ministry of Health, supported by WHO and the Office of the United Nations Resident Coordinator, developed a costed national COVID-19 response plan. This plan was structured around the nine pillars of WHO’s Strategic Preparedness and Response Plan and served to galvanize the COVID-19 response in Tunisia not only as far as the Ministry’s work was concerned, but also with regard to securing the support of partners and donors. For instance, the International Monetary Fund’s decision to lend money to support the Tunisian health sector was taken after reviewing and endorsing the costed national plan. Funding decisions by the World Bank and the African Development Bank were based on similar criteria. The WHO Country Office, in liaison with the Regional Office for the Eastern Mediterranean, secured additional funding from Canada, Kuwait and the United States Agency for International Development (USAID) to support implementation of the national plan.

Within the national coordination mechanism, the WHO Representative in Tunisia is a member of the scientific committee led by the Minister of Health. During the committee’s meetings, WHO guidance documents are used as a basis for assessing the current situation and deciding on appropriate public health measures.

WHO guidance is expected and greatly valued by the various members of the committee. At the request of His Excellency Mr Kais Saied, President of the Republic of Tunisia, the WHO Representative met the Head of State on 16 March to discuss the COVID-19 situation. Such meetings are otherwise rare, which highlights the visibility of WHO during the COVID-19 response.
Technical assistance provided by WHO

Support for the expansion of testing

In February 2020, the WHO Country Office was able to provide the Ministry of Health with the first ever diagnostic test kits for COVID-19 to become available for use in Tunisia. Since then, it has procured further test kits, reagents and laboratory equipment with a total worth of over US$ 500 000. Additionally, WHO has promoted the expansion of laboratory capacity, helping to set up seven new laboratories to support the country’s six existing facilities.

WHO’s role in enhancing health facilities

Since the beginning of the COVID-19 pandemic in Tunisia, the WHO Country Office has supported the Ministry of Health with more than US$ 2.1 million worth of medical supplies and equipment, including US$ 1.2 million for personal protective equipment (PPE). The Country Office is helping the Ministry to equip health facilities with PPE for the next few months and seeking to secure additional funding for the procurement of supplies to last until the end of 2020.

The hospital readiness checklist developed by the WHO Regional Office for the Eastern Mediterranean was adapted early on and used to gauge the preparedness of Tunisia’s health facilities. A team from the Ministry of Health and WHO assessed hospitals throughout the country to identify gaps and propose solutions. WHO provided close to US$ 1 million in support of the implementation of suitable triage spaces at six health facilities.

The high number of infected health workers, who account for around 13% of COVID-19 cases in Tunisia, has highlighted the need to intensify training on infection prevention and control. Continuous training is currently taking place throughout the country, with WHO technical and financial support.

Ensuring the continuity of essential health services

Ever since the pandemic reached Tunisia, the health system has been facing a disruption in the continuity of care for non-COVID-19 patients, particularly with regard to the treatment of patients with chronic illnesses, vaccination programmes, and sexual and reproductive health services. This disruption is due to several factors, including the closure of health and family planning centres because of the lack of medical staff and protective equipment. There has also been a general decline in the frequency with which people attend health facilities owing to fear of exposure to the virus.
The Ministry of Health has urged WHO to provide technical support in monitoring the continuity of essential health services across the country. Recommendations based on the WHO publication Maintaining essential health services: new operational guidance for the COVID-19 context were presented to the Ministry, which then issued a circular with clear directives for the regional health authorities to determine whether to resume or reschedule essential and emergency health activities during the pandemic. These directives emphasize the need to provide chronic patients with medicines and develop mechanisms for follow up; to ensure that PPE is available to all health professionals and introduce necessary measures aimed at preventing contamination; and to communicate with the public on the availability of essential services. WHO is currently supporting the Ministry with the development of tools for monitoring the continuity of essential services during a future COVID-19 outbreak and other potential crisis situations.

Tunisia’s national COVID-19 response plan covers the provision of mental health and psychosocial support services. A toll-free helpline was established, with 240 mental health professionals providing remote support to people during and after the lockdown. WHO is working with the Ministry of Health on strengthening its Psychological Assistance Unit, which was set up to support people who have developed mental health issues as a consequence of the COVID-19 crisis and to prevent any relapse in those with prior mental health conditions.

Looking beyond the COVID-19 pandemic

WHO was very much thrust into the spotlight by the pandemic and has, consequently, been able to increase awareness of its unique role. The WHO Country Office in Tunisia has adapted quickly to multiple new working arrangements; its annual budget has increased considerably to take into account the fact that staff are now dealing with procurement, among other tasks.

While the pandemic is currently under control in Tunisia, the risk of a second wave remains. Securing additional funding for the health sector therefore remains a priority for the WHO Country Office. Donor countries and institutions are now less inclined to provide such funding precisely because of the success in containing COVID-19 hitherto, but they should bear in mind that strengthening the health system further in a sustainable manner will help Tunisia to respond effectively to future epidemics.
UZBEKISTAN

Key areas:

Leading the way in the fight against COVID-19

A focus on preparedness: WHO’s support for the Ministry of Health

Uzbekistan, a country with a population of over 33 million, has reported only 22 COVID-19 related deaths as of 29 June 2020. Given that the international tourism industry has slowly begun to recover, though with an increasing number of people choosing where to go on holiday on the basis of the COVID-19 situation in individual countries, the Government recently launched the “Uzbekistan: Safe Travel Guaranteed” campaign to attract international tourists. Like Italy, Uzbekistan plans to offer financial compensation to anyone visiting the country who becomes infected with COVID-19. According to the Government, the whole campaign is meant to demonstrate that the new safety and hygiene measures being implemented across the tourism sector in Uzbekistan will protect visitors from COVID-19. This decision comes as no surprise, since Uzbekistan was the fourth fastest growing tourism market in 2019, according to the World Tourism Organization. With plans to lift more of its lockdown restrictions soon, the country has relied on WHO support throughout to make strong headway in its fight against the pandemic.

Well before the first case of COVID-19 was recorded in Uzbekistan, the Government requested WHO assistance to conduct a joint external evaluation of its core capacities for implementation of the International Health Regulations (2005). Following that request, the WHO Country Office started to work intensively with the Ministry of Health on preparing for a potential outbreak of COVID-19. These preparations included the assessment of two hospitals in Tashkent, which resulted in recommendations on how to improve their level of readiness; the evaluation of designated laboratories under the Agency for Sanitary and Epidemiological Well-being and its regional branches; and training of the laboratory staff on COVID-19 diagnostics and biosafety. WHO thus helped the Ministry to become ready to prevent, detect and rapidly respond to a major public health risk.

The initial focus was not just on hospital readiness but also on surveillance at the country’s 53 entry points – and rightly so, as it turned out. Nevertheless, when the first COVID-19 case was recorded in the country on 16 March 2020, it became clear that although the Government had put measures in place to record all people entering Uzbekistan, tracking their subsequent movements was difficult, because many of them did not stay at one location but travelled across the country.
Coordination and partnership-building for the COVID-19 response

Preparing for COVID-19 also meant getting all the national and international stakeholders to work together. At the national level, an Anti-COVID Commission led by the Prime Minister was established. The Ministry of Health, with WHO support, prepared for a worst case scenario, in which 10% of the population would become infected with COVID-19. This allowed the Government to make plans for the procurement of a sufficient quantity of personal protective equipment and to review its health workforce capacity and health infrastructure. WHO assisted the Ministry of Health in developing Uzbekistan-specific COVID-19 guidelines by adapting its global guidance to the local context, thereby fostering a sense of national ownership and winning the appreciation of the country’s authorities. WHO also provided technical support to working groups of the Ministry dealing with test protocols, COVID-19 case scenarios, and infection prevention and control (IPC). This enabled the Ministry to strengthen its collaboration with, and outreach to, medical universities in all of the country’s regions and to ensure an uninterrupted flow of accurate information on COVID-19. All training and communication material was translated into the Uzbek, Russian and Karakalpak languages.

In coordination with the United Nations (UN) Country Team and development partners, WHO provided technical and administrative support to the Government in drawing up the national Strategic Preparedness and Response Plan (SPRP) for dealing with COVID-19. As a result, Uzbekistan became the first country to finalize its SPRP and to upload it to the COVID-19 Partners Platform. WHO also contributed to the UN framework for the socio economic response to COVID-19 in Uzbekistan.

WHO regularly updates the resident UN agencies, development partners, embassies, and international and local nongovernmental organizations on international and country-specific COVID-19 matters. As more global guidelines on COVID-19 were issued by WHO, other UN agencies, such as the United Nations Children’s Fund (UNICEF) and the United Nations Population Fund, came to rely extensively on these when developing their own guidance documents to support Uzbekistan’s response to COVID-19. The Ministry of Health’s task force on procurement drew on WHO’s advice and data for its work, while WHO itself assumed a leadership role within the task force on capacity building.

WHO has organized several webinars and distance learning courses in Russian and Uzbek to cater to the trainees’ diverse linguistic and professional background. Furthermore, the WHO Country Office translated into Uzbek four courses from the OpenWHO platform, dealing with COVID-19 management, IPC and the management of severe acute respiratory syndrome. The Country Office has also created a publicly available folder on its website with COVID-19 materials for all medical institutions, international partners and health workers.

Thanks to WHO’s unique relationship with the Ministry of Health, the WHO Representative has been able to play a convening and brokering role in relations between development partners and the Government, helping to strengthen their cooperation. “Every day at seven in the morning and just before going to bed, the Health Minister and I have chats via the Telegram app, where we exchange our ideas, I provide an update on the work of other UN partners, and we discuss what we did not have time to during the day,” says Dr Lianne Kuppens, WHO Representative in Uzbekistan. “And the next day I share my feedback with UN Country Team colleagues and other partners, as WHO remains the only channel from which development partners can get this kind of direct soft intelligence.”
Fundraising to improve the preparedness and sustainability of the country’s health systems

WHO has helped the Government to raise funds totalling more than US$ 18 million (with an additional US$ 15 million pledged) from various donors and development partners: the Asian Development Bank, the World Bank, the European Union (EU), the Organization for Security and Co operation in Europe, the United States Agency for International Development, the United States Centers for Disease Control and Prevention; and the Governments of Japan, Norway, Germany, Canada, the United Kingdom, Switzerland and Turkey. All funds received and committed will be used to build resilient health systems and to carry out countercyclical interventions aimed at mitigating the negative socio-economic impact of the pandemic. Additionally, the Government and WHO have agreed to back these efforts by conducting a joint external evaluation of Uzbekistan’s core capacities for implementation of the International Health Regulations, which will ensure that the country’s health systems are well prepared for future emergencies.

Maintaining essential health services, surveillance and referral

Ensuring that essential health services continue to be delivered remains one of the main priorities of WHO’s work in the country. Thus, the WHO Country Office has supported the Ministry of Health in controlling a recent measles outbreak through a booster vaccination campaign and its general immunization programme. For example, Uzbekistan successfully completed the second round of its human papillomavirus vaccination campaign, achieving close to 95% coverage.

Given that people with chronic diseases and non-communicable diseases (NCDs) are among the most vulnerable population groups during the COVID-19 pandemic, WHO has assisted the Ministry of Health in maintaining without interruption its national chronic disease and NCD programmes. Thanks to WHO’s support, Uzbekistan is currently the only country worldwide that uses all three tools developed by WHO to help Member States to strengthen the health system response to COVID-19: the Adaptt Surge Planning Support Tool, the Health Workforce Estimator and the COVID-19 Essential Supplies Forecasting Tool. The Uzbek authorities are using these to assess and monitor acute and intensive care capacity needs over time, to determine the timing and severity of the epidemic peak, and to draw up detailed human resources plans for the country’s health systems.

Although Uzbekistan’s pandemic influenza preparedness programme has small geographical coverage, the programme did stand the Government in good stead when preparing for COVID-19. WHO has not reviewed the country’s laboratory testing strategy, but the Government’s recent decision to test asymptomatic as well as symptomatic people suggests that the authorities are following the relevant WHO guidelines. More than 20 000 tests are carried out daily. WHO has provided the Government with over 25 000 polymerase chain reaction (PCR) test kits, 3500 vials of reagents for RNA extraction and almost 8000 pipette tips. In addition, thanks to a contribution of €2.5 million from the EU, WHO was able to purchase over 10 000 surgical masks, 10 000 examination gloves and 1400 isolation gowns for Uzbekistan.
To verify whether those who test positive for COVID-19 are receiving the necessary treatment, WHO was invited to join a visit to a quarantine facility in which most of the cases are based. Heeding WHO’s advice, the Government intends to implement some changes to the conditions at this closed setting to ensure that the basic health needs of those who are in isolation are met. Moreover, people will be offered the option to stay at one of the designated hotels instead of the quarantine facility.

Looking ahead

As Uzbekistan begins to relax confinement measures in order to support the liquidity of households and businesses and to attract tourists, the Government continues to rely on WHO support to ensure that the recovery is accompanied by appropriate public health measures – notably the use of a test, track and trace strategy – and continuity in the delivery of essential health services. On the whole, the pandemic also represents an opportunity for Uzbekistan to consider long overdue structural reforms of its health sector that are crucial to long-term recovery and resilience. WHO’s relevance in the country and its commitment to supporting the Government have never been greater than now.
VIET NAM

Early and strong action buttressed by a whole-of-society approach has led to an internationally acclaimed success in the control and prevention of COVID-19

Highlights
- Early activation of a strong response system enabled Viet Nam to control COVID-19 successfully.
- The Government displayed strong leadership and mobilized resources effectively using a whole of society approach.
- WHO is supporting long-term investment to strengthen health emergency preparedness – investment initiated by the Government after previous epidemics – and providing technical support in various key areas, including the continuation of essential public health services.

Overview
Viet Nam has been acclaimed for its successful response to the COVID-19 pandemic, which has affected all countries around the world, regardless of geographical location or income level. As of 14 July 2020, Viet Nam has recorded a total of 373 confirmed cases of COVID-19, with 23 active patients and no deaths. Of these 373 cases, 266 (71.3%) are imported cases while the remaining 106 (28.4%) are locally transmitted. The country has not recorded any local transmission since 16 April. All subsequent cases reported from Viet Nam have to date been imported cases detected during incoming travellers’ mandatory 14-day quarantine on arrival. Viet Nam has the lowest infection (0.38 cases per 100 000 population) and mortality (0) rates among countries with a population of more than 50 million. This is a notable accomplishment considering the country’s population size (over 95 million) and its lower-middle-income status (the gross domestic product per capita is US$ 2566).

Viet Nam’s success has awakened international attention, and those analysing it have focused in particular on the Government’s immediate actions and strong measures. The main factors behind this success include the country’s long term investment in the systems for disease prevention and control (building on lessons learned from previous disease outbreaks); trustworthy and comprehensive communication with the public; and strong leadership by the Government, which managed to mobilize all sectors of society.

WHO worked, both through its Country Office in Hanoi and through the Regional Office for the Western Pacific, with national counterparts to strengthen Viet Nam’s capacity to prepare for the pandemic and is currently supporting the COVID-19 response by providing invaluable technical assistance. Moreover, WHO is helping the country to prepare for possible new waves of the pandemic while continuing to deliver other essential public health services.
Early activation of a strong response system

Viet Nam mounted an early response to the COVID-19 emergency, having systems in place to prevent and control the transmission of COVID-19 even before the virus entered the country. After a cluster of cases of severe pneumonia of unknown cause was reported from Wuhan, China, at the end of December 2019, Viet Nam conducted its first risk assessment exercise in the first week of January 2020. As soon as the first confirmed case outside China was reported by Thailand on 13 January, Viet Nam convened the first meeting of the National Steering Committee for COVID-19 Prevention and Control (NSC) at a multi-ministerial level. The first version of the national COVID-19 response plan was issued on 20 January.

On 23 January, Viet Nam confirmed its first two COVID-19 cases at the same time – these were some of the earliest examples of local transmission outside China. On 24 January, international media reported that a lockdown had been imposed on the city of Wuhan. Viet Nam immediately convened the NSC, which decided to strengthen entry screening measures and to extend the ongoing Tet (Lunar New Year) holiday for schools until further notice.

On 30 January 2020, the same day that WHO declared the COVID-19 outbreak a public health emergency of international concern, Viet Nam formally (and retrospectively) established the NSC by a decree of the Prime Minister. COVID-19 cases in the country increased as more Vietnamese workers came back from Wuhan, China. By 13 February, the case number had climbed up to 16, with limited community transmission detected in a village in the commune of Son Loi, near the capital Hanoi. The country implemented a three-week village-wide quarantine, affecting about 11,000 people. Thanks to these efforts, the authorities were able to limit the first wave of the COVID-19 outbreak in the country to just 16 cases.

Strong government leadership and successful mobilization of resources using a whole-of-society approach

The NSC leads and coordinates Viet Nam’s COVID-19 prevention and response efforts. Chaired by the Deputy Prime Minister, it is composed of 24 members from different sectors. The Committee meets frequently to coordinate prevention and response activities across ministries and sectors. Key issues to be decided are reported to the Prime Minister, who is responsible for ultimate approval of the decisions adopted by the NSC. Provincial and lower-level committees are also in place, helping to inform the local response. This well-designed command and control system has made it possible to mobilize resources effectively using a whole-of-society approach.

Case investigation and contact tracing

Each district in Viet Nam has rapid response teams consisting of health staff trained in epidemiological investigation and response. These teams conduct an epidemiological investigation of every COVID-19 event (a single suspected or confirmed case, or a cluster of such cases), identify close contacts and provide a response. Contact tracing is considered to be a critical part of the investigation and is carried out in close collaboration with local authorities, the community and other relevant sectors, including airlines, travel agencies, workplaces and media partners. Several
other means, including mobility tracking, the Suc Khoe Viet Nam (Healthy Viet Nam) and Bluezone mobile apps, and closed-circuit television cameras, have been used to support effective contact tracing. Thanks to these methods, the authorities were able to trace close contacts quickly, thereby preventing the further spread of the virus.

Viet Nam has so far recorded seven clusters in different settings, with the number of cases in each one ranging from four to 44. Through efficient case and cluster investigation and active contact tracing, local authorities were able to swiftly quarantine individuals and communities, which ensured that no further local transmission could take place.

Quarantine and isolation

Viet Nam developed its own quarantine and isolation policy, known as the four-ring quarantine system, to control COVID-19. The first ring is the isolation of cases and their high-risk close contacts at designated hospitals for treatment and isolation. These hospitals are equipped with intensive care units and have the capacity to treat severely ill patients. The second ring is the quarantining of lower-risk close contacts of cases (or suspected cases) at centralized quarantine facilities for testing and monitoring. Military barracks, academic institutions and public hospitals in each locality were used for that purpose. The third ring is home quarantine or self-isolation: contacts of those being quarantined in the second ring are advised to stay at home or their place of residence and to report any COVID-19 symptoms to the local health authority daily. The fourth ring is area-level quarantine at the community, street or building level in areas where multiple cases have been reported. Quarantine operations are conducted by local authorities with technical support from the Ministry of Health in accordance with the national COVID-19 response plan. In this way, the country was able to control the spread of the virus while avoiding large scale lockdowns as much as possible.

In addition to the four quarantine rings, the country has also established a mandatory 14-day quarantine on arrival for travellers entering Viet Nam. This is to ensure early detection of imported COVID-19 cases, minimizing the risk of local spread of the disease. The system was first implemented on 7 February 2020 for travellers from Hubei Province, China, and was gradually expanded to cover travellers from other countries as the COVID-19 pandemic spread across the globe. Since 21 March, all incoming travellers have been required to undertake such a quarantine. The country has mobilized resources from the military and from local governments to provide free meals and amenities in all quarantine facilities.

Physical distancing measures

Viet Nam applied physical distancing measures at an early stage and increased their intensity gradually in line with the evolving COVID-19 situation. In late January 2020, all educational institutions – from kindergartens and schools to universities – were advised to extend the Tet (Lunar New Year) holiday period. Planned public events and mass gatherings, such as festivals, were suspended. In mid-March, people were recommended (later required) to wear face masks in public and keep a physical distance of at least 2 m from others. Between late March and early April, as the second wave of COVID-19 proved to be worse than the first (with more confirmed cases occurring through community transmission), mandatory and more restrictive measures were imposed. On 1 April, the Prime Minister issued a nationwide physical distancing directive. People were advised to stay at home, non essential businesses were requested to close and public transport was reduced. The Vietnamese public have been exceptionally compliant with government directives and advice.
Following a decrease in newly confirmed cases, the Government began on 15 April 2020 to lift physical distancing measures on the basis of risk assessments by the NSC. Fourteen days after the last locally confirmed case, most physical distancing measures were removed. School classes resumed in early May. Mandatory mask-wearing was also ended in May. Public transport, including domestic air travel, has been operating at full capacity since mid May.

**Trustworthy and comprehensive communications**

The Government has engaged actively with the media to ensure timely, clear, accurate and consistent risk communication. Daily and hourly news releases through all media channels reassured people and also helped to tackle misinformation and rumours. The Government has collaborated with various organizations, including WHO, and sectors to develop and deliver effective communication products and messages by various means, also through innovative channels, such as mobile messengers and apps.

**Financing the COVID-19 response and economic relief**

The Government is not only covering the health care costs of COVID-19, but also providing financial support to individuals and companies that have suffered economic loss. The total cost of implementation of the national response plan is being paid by the Government, which has adopted a massive financial support package worth 62 trillion dong (US$ 2.6 billion) to support individuals below the poverty line, the unemployed, those living on social security and those who are staying at home. The business sector is receiving various forms of financial support, such as suspension of tax payments and social insurance contributions. Although Viet Nam’s economy has been affected significantly by the interruption of business activities, its growth rate for this year is still expected to be higher than that of other countries in Asia.

**International cooperation and solidarity**

Viet Nam has not only controlled the disease outbreak within its own borders, but has also worked beyond these to promote international and regional solidarity and cooperation on the response to COVID-19. This is reflected in the theme “ASEAN: Cohesive and Responsive” that Viet Nam selected for its chairmanship of the Association of Southeast Asian Nations (ASEAN) in 2020. As well as chairing virtual meetings with ASEAN members and external partners, Viet Nam has provided medical supplies to other countries. A notable event was the special summit of ASEAN plus China, Japan and the Republic of Korea on COVID-19 on 14 April 2020, at which the participating countries came together to act decisively in response to COVID-19. Their leaders agreed to create a COVID-19 ASEAN Response Fund and to build up regional reserves of medical supplies.

The Prime Minister of Viet Nam also gave speeches at the virtual meeting of health ministers from the WHO Western Pacific Region held on 8 April and themed “Stand in Solidarity to Combat COVID-19”, and at the closing session of the Seventy-third World Health Assembly in May, in both of which he called for international solidarity and concerted efforts against the pandemic.
Through the Ministry of Foreign Affairs, Viet Nam has donated funds to WHO to support its global COVID-19 response and provided bilateral support to other countries.

**WHO technical support**

WHO, through its Country Office and the Regional Office for the Western Pacific, has stood side by side with Viet Nam since the beginning of the COVID-19 outbreak in January 2020. As the lead health agency within the United Nations (UN) system, WHO has been overseeing the overall support provided by the UN system for the Government’s preparedness and response plan and also liaising with international partners to facilitate their provision of technical assistance to the country. WHO has provided inputs at a high level, notably at the NSC meetings, for Viet Nam’s COVID-19 response. Moreover, WHO co-chairs and supports the Health Partnership Group, led by the Ministry of Health, and facilitates coordination between the Government and development partners. WHO has focused its technical support on the following areas: surveillance and risk assessment; public health measures at points of entry; laboratory testing; clinical management and infection prevention and control; and risk communication.

**Surveillance and risk assessment**

WHO is supporting the Ministry of Health in monitoring and updating the situation through regular risk assessment. WHO has helped with the development and ongoing revision of the national response plan and interim technical guidelines on COVID-19. Specific areas of technical assistance include surveillance, contact tracing, and outbreak investigation and response.

WHO facilitated training on Go.Data, an outbreak investigation tool for field data collection during outbreaks of infectious diseases and public health emergencies. From early March to May 2020 such training was provided in Hanoi, Ho Chi Minh City and Nha Trang to national and regional participants, including epidemiologists, members of rapid response teams and other front line workers who had supported the local outbreak investigation and response to COVID-19.

**Public health measures at points of entry**

WHO’s technical support for public health measures at points of entry (POEs) focused on application of the current measures and on strengthening POE system capacities. Contingency plans were reviewed and updated. Technical guidelines on POEs were developed, and training on sanitation and disinfection of ships and aeroplanes was provided. Border quarantine staff were trained to enhance risk communication capacity. Support was provided for the development and implementation of a legal framework for the coordination of the various staff teams at POEs.

**Laboratory testing**

WHO has continuously provided technical assistance for laboratory testing and interpretation of the results. In particular, WHO assisted with the development of evidence-based guidelines and testing algorithms and with preparing for the potential needs that laboratories might face should there be widespread community transmission of COVID-19. Testing supplies and reagents were provided to regional laboratory institutes (the National...
Institute of Hygiene and Epidemiology, the Pasteur Institute in Ho Chi Minh City, the Tay Nguyen Institute of Hygiene and Epidemiology, and the Pasteur Institute in Nha Trang) and to designated national hospitals from early February onwards, including RNA extraction kits, enzymes, primers and probes for reverse transcription polymerase chain reaction (RT-PCR) assay for detection of the virus responsible for COVID-19. WHO assisted with training on sample collection, biosafety and laboratory diagnosis from the very beginning of the response. More than 100 laboratories are currently capable of performing RT-PCR tests.

Clinical management and infection prevention and control

WHO worked closely with national hospitals to strengthen clinical management and infection prevention and control (IPC) capacity for the appropriate treatment of COVID-19 cases by developing or revising relevant technical guidelines and providing training opportunities for front line health workers. OpenWHO clinical management and IPC training courses have been translated into Vietnamese with support from Hanoi Medical University and made available for free on online platforms, such as OpenWHO and Hai Phong University of Medicine and Pharmacy’s eLearning for Health portal, which was developed by WHO with financial support from the India, Brazil and South Africa Facility for Poverty and Hunger Alleviation (IBSA Fund). Moreover, WHO has conducted weekly webinars on clinical management in coordination with the National Hospital of Tropical Diseases.

In addition to guidelines and training, WHO helped to directly assess the preparedness of the country’s health care facilities through site visits by its field teams. WHO also mobilized resources for the procurement of personal protective equipment in the early stages of the outbreak.

Risk communication

To help in delivering timely and context-appropriate messages to the public and guiding its behaviour, WHO has put tremendous effort into supporting the Government’s risk communication activities. WHO helps the Ministry of Health to develop risk communication messaging and materials, and to conduct social listening so as to counter rumours and misinformation. It has not always been easy to ensure that communications materials are context appropriate and technically sound at the same time: some flexibility is required when adapting global and regional guidelines to the local context.

Collaborating and sharing information with the UN and other international organizations, development partners and the diplomatic community, WHO has been coordinating all the COVID-19-related risk communication and community engagement activities in Viet Nam. WHO has also conducted training for the risk communication focal points at the national and provincial levels using standardized modules. The focal points have thus been able to improve their knowledge of innovative technologies and to gain experience with the use of these tools not only for social listening and rumour management, but also for surveillance and risk assessment.
Lessons learned and the next steps ahead

Viet Nam’s hitherto successful management of the COVID-19 outbreak can in large part be attributed to its earlier efforts to strengthen its health system. As a hotspot for emerging infectious diseases, the country has invested considerably in enhancing its capacities and has made substantial progress in preparing for and responding to public health emergencies over the past decade.

This investment in capacity-building has clearly paid off, as witnessed by Viet Nam’s successful response to COVID-19. At the time of writing, the country had not reported any local COVID-19 infections for more than 90 days. However, the pandemic is still evolving and the country continues to report positive cases among those arriving from other parts of the world. Viet Nam needs to stay vigilant and should make use of its hard-earned favourable situation to review the past response, further strengthen its health care system for a possible next wave, and fully resume the provision of essential public health services.
WEST BANK AND GAZA STRIP

Key areas:

Responding to COVID-19 in the context of chronic occupation, protracted conflict and a fragile health system

How does a territory that has faced 53 years of chronic occupation and protracted conflict, leading to significant movement and access restrictions, and whose health system is severely overstretched and fragile, respond to COVID-19? This case study highlights the additional challenges posed by the pandemic in such a setting and the support that WHO has been providing to the Palestinian Authority and partners for response efforts thus far.

The context

The Palestinian health system is beset by shortages of human resources, pharmaceuticals, medical supplies and equipment. In the Gaza Strip, stocks of over 40% of essential drugs are permanently depleted, and hospitals suffer frequent power outages. The humanitarian needs are significant: 2.4 million Palestinians are in need of assistance, most (75%) of whom live in the Gaza Strip, where people experience high rates of poverty and unemployment. As a result of the Great March of Return demonstrations from March 2018 to early 2020, the Gaza Strip’s already weak health system came under massive strain, particularly because of an influx of trauma patients. More than 300 people were killed in those protests and 33 000 injured, of whom 8000 suffered gunshot wounds, mainly to their limbs, leading to a high risk of amputation.

The COVID-19 situation: some early success

Recognizing the considerable existing vulnerabilities of the territory’s health system, the Palestinian Authority and partners acted quickly and decisively in the early phases of the pandemic to effectively contain the spread: only 600 confirmed cases and five COVID-19-related deaths were recorded in the first three and a half months following the first reported case in early March 2020. A state of emergency was declared by the President on 5 March 2020, and the Prime Minister’s Office assumed responsibility for overall coordination of the response. Adopting a whole of government approach and focusing on containment, the latter worked in close consultation with the Ministry of Health and was supported throughout by the United Nations (UN) system.
In the West Bank, however, restricting population movement has proved to be a significant challenge, since the Palestinian Authority lacks control over the points of exit and entry through which large flows of people, goods and services move to and from Israel. Nevertheless, the restrictions on movement and physical distancing measures put in place across the West Bank and the month-long lockdown imposed on 14 March were initially well adhered to and appear to have been effective in curbing the spread of COVID-19. Some restrictions remained in place during the holy month of Ramadan into late May, with mosques, churches and other public places remaining closed, and celebrations and mass gatherings prohibited. But as the number of COVID-19 cases remained stable at low levels, the Government started to ease restrictions while continuing to promote and mandate certain protective measures. Despite continued appeals by officials to the public, compliance with public health regulations (including the wearing of face masks and physical distancing) rapidly declined, and two weeks after the end of Ramadan, cases started to surge exponentially in the West Bank. Whereas an average of 200 cases per month had been confirmed between March and May, the period from 15 June to 15 July alone saw 7477 new COVID-19 cases. As of 15 July, 49 COVID-19-related deaths have been recorded.

In the Gaza Strip, the situation has remained stable, with 72 cases and one death reported as of 16 July. The ongoing blockade restricts access for its 2 million inhabitants to the remainder of the territory under the Palestinian Authority and to the outside world, the only ways of entering the area being through the Rafah crossing from Egypt or through the Erez crossing from Israel. In addition, the authorities in the Gaza Strip imposed an extended 21-day mandatory quarantine, to be undertaken at designated facilities, for everyone entering the area, which so far has effectively prevented community transmission.

Early containment created a window of opportunity to prepare accordingly

The first few months, during which case numbers were relatively stable and low, provided a window of opportunity for the Government and its partners, including the UN, to scale up efforts aimed at enhancing preparedness, expanding testing capacity, improving case management capacity and strengthening infection prevention and control measures. Several key areas of early and ongoing support are outlined below.

UN task force established to support response

WHO, its sister UN agencies and partnering nongovernmental organizations (NGOs) formed a dedicated task force, led by the UN Resident and Humanitarian Coordinator, to support the Government’s efforts to contain and mitigate the outbreak. An interagency COVID-19 response plan was developed to support the overall government response plan and mobilize additional resources. The UN agencies have also drawn up a system-wide development plan to help in addressing the broader COVID-19-related challenges, including the economic consequences of the pandemic.
Laboratory capacity scaled up to meet testing needs, and quarantine facilities established

In the early stages of the pandemic, the West Bank and Gaza Strip did not have the equipment and supplies required to conduct polymerase chain reaction (PCR) testing for detection of the virus responsible for COVID-19. In the Gaza Strip, WHO arranged for the repair of the only available PCR machine in the Public Health Laboratory, which was broken, and supported coordination efforts to import additional PCR machines, also providing funding to upgrade laboratory capacities. In the West Bank, WHO coordinated the delivery of test kits and supplies so that testing for COVID-19 could commence in the city of Ramallah and in decentralized laboratories elsewhere in the area. Testing capacity was scaled up substantially over time, and now up to 5000 PCR tests a day can be performed.

WHO also supported the Ministry of Health in establishing the necessary facilities: schools and hotels were converted into quarantine centres, and dedicated treatment and isolation facilities were set up, each with appropriate protocols for treatment and case management. In the Gaza Strip, quarantine facilities with a total capacity for 2000 people were established, and the Egyptian authorities agreed to quotas for the movement of people so that all those entering the area could be accommodated in these facilities.

Shortages of health workers, medical supplies and equipment addressed

WHO supported the training of more than 1000 health workers in early detection and case management, and conducted two simulation exercises, attended by over 400 participants, to test procedures for identifying and managing COVID-19 cases. Chronic gaps remain in the availability of intensive care unit (ICU) equipment in the Gaza Strip, which has only 87 adult ventilators, most of which are in use, to serve 2 million people. Meanwhile, the West Bank has 321 ICU beds equipped with ventilators to serve 3 million people. Through the global supply chain system, and in close coordination with the United Nations Children’s Fund (UNICEF) and the World Food Programme, WHO scaled up efforts to mobilize medical equipment and supplies. Despite global shortages, substantial quantities of test kits, personal protective equipment and pharmaceutical supplies were delivered. In total, Health Cluster partners ordered 130 new ventilators for the West Bank and Gaza Strip. Since March 2020, WHO has spent US$ 1.8 million to procure and deliver essential medical supplies, including thousands of items for infection prevention and control to protect health workers.

Communication of COVID-19 risks and community engagement

WHO and UNICEF have worked closely with the Ministry of Health and other partners on establishing a private–public partnership to inform the public about COVID-19. The Palestinian International Cooperation Agency, the Bank of Palestine, the mobile phone network provider Paltel and various private companies became actively involved in a risk communication
and community engagement campaign. This has resulted in extensive dissemination of health messaging and advice aimed at the public (including several specific target groups) through a variety of media channels. The campaign has involved more than 40 NGOs and UN agencies in its outreach activities, developing and sharing over 1200 social media posts and achieving over 15 million views of content. Additionally, it has to date distributed more than 300 000 brochures, sent out over 6 million text messages and reached out to the public via radio, billboards, cash machines and television – in the last case through video clips featuring prominent singers, actors and religious figures.

Substantial challenges still need to be addressed

A second peak hits the West Bank, triggering renewed public health measures

Following the lifting of restrictions at the end of May and as a result of inadequate compliance with public health regulations, the West Bank has seen a surge in cases since mid-June. In response, the Palestinian Authority reimposed strict restrictions on movement in the areas with the highest case numbers and adopted a series of additional measures aimed at containing the surge, including a lockdown of specific governorates, followed by a complete temporary lockdown of the West Bank from 3 July. In close consultation with the Ministry of Health, WHO and partners are targeting the population of the governorates most affected, using health advice and messages disseminated via social media and other channels to reinforce and encourage adherence to personal protective measures. Among the economic consequences of the pandemic, it is expected that more Palestinians will fall below the poverty line.

Chronic gaps in health system capacity are making the COVID-19 response even more challenging

Many significant and chronic gaps persist, especially in the Gaza Strip, which make it difficult to ensure an effective and sustained COVID-19 response. Shortages of medical supplies, equipment and staff impair contact tracing and the follow up of mild cases in home isolation, where compliance is a concern. Local shortages of supplies, including personal protective equipment, for front line health workers undermine infection prevention and control and prevent the optimal case management of COVID-19 patients.

WHO and partners continue to support the Palestinian Authority in addressing all the main areas of the national COVID-19 preparedness and response plan, including: strengthening event based surveillance; increasing and sustaining testing capacities; improving the isolation of confirmed cases, contact tracing and the quarantining of contacts; enhancing infection prevention and control (with a particular focus on protecting health workers); scaling up training and guidance on effective case management and critical care for severe cases; ensuring the availability of psychosocial and mental health support for patients, their families and communities; and continuing efforts aimed at informing the public of the risks associated with COVID-19, promoting key public health measures (such as physical distancing and hand hygiene) and tackling social stigma and misinformation.
New political stalemate

Amid the COVID-19 crisis, new political challenges emerged that froze technical and operational coordination between the Palestinian and Israeli authorities. In view of the looming threat of annexation of parts of the West Bank, President Mahmoud Abbas announced on 19 May 2020 that the Palestinian Authority was absolved of all its obligations under bilateral agreements with Israel. This suspension of coordination has resulted in a backlog of shipments of essential medical equipment and supplies, which are pending import and customs clearance, and in significant additional obstacles for people (especially from the Gaza Strip) who need to be referred for specialist health care outside the territory under the Palestinian Authority. Following several high-level meetings with the Prime Minister, the Humanitarian Coordinator and WHO, the UN is working on solutions to facilitate the clearance of humanitarian shipments through the Logistics Cluster mechanism and to ensure that patients can continue to be referred for essential treatment outside the territory.

Maintaining access to essential health services

Continuing to prioritize the ongoing immunization programme, the Ministry of Health and partners have managed to maintain high vaccination rates (above 90% coverage for most vaccines on the routine schedule), even at the height of the COVID-19 crisis. Owing to a reprioritization of capacities to support the COVID-19 response, primary care services, noncommunicable disease programmes and, to some extent, maternal and child health programmes have been scaled down.

The people most affected are those in need of specialized services, such as cancer treatment (radiotherapy and chemotherapy). Patients from the Gaza Strip are faced with further hurdles to securing the Israeli permits that they need to be able to access treatment and care outside the area, and this is having a devastating effect on them and their families. In the context of COVID-19 and the new political challenges, WHO continues to uphold the right of these gravely ill people to specialist care. WHO is working very closely with the Ministry of Health, other UN system agencies, donors and the NGO community to enhance primary care and hospital services.
BANGLADESH

Key areas: 

WHO’s Surveillance and Immunization Medical Officers are the frontline warriors in Bangladesh’s COVID-19 response

The WHO Bangladesh Country Office helped the Government response to COVID-19 with strategic guidelines, supplies, equipment, logistics, capacity-building, risk communication, and on-ground field support through the network of Surveillance and Immunization Medical Officers (SIMOs). Sixty-four SIMOs and seven Divisional Coordinators (DCs), under the overall leadership of the Incident Management System (IMS) are at the forefront of Bangladesh’s COVID-19 response in every District. This involves: coordination in the field; building capacity in Infection Prevention and Control (IPC) and contact-tracing; supporting and ensuring timely transportation of laboratory samples; conducting surveillance; and maintaining immunization and other essential services at refugee camps in Cox’s Bazar. This case study highlights the challenging COVID-19 situation and the difference that WHO’s frontline warriors are making.

Initiating preparedness for a global pandemic

Implementing the International Health Regulations (IHR 2005), the Government has been establishing the foundations for emergency preparedness and response. When COVID-19 emerged in January 2020, the Ministry of Health and Family Welfare (MOHFW), with the support of the WHO Country Office, already had an Early Warning Alert and Response System (EWARS) in place, along with event-based reporting, a biosafety laboratory and a health emergency operations centre (HEOC).

Working closely with MOHFW, WHO took immediate action to increase capacity to detect and respond to the new disease. Early in February 2020, surveillance was intensified, including at the points of entry (POEs). To strengthen the country preparedness to respond to COVID-19, WHO provided MOHFW, the Institute of Epidemiology, Disease Control and Research (IEDCR) and local authorities with laboratory supplies and reagents to improve testing capacity. An assessment of required logistic support was made and WHO worked with the Government and development partners to provide it. Meanwhile, SIMOs started surveillance for COVID-19 and risk communication activities began.

The Preparedness and Response Plan for COVID-19 was developed, providing guidelines for each pillar of the response: coordination and planning; surveillance, laboratory and points of entry; case finding, contact tracing and quarantine; clinical case management; infection prevention and control; risk communication and public awareness; operational research.
Rapid transmission of the new disease

On 8 March the MOHFW announced the first three cases of COVID-19. Public hospitals soon started setting up isolation wards to admit suspected COVID-19 patients. On 16 March the Government closed all educational facilities and this was followed by a ban on public gatherings. On 23 March the population was advised to stay at home except for urgent needs. All public and private offices, except those providing a few essential services, were closed. As of 23 March, IEDCR confirmed 39 cases and four deaths, taking the case fatality rate to 10.3%.

Despite the restriction on people’s movement and the country’s effort to curb COVID-19, in April 2020 the number of confirmed cases rapidly increased, from 100 on 6 April to 1000 on 14 April. At this point the already stretched health system wrestled with the increasing number of hospital admissions, and health professionals were challenged to provide care for a disease unknown to them.

During the Muslim fasting month, extending from the last week of April until the Eid al-Fitr holiday on 23 May, the Government advised people to minimize social gatherings and implement social distancing. The number of COVID-19 cases nevertheless increased by around 10 000 within a week, from 23 870 on 18 May to 35 585 on 25 May. Physical distancing is not easy in this densely populated country with around 1265 people per square km. In Dhaka, with over 20 000 people per square km, physical distancing is even more challenging to implement. One and a half months after the implementation of movement restriction, the number of people confirmed as positive for COVID-19 was almost 50 000 and 672 people had died from the disease. As of 12 August, 263 503 people had been confirmed as COVID-19 positive and 3478 people had died, i.e. 1.32% of confirmed cases.

With 21.8% of the population below the national poverty line and with 15% of workers earning not more than $6 a day, people were desperate to get back to work. In addition to the economic blow, people in some areas were hit by natural disasters. On 20 May, cyclone Amphan affected 26 Districts in West Bengal, forcing 4 million people to seek shelter. In July, flash floods and landslides affected 2.4 million people in 18 Districts. Over 550 000 families lost their houses and had to stay in temporary shelters. Moreover, Bangladesh hosts 860 000 Rohingya refugees from Myanmar who live in 34 camps in Cox’s Bazar.

Under the leadership of the WHO Representative and in coordination with the WHO Health Emergencies Programme, WHO provided timely and effective support to the Government by enabling rapid provision of medical supplies and logistics, supporting screening and quarantine at POEs, and timely training of health staff across the country in infection prevention and control and case management.

2 In rural areas where 70% of Bangladeshis live, it is estimated that there are only 3.05 physicians per 10 000 population and 1.07 nurses per 10 000 population.
4 https://www.adb.org/countries/bangladesh/poverty
6 https://reliefweb.int/sites/reliefweb.int/files/resources/MDRBD024du1.pdf
7 https://www.who.int/docs/default-source/searo/bangladesh/covid-19-who-bangladesh-sitrep-13-20200525.pdf?sfvrsn=a15591c0_4
8 https://reliefweb.int/disaster/fl-2020-000161-bgd
Responding to the COVID-19 pandemic: 
WHO’s action in countries, territories and areas, 2020

At the beginning of the outbreak there was only one laboratory ready to do COVID-19 testing, with WHO providing the necessary support such as COVID-19 polymerase chain reaction (PCR) probes and controls. During this phase of the response, WHO had to undertake a vast operation of transporting samples from all 64 Districts. To accelerate COVID-19 testing, WHO helped MOHFW to establish District and field laboratories specific for COVID-19, complete with PCR Real Time PCR machines, technical guidance, and even personnel. Around 100 vehicles operated by WHO, including 13 heavy duty vehicles and 85 cars, played a vital role of mobilizing items crucial to the COVID-19 response, including reagents, biohazard bags, gloves, swab sticks, tubes and zip-lock bags. Over 500,000 pieces of personal protective equipment (PPE) have been distributed for health workers administering the COVID-19 test, as well as for professionals providing care in health care facilities.

As of the end of July, WHO had supported the establishment of 82 laboratories to test COVID-19 samples, enabling more than 1.2 million people to be tested. However, with the rate of positive tests consistently above 20% throughout July and August, testing would need to be significantly increased to meet the WHO-recommended thresholds for safe easing of public health and social measures. Furthermore, the numbers of tests being performed have been decreasing each week since the beginning of July, coinciding with the introduction of user fees for testing and the occurrence of severe floods that may have limited access to testing.

In Cox’s Bazar, close surveillance continues with over 300 trained volunteers using Go.Data software for efficient and effective contact-tracing. A total of 139 of 166 health facilities (84%) are active in the Early Warning Alert and Response System. To minimize the risk of transmission, WHO collaborated with UK Aid and other partners to scale up isolation and treatment capacity.

Over 160 WHO staff are still working throughout Bangladesh to ensure the distribution of essential supplies for combating COVID-19. The Government continues the arduous work of controlling COVID-19 with the support of WHO and many other partners.

COVID-19 front-line warriors: Surveillance and Immunization Medical Officers (SIMOs)

In 1999 WHO established a network of Surveillance Medical Officers (SMOs) to support MOHFW with the surveillance of acute flaccid paralysis and the activities conducted to eradicate polio. The SMOs were assigned to operate at District level, working closely and seamlessly with the national Extended Programme on Immunization.

Over the years the functions of the SMOs extended to supporting the strengthening of routine immunization, the introduction of new vaccines, vaccine-preventable disease surveillance, measles elimination, maternal and neonatal tetanus elimination, data analysis, capacity-building, and microplanning. As the public health background of the SMOs efficiently contributed to developing the health system at District level, in 2017 the title was changed to Surveillance and Immunization Medical Officer (SIMO), reflecting the expanding role. While they are still the backbone of the immunization programme, they also provide support during emergencies and surveillance related to outbreaks of any emerging vaccine-preventable disease.

Currently, 61 SIMOs are covering 64 Districts and 12 City Corporations (Fig. 1). There are an additional three SIMOs supporting the interventions to address the Rohingyas refugee crisis in Cox’s Bazar and the entire operation is being overseen by an Immunization Coordinator. To allow smooth mobility for fieldwork, each SIMO is supported by a driver. Seven Divisional Coordinators and one Immunization Coordinator in Cox’s Bazar oversee the entire SIMO operation and report to the WHO Country Office in Dhaka.

9 Public health criteria to adjust public health and social measures in the context of COVID-19 identifies that less than 5% of samples should be found positive for COVID-19, at least for the previous two weeks, assuming that surveillance for suspected cases is comprehensive.
SIMOs: the first responders

The SIMO network is not new to emergency response. It has experience with outbreaks, cyclones, floods, landslides, and the 2004 tsunami. When WHO and the MOHFW started their preparedness for COVID-19, SIMOs had already been conducting more rigorous surveillance. Under the coordination of the Incident Management System, SIMOs immediately initiated sensitization sessions for over 200 health personnel with a practical demonstration on IPC and hygiene promotion. Within a week of the first case being announced, all SIMOs were repurposed to support every aspect of the COVID-19 response in their Districts.

![Fig. 1. Simo Network Bangladesh](image)

Once repurposed, and still coordinated by IMS, SIMOs have supported the following four pillars of the overall response: surveillance, contact tracing and laboratory support; case management, including assessment of health activities; risk communication; and supplies and logistics.

SIMOs took a vital role in transporting samples from testing points to the designated laboratories. They coordinated with laboratories, health facilities, and with local and central authorities. They tracked movements, making sure that samples were properly transported and processed in the laboratories.

At the beginning of the COVID-19 emergency, WHO and its SIMOs managed to transport 85% of the country’s samples. By the end of March, SIMOs had managed the transportation of more than 200,000 samples across the country.

SIMOs have been continuously working and traveling extensively to provide support to the COVID-19 response throughout the country. They solved unprecedented problems, even that of finding drivers to transport samples. They overcame their fears and the fears of other people who joined WHO’s response.
When natural disasters hit some Districts and the country experienced heavy rains and floods, the SIMOs and drivers demonstrated their commitment and confronted the adverse conditions.

**SIMOs: technical experts and problem solvers**

While working with the Government for the country’s preparedness and response to COVID-19, WHO trained SIMOs on surveillance, capacity-building, laboratory work, logistics, sample collection and transportation, data management coordination, contact-tracing, IPC, and case management. Within a short time the SIMOs had to learn new procedures and guidelines. They were quickly involved in disseminating their learning to health providers and trained 17,000 laboratory staff, sample collectors and transporters from public health facilities, health partner organizations and local administration.

SIMOs also assisted with training for health care professionals to implement triage, conduct early detection, and manage IPC in health facilities across the country. In the district of Cox’s Bazar, SIMOs worked to minimize the transmission risk in a highly challenging environment. They gave and supported IPC training for over 1500 health care workers in the Rohingya camps to enhance safety for patients and health workers.

All these capacity-building activities have involved face-to-face and online communication, ensuring that staff from all parts are properly trained and oriented.

Being at the centre of the health system’s reporting mechanism, SIMOs coordinated with IEDCR as well as with local and central authorities for collecting information and line-listing positive cases for contact-tracing.

On the ground, SIMOs spend long hours communicating, coordinating and working with different stakeholders and members of the community. They collaborate with different counterparts to implement and support the National Preparedness and Response Plan. The current situation has pushed them to take different roles in COVID-19 response: mentor, technical advisor, problem-solver, collaboration facilitator, coordinator. Their daily work includes discussing local response measures with civil surgeons, ensuring smooth deliveries of supplies for different facilities, educating drivers on safety procedures, and solving water issues in shelters. All the emergency activities are managed while they continue doing routine surveillance, collecting and analysing data, and implementing EPI activities.

**SIMOs: the trusted voice in the field**

The interactions of SIMOs with communities yield feedback that enables the Government and partners to understand public perceptions and behaviours. This eventually contributes to the development of an appropriate risk communication strategy and to the supporting of public health interventions.

SIMOs monitor processes and minimize data gaps. In each District the responsible SIMO ensures that COVID-19 testing is conducted swiftly and prevents testing backlogs. When inevitably a District experienc-
es a backlog, the SIMO coordinates with central authorities so that samples can be shifted to other laboratories. Based on SIMO observations and reports on the lack of IPC measures for immunization activities, IPC training is being conducted throughout Bangladesh.

Within WHO, SIMOs constantly communicate with their Divisional Coordinators. Twice a week the Divisional Coordinators contact the WHO Country Office, informing and updating the central team on COVID-19 response and surveillance, immunization, and natural disasters such as floods, cyclones and landslides. Information from SIMOs about field situations can help WHO colleagues to prepare more efficient field missions.

The COVID-19 response is a colossal operation involving numerous players, like Division and District health authorities, health workers and health care professionals, development agencies, civil society organizations, and community members. Through the SIMO network structure it has been possible for Divisional Coordinators and the team leader in the WHO Country Office to accelerate the stakeholder coordination necessary for managing COVID-19.

Ensuring the maintenance of essential health services

Apart from sustaining routine communicable disease surveillance, prevention and control, in order to protect people from the devastating impact of another disease outbreak, SIMOs have been supporting the maintenance of health care services to those who need uninterrupted treatment and urgent care.

In February 2020, while preparing for the COVID-19 response, SIMOs supported the preparation, implementation and monitoring of a measles campaign in Cox’s Bazar reaching 290,000 children aged from 6 months to less than ten years. Currently, SIMOs and Divisional Coordinators are providing technical support to the District Civil Surgeon Offices and Divisional Director Offices in disease surveillance and coordination activities without hampering routine immunization activities.

In Cox’s Bazar, SIMOs work with 20 field monitoring officers to maintain surveillance activities and prevent disease outbreaks, particularly those which can be prevented by vaccination. After nearly two months of movement restrictions, when vaccination rates severely dropped, the SIMOs helped the Government to resume vaccination activities with a new strategy and microplan based on health facilities, while ensuring the continuation of protective measures such as mask-wearing and social distancing.

Although the MOHFW has been resuming full health services with the lifting of the restrictions on 31 May, Fig.2 shows that maternal and child health service coverage, including the essential nutrition service, has diminished during the COVID-19 crisis. This has happened when mothers avoided going to health facilities in an attempt to protect their children from contracting the new disease.

With the mandate to ensure access to essential health services despite lockdown measures, digital tools have been adopted, and existing telemedicine capabilities have been considerably strengthened. The National Institute for Mental Health has started WhatsApp-based ‘Mental Health & Psychosocial Support’ for patients and health care providers and has augmented the telemedicine service at subdistrict level. The Noncommunicable Disease Unit (NCD) of the DGHS has also strengthened app-based screening and monitoring of people with NCDs or NCD risk factors in pilot areas.
Health promotion and risk communication activities are being continuously scaled up to encourage communities and individuals to adopt new healthy habits, such as regular hand-washing, physical distancing and mask-wearing.

While frontline health care professionals receive global recognition as the heroes of COVID-19, SIMOs are the WHO’s heroes on the ground who are ensuring that COVID-19 responses and essential services continue in accordance with best practice guidance.
‘I am a doctor, and I will deal with this pandemic’

Dr Tasnim Mirza, SIMO, Bangladesh

In March, Tasnim Mirza was intensively working to prepare a massive measles/rubella vaccination campaign targeting 30 million children. But in one day everything changed. After the first COVID-19 case was confirmed, she was assigned to support the COVID-19 response in the District of Jashore, with a population of 2.7 million people.

“My new responsibilities included training staff alongside the sample collection chain and monitoring the process. I didn’t know too much about the virus, but as I was from WHO, I had the responsibility to ensure that the standards and procedures were all followed. Everybody was very afraid of the virus and didn’t even want to be in the presence of the collected samples or nearby the carrier for sample transportation to the laboratory. But I told myself that I was a doctor and would deal with this pandemic.”

In early April, Tasnim was the first UN staff member to be infected with COVID-19. She was one of the many frontline workers that confronted uncertainty for the benefit of public health.

“My first thoughts were that I was alone at my duty station; my family, including my six-year-old son, were in Dhaka; I could not take care of myself. I also felt I was not safe for my family; my mother was 67 and I could not go home.”

Tasnim was transported to Dhaka where she stayed in home isolation with her husband while her mother and child moved away to avoid infection. After 15 days of quarantine and a moderate form of COVID-19, Tasnim met her child, one day before she went back to her duty station.

“I couldn’t stay away. I knew there was a lot of work, many things to be done, otherwise more people would get infected. It is very difficult to be away from my family, but I am grateful for being part of a great team, supporting and looking after each other, hoping every day to see fewer positive cases and wishing for the day when all this will be behind us.”
BARBADOS

Key areas:  

An example of Government leadership and regional cooperation in containing the COVID-19 virus

As of 10 August the Eastern Caribbean nation of Barbados, a high-income country with a population of 290 000 and an economy dominated by tourism and international trade, has recorded 142 confirmed COVID-19 cases and seven deaths, with more than half the cases occurring within a month of the first that was reported on 16 March. There have been no deaths since the end of April. The risk of COVID-19 is now considered low enough for the Government to promote the country as a haven from the disease for foreigners who wish to stay and work remotely. While Barbados has the advantage of being an island and thus has the ability to more easily prevent importation of the virus, the country’s quick and comprehensive response to the pandemic has undoubtedly been a key factor in the success so far achieved in preventing widespread community transmission.

This case study describes the actions taken and the critical factors that account for Barbados’s success, as well as PAHO’s role in supporting the nation’s response.

Early planning, building on past experiences and plans

Barbados had the advantage of well-developed preparedness plans for pandemic influenza and other pandemic diseases (e.g. Ebola). The PAHO Office for Barbados and the Eastern Caribbean countries worked with Ministry of Health officials to identify gaps in and required adjustments to these plans in order to develop a COVID-19 plan. This plan, which details the steps to be taken by a wide range of sectors and stakeholders at each of four stages of the outbreak, was completed and approved by the Government by mid-March, several days before the first case was identified. The planning, along with the sharing of technical guidelines and consultations by PAHO with the Government, led to rapid actions once the first cases (from passengers arriving from overseas) were confirmed. These early actions included the following:

- Screening of all arriving passengers at points of entry for COVID-19 symptoms and requiring them to leave their contact information. This was soon followed by a requirement for all arriving passengers to quarantine for 14 days regardless of whether they had symptoms. This caused airlines to suspend most international flights.
- Designation of the Barbados Government Information Service (https://gisbarbados.gov.bb/covid-19/) as the primary source of accurate information on COVID-19 the day after the first case was reported. The website contains a range of protocols, situation reports and articles, and educational videos.
- Establishment of a 24-hour hotline manned by medical and nursing students and volunteers to provide accurate information to individuals – in an effort to counter rampant misinformation and fake news – and to direct people with symptoms to appropriate services, thus helping to identify cases. The hotline, set up a week before the first case was reported, has received, on average, 150 calls a day.
Early development and rapid build-up of COVID-19 testing capacity and contact tracing

In anticipation of COVID-19 arriving in the Eastern Caribbean, on 11-12 February PAHO conducted a hands-on, in-person training in COVID-19 PCR testing for staff of the Best dos Santos Public Health Laboratory, a state-of-the-art facility built with the support of the US CDC. PAHO also provided test kits, reagents and other testing supplies, enabling the laboratory to begin COVID-19 testing more than a month before the first case was detected. Thus, in a matter of weeks, the national laboratory went from having no capacity to test for influenza prior to the emergence of COVID-19 to being one of the first laboratories in the Caribbean to conduct COVID-19 testing.

While there have been some shortages of test kits and testing supplies, especially in April when global demand was highest, Barbados has largely been able to test those who need testing (i.e. persons with symptoms, health workers, contacts of cases) in a timely manner. As a result of a PAHO donation of testing kits and enzymes, procurement through the UN system, and purchases on the open market, the country has been able to procure 20 000 test kits. The laboratory has conducted more than 13 000 tests to date and currently has capacity for over 100 000 tests.

The Ministry of Health and Wellness created the new position of Health Liaison Officer in response to the outbreak. Sixty officers were hired throughout the country to support contact tracing, as well as to work with community leaders to disseminate accurate COVID-19-related information and encourage community cooperation with the response.

Strong inclusive leadership and communication from the top

The Prime Minister, Mia Amor Mottley, has received international attention for her leadership in responding to the COVID-19 pandemic.1,2 She took ownership of the response early on in making key decisions and in keeping the public informed about the epidemic and restrictive measures to curb it. She appointed a COVID-19 czar, a sociologist with experience in Sierra Leone during the Ebola outbreak, to coordinate the Government’s response and serve as its consistent public face. The Prime Minister also appointed two other technical experts to help lead the response – a facilities manager to oversee the establishment or conversion of COVID-19 treatment and quarantine facilities, and an infectious disease specialist to oversee the clinical management of cases and the training of health workers. Shortly after the first case was confirmed, the Prime Minister

---


Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

gave a press conference to inform the public about the outbreak and the Government’s actions. There followed regular press updates broadcast on TV and radio from the COVID-19 leadership team, the Health Minister and the Chief Medical Officer, among others.

Another key aspect of the Prime Minister’s leadership was to consult with and seek the buy-in of a range of stakeholders – from the public and private sectors, including the business and tourism sectors – in the national COVID-19 preparedness plan and in changes in the designated stages of the outbreak. She held a five-hour meeting with these stakeholders to present and discuss the plan before its publication in early March. Most critically, following the WHO DG’s request that countries should not politicize the pandemic, opposition political leaders were included in the meeting and all agreed to present a united front in supporting the Government’s COVID-19 response. PAHO officials, upon request, made presentations and participated in the discussions during the consultations with stakeholders.

This solidarity probably contributed to the population’s generally good compliance (with some lapses) to the rather strict lockdown measures that were put in place once a national emergency was declared on 28 March. The country entered Stage 3 of the response after 24 cases had been confirmed. These measures included the closure of all non-essential businesses for a month from early April to early May and a 24-hour curfew during this period, which prohibited all but essential workers from leaving their homes, except for medical reasons or to visit banks and supermarkets, following a schedule based on the first letter of each person’s last name. From 3 May to 30 June the curfew was relaxed to cover evening hours only.

Scaling up COVID-19 treatment and quarantine capacity to minimize disruption in the delivery of essential health services

To prevent the main hospital from being overwhelmed with COVID-19 cases in the event of a major outbreak and to avoid major disruptions in essential health services, the Government made plans early on to set up specific facilities for treating and isolating COVID-19 patients and for quarantining those potentially exposed to the virus. A military hospital – the field Medical Facility at Paragon Base – became a COVID-19 treatment facility, to which PAHO donated PPE kits. And within five weeks, beginning in early March, an abandoned prison was rebuilt and converted into a first-class hospital with 220 beds (38 with ventilators and monitors and 182 isolation beds) and turned over to the Ministry of Health and Wellness. A contingent of 100 Cuban doctors and nurses with intensive care experience was introduced in early April to treat COVID-19 patients at these facilities, thus freeing up local health workers to conduct COVID-19 testing and provide other routine health services.
Within eight weeks, the number of intensive care unit beds with ventilator capacity increased from 6 to 54, and all cases were able to go into isolation soon after receiving a positive test result.

Meanwhile, several quarantine or isolation facilities were established to house the contacts of cases and others not able to quarantine or isolate at home (e.g. travellers from overseas before flights were halted). These include a 70-bed quarantine and isolation facility (Enmore) across from the country’s main hospital that was built during the Ebola epidemic in West Africa, and a primary school (Blackmann & Gallop) that had been designed to serve as an emergency shelter during tropical storms and which expanded its capacity for COVID-19 from 48 to 126 beds.

PAHO has monitored the provision of essential health services during the COVID-19 emergency and found that critical services (immunization, maternal and newborn health, sexual and reproductive health, NCDs and communicable diseases) were maintained, except during the one-month strict lockdown period, when patients were required to make appointments. Reductions in services also resulted from some health workers at the primary health care level being diverted to higher levels of care. To address these reductions, the Government expanded the schedule for primary health care clinics, increased the use of telemedicine, and revised drug prescribing policies to enable patients with noncommunicable diseases to obtain a three-month supply of their medications.

Collaborating with other Caribbean island countries

Through CARICOM – a regional organization of 20 Caribbean states that promotes economic integration and cooperation – and other groups, such as the forum of Eastern Caribbean country health ministers, Barbados worked with other countries in the region to coordinate their responses to COVID-19, share experiences and assist each other during the crisis. CARICOM countries, led during this period by the Barbados Prime Minister as rotating chair, jointly procured critical medical supplies and equipment (e.g. PPE, ventilators, test kits) in order to improve economies of scale through centralized procurement, using two pooled purchasing mechanisms: 1) the PAHO/WHO Strategic Fund for essential medicines and public health supplies; and 2) the Logistics and Procurement Cell of the Regional Coordination Centre, a regional response mechanism managed by the Caribbean Disaster Emergency Management Agency.

Through CARICOM, Member States were also encouraged to integrate psychosocial support, gender considerations, child protection, and appropriate cultural elements into their COVID-19 policies and strategies, as well as to join the WHO Solidarity Trial for COVID-19 vaccines. In addition, the seven countries covered by PAHO’s Eastern Caribbean Country Office shared test kits and other critical supplies with each other to minimize shortages. As a further example of regional collaboration, the Caribbean Public Health Agency’s laboratory in Trinidad, with supplies provided by PAHO/WHO, conducted COVID-19 tests of samples sent from other Eastern Caribbean countries before their own testing facilities were ready.
A prime example of cooperation among Eastern Caribbean countries in the fight against COVID-19 involves the Regional Security System (RSS), a long-standing collaboration between the military forces of the seven countries to share in each other’s defence and provide mutual aid during natural disasters. Following a letter of agreement between PAHO and this network, and in coordination with the Public Health Emergency unit at the PAHO Country Office, RSS helicopters ferried critical medical supplies, including test kits, specimens and PPE, as well as personnel, to the various Member States. During a time when all other air travel was suspended, these airlifts became a critical lifeline in the response to COVID-19 for the small island countries concerned.

Applying the experiences and innovations from COVID-19 to improve health services in Barbados

The COVID-19 crisis has led to various improvements and innovations in the delivery of health care services which should continue into the future. Examples include extending the hours for primary health care services, using telemedicine to ensure continuity of NCD care services and to extend their reach (as practised by the Barbados Diabetes Association), and the use of hotlines or helplines to provide responsive health advice to people.

The Country Office will continue its support for the health system through a combination of strategies. These include strengthening health service delivery by focusing on primary health care, incorporating evidence-based innovative approaches to promote greater access to health services, positioning the health sector at the centre of the Government’s digital transformation, and exploring opportunities to strengthen collaboration across sectors and establish strategic alliances with partners to address the impact of the deepening inequities across society arising from the pandemic.

Taking advantage of Barbados’s low-risk COVID-19 status to encourage foreigners to work remotely from its beaches: the Welcome Stamp Visa Programme

While Barbados had not closed its borders due to the COVID-19 pandemic, once it announced a 14-day quarantine for all travellers from Europe and the US, along with the suspension of cruises, tourism effectively stopped. With tourism accounting for more than 40% of the economy and a major source of foreign exchange earnings, this has had a devastating economic impact in a country that was already highly indebted in terms of the debt to GDP ratio (at 118% in 2020).  

With the incidence of COVID-19 remaining low, leading to the lifting of curfews on 1 July and the phased-in resumption of international flights starting in mid-July (based on the COVID-19 risk in originating countries), Barbados has decided to promote itself as a refuge from COVID-19 for foreigners able to work remotely: the Welcome Stamp Visa Programme, started in mid-July, offers tax-free stays for 12 months or longer for workers and businesses that are location-independent. To further attract long-term visitors, applications submitted online are processed within 48 hours and the visas are processed within seven days.

As the Prime Minister has stated, “COVID-19 has placed a severe strain on people’s mental wellness. The sunshine is powerful. The seawater is powerful. They’re both therapeutic in ways that are hard to explain. And so why not share these things?” According to the Washington Post, the message is: “Come here, not just for a holiday but for up to a year. Bring your laptop. Soak up the sun, sea and sand and forget about coronavirus.” The appeal of Barbados as a long-term destination is enhanced by its political stability, well-developed tourism infrastructure, relatively high standard of living and the fastest fibre-options Internet and mobile services in the Caribbean.

The focus on longer-term stays and permanent relocation of professionals and businesses is seen as having many of the same economic benefits, including foreign exchange earnings, as short-term tourism, while reducing the risk of importing COVID-19 that a greater number of short-term visitors would entail. Strict protocols have been put in place for all visitors to minimize this risk, including temperature checks at the airport, and confirmation of a negative COVID-19 test result taken within 72 hours prior to arrival, or submission to testing at the airport, followed by quarantine until the test results are received.

This programme may become a model for other tourism-dependent countries that remain at low-risk of COVID-19 transmission and is already being examined by other Caribbean island countries.

Examples of PAHO’s assistance to the Eastern Caribbean subregion in responding to COVID-19

In addition to Barbados, the PAHO Country Office serves six other small Eastern Caribbean countries: Antigua and Barbuda, Dominica, Grenada, the Grenadines, St. Kitts & Nevis, St. Lucia, and St. Vincent. Within days of WHO declaring COVID-19 a public health emergency of international concern (on 30 January 2020), the Office set up an Incident Management and Support Team, consisting of PAHO experts in various technical areas (surveillance, health services, laboratory testing, clinical management, infection prevention and control, as well as PAHO specialists residing in each of the six other countries, to coordinate an effective response throughout this subregion and to advise on adjustments to policies and protocols. Highlights of this assistance include:

- Development of national COVID-19 plans. Building upon existing pandemic preparedness plans, such as that for influenza, PAHO assisted each country through field visits and teleconferencing to develop national COVID-19 Strategic Preparation and Response Plans.

- Building national laboratory capacity in COVID-19 testing. Besides the laboratory in Barbados, PAHO provided training, mainly virtually, in PCR testing for COVID-19 to laboratories in each of the six other countries. These included national laboratories, private testing facilities that provided free tests, and university laboratories. PAHO also donated test kits and helped the laboratories to procure other critical supplies. As a result, all seven countries are now conducting COVID-19 testing on their own.

---

• Building national technical capacities. The PAHO ECC office has organized Webinars on wide-ranging topics for different audiences across the seven countries. These have included: sharing experiences in COVID-19 clinical management (attended by 187 health professionals across countries); training on data collection tools for COVID-19 surveillance and in mathematical modelling of COVID-19 incidence to plan short-term needs; IPC training for health workers and workers in the tourism sector, such as hotel workers and taxi drivers; training in the management of acute stress among health care workers dealing with COVID-19 (using MHGap); psychological first-aid training for individuals and communities (attended by 1300 community and religious leaders, influencers and hotline workers); a virtual dialogue among 1400 young people from the region on coping with pandemic-related isolation; training in the management of NCD services during the pandemic; and dialogue and guidance on how to safely resume international travel in the region.

• Procurement of essential supplies. Needed medical supplies, test kits and testing supplies, together with communication materials, were procured through the PAHO Strategic Fund for medicines and public health supplies for all seven countries. In addition, PAHO mobilized resources from international partners such as UK-DFID, the European Union, USAID, and the Governments of Brazil and Canada to procure essential supplies. PAHO’s collaboration with the RSS also ensured the distribution of these supplies to the countries when commercial air travel was suspended.

Calling on the local and emigrant community to help those most in need during the COVID-19 emergency: the Adopt a Family Programme

With the economic devastation resulting from the suspension of tourism and the lockdown, including a nearly fourfold increase in unemployment (to 40%), the Government has established the innovative Adopt a Family Programme as part of a large stimulus package to assist individuals and local businesses. Corporations and well-off Barbadians, including those living overseas, are encouraged to contribute to a Government fund that provides cash assistance (BD$ 600 or US$ 300 per month) to the neediest families. Contributions can be made through WhatsApp or through local banks.

As of 14 July, the fund, which received considerable media attention, has received BD$ 5 million, of which the Government contributed $ 2.9 million and private donors, including ones from the US, contributed $ 2.1 million. While 1500 families were initially targeted, the private donations have enabled the programme to assist nearly 3000 families, who are given debit cards.

Interested to learn more about WHO’s COVID-19 response across the globe? The response addresses the pillars and areas covered in WHO’s Strategic Preparedness and Response Plan. Find out about WHO’s work in countries across the world on scaling up countries’ preparedness, surveillance, maintenance of essential health services, coordination and much more. Follow our stories and view our videos on our WHO response in countries pages.
How early action and careful border control policies have so far contained COVID-19 in clusters

Well known for its safari destinations and natural beauty, Botswana is a small country of just over 2.3 million people. It boasts Africa’s oldest continuous democracy and is an upper-middle-income country. Botswana is located at the centre of Southern Africa, between Namibia, South Africa, Zambia, and Zimbabwe. One of the world’s poorest countries at independence in 1966, it rapidly became a development success story. With its economy built on a foundation of diamond mining, prudent fiscal policies and international financial and technical assistance, Botswana has now the fourth largest gross national income in Africa and the highest human development index of the sub-Saharan region. Botswana spends at least US$ 466 per capita on health with only about 4% of the total health expenditures generated through out-of-pocket payments. This enables access to needed health services without significant financial hardships for a large proportion of the population. These achievements have undoubtedly assisted in Botswana’s response to the COVID-19 pandemic, although various challenges persist.

Preparing Botswana before COVID-19

Botswana’s response to COVID-19 is firmly grounded on the IHR 2005 as it is wholly incorporated into the country’s Public Health Act. This Act and the Emergency Powers Act 2020, which was promulgated to address the COVID-19 pandemic, provide the necessary emergency legal framework for a comprehensive response. The delayed arrival of the pandemic on the African continent allowed the WHO Country Office to support the country’s readiness and preparedness, including learning from the situation unfolding in neighbouring South Africa, which has been the African epicentre for COVID-19 since the pandemic was announced.

During that period, WHO was actively capacitating and working with the health sector across all the components of Botswana’s Emergency Preparedness and Response. These included early and proactive Risk Communication and Engagement, provision of technical guidance, adaptation of WHO guidance for the country’s needs and specificities of the health system, activation and refresher training for District Rapid Response Teams and coordination structures, training and screening at Points of Entry (POEs), development of a comprehensive multisectoral response plan, and active engagement with other sectors and communities. WHO provided input and guidance for the country’s entire response effort. The response framework was established before a single case appeared, a critical step in being prepared.
One of the most crucial preemptive steps in the response effort was the early closure of borders. All but 12 POEs were closed on 24 March 2020, six days before the first positive COVID-19 case was reported. As from 8 August there have been 804 confirmed cases of COVID-19 and two COVID-19 related deaths. After reporting the first confirmed case on 30 March, the Government declared a state of emergency and subsequently imposed a 28-day lockdown on 2 April that led to further restrictions on movement. This period allowed the country to prepare adequate quarantine and isolation facilities to be used in the event of an upsurge in cases. Furthermore, capacity for case management and Infection prevention and control (IPC) was developed in targeted hospitals and clinics. A gradual return to normal started on 8 May and schools reopened on 2 June.

The Ministry of Health and Wellness (MOHW) is coordinating the health care response, based on the structure recommended by WHO. The WHO Representative and technical staff regularly consult with and advise MOHW senior management and the Presidential Task Force (PTF) on COVID-19. The PTF provides oversight and coordination of the multisectoral response. WHO enables engagement with other UN Agencies, development partners, civil society and Government sectors. It participated in the development of the UN plan for supporting economic recovery and also ensured capacitation and activation of local district-level structures.

Alongside technical support, WHO and the Government conducted a nationwide communication campaign to engage the people on public health and social measures. WHO experts teamed up with highly respected members of communities, enabling the Government to effectively interact with the population, convey key messages, build trust in various constituencies and achieve the acceptance of information on COVID-19.

**WHO support during the COVID-19 response**

Botswana’s strategy has been in alignment with WHO guidance on containing the spread of COVID-19 through physical distancing, isolating and quarantining cases, quality clinical care for infected clients, contact tracing and testing, and restricting movement. A vital element of WHO support, was the Organization’s effort to build the capacity of local laboratories for COVID-19 testing and diagnostics. Even though Botswana had advanced capacity to test for HIV and TB, it was unable to perform PCR testing for COVID-19 at the outset of the pandemic and relied on the transportation of specimens to the increasingly overwhelmed National Institute for Communicable Diseases (NICD) in South Africa, one of only two accredited laboratories in Africa. With reduced transportation links and an urgent need to scale up its national testing capacity, the Government relied on WHO’s support and guidance to fuel and build the capacity of the country’s own National Health Laboratory for COVID-19. WHO provided a laboratory expert to train staff, develop normative guidance and repurpose equipment for COVID-19 testing. The National Laboratory was duly certified and has played a key role in the containment of COVID-19. In addition, WHO procured reagents and test kits, thereby allowing the decentralization of testing capacity throughout the country. These efforts allowed test processing times to be reduced. The National Laboratory has since opened satellite testing centres in selected districts with sizeable populations and in key POEs. WHO also provided other essential supplies, including stocks of personal protective equipment and thermometers, which were immediately deployed for use on the front line. WHO is engaging with the Government to keep up with the demand for COVID-19 testing and to increase diagnostic capacity so as to fully understand the pandemic curve.
Manual records systems were in wide use, but with the help of WHO, the mainstreaming of electronic systems enabled results to be sent in real time to all districts, thus reducing response delays. WHO also employed data managers to assist in decreasing a backlog of case files, which was helpful in informing the whole response. This technical support was crucial for partners to know where to direct funding.

**Handling of cross-border COVID-19 cases**

Sharing a long border with South Africa, a country with over 330,000 positive COVID-19 cases, Botswana created a comprehensive risk assessment for all districts, although most cases were found among South African drivers delivering essential goods. Relying on relevant WHO guides, the Government established a holding area where all drivers remained until testing was completed. Drivers who tested positive were given the choice of isolation in Botswana to prevent further transmission or of returning to South Africa; most chose the latter. The Botswana authorities worked closely with the Southern African Development Community (SADC) to coordinate policies and operations at border crossings.

**Work with the United Nations System in post-COVID-19 recovery**

WHO worked with the UN team in the country to assess the socioeconomic effect of COVID-19 in various sectors. Based on this assessment, most impacted sectors were identified along with actions for recovery.

As part of the recovery plan it is essential to quantify the effects on the rest of the health services and to determine how COVID-19 has affected them. Botswana has limited human resources for health, and the effects of this pandemic have been tremendous. Many personnel were redirected to the crisis, even from areas that have not been heavily affected.

**Continuation of essential health services**

While an estimated 84% of the population lives within 5 km of a health care facility, there is considerable inequity in the distribution of health facilities between urban and rural areas. To respond to COVID-19, the Government has earmarked eight facilities across the country as isolation and case management centres with varying capacities, translating to one facility per administrative district.

The significant burden of HIV/AIDS, tuberculosis and noncommunicable diseases (NCDs) in the country means that even young people may need inpatient management if they suffer from one of these comorbidities. Furthermore, Botswana has a lower inpatient care capacity compared to other middle-income countries in the region, with 18 hospital beds per 10,000 people and only 120 intensive care beds. If large-scale community transmission were to materialize, the additional pressure on the health system would soon be overwhelming. Ensuring the continuity of essential health services will be an enormous challenge.
Botswana’s early progress and learning in containing COVID-19

Botswana has never experienced an emergency of this nature and magnitude. The response to date has involved an interesting learning curve. Overall, initial work and support by WHO have helped to contain the outbreak. The training of health staff, media personnel and other stakeholders was key. WHO’s contribution to evidence-informed messaging for the general public is utilized by the media around the clock. WHO procured critical essential supplies and supported the establishment and activation of essential structures.

WHO assessed and helped to designate the current national isolation facility, the teaching hospital which is effectively dealing with the current case load and could carry a bigger case load in the event of future increases. WHO provided technical guidance and support in the development of key documents such as the Public Health Multi-hazard Plan, the National Action Plan for Health Security, the Risk Assessment tool, and the National Emergency Preparedness and Response Plan and Strategy, and continues to play a key role in constantly reviewing many other strategic instruments. All this has ensured that Botswana’s response takes an effective multisectoral, all-of-Government and all-of-society approach, as well as ensuring that the core capacities for emergency preparedness and response are strengthened nationwide.

Botswana has done a remarkable job in containing the COVID-19 pandemic and stands as an example for the rest of the Southern African Development Community. With continued support from WHO and partners, the country is committed to continue handling the crisis effectively.
GHANA

Key areas:

Taking a proactive and unique approach to fight the pandemic: WHO’s support to Ghana’s COVID-19 response

Many remember the iconic Ghanaian pallbearers whose 2017 dancing video went viral on social media. Amid COVID-19, the troupe has again made the news. ‘Stay home or dance with us’ has become a powerful, even if somewhat cheeky, message to spread awareness about COVID-19 and to make sure that everyone stays at home and practises social distancing. In Ghana, music and dance are culturally important and have helped to promote key public health measures. However, this is not the only unique element of Ghana’s COVID-19 response.

Strengthening the country’s preparedness to fight COVID-19

A whole-of-society approach for preparedness

Understanding that preparedness is one of the best defences against the pandemic, and well before the first case of COVID-19 was recorded in the country, the Government and WHO worked hand in hand on scaling up the capacity for surveillance and case management. After the first two cases were registered on 12 March 2020, Ghana adopted a whole-of-Government approach under the leadership of the President. As of 7 August there have been 39,075 confirmed cases of COVID-19 and 199 deaths. The President announced that US$ 100 million would be made available to enhance Ghana’s COVID-19 preparedness and response.

The Inter-Ministerial Coordination Committee was set up, comprising the Ministries of Finance, Health, Local Government, Gender, Children and Social Protection, Information, Transport, Interior, and Defence, together with the Office of the President as the coordinating body for the COVID-19 response. The Emergency Operations Centre was activated, under which the Government has rolled out activities. These include risk communication, point of entry surveillance, laboratory diagnostics capacity-building for case management, and coordination of preparedness and response actions. Since then WHO has extensively supported the country in developing a full national preparedness plan involving testing, treating and isolating, under the leadership of the Minister of Health. Serving by example, the President began a two-week quarantine period after meeting one person in his inner circle who tested positive for COVID-19.

WHO and other partners, such as CDC-USAID, DFID-UK and the Japanese Government contribute technical logistics and financial support. The anticipated scale of the COVID-19 outbreak cannot, however, be contained without further strengthening institutional and human resource capacity as an integral part of health systems strengthening efforts in alignment with prioritized interventions listed in the Government’s UHC Roadmap.
COVID-19 preparedness weaved into national and international sustainable action

In 2020, Ghana committed to attaining UHC as its overarching strategy for developing the health sector. It has developed a UHC Roadmap with the goal of increasing access to quality essential health care and population-based services for all by 2030. The target group comprises people living in poverty and in situations of vulnerability, particularly children, adolescents, women and older adults. The Roadmap objectives emphasize: access to essential primary health care; maternal and child health management; domestic finance mobilization; and public health emergency preparedness and response. Additionally, a National Action Plan for Health Security (NAPHS-2020-2025) has been developed to address health emergencies under the One Health framework, as well as a COVID-19 Emergency Preparedness and Response Plan (COVID-19-EPRP 2020). The NAPHS’s goal is comprehensive systems development to build resilience within the health and other allied sectors for emergency preparedness and response.

The UHC Roadmap for Ghana 2020-2030, the NAPHS and the COVID-19 EPRP resonate with various global initiatives such as WHO’s COVID-19 global Strategic Preparedness and Response Plan (SPRP), the Sustainable Development Goal Declaration, principles of the African Union Agenda 2063, the Global Action Plan for Healthy Lives and Well-Being, Astana Declaration on PHC (2018), UHC 2030 Compact, and the UHC Political Declaration adopted at the UN High-Level Meeting in September 2019. These are linked with human rights, equity, gender and people-centred approaches.

Scaling up local capacity to test for COVID-19

With just two laboratories available in Ghana for COVID-19 testing at the start of the pandemic, WHO has provided technical guidance and operational support to the Government, which adopted pooled testing to scale up capacity. As a result there are now nine laboratories, which have so far conducted more than 350 000 tests for COVID-19. In many cases, drones are used to carry samples from suspected coronavirus patients to laboratories in Ghana’s big cities, allowing the Government to more quickly monitor the spread of COVID-19.

Fortunately, the public health etiquette (hand sanitizing and wearing of facial masks) that Ghanaians acquired during the outbreak of Ebola virus in 2014-2016 has been retained, despite Ghana not having registered a single case during that epidemic. WHO and other partners have supported the Government in quantification for COVID-19 essential supplies using WHO tools and in the development of a procurement plan. However, disrupted transportation links meant that Ghana quickly experienced a shortage of sanitizers and PPE. The Government has promoted the local production of PPE and sanitizers and, in line with WHO guidelines, the Ghana Foods and Drugs Authority ensures that only those that are of satisfactory quality are approved for use. There are currently 1103 local manufacturers producing PPEs and sanitizers.
Contact tracing is another niche where WHO and the Government have been collaborating in the development of guidelines and training. Based on WHO technical guidelines, Ghana has launched an app designed to help in tracing people who have come into contact with COVID-19 positive individuals.

**Leveraging on pandemic influenza preparedness insights to tackle COVID-19**

In early 2020, WHO was supporting the Government in updating its Pandemic Influenza Preparedness. When COVID-19 was declared as a global pandemic, WHO swiftly reprogrammed the plan and supported the Government in activating the national COVID-19 response thematic groups. When the first COVID-19 case was registered, communication messages, with WHO’s input, had already been drafted and were ready for dissemination. By then the Government had identified core staff from high-risk regions. With WHO support they were trained for rapid investigation and response, using WHO’s Integrated Disease Surveillance and Response tools. Subsequently, Ghana proceeded with the closure of its borders.

WHO provided support beyond the Ministry of Health and fostered a multisectoral response. With the decision to lift lockdown measures, the Ministry of Education and the Ministry of Labour were supported by WHO to finalize guidelines on return to schools and workplaces as the country resumed its social and economic life. In addition, WHO assisted the national authorities in producing TV and radio documentaries on hygiene and infection prevention and control, and conducted an advocacy campaign to promote education for public and health care workers to reduce stigma.

**Coordinating with UN partners in the response to COVID-19**

With limited financial resources but extensive technical experience, WHO has comprehensively worked with UN agencies to design needs-specific interventions that support the Government in its response to the COVID-19 pandemic. This includes the development of the UN Comprehensive Public Response Plan and the Health First pillar of the Socioeconomic Response Plan. Furthermore, IOM has set up COVID-19 testing facilities, and UNDP has designed interventions addressing the negative socioeconomic effects of COVID-19 and has reached out to vulnerable populations (disabled and PLHIVs) in hard-to-reach communities.

With funding from the UN Multipartner Trust Fund, WHO and UNICEF are working on the continuity of essential services for vulnerable populations in Accra. In addition, a collaboration with UNICEF, UNFPA, WFP, FAO and IRC, with funding from the World Bank, will focus on addressing several aspects of the pandemic. WHO support will focus on improving Ghana’s case management and contact tracing based on the findings of a WHO-supported assessment of case management, ICU and isolation capacity.
Ensuring continuity of essential health services during the COVID-19 pandemic

Maintaining essential health services remains a critical part of WHO’s work while providing support on responding to COVID-19. Holistic sector assessment using the WHO approved tool showed that the health care system remained significantly weak. The Universal Health Coverage (UHC) Roadmap 2020-2030 also indicated that the sector is inadequately resourced to provide the services needed to achieve the goals. The assessment showed that human resources were poorly distributed across the country.

With conflicting messaging, e.g. “stay at home” and “get vaccinated”, some communities have been at risk of missing vaccination or antenatal services. This threatens the loss of gains made earlier in reducing maternal and child mortality. In this context and with WHO support, the Government developed guidelines on maintaining RMNCAH-N services, including immunization. WHO supported the dissemination of these guidelines and provided funding for training at district level. Furthermore, funding was provided to the Upper West Region and will support seven other regions so that communities can continue to benefit from routine vaccination despite the COVID-19 pandemic.

While the current sex-disaggregated data for COVID-19 show that more men are affected than women (60% and 40% respectively), there are differential vulnerabilities to infection, exposure to pathogens, and treatment received. About 64% of the health workforce are women and are thus at higher risk of exposure.

The COVID-19 pandemic is a wake-up call for all countries to achieve the strengthening and preparedness of health systems. By providing its traditional type of support and through innovative solutions to address public health problems, WHO stands by the Government of Ghana in ensuring a comprehensive and effective response to the pandemic, leading to a reduction in the number of COVID-19 positive tests and promoting socioeconomic recovery.
With “failure not an option”, Jordan enforced strict public health measures to combat COVID-19

With densely populated urban areas and a large number of refugees and vulnerable people, Jordan cannot afford to let COVID-19 “take hold” among its population of 10 million, one third of whom are non-Jordanian. The country has done well to control the epidemic and community transmission of the virus. With 1191 confirmed cases and 11 COVID-19-related deaths (as of 30 July 2020) Jordan is doing well compared with neighbouring countries in the region. The success so far can be attributed to the government’s early and strict public health measures, enforced by the Jordanian Army through 14 National Defense Orders, all of which bought the country and its partners precious time to develop and implement a comprehensive National COVID-19 Preparedness and Response Plan. This case study highlights the key areas of the World Health Organization’s (WHO’s) support to the Government of Jordan, and the impact this support is having on the response to date.

Coordination and planning for a whole-of-society approach to containing COVID-19

To advise the government on strategic health decision-making concerning the response to COVID-19, Jordan activated the National Epidemic Committee as early as 25 January 2020 (see Box 1). The multisectoral committee, with membership from the public and private sectors and academia, is chaired by the Minister of Health and is routinely attended by both the WHO Representative in Jordan and the WHO International Health Regulations 2005 (IHR) focal point. Because COVID-19 is a new virus, and scientific evidence is still emerging on how to treat it, WHO has supported the Government of Jordan in modelling and forecasting the epidemiological situation under different intervention scenarios, and has employed several WHO tools to estimate what will be needed in terms of health workforce, surge capacity and essential supplies.
Under the leadership of Jordan’s Ministry of Health (MoH), and following WHO’s global operational guidance, the WHO Country Office (WCO) in Jordan supported the development (in March 2020) and then the revision (in April 2020) of a comprehensive National COVID-19 Preparedness and Response Plan. The plan identifies the health response and financial resources needed to effectively protect and care for all people residing in Jordan, including almost 750,000 refugees (about 655,000 from Syria, 67,000 from Iraq, 15,000 from Yemen, 6,000 from Sudan and 2,500 from 52 other nations).

While adjusting to lockdown measures and new ways of working, in mid-March the WCO mobilized its full capacity for the fight against COVID-19, by reorganizing and repurposing its 19 staff and contractors to deliver on the nine pillars of the National COVID-19 Preparedness and Response Plan. An office manager was assigned to coordinate the team’s day-to-day functions and communications, and to produce weekly reports to support the functions of the WHO Representative while she was engaging with the MoH, United Nations (UN) donors and partners. Building on existing health coordination and partnership mechanisms in the country, in early April, WHO – along with the MoH and the United States Agency for International Development (USAID) – activated the existing online health coordination platform to coordinate the efforts of partners and reduce duplication in support of an effective government response. As co-chair of the platform, WHO has been instrumental in establishing and overseeing four working groups to use the strengths of resident agencies and organizations. Meetings are held twice a week to collectively identify needs, and to accelerate and coordinate action in the following areas: planning and health coordination and essential health service; risk communication and community engagement; technical support for surveillance, points of entry, laboratories, infection, prevention control and case management; and operational support, logistics and procurement.

Supporting the establishment of basic public health measures

By the end of April, the MoH had mobilized 160 epidemiological investigation teams deployed throughout Jordan, and had developed a national COVID-19 surveillance system for contact tracing in the field, hotels

Summary of Jordan’s actions to contain COVID-19 (2020)

25 January – Action to prepare for COVID-19 began with the activation of the National Epidemic Committee

2 February – Repatriation of 100 Jordanian and Arabic students from Wuhan, China

2 February – The existing public health law (47/08) was implemented and travellers from China were banned

25 February – Travellers from the Islamic Republic of Iran, Italy and South Korea were banned from entering Jordan

2 March – First confirmed case of COVID-19

25 February – Travellers from Egypt, France, Germany and Spain were banned from entering Jordan

18 March – With fewer than 60 cases and no deaths, Jordan announces a total lockdown, with closure of schools, and the public and private sectors; all public gatherings are banned, with the borders and airports closed (with the exception of commercial trade)

21 March – With fewer than 100 cases, the government announces its first Defense Order n. 2, imposing a strictly enforced national curfew, after learning that a COVID-19 confirmed case had attended a wedding with 400 guests in the northern city of Irbid

25 March – After only 4 days, the strictly enforced curfew is relaxed and people are allowed out to buy essentials from 10 am to 6 pm daily; civil defense sirens are used at the end of each day to announce the start of the evening curfew

Between 21 March and end April – As infections rise to more than 400 cases, the Jordanian Army – tasked with implementing the COVID-19 plan – issues a number of Defense Orders, including restrictions on the use of cars (with the exception of essential workers), isolating neighbourhoods with confirmed cases and banning all travel among governorates

27 March – Jordan announces its first COVID-19-related death

30 April – The Jordanian Government eases the lockdown and begins to reopen the economy after confirming 451 cases and 8 deaths

26 May (after Ramadan) – The public and private sectors begin to open as curfews are lifted, but schools remain closed

31 May – The MoH announces that health centres will reopen at 50% capacity, taking into consideration all safety and precautionary measures

5 June – Most sectors reopen, restrictions on people’s movements are lifted and the full curfew is removed
and points of entry. WHO supported the establishment of screening upon arrival at all points of entry (before the lockdown), provided personal protective equipment (PPE) to health workers, and delivered refresher training for 150 health workers on infection prevention and control practices.

Procuring essential supplies in a scarce global market

To ensure that essential supplies are available to fight COVID-19 and protect health workers, the WCO has been quantifying needs and submitting proposals through existing and new procurement channels, including to the global WHO World Food Programme COVID-19 Supply Chain Task Force through the recently established supply portal.

From the beginning of the pandemic to July 2020 date, WHO has delivered US$ 1 million worth of PPE (50 000 surgical/respirator face masks, 1 000 000 pairs of examination/surgical gloves, 86 400 gowns, 53 700 face shields, 7300 goggles and 4000 biohazard bags); laboratory supplies (2 polymerase chain reaction [PCR] machines, 70 000 PCR test kits, 21 000 nasal swabs and 10 000 vials of viral transport medium); medical supplies, including transfusion products (2 400 000 vials of human albumin); and information technology (IT) equipment, including two laptops and 100 tablet computers for use in contact tracing. At the request of the MoH and at a value of US$ 0.8 million, 15 vehicles (four-wheel drives, including two refrigerated vehicles) are being procured, along with 300 refrigerators for cold chain management of medicines, which will be critical to ensure routine immunization and to prepare for vaccination activities for influenza and possibly for COVID-19.

Additional items to be delivered within the next 3 months include US$ 5.5 million worth of PPE (286 000 surgical/respirator masks, 40 500 gowns, 42 000 face shields and 7000 goggles), laboratory supplies (5 PCR machines and 215 000 PCR test kits) and medical supplies including transfusion products (500 000 units of dexamethasone, 500 000 units of hydrocortisone succinate, 80 000 units of atracurium, 50 000 units of omeprazole and 500 000 units of water for injection).

Collective efforts to successfully engage and inform the community on COVID-19
In mid-March, in collaboration with WHO, the UN Children’s Fund (UNICEF) and several nongovernmental organizations (NGOs), the MoH launched a mass media national awareness campaign (Elak-o-feed) aimed at educating the public about COVID-19 risks and prevention measures, and encouraging them to seek care appropriately. The campaign included targeted messages to promote psychosocial wellbeing and resilience, and to address the harms of stigma, gender and other forms of discrimination, and violence. Throughout April and May 2020, the daily social media messages reached 1–2 million people every week, while the full campaign (including WhatsApp, TV and radio messages) reached more than 3.2 million people, including 300,000 vulnerable communities in rural areas and hard-to-reach areas. After going viral online, one public service announcement reached 7 million people (75% of the Jordanian population). The ongoing campaign appears to be countering false rumours and stigma, while empowering the general public to protect themselves from COVID-19.

Ensuring people’s access to essential health services

Although emergency first-response services have remained functional throughout the pandemic, the sudden enforcement of the lockdown to prevent the spread of COVID-19 caused temporary disruptions to outpatient care and access to public and private hospitals in Jordan, with some services completely suspended. WHO and USAID have set up a working group (essential health services subgroup of working group 1 of the health coordination platform outlined above) to track the disruption of services, support the design of interventions to address bottlenecks, and coordinate partners and donors involved in supporting health services delivery. Working closely with the MoH, WHO has initiated several key interventions to ensure the maintenance of priority services for Jordanians. A rapid assessment was undertaken to determine the supplies of chronic medications for patients from primary health care centres, and an alternative pathway was established for delivering psychotropic medications through the National Center for Mental Health. Routine immunization services for vulnerable groups have been strengthened; these groups include refugees, and people living in informal settlements and hard-to-reach areas.

Support for people to stop smoking has been greatly enhanced since the establishment of a dedicated hotline to provide counselling on smoking cessation. Jordan benefited from a new initiative launched on 10 July 2020 by the Director-General and HRH Princess Dina Mired, in which nicotine replacement therapy was made available to more than 5000 people thanks to a donation from Johnson & Johnson.

WHO has collaborated with the UN Office for the Coordination of Humanitarian Affairs (OCHA) in Jordan to support NGO service providers to provide essential services during the complete lockdown; for example, by facilitating government approval for more than 75 critical staff to reach people with essential hygiene needs, cash for health, medications, consultancies and more.
New and enhanced partnerships: coordinating resources and capacities to support Jordan’s response to COVID-19 while continuing to address an ongoing humanitarian situation

In Jordan, the UN is represented by 17 resident agencies, funds and specialized programmes (including WHO), working together to deliver as “One UN” through the coordination, development and implementation of activities. In the context of COVID-19, the UN collaboration has only grown more important. The UN Country Team and its subgroups (e.g. UN Crisis Management Team and UN Security Management Team) meet regularly, with participation from WHO, to discuss the situation, needs and collective UN activities in Jordan. The UN Country Team has recently developed a UN framework for the immediate socioeconomic response to COVID-19, with a “health first” vision designed to help the country to “build back better”, using the challenge of COVID-19 to strengthen the health system in the longer term.

To meet the unique needs of vulnerable Jordanians, migrants and refugees in urban and camp settings, WHO and the UN Refugee Agency (UNHCR) are co-leading a Health Sector Working Group comprising 35 international, national, NGO and civil society partners that meet twice a week to monitor the situation and develop solutions. To complement the National COVID-19 Preparedness and Response Plan, UNHCR and the UN Relief and Works Agency have developed a comprehensive contingency plan to address COVID-19 should it reach Syrian and Palestinian refugees living in camp settings and local communities.

To support the more than 300 000 migrant workers in Jordan, WHO has provided technical advice on health measures to the International Labour Organization, to ensure that appropriate health measures can be put in place by employees in the labour market. WHO procured 250 thermometer guns, facilitated screening of industrial labourers working in 80 factories and provided health promotion materials for use in these facilities.

To operationalize a strong response, WHO has been approaching its partners to discuss the possibility of repurposing existing funding for the COVID-19 response. At the same time, WHO has been mobilizing additional resources from several generous donors, including the Government of Kuwait (US$ 4.5 million), the United Kingdom of Great Britain and Northern Ireland’s Department for International Development (US$ 150 000) and the Bill & Melinda Gates Foundation (US$ 100 000). However, the response needs much more in the way of resources. WHO is also integrating its emergency operations with the urgently needed maintenance of essential health services. In June 2020, WHO struck a deal with the Italian Cooperation Agency for an additional €500 000 to support mental health and disability services, on top of the €1 million already agreed for the 2-year project. Under a new European Union (EU) and WHO collaboration, the EU Trust Fund is supporting the use of €2.7 million (of the total €32 million 3-year grant) for WHO to support the national COVID-19 response, with an additional €11 million being negotiated.
Clear communication of needs, challenges and progress is essential for building trust and collaboration among partners. Since the end of February, WHO has been sending regular updates to over 400 humanitarian and development partners, national institutions, donors and embassies in Jordan, to update them on issues such as government measures, defense laws issued, travel advisories, referral hospitals and laboratories available, and quarantine locations.

Looking forward

WHO is currently supporting Jordan to conduct seroepidemiological studies to better understand the spread, severity and impact of COVID-19 transmission in communities and among health workers. The findings of these studies will inform and guide future strategies and measures to prevent and respond to COVID-19. Several key priorities remain, which will require the continued, sustained and coordinated efforts of the government and partners. An approach of enhanced integrated disease surveillance and early warning systems must be strengthened to ensure the early detection of and targeted response to future, inevitable outbreaks, and to ensure accurate and complete data for decision-making. Maintaining essential health services is the other key issue – especially primary health care for routine immunization, chronic disease management, mental health, tobacco cessation, and sexual and reproductive health services.
Kenya

Key areas:

Adapting to challenges through a strong, WHO-supported COVID-19 response

The Republic of Kenya is home to a population of 47.6 million people, and has a rich historical and cultural background. Today, faced with many macroeconomic challenges – including wealth disparity, poverty, and limited fiscal space for financing the Kenyan Medium-Term Plan (MTP) 2018–2022 – Kenyan health services are struggling to cope. Despite the many hurdles, in the wake of the global COVID-19 pandemic, the World Health Organization (WHO), together with the Government of Kenya and alongside numerous United Nations (UN) agencies and bilateral partners, has taken steps to stem outbreaks of the disease within its borders.

Early establishment of COVID-19 coordination mechanisms

Kenya’s Ministry of Health (MoH) paid close attention to the outbreak of COVID-19, even before a public health emergency was declared globally. Meetings were initiated in January 2020, 2 months before the first case was recorded in the country. This close attention to the danger behind the COVID-19 pandemic stems largely from the relatively recent experience of the Ebola outbreak in Africa and of pandemic influenza.

WHO has been involved from the beginning of Kenya’s COVID-19 preparedness, readiness and response efforts. For example, the WHO Country Office (WCO), under the leadership of the WHO Representative, mobilized to focus on the pandemic and the repurposing of the subregional health emergency team (based in Nairobi), with support from the WHO Regional Office for Africa.

When the first case arrived in Kenya on 13 March 2020, discussions were elevated to the highest levels of government, ensuring that leadership in the MoH was engaged, while the Emergency Operations Centre was activated with WHO support. The country set up a National Emergency Response Committee on COVID-19, chaired by the Cabinet Secretary for Health. The committee was established by the President through an executive order to address various multisectoral aspects related to COVID-19 preparedness and response. The National COVID-19 Task Force acts upon technical guidance from WHO and draws membership from the MoH, other relevant government agencies, development partners, nongovernmental organizations and civil society organizations. The mandate of the task force is to review the evolving threat from the COVID-19 outbreak, regularly provide technical advice to the MoH and jointly problem-solve issues arising out of the outbreak response. The task force has 12 technical working groups, which are responsible for coordination; surveillance and port of entry; laboratory; case management and infection prevention and control (IPC); risk communication and logistics; resource management; facilities; water, sanitation and hygiene (WASH); psychosocial support; and maintenance of essential health services.

“As we understood that the nation’s COVID-19 response was going to be a long-term issue, WHO called for and highlighted the importance of continuing essential health services. We repurposed additional staff to ensure that we can support MoH in maintaining essential health services despite the COVID-19 crisis.”

Dr Eggers, WHO Representative in Kenya

1 The MTPIII is a nationwide, multisectoral document that outlines the main policies, legal and institutional reforms, as well as programmes and projects that the government plans to implement during the period 2018–2022.
With the announcement of the first case, the WCO repurposed staff to various national COVID-19 technical working committees, selected high burden counties and reassigned staff to the Emergency Operations Centre and the office of the government spokesperson. Additional support for communications was provided, with two staff from the WCO fully embedded in Kenya’s MoH and providing support to the government on risk communication.

WHO staff have been integrated into the national COVID-19 technical and coordination committees since mid-January. In addition, under the technical leadership of WHO, 40 UN staff have been deployed to offer immediate technical and coordination support across the spectrum of interventions for COVID-19 response.

In a media release and appeal to the Kenyan population on 19 July 2020, the MoH said, “We continue to appeal to our people to carry on with the precautions and other containment measures we have shared with you seriously”. With continued support from UN agencies, WHO, the Kenyan MoH and partners, Kenya will be able to tackle the current challenges in its COVID-19 response.

**Adapting to challenges to mount a strong, WHO-supported COVID-19 response**

One challenge that WHO faced during the initial response was the lack of funds for its operations. Through constant engagement from the WHO Representative with WHO headquarters and the WHO Regional Office, in addition to exploring opportunities with bilateral donors present in the country, the WCO mobilized US$ 2.3 million in European Union funds from WHO, and US$ 1.5 million from the Canadian Government. This enabled the WCO to be in a better position to provide training and rapid response activities together with the Government of Kenya.

Given the adverse socioeconomic impact of the unfolding COVID-19 crisis on the Kenyan population, the country has instituted a whole-of-government and whole-of-society approach. Priorities on how to do this have been clearly stated by WHO: testing every suspected case, isolating and caring for every confirmed case, and tracing and quarantining every close contact. Even before the first case was reported, WHO highlighted the importance of contingency planning and supported the government in the development of such planning. By mobilizing external resources, WHO built capacity at points of entry, purchased thermoscanners for these points of entry, and provided training for the staff who worked there; these initiatives were vital to the response effort.

WHO has also been central to the capacity-building efforts in Kenya, especially at the subnational level. These include various training on COVID-19 surveillance, including epidemiology of COVID-19, laboratory sample collection packaging and shipment, contact tracing, integrated event-based surveillance and data management analysis for over 1000 rapid responders from 28 counties. In addition, 300 health workers across six counties were trained in IPC standard procedures. Ten counties have benefited from WHO-supported critical care training for 150 specialists. WHO has also provided training to 1084 health care workers at the county level across Kenya, to manage disease surveillance and response.
On 6 August 2020, the country had a total of 23,873 confirmed cases of COVID-19, with 391 deaths. Most of the cases are in the age group 30–39 years. Cases are now reported in 44 of the 47 counties in Kenya. The two counties with the highest attack rates of COVID-19 are Nairobi City and Mombasa, at 176.1 and 151.9 per 100,000 population, respectively (compared with 28.1 per 100,000 for the whole country); thus, these counties need enhanced interventions. Kenya now has 25 testing laboratories, distributed across the country; these laboratories are an important part of case management, because knowing where the virus is allows appropriate interventions to be deployed. With the disaggregation of local data by place, age, sex and transmission stage, WHO was able to observe the movement of the disease, accurately identify hotspots, and design and implement targeted responses to contain the hotspots.

In terms of case management for COVID-19, WHO is monitoring and advising the government on the limited capacity of the MoH. With only 447 intensive care unit (ICU) beds and 437 ventilators in the country, and about 10,000 isolation beds (compared with a national target of 30,500 units), more resources will be needed if case numbers continue to increase. Some counties in Kenyan hospitals have yet to establish ICU capacity.

In terms of partner coordination, WHO is sharing progress and updates on Kenya’s COVID-19 response three times a week to ambassadors and heads of agencies (205 recipients). These briefings provide an epidemiological update and highlight areas of concern regarding the COVID-19 outbreak in Kenya.

Risk communication, laboratory testing and contact tracing have been identified as key challenges. The government has developed a national risk communication and community engagement strategy based on the WHO guidelines. In outreach support, WHO has been invited to several media interviews, allowing the wider public to receive accurate information on COVID-19, translated into the local language. The Kenyan MoH regularly receives WHO guidance on COVID-19, which is then contextualized and adapted to Kenya’s context.

Informing people about COVID-19.
Photo credit: WHO AFRO
Socioeconomic response to COVID-19 in Kenya

Within a few days of the first case, a UN flash appeal and a call for support linked to the social and economic impact was set up for Kenya and across the WHO African Region.

Challenges to the COVID-19 response in Kenya

A major challenge for the COVID-19 response effort is fatigue and complacency within the community. This is shown through recent increases in numbers of positive cases, which in turn lead to another risk – the lack of capacity for case management and the lack of equipment, especially in counties outside Nairobi and Mombasa. Additional challenges include the current situation regarding locusts and outbreaks of cholera and measles. These additional health burdens bring economic and livelihood risks.

Despite these risks and challenges, WHO and the Kenyan MoH remain committed to a proactive and far-reaching response to the COVID-19 pandemic. In June 2020, President Kenyatta looked at the modelled worst-case scenario and the best options to contain the spread of the disease without affecting the economy irreversibly. Had Kenya not taken the stringent measures it did in March 2020, the rate of infection would have peaked at 800 000 people by the end of July, with more than 75 000 deaths by the end of August 2020.
KYRGYZSTAN

Key areas:

Early planning for strong COVID-19 preparedness and response actions

The Central Asian country of Kyrgyzstan is a nation of just over 6.2 million people, with a relatively young population: 67% of the total population is under the age of 35 years, and 64% of the population is of working age (i.e. 15–64 years). Kyrgyzstan has adopted successive reforms to transform its health system. These reforms have included the establishment of a single purchaser, the Mandatory Health Insurance Fund (MHIF), which pools funds at the national level to purchase a standardized package of services. The country was among the first former Soviet Union countries to shift from input-based to output-based budgeting. A reform of the service delivery model to promote family medicine practices and rationalize excess hospital capacity improved the efficiency of the system. Although the government has prioritized health in its budget, government spending on health amounts to only US$ 33 per capita, and out-of-pocket payments remain high, representing 56% of current health spending. The spread of COVID-19 may jeopardize the progress the country has made. Therefore, the World Health Organization (WHO) and development partners continuously advocate to keep investing in preparedness and strengthening the health system against COVID-19, to mitigate the broader socioeconomic costs of the pandemic.

Kyrgyzstan’s preparedness to respond to the COVID-19 pandemic

Kyrgyzstan has been at the forefront of the Central Asian region’s response to the COVID-19 pandemic. Despite challenges, Kyrgyzstan, in cooperation with WHO, has proven to be a leader in the region in terms of this response. Kyrgyzstan’s preparation for and almost immediate response to the pandemic was assisted by the presence of one of three European sub-regional WHO Health Emergencies Programme hubs, which enabled the country to effectively respond to COVID-19. As the demand for WHO expertise and support continues to grow in the region, the Kyrgyz hub is being fortified with more professionals, to have a larger response on the ground and to cater to the needs of neighbouring countries.

To improve the detection of COVID-19 cases and epidemiological surveillance of suspect cases, the WCO in Kyrgyzstan equipped and trained national epidemiologists to increase their skills on investigation and contact tracing. Bishkek, early February 2020. Photo credit: WHO/Mihail Grigorev

1 The hubs have been operational since 2017 and are in the WHO Country Office (WCO) in Serbia for the Balkans, WCO in Georgia for South Caucasus, and WCO in Kyrgyzstan for Central Asia.
Responding to the COVID-19 pandemic: Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Drawing strength from past preparedness experiences

Some of the preparedness activities undertaken for Kyrgyzstan in previous years include laboratories and influenza preparedness. The joint efforts of WHO, the country’s national health authorities and other development partners to strengthen Kyrgyzstan’s preparedness for emergencies have proven fruitful in the face of COVID-19. For example, WHO assisted during the meningitis outbreak by strengthening laboratory capacity. Laboratories play an essential role in detecting and controlling infectious diseases and preventing outbreaks; hence, improving the quality of laboratory services and strengthening national laboratory capacity are key elements of this work. Influenza pandemic preparedness is a focus, because influenza peaks every year during the cold season in Kyrgyzstan. Over the past 2 years, WHO has helped the country to develop a pandemic influenza preparedness plan, strengthen influenza surveillance, and train specialists on epidemiological and laboratory surveillance and clinical management; these efforts have now contributed to Kyrgyzstan’s COVID-19 preparedness, readiness and response.

In January 2020, before any cases arrived in Kyrgyzstan, WHO conducted rapid needs assessments based on International Health Regulations (2005) (IHR), identifying the need to enhance the country’s IHR core capacities. Just before the country went into lockdown, and at the request of the Government of Kyrgyzstan, the WHO Regional Office for Europe organized three missions focused on evaluating local hospital capacity, preparing the contingency plan and assessing the capacity of national laboratories. The mission’s results were beneficial for Kyrgyzstan, and were also shared with the neighbouring countries of Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan.

WHO has assessed the country’s operational readiness for preventing, detecting and responding to a public health emergency as a score of 2 out of 5 – among the lowest in the region. The key gaps highlighted in the country’s emergency readiness for public health emergencies were in the areas of human resources (i.e. shortage of staff and low qualifications due to high turnover and low levels of pay), infrastructure, and lack of equipment and consumables for essential operations. As of the end of July 2020, there were 35 805 confirmed cases of COVID-19 with 1137 deaths.

National commitments and plan to address COVID-19

Kyrgyzstan is at high risk since it borders four countries – China, Kazakhstan, Tajikistan and Uzbekistan – and a large proportion of the population temporarily works abroad, increasing the likelihood of cross-border transmission.

With the support of WHO, the government has initiated a pandemic preparedness response. On 29 January 2020, the country adopted key legislation for COVID-19, including Government Order No. 30, Order No. 52 of the Minister of Health on prevention of the spread of COVID-19 disease, and Protocol No. 1 based on the meeting of the Republican Headquarters for the Prevention of the Spread of COVID-19 on the Territory of the Kyrgyz Republic. The Ministry of Health (MoH) has also established its own COVID-19 headquarters and a secretariat that is available around the clock.

WHO encouraged the Kyrgyz Government to implement preparedness initiatives in advance, and the government acted quickly. This resulted in the development of a 12-month interagency COVID-19 contingency plan, recognizing that fundraising and procurement of supplies would require time. This plan, developed by WHO and well received by the government, initially called for US$ 15.8 million and was designed to ensure an effective, timely and coordinated response to mitigate the impact of the COVID-19 outbreak. The plan was approved by the government on 18 March 2020. The Kyrgyz National Contingency Plan (NCP) builds on the WHO COVID-19 operational planning guidelines and other countries’ experience; it captures all essential activities required for an effective outbreak control. The preparedness and response activities included in the NCP could be broadly divided into five focus areas. Although all key activities are mapped out, given the current transmission scenario in the country (i.e. with sporadic cases), high priorities are early detection, isola-
tion and contact tracing (surveillance). As such, all point-of-entry and laboratory capacities for COVID-19 testing are being immediately strengthened. Within just a few weeks of the initiation of the plan, seeing the impact that the interventions had on the population, international partners decided to commit additional funding, resulting in the plan’s budget of over US$ 46 million.

This preemptive, intersectoral IHR-based approach reached the highest level of national authority for designing a response plan. The plan included coordination of partners and the government, emergency risk communication, surveillance control, infection control and prevention (IPC) in hospitals, logistic support, and more. With this plan in place, and with WHO’s technical guidance, the government prepared all entry points into the country, and was well equipped to receive imported cases and establish quarantine areas for those cases. All 22 points of entry have temporary medical points, staffed with public health medical staff. All arriving travellers are thermo-screened, and travelers from countries with a high incidence of COVID-19 are required to complete a questionnaire based on the WHO template. Asymptomatic travelers arriving from countries with a high incidence of COVID-19 are taken to a designated hospital for 14 days for medical observation, while travelers displaying symptoms are taken to four other designated hospitals for treatment. Information is transmitted to the MoH three times per day from the oblast health authorities (an oblast being a type of administrative division in Kyrgyzstan). For instance, quarantine area preparation included repurposing a former United States (US) military base near the country’s main airport, as well as all hotels – all following WHO’s guidelines on quarantine measures.

WHO’s coordination role and its wide network of expertise helped Kyrgyzstan to be the first country in the Central Asian region to bring in an emergency medical team from abroad (specifically, from Poland). With the first cases of COVID-19 recorded on 18 March 2020, Kyrgyzstan was prepared. The national testing capacity has increased significantly because there are 13 laboratories performing COVID-19 tests. The weekly test load has consistently been above 15,000 since early April 2020. As of 20 July 2020, there are 26 hospitals that have been designated for COVID-19 response, with a total of 3,142 beds, including 96 intensive care units (ICUs). Confirmed cases of COVID-19 will be treated in 26 designated hospitals. Despite this preparedness, capacities for management of severe acute respiratory infections are limited at designated reference hospitals, and room ventilation systems in infectious disease hospitals are not available.

WHO’s support and coordination in Kyrgyzstan

For over a quarter of a century, WHO has been a first point of trust for health matters within Kyrgyzstan. This established trust further benefited from WHO’s support to the government in responding to the ongoing pandemic. “WHO is seen through social and other media channels as a go-to source of information” said Dr Nazira Artykova, WHO Representative in Kyrgyzstan. “Since the start of the pandemic, WHO’s main message was that COVID-19 is not just a health sector issue but is the business of everyone”, she continued. This message was essential in establishing an intersectoral approach at the government level. It is now at the centre of the government’s efforts to contain the epidemic, address its socioeconomic impact and ensure that all health services are maintained in a coordinated manner, with the engagement of the four levels of government.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Communicating with the Kyrgyz population

An example of working in coordination can be found at the level of the central government, reaching the offices of the Kyrgyz Prime Minister and Vice Prime Minister, through the special COVID-19 headquarters headed by the Prime Minister. The Republican Headquarters for the Prevention of the Spread of COVID-19 comprises all ministries and state agencies. With these offices and with WHO’s technical guidance, a COVID-19 Communication Unit has been established, which now also includes the United Nations Children’s Fund (UNICEF) and the Red Cross. The Republican Health Promotion Center (RHPC) is responsible for informing the population about the disease risk factors and prevention methods. The RHPC provides the public with regular information and updates through mass media and other mechanisms. Additionally, a COVID-19 hotline has been established and is widely used. Daily briefings for the population and media were established, with all data being transparently reported, in line with the country’s obligations under IHR. In doing so, WHO supported the establishment of one common language and channel for the media, government and partners. This transparency from the side of the Kyrgyz Government allows everyone to have access to reliable, accurate and timely information on COVID-19.

Village health committees, who are informed and educated by the RHPC, hold regular meetings to discuss threats and prevention methods, to ensure preparedness. The MoH has distributed COVID-19 prevention communication materials and is using these meetings to educate and inform the population about risks, prevention and detection of COVID-19 cases, and to avoid stigma or panic.

Achievements in maintaining essential health services

In a true sign of success for WHO Kyrgyzstan in the maintenance of essential health services, the nation conducted the European Immunization Week with support from WHO and UNICEF. Under this initiative, 65 mobile teams, fully equipped with personal protective equipment (PPE), were established and deployed to remote areas of the country. Over the course of the week, 24,000 children were reached and successfully immunized against measles and other vaccine-preventable diseases. This was an important message to give to the population – that, despite COVID-19, people-centred primary health care services remain fully accessible.

With the support of the WHO Regional Office for Europe, online trainings, briefings and webinars were hosted. All national authorities, institutions and universities followed these WHO webinars. As a result, several clinical working groups on diabetes, hypertension and mental health were then established. Additionally, alongside a COVID-19 support hotline, WHO helped the government to establish a hotline for the mental health response.

Specialist training

There is a continuing shortage of epidemiologists, but WHO was a pioneering agency in preparing for this shortfall. Initially, 100 clinicians were trained before COVID-19 arrived in Kyrgyzstan. Following the lockdown of the country, martial law was declared and movement throughout Kyrgyzstan was strictly limited. In light of this situation, all training was moved online. Through this initiative, more than 18,000 doctors and nurses were trained on COVID-19 (this included 600 on IPC, and 180 public health specialists and epidemiologists, including from private sector); this training was vital to the response effort.
Next steps for Kyrgyzstan

There are several challenges facing Kyrgyzstan throughout the COVID-19 pandemic. The key challenges are ambulance care, clinical management of pneumonia and laboratory testing. Additionally, it was not expected that the country would see such a rapid increase in cases during the summer months. This created a challenge for procurement of the life-saving equipment needed in hospitals. Establishing telephone triage care could prevent patients from coming to the hospital if they could be treated at home.

From the start of the pandemic, trust towards WHO was built at all levels of government and society. Key features of the response have included advance preparedness; commitment at the highest levels of national authorities; and encouraging the government to review its health security and contingency plans, thus allowing for resources to be allocated throughout the country in a timely manner. Despite the remarkable response, increasing and improving social and technical support within the country is vital. Returning and adapting to a “new normal” is going to take continued effort, and will allow Kyrgyzstan to expand its role as an example for all Central Asian countries.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

NEPAL

Key areas: 

Nepal contained a first wave among returning migrant workers, but the threat of large-scale community transmission remains

A unique epidemiological picture with an early, aggressive Government response

As of July 2020, Nepal had the fourth highest number of confirmed COVID-19 cases in the WHO South-East Asian Region, behind India, Bangladesh and Indonesia. The epidemiology of COVID-19 in Nepal is, however, unique in the Region and the world. The numbers of cases rose rapidly between mid-May and the end of June as large numbers of Nepalese migrant workers returned home – mainly from neighbouring India – and were triaged at points of entry and subjected to testing and quarantine. Owing to an aggressive, comprehensive testing strategy for all returnees, < 1% of all positive cases were symptomatic at the time of testing. Relatively few COVID-19-related deaths (40 as of 22 July) have been observed, because of the demographic profile of those who tested positive (80% of positive cases – 14 260 of 17 882 as of 22 July – were in men aged 15–54 years), and the overall case fatality ratio for all ages has been < 1%.

A nationwide lockdown was imposed 1 day after the second case of COVID-19 was confirmed in mid-March. To manage the influx of returning migrants, the Government quickly established quarantine facilities by repurposing schools and other facilities and creating many makeshift shelters. As of the end of July 2020, about 500 000 people had been quarantined in Nepal since the beginning of the pandemic. The numbers at times were challenging, with hot temperatures, electricity outages and limited hygiene and food. All positive cases, even those without symptoms, were isolated in hospital facilities.

Although many people found the quarantine and lockdown difficult, the strict approach and generally good adherence by communities to quarantine and lockdown measures appear so far to have contained the virus that arrived with returnees, preventing spread to communities. Although all 77 districts of the seven provinces of Nepal are affected – especially those on the border with India – cases are still clustered in a few municipalities and not spread across districts. Five provinces are experiencing transmission, and clusters of cases in the remaining two provinces (Bagmati and Gandaki) indicate sporadic transmission. The daily number of reported cases, which was about 500 cases per day in late June, fell to fewer than 150 cases per day by the second week

One isolated case had been detected in January.

1
2
of July, as the flow of Nepalese returnees slowed. As of the end of July, some districts had had no cases for weeks (including Bhojpur, Khotang, Manang, Mustang and Sankhuwasabha). Another indication that transmission is under control is that the country’s early warning and reporting system is no longer reporting excess cases of severe acute respiratory infections over the number in the same period in previous years.

With fewer migrant workers returning, pressure on quarantine facilities is lessening, but the fight against COVID-19 is not over. With a population of almost 30 million and sharing a long border with India, Nepal is still vulnerable to widespread community transmission of COVID-19 if new cases arrive or occur undetected. The country could experience new challenges in the near future with the number of cases rising, which would quickly overwhelm the country’s current 10,000-bed capacity. With the end of lockdown on 22 July, most businesses are now opening. People are asked to wear masks and to maintain physical distance, but this is not always possible in densely populated urban areas. International and domestic flights were set to recommence on 1 September 2020.

Nepal’s newly decentralized health system requires WHO support at every level to combat COVID-19

To address COVID-19, the Nepal Government has established a coordination mechanism led by the Deputy Prime Minister, activated an incident command system at the Ministry of Health and set up a Corona Crisis Management Centre to coordinate the actions of different sectors, including the army, the police and supply. Decisions on key public health measures, such as lockdown, quarantining and testing, have been made at national level, with guidance to provincial and local governments on implementing the strategies. Ensuring adequate capacity and resources to implement national directives can be a challenge at the local level, which became evident in adherence to standards for quarantine facilities. Furthermore, local governments, which engage with their constituents and communities, may be inclined to formulate their own responses so that they are accepted locally.

In alignment with the country’s federal structure, WHO has provided critical and strategic support to both the federal and provincial governments for a coordinated COVID-19 response. WHO’s central office in Kathmandu was repurposed so that, by the end of March, WHO’s team of emergency staff had increased to a 95-person incident management system working on the nine pillars of the national preparedness and response plan. Some WHO staff and consultants were embedded in national Government units to provide daily support and to respond rapidly to requests and address bottlenecks in responding to the new virus. Box 1 lists several areas of WHO support to the central Government.

To enhance the COVID-19 response in all of Nepal’s seven provinces, the usual deployment of 47 WHO personnel, consisting of seven field medical officers, 15 surveillance medical officers and 11 administrative and finance associates (for immunization), seven public health officers (for health system strengthening) and seven information management assistants was extended to 90 professional and support personnel and consultants. The main areas of support to date have been extending testing capacity, standards and assessments of quarantine, isolation and treatment of positive cases, and contact tracing. At the beginning of the pandemic, the National Public Health Laboratory in Kathmandu was the only laboratory that could conduct PCR testing for COVID-19. WHO brought in international and national experts to train staff in testing and at the same time provided quality assurance procedures and training to the National Public Health Laboratory to assure the quality of testing in laboratories throughout the country. As of 22 July, 28 designated COVID-19 testing laboratories were functional in the...
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

country, including the National Public Health Laboratory. In 2014, WHO had supported Nepal in establishing a national health emergencies operations centre to ensure rapid communication and coordination in an emergency. Since the deadly 2015 earthquake, WHO has supported the establishment of health emergencies operations centres in each province. Therefore, when COVID-19 appeared, six of seven provinces already had a health emergencies operations centre equipped for rapid communication and coordination.

Box 1. WHO support to the central Government

- Contextualization to Nepal of evolving global guidance on all aspects of COVID-19 preparedness and response
- Regular communication with the Government and stakeholders and strategic advice for decision-making
- Forecasting requirements for essential resources and logistics
- Analysis and interpretation of epidemiological and logistics data for decision-making and daily and weekly epidemiological updates
- Enhanced daily surveillance in hospitals for influenza-like illness, severe acute respiratory infections and suspected COVID-19
- Training and management of the WHO Go.Data tool and database for case investigation and contact tracing
- Rapid assessment of designated level-2 COVID-19 treatment hospitals for infection prevention and control and clinical preparedness
- Context-specific training to build national capacity for case investigation, contact tracing and clinical management
- Production of risk communication materials and assistance in daily briefings by ministry spokespeople
- Support and technical guidance for establishment and continuous functioning of a COVID-19 call centre to provide the information required by the public, respond to rumours and follow up contacts of the cases
- Support formulation of operational research protocols
- Develop a web portal to provide mental health support to health and social service providers

WHO’s central role in convening and coordinating partners

WHO has long been a trusted partner of the Government, and its leading and convening role in health has increased in the unfolding COVID-19 response. WHO co-leads the health cluster at both national and provincial levels and serves as the secretariat for the external development partners’ forum, which brings together the main multilateral and bilateral agencies working on health. In the context of COVID-19, the partners’ forum has extended membership to relevant nongovernmental organizations. Meetings of the forum are now held weekly to ensure that agencies are informed and that their support to the Government is aligned and coordinated.

Within the United Nations Country Team, WHO leads the health response on behalf of the 15 resident United Nations agencies, funds and programmes in Nepal. In February 2020, a United Nations-wide COVID-19 response plan was developed to coordinate support to the Government and to raise funds. The plan was revised in May to align with the Government plan for preparedness and response to COVID-19. The Team meets once a week to review progress and activities. A crisis management team has been established, comprising the main agencies involved in the day-to-day response.

The United Nations Resident Coordinator leads in all non-health matters, including contingency planning and the overall socio-economic framework for immediate recovery. This clear division of labour within the United Nations family, which is based on comparative advantages and capacity, has been critical in this crisis. To ensure

Impact of COVID-19 on essential health services

Citizens of Nepal have the constitutional right to basic care free of charge, and the Government has developed policies and strategies to strengthen the health sector in order to deliver better, more equitable health services. A basic health care package (2018) and a Public Health Service Act (2018) are designed to improve equity and to move towards universal health coverage. Even before COVID-19, however, the health system faced challenges in delivering high-quality health services, retaining appropriate skilled human resources and ensuring the availability of essential commodities for basic health care.

With lockdown measures restricting movement and travel in the country, use of essential health services decreased significantly. Preliminary data from Nepal’s health management information system indicate a decrease of > 50% in health facility deliveries and use of antenatal care services. Vaccination rates also dropped to less than half of the usual coverage during the lockdown, as routine outpatient and outreach services were interrupted for more than a month. The second phase of a campaign with measles–rubella and polio vaccines was also halted because of the national lockdown in late March but was resumed in April and completed in July. As routine immunization is again a priority, the coverage rates are returning to pre-lockdown levels. In Nepal, COVID-19 is only one of several outbreaks that must be contained. After an assessment and consultation with the immunization technical advisory group on risks and benefits, the national immunization programme has conducted outbreak response vaccination against measles and rubella for 31 000 at-risk individuals (in several age groups, including adults).

Access to essential health services has been hindered not only by travel restrictions but also by rumours, fear and misinformation about the risk of COVID-19 transmission from health workers at facilities, which appears to have contributed to low service uptake. Even some health workers were reluctant to provide services to people visiting health facilities for fear of COVID-19 transmission. WHO has supported a suite of measures in facilities to improve both infection prevention and control (including training and dissemination of personal protective equipment) and risk communication and community engagement, in collaboration with the Ministry of Health and development partners, in order to systematically counter rumours and misinformation through the media, social media and health systems channels.

4 To be finalized in August 2020.
5 Data on coverage were being compiled at the time of reporting.
With UNFPA and other partners, WHO has issued interim guidance to ensure the continuity of reproductive, maternal, neonatal, child and adolescent health services during COVID-19. Teleconsultation services are used for antenatal and postnatal follow-up to rule out complications, provide health information and advice and ensure timely referral or home visits, if necessary. While all women are still encouraged to have an institutional delivery, those at 8 months of gestation are provided with essential supplies to prevent haemorrhage and infection in case of home delivery, including misoprostol, a clean delivery kit and chlorhexidine antiseptic.

To ensure that women are not deprived of time-sensitive, safe abortion services, the Government decided to allow registered medicine shops and pharmacies to stock and dispense medical abortion drugs approved by the Drug Development Authority. Recently graduated midwives, professional bodies and an international nongovernmental organization conduct teleconsultations for clients seeking information on safe abortion options, service availability and symptoms of complications. Trained health service providers have been mobilized from nongovernmental organizations and the private sector to provide home medical abortions and post-abortion family planning. Trained health workers (e.g. from Marie Stopes) in partnership with female community health volunteers have effectively improved the access of women to family planning and safe abortion services.

Service coverage levels are slowly improving in several areas, but the advance may be fragile, although the country continues to make progress in some areas despite COVID-19. Building on its robust routine immunization service, Nepal has introduced rotavirus vaccine into its extended programme of immunization. In view of its history of strong participation in vaccination programmes, Nepal is unlikely to face the issue of vaccine hesitancy seen in some countries when it introduces a COVID-19 vaccine. In fact, the Nepalese people are likely to welcome it!

To minimize the impact of COVID-19 on the mental health of health care and social service providers, WHO is supporting the Government and partners to operationalize a web portal with modules on self-care, stress management and self-assessment of mental health and an opportunity to seek support from specialists.

Looking forward

Nepal’s initial relative success in its campaign for early detection and containment of COVID-19 in returning migrant workers created a window of opportunity, through which WHO and partners have scaled up essential capacities for surveillance, testing, contact tracing, quarantining and treatment. The health system is not, however, equipped to deal with large numbers of critically ill patients. The priority is further scaling up of interventions and increasing capacity to manage severe cases.
As testing of returnees scales back as the flow slows, the Government is revising its testing strategy to focus on health workers and vulnerable groups to interrupt local transmission. Other strategies and policies will have to be adopted, such as home isolation and use of temporary facilities to treat mild cases in order to ease pressure on hospitals in the event of a “second wave”. Mental health and psychosocial support services should be extended to meet the needs of the population in integrated primary care.

Beyond the health sector, people’s economic situation (especially of returning migrant workers) is worsening, and an economic downturn is likely to affect all parts of society, including Government spending on essential health services. The progress of federalism will also be tested, as governments at each level articulate and practise clear roles, responsibilities and accountability. In what is likely to be a long-term COVID-19 response, with continued vigilance and new public health measures, a concerted effort will be required from the Government, its partners and the whole of society to protect the country’s recent fragile health gains and to continue to prioritize human resources development, infrastructure, public financial management and other aspects for a strong, decentralized health system in Nepal.

Postscript 12 August 2020
Since this report was written, the numbers of cases and deaths in Nepal have started to increase. Between 1 and 11 August 2020, 4177 new cases and 27 COVID-19-related deaths were confirmed. The Government is taking new measures, both nationally and locally, to limit the spread of the disease.
NIGER

Overcoming challenges in the response to COVID-19

Niger is a poor, large, landlocked country in the arid Sahel region of West Africa. Most of the country’s territory is sparsely populated or consists of uninhabitable desert, with a low national population density (18 inhabitants per km²) and a very low rate of urbanization (more than 81% of Niger’s population lives in rural areas). About 50% of Niger’s estimated 22.4 million inhabitants are under 15 years of age, and 75% are under 25. Before the COVID-19 outbreak, Niger was already facing many public health challenges, including weak health infrastructure and endemic communicable diseases such as malaria, polio, HIV infection, measles and meningitis. The situation in the country is further complicated by significant population displacement at the borders with Mali and Burkina Faso. Armed forces have forced populations to flee, and thousands of families are now reconstructing their lives away from their homes, relying on other villagers for shelter and food.1 Furthermore, Niger is a country of transit for migrants in and out of Algeria and Libya and considered a safe place for refugees fleeing violent outbreaks in Nigeria.

WHO, a key partner of the Government of Niger in the COVID-19 response

The WHO Country Office in Niger worked with the Government and partners in preparing three crucial national plans to prepare and respond to COVID-19. The first national plan was developed in February 2020, backed by the WHO Niger Country Office preparedness and response plan and a contingency plan to ensure the full, continuous support of the United Nations family. The WHO Country Office set up an incident management team for the COVID-19 strategic preparedness and response plan and reassigned staff working on polio in the eight regional commissions2 in the country to provide technical support in the fight against COVID-19.

2 The regional commissions are linked to national level through a regional coordination committee chaired by the governors of the regions and composed of seven sub-commissions for each of the seven pillars of the response.
Niger confirmed its first case of COVID-19 on 19 March 2020. As of 22 July, there were 1108 confirmed COVID-19 cases and 69 deaths. Niger is very vulnerable to a widespread outbreak because of its porous, insecure borders and the presence of many internally displaced persons. Niger borders seven countries, six of which had reported cases of COVID-19 as of 22 March 2020. Therefore, after announcement of the first COVID-19 case in March, the Government declared a health emergency, leading to isolation of the capital city Niamey; closure of borders, schools and places of religious worship; suspension of all international flights; and a ban on mass gatherings. As the virus spread across the country, a peak was recorded on 8 April 2020, since when the number of new cases has been decreasing.

Before Niger declared its first case, many diplomats and partners asked WHO for information on the country's preparedness for COVID-19. Three joint press conferences were held with Government officials and WHO to inform the population about the Government's plans to address COVID-19; however, misinformation on social media became a significant challenge, and the Government increased its communications in collaboration with WHO and other partners. The initiatives included two television spots with messages from Niger’s First Lady, social media publications and external communication supports (leaflets and posters).

**Protecting health at international borders**

In March and April, the risk of importation of COVID-19 through points of entry was very high because of limited surveillance infrastructure, making prevention, screening and quarantine difficult. WHO supported several missions to border areas to assess and improve the situation by collaboration at national and regional levels. Interventions to improve surveillance and sensitization were also implemented at airports.

Despite the COVID-19 pandemic and closure of its borders, Niger has continued to welcome refugees; after April 2020, almost 30 000 refugees fled from Nigeria to Niger. Thousands of migrants from Libya and Algeria and Niger citizens returning home were also received. All were quarantined and released only after a negative test.

**WHO facilitates collaboration with other United Nations agencies and nongovernmental organizations**

During the first stages of the response to the pandemic, WHO was the leading agency and the focal point for collaboration among other agencies and the Government. On 9 June 2020, the Government held the first joint meeting, chaired by the Prime Minister and attended by ministers, the United Nations Resident Coordinator, WHO, United Nations agencies, financial partners and diplomats. The objective was to reinforce collaboration between the Government and partners to improve the response to the outbreak. When reviewing the situation, the Prime Minister highlighted four major challenges to be addressed: mobilize funding for the response plan; strengthen the health system to cope with subsequent shocks; address misinformation on social media, denial of the virus and stigmatization of infected people; and support vulnerable populations.
The Ministry of Public Health established seven committees for the national response to COVID-19, and a preparedness and response plan was developed with a budget of US$ 275 million. The main areas of intervention in the plan are: coordination, epidemiological surveillance, health system strengthening, risk communication, and community engagement and case management.

Throughout the response to COVID-19, WHO has been a key support agency, ensuring that all information is shared at regional and provincial levels, as well as with the diplomatic community, partners, and nongovernmental organizations. The WHO team in Niger adapted tools and guidance received from WHO headquarters and the Regional Office for Africa for the country context. WHO is the only agency that participates in the Strategic Response Coordination Committee (the orientation committee is chaired by the President and the inter-ministerial committee by the Prime Minister). The two strategic committees met weekly initially and then every other week. That chaired by the President met weekly at the beginning of the response with the attendance of WHO, and after May met on Fridays during weekly ministerial consultations, in which WHO does not participate but is informed of its conclusions. Several partners participate in daily meetings of the National COVID-19 Coordination Committee and have committed technical and financial support for implementation of the National COVID-19 Preparedness and Response Plan.

The United Nations Country Team meets weekly, and meetings of the humanitarian community and health partners are other opportunities for the agencies to share information on the epidemiological situation of COVID-19, coordinate their work and join forces on initiatives such as case surveillance, risk communication, community engagement and ensuring the continuity of essential health services.

Ensuring funds to respond to the outbreak has been a key role of WHO.

On 5 March 2020, with the Minister of Health and the Prime Minister, WHO organized a meeting to provide guidance on rapid fund mobilization. Various partners offered their support, including the World Bank, which provided funds directly to the Ministry of Health. On 14 May, the European Union approved early disbursement of 31 million euros (US$ 35 million) to support the Government’s health and economic response plan of US$ 2.4 billion. Other international financial institutions, such as the International Monetary Fund and the African Development Bank, have provided critical financial support.

Challenges in testing for COVID-19 throughout the response

The initial WHO assessment indicated that one of the weakest aspects of the COVID-19 response plan for Niger was testing and diagnosis of COVID-19. In April, very few tests were conducted (20–80 per day in the whole country), and weekly analysis of country data by the Regional Office also showed a low rate of testing (3.2 per 10,000 inhabitants). At the early stage of the response, the population demanded testing, visited laboratories without medical advice and called the COVID-19 numbers set up by the Government. With the support of WHO, the laboratory system was reorganized and testing was focused on symptomatic patients.

---

3 For response coordination; surveillance and response; infection prevention and control; case management; logistics; communications; and laboratory and research
WHO has also supported the Government in defining the national strategy and decentralizing testing facilities for COVID-19 to three additional sites covering one or two provinces. WHO continued to provide support by providing laboratory equipment and capacity-building, including training laboratory technicians and further training 10 technicians and 160 health workers in sample collection. WHO remained concerned, however, that the epidemiological situation was not fully known or adequately controlled because of insufficient resources and infrastructure for large-scale testing, although 9660 patients had been tested as of 22 July 2020. Testing capacity was initially concentrated in Niamey but was extended to other regions of Niamey (covering Niamey, Tillabery and Dosso) and to Tahoua (covering Tahoua and Agadez), Maradi and Zinder (covering Zinder and Diffa); however, the number of cases did not appear to decrease. Testing was extended further after reception in mid-July of 16 240 GeneXpert cartridges for the 27 GeneXpert machines in the country and the purchase of a GeneXpert machine and cartridge at the clinic for United Nations staff and dependants.

Sensitization should also be increased, so that the community and health facilities remain alert to possible cases and confirm them by testing. Extension of testing to other target groups, such as people living in enclosed spaces (e.g. prisons) or with respiratory diseases, is an important next step. Currently, any traveller to Niger, their first-degree contacts (average of 11 per contamination), all health workers and vulnerable populations are being tested. Therefore, more travellers entering the country are tested than the local population (61% of tests conducted during June were for travellers).

Air borders were to be reopened on 1 August 2020. WHO has supported preparation of standard operating procedures and communication and surveillance material, which will be distributed widely and placed at international airports. Advice was provided on the rapid diagnostic test to be used for screening passengers on arrival and opening COVID-19 testing centres in Niamey for voluntary testing.

Leveraging established polio networks to address COVID-19

A team of nine international consultants and six local staffs was deployed to participate in polio initiatives in the eight regions of Niger, and, in February, WHO reassigned the team to the COVID-19 response. WHO ensured adequate training of polio staff on COVID-19 surveillance and case detection by teleconference before they were sent to the regions. This additional field presence began with support at the borders and airports, and their role has evolved as the restriction measures are eased. In June, the polio teams included active search for COVID-19 in polio surveillance and provided support for other health interventions to ensure the continuity of essential health services during the COVID-19 pandemic. COVID-19 has also been included in the Open Data Kit Collect application platform for polio surveillance to support active search of cases. The teams then trace cases and take the appropriate action in collaboration with health workers in health facilities.

Searching for COVID-19 in Agadez

Polio staff in the Agadez region conducted 36 visits to 16 health facilities in five districts of the region. They found 10 cases matching the COVID-19 case definition in the registers of health facilities visited between mid-May and end-June. The suspected cases were contacted by health workers, but no samples were taken as more than 14 days had passed since they had visited a health facility. Health workers were further sensitized to the case definition of COVID-19 and the measures to be taken when the definition was matched.

Easing of restrictions and continuing challenges as Niger prepares for elections

With decreasing numbers of COVID-19 cases reported, the Government eased restrictions at the beginning of June, lifting curfew and confinement in Niamey and reopening places of worship and schools on 1 June. Other restrictions, such as on international passenger flights, closure of land borders and the nationwide state of emergency remained in place. Although it is too early to assess the impact of relaxing the measures, the number of cases reported had fallen by more than one third in May as compared with April. As the population resumed their
normal activities, the Government stressed maintenance of protective measures by compliance with social distancing and wearing masks.

Niger is to hold local and regional presidential and legislative elections on 13 and 27 December, with, if necessary, a second round of presidential elections on 21 February 2021. Technical preparations have been made to ensure that public health measures are in place for the elections; however, the political situation continues to be marred by mistrust, lack of consensus and absence of dialogue among key stakeholders. In preparing for the elections, the Government continues to limit mass gatherings but has agreed on small meetings with compulsory face protection.

Maintaining essential health services and ensuring the continuity of WHO programmes

During the first 3 months of the outbreak, essential health services in Niger were severely affected due to high COVID-19 infection rates among health care workers, who accounted for 20% of the declared cases. This situation led to mistrust in the population and fear of contamination by health care workers, which affected the delivery of health care; services had to be reorganized.

WHO and UNICEF have made concerted efforts to ensure that the expanded programme on immunization is sustained during the outbreak. While immunization coverage decreased at the beginning of the outbreak, when people did not visit health facilities, trust is being rebuilt and the immunization rates have stabilized at ≥ 90%. A joint visit by WHO and the Minister of Health, UNICEF and UNFPA to a reference maternity ward on 13 July showed that services were well attended and that barrier measures were observed by health workers and patients.

Since 1 June and the easing of restrictions, field activities have resumed with the support of WHO and partners, including door-to-door distribution of bed nets, a mass campaign of seasonal malaria chemoprevention and screening for malnutrition and COVID-19 in the community. WHO will continue to accompany and support the Ministry of Health of Niger as the COVID-19 pandemic evolves, addressing challenges as they emerge.
SUPPORTING 21 PACIFIC ISLAND COUNTRIES

Key areas:

WHO Division of Pacific Technical Support for the COVID-19 Response

COVID-19 contained Pacific

Cases of COVID-19 have been recorded in almost every country in the world. However, some Pacific Island countries and areas (PICs) are yet to report a single case\(^1\). Papua New Guinea, Guam and French Polynesia are unfortunately now tackling outbreaks, and there have been sporadic cases reported from mid-March in Fiji, New Caledonia, and the Northern Mariana Islands. However, other PICs have yet to report a case, thanks to swift and decisive action to close borders, efforts to test, trace and isolate, and the implementation of non-pharmaceutical interventions with the engagement of communities.

The WHO Division of Pacific Technical Support (DPS), established in 2010 as a division of the Western Pacific’s Regional Office, is located in Suva, Fiji [1]. It is coordinating the support of partners to the health sector response across a range of areas, including surveillance, testing, supplies, risk communications and essential health services.

Unlike the common modality of WHO presence, DPS coordinates WHO’s support to 21 PICs including territories and areas. In addition to the Fiji office led by Dr Corinne Capuano the WHO Representative to the South Pacific

\(^1\) As of 11 August 2020, these PICs are American Samoa, Cook Islands, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, Niue, Palau, Pitcairn Island, Samoa, Solomon Islands, Tonga, Tokelau, Tuvalu, Vanuatu, and Wallis and Futuna.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

and the Division’s Director, there are also WHO offices in Samoa, Solomon Islands, Kiribati, Tonga, Vanuatu, and the Federated States of Micronesia. The Fiji-based team coordinates and provides tailored technical support to address the unique needs and contexts of the geographically dispersed islands in the Pacific. Like WHO, many UN agencies and partners also have sub-regional offices and offices in selected countries, and WHO works with the UNCT to lead the health response.

Joining forces across agencies to support PICs’ preparedness and response efforts

Since 2007 PICs, with support from WHO and other partners, have been working to fulfil IHR core capacities, using the Asia Pacific Strategy for Emerging Diseases (APSED) as a roadmap. Less than a year ago, Ministers in the Western Pacific Region also endorsed ‘For the Future’ which prioritizes pandemic preparedness as a driver for strengthening countries’ planning and readiness for responding to health emergencies and outbreaks. Despite this, no one – in the Pacific or elsewhere – could have imagined we’d face a pandemic of this scale, and so soon. Since January 2020, DPS has been providing contextualized support to PICs to prepare for and respond to COVID-19 leveraging the momentum of DPS’ support addressing a measles outbreak.

From measles to COVID-19: WHO supporting PICs

WHO’s response to the measles outbreaks in 2019 in some of the PICs meant that a coordination mechanism for COVID-19 preparedness and response was already in place in January 2020.

In October 2019, a measles outbreak in the Pacific was declared in Samoa. This devastating outbreak ultimately cost the lives of 83 people - mostly children. As the outbreak spread to other PICs, an Incident Management Team (IMT) was set up by WHO in Suva, Fiji, involving relevant partners in a transparent way. Weekly meetings were held at WHO office and were open to all the partners. With the operation of the measles IMT, WHO established its leadership and earned the trust of partners. When the measles outbreaks increasingly became under control in January 2020, the IMT began wrapping up its operations. However, the early reports and warning signs of COVID-19 (then 2019-nCoV) prompted the IMT to keep to its meetings schedule and shift its focus to COVID-19. As a result, both measles and COVID-19 were discussed at same meetings, along with other outbreaks.

By the end of January 2020, the Measles IMT had transformed into a fully functioning COVID-19 Joint Incident Management Team (JIMT) involving a wide range of partners, with leadership by WHO. Since then, the JIMT has served as a common platform for information sharing and coordinated action. Over 20 key partners are engaged in the JIMT, including the UN with the Pacific Humanitarian Team (PHT), as well as various international, regional and bilateral development partners [2]. By this time the WHO Pacific Action Plan for Novel Coronavirus (COVID-19) Preparedness and Response was under development, to complement and contextualize the WHO global COVID-19 Strategic Preparedness and Response Plan and the WHO Western Pacific Regional Action Plan for Response to Large-scale Community Outbreaks for COVID-19 and has been utilized to guide priority actions. Communications channels were also strengthened, including weekly calls between the WHO Regional Director and Pacific health ministers and regular technical briefings to adapt global guidance to Pacific contexts.

Many PICs still recall the impact the 1918 influenza pandemic had in the Pacific, and with the measles outbreaks still in their minds, were committed to being prepared, so that health systems would not be overwhelmed. The initial guiding principle to COVID-19 was a “no regrets policy”. Based on this principle, WHO quickly involved more partners to collectively respond to this new and unknown virus. WHO asked UNICEF for a logistician staff to be repurposed into the JIMT to facilitate emergency supply and logistics, and this request was immediately fulfilled. WHO also requested support from two major bilateral donors in the Pacific, Australian Department of Foreign Affairs and Trade (DFAT) and New Zealand Ministry of Foreign Affairs and Trade (MFAT), who deployed staff from Canberra and Wellington to the WHO office in Suva. At the same time, the Pacific Community’s (SPC)
Deputy Director of their Public Health Division was also physically located in the WHO office. Collaborative partnerships were set up with other agencies such as OCHA and the UN Resident Coordinator’s Office (UNRCO) in the Pacific, both of which supported WHO’s leadership of the UN’s health response.

**Repurposing and deployment of staff**

DPS staff based in Fiji were swiftly repurposed to provide support to COVID-19 preparedness as part of JIMT. The health system team coordinator was repurposed to lead the health operations pillar. The NCD and health through the life-course team coordinator became responsible for the partner coordination pillar and the health service delivery cell. The Technical Officer working on tobacco control joined the data management and communication team in JIMT. WHO staff not only focused on COVID-19-specific support but also linked their programme areas and expertise (e.g. health service delivery, NCD risk factors and behaviors) to the operational and technical aspects of COVID-19.

Through a collaboration between the South Pacific Office and WHO Country Offices in FSM, Kiribati, Samoa, Tonga, Solomon Islands and Vanuatu, WHO has deployed multiple staff to PICs to support early-phase preparedness and response actions concurrently. Health emergency experts, epidemiologists, public health specialists, as well as technical experts from partner agencies travelled to the hard-to-reach island countries and areas in the Pacific despite travel restrictions, providing support in national planning, training, and risk communication. Before PICs closed their borders—between January and mid-March—the Team logged 60 deployments dedicating the equivalent of more than 600 days of staff time to provide tailored technical guidance.

**Early, swift actions to prepare and respond**

**Procuring supplies with no regrets**

From the beginning, based on the “no regrets policy”, WHO and partners agreed not to waste time, and therefore purchased and ordered minimum necessary medical supplies including personal protective equipment (PPE), and sent these to all PICs in order to ensure a baseline level of preparedness.

Provision of PPE was crucial support, which has been led by WHO and UNICEF based on a Memorandum of Understanding that allowed WHO to harness UNICEF’s procurement mechanisms to procure with WHO budget. This was coupled with a regular review of regional and in-country PPE stockpiles in clinical and laboratory settings by the JIMT’s Operations Support and Logistics pillar. A logistics tracker was established to monitor the distribution and equipment that is in the pipeline. During Phase 1 over 368,109 individual items of PPE and laboratory supplies were distributed to 16 PICs to ensure a minimum supply of equipment for the detection and management of cases and clusters and to keep health care workers and other first responders safe.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Building capacity across the Pacific

This swift and action-oriented approach was similarly applied to the deployment of staff to countries to directly support COVID-19 preparedness and response activities. Support was prioritized to strengthen preparedness for early case detection and isolation, effective contact tracing and quarantine, and adherence to case management and IPC protocols in the Pacific as this would greatly decrease the risk of sustained community transmission. To assess the current system readiness and capacity, WHO conducted rapid risk assessments related to case importation, sustained community transmission and the health system vulnerability. This was followed by technical support in adapting global guidelines to the local Pacific context by providing a package of Interim Operational Information for PICs with specific guidance on case management protocols, infection prevention and control, appropriate use of PPE, and quarantine and isolation of contacts and cases. A tracker of country requests for technical support has shown a shift from risk communications in the beginning, to support around IPC, case management, and quarantine measures.

Between January and June, the WHO Pacific Action Plan for Novel Coronavirus (COVID-19) Preparedness and Response estimated the initial budget to be about two million US dollars. This amount was quickly funded by partners, who also offered additional funding for the next phase.

The Phase 1 Plan focused on preparedness, early detection of cases, quarantine measures and provided technical assistance to translating global guidelines to the Pacific local context. The Phase 2 Plan has been developed by JIMT (lead agencies: WHO, SPC, IOM, UNICEF, UNFPA) as a joint response plan subsequent to the Phase 1 Plan and it has a greater focus on mitigating impact of the pandemic and filling the gaps in country needs. A Pacific Humanitarian Plan (under the cluster system) was also developed and linked to the JIMT plan, since the JIMT is considered the de facto Health Cluster.

Border closures and breakthroughs to provide support

One of the challenges faced in providing support was the border closure measures taken by most PICs to limit importation of cases. These closures, while important in preventing or mitigating outbreaks in many PICs, have affected the deployment of technical assistance and slowed the distribution of supplies.

Alternative ways to provide support have been sought through discussion within the JIMT and with regional partners. For example, as borders started closing in March 2020, the JIMT worked with the Pacific Island Forum Secretariat to support the establishment of the Pacific Humanitarian Pathway to enable essential transportation for COVID-19 responses across the Pacific.

Strengthening local testing capacity

Lack of testing capacity in the Pacific is one of the main challenges to respond to COVID-19. Only a few PICs have PCR testing capacity, and many countries still needed to send their testing samples to certain reference laboratories in other locations. Border closures mean that local testing capacity is increasingly critical. Agreements were made with reference laboratories in Australia, New Zealand and US CDC to facilitate transport and testing of COVID-19 suspected samples free of charge. Support was prioritized to increasing laboratory testing capacities and providing testing equipment and supplies.
At the same time, many countries began to plan for how they could develop their own PCR testing capacity, supported by development partners. However, in the interim, the JIMT recognizing the importance of in-country COVID-19 testing, considered benefits of point of care testing systems. Since PCR machines (Cepheid’s GeneXpert®) had previously been made available to all PICs for tuberculosis testing (except for Tokelau), it was agreed to provide COVID-19 GeneXpert cartridges to all the PICs, to allow every PIC to be able to do their own in-country testing.

As the pandemic has continued, supplies of all testing materials for PICs has become more challenging to secure and it has been critical for WHO and partners to emphasize the criticality of supporting PICs with testing supplies, particularly the GeneXpert cartridges given these are still the only in-country testing option for many PICs still (while they work on developing their lab capacity). “In this part of the world, tests can be lifesavers,” said Dr Corinne Capuano, WHO Representative to the South Pacific and Director of Pacific Technical Support.

Vaccines and global supply

As the JIMT continues to work towards improving the reliability of supplies necessary for testing in PICs, there is a concern regarding future distribution of a potential COVID-19 vaccine through global supply systems when it becomes available. It is important for global decision makers to understand the unique challenges and the sensitivities in the Pacific as Small Island Developing States. Global decisions need to accommodate local specificities. The voice of the Pacific should be fully heard and understood.

Socioeconomic impact and UN response framework

While Pacific populations remain largely protected from infection, the indirect impacts of COVID-19 across the Pacific are significant. Pacific economies - heavily reliant on tourism and exports - have shrunk, impacting people’s lives and livelihoods. An estimated 140,000 Fijians have lost their job. There is a desperate need to find ways to support the Pacific, beyond support to its public health and clinical response.

Starting with Fiji, the UN in the Pacific is undertaking assessments of the socio-economic impact of COVID-19, guided by the UN Secretary General’s Framework for the Immediate Socio-Economic Response to COVID. Pillar 1, Health First, has been led by WHO in close collaboration with the World Bank and other UN agencies and partners. WHO has participated in high-level policy roundtables with the World Bank, Asian Development Bank, UNRC, about reopening closed borders and resuming international flights. WHO enabled stakeholders to see and understand health systems as a crucial part of the bigger socioeconomic picture. There has been a recognition that it’s time to put on both a public health and an economic lens, realizing that COVID-19 is not only a public health crisis, but also a socioeconomic crisis that needs economic arguments.

Delivery of essential health services

Compared to the situation globally, disruption to the delivery of essential health services has been relatively small. However, repurposing health workers for COVID-19 preparedness and response has impacted health service delivery - and closure of borders has limited overseas medical referral (and country visits of medical teams) - which PICs rely heavily on for the provision of specialist services. In addition, some PICs have faced challenges delivering their immunization and other essential health services programmes as planned due to difficulties in logistics of receiving supplies of vaccines and medicines with the limited number of flights and cargo capacity.
It is worth noting the innovative approaches some PICs have taken to ensure maintenance of essential health services, and even found opportunities to advocate and make the necessary changes in health care. For example, in Tuvalu there has been an uptake of utilization of primary care facilities by patients coming for routine NCD management, instead of visiting the main referral hospital, fearing of COVID-19 infection in a crowded space. This has further added to the momentum to strengthen primary health care. For NCDs - the biggest health burden in the Pacific, health care workers are encouraged to provide a longer-term prescription and treatment (e.g. for 3 months) in stable chronic patients to reduce the need for frequent appointments.

Looking ahead with an eye on the socioeconomic impacts of the pandemic

Despite the unique and complex situation in the Pacific, under the leadership of the WHO Representative to the South Pacific and Director of Pacific Technical Support, WHO has successfully established a strong coordinating mechanism with partners, providing contextualized technical support and ensuring a baseline level of preparedness across all PICs.

While the importation of the virus is under control in many PICs, the socioeconomic impact of the pandemic on the people’s lives is enormous, and DPS is taking this into consideration as it continues to work closely with partners to support PIC preparedness for community transmission.

[1] PICs are American Samoa, Cook Islands, Federated States of Micronesia (FSM), Fiji, French Polynesia, Guam, Kiribati, Marshall Islands (Republic of the), New Caledonia, Nauru, Niue, Northern Mariana Islands (Commonwealth of), Palau, Pitcairn Island, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, Wallis and Futuna

August 2020
THE KINGDOM OF BHUTAN

Key areas:

A country’s unique approach to limit COVID-19 transmission

Living in the country that gave birth to National Gross Happiness, people in Bhutan take time to pursue happiness. Yet, when it comes to dealing with COVID-19, the Government and people of Bhutan have quickly and harmoniously responded to the global pandemic. As of 8 September 2020, six months after COVID-19 was declared by the World Health Organization (WHO) to be a Public Health Emergency of International Concern, Bhutan is one of a few countries with no COVID-19 fatalities. The Government’s proactive and fast action, as well as its willingness to adopt WHO’s technical recommendations, has helped to achieve an effective COVID-19 response.

A unique country striving for universal health coverage

Bhutan is the only country in the world that officially puts happiness first. In 1972, His Majesty the Fourth King of Bhutan, Jigme Singye Wangchuk, announced that any development in the Kingdom should be in line with the philosophy of Gross National Happiness (GNH) instead of the global indicator of Gross Domestic Product. Since then, GNH has guided the country’s development, requiring the Government to strike a balance between the noneconomic and economic aspects of well-being. Their success is indicated in nine domains, of which psychological well-being and health are the first two.

The country’s constitution indicates that “the state shall provide free access to basic public health services in both modern and traditional medicines…and… shall endeavour to provide security in the event of sickness and disability or lack of adequate means of livelihood for reasons beyond one’s control”. The Government has been providing free health care at the point of delivery since the early 1960s. Since 2008, Bhutan has been committed to providing free and quality universal health care for the country’s population of 748 931. ¹

Health in Bhutan

The health system emphasizes primary health care and preventive services. Health care is accessed through three referral hospitals, 49 hospitals, a total of 186 primary health centres and 468 outreach clinics.² The Government has been encouraging the establishment of private hospitals but as yet there are only 14 private diagnostic health centres in a few major towns.

² https://apps.who.int/iris/bitstream/handle/10665/255701/9789290225843-eng.pdf?sequence=1&isAllowed=y
As the country has been expanding its health infrastructure, human resources for health have also been steadily increasing. Nonetheless, there is still a shortage of medical personnel. According to the 2020 Annual Health Bulletin, there are 114 medical specialists, 204 medical doctors, 1364 nurses, 620 health assistants, 205 medical technologists, 65 dental surgeons, 945 medical technicians and 170 traditional medicine professionals, providing medical care for the entire country.

Ready for coronavirus

Bhutan is highly vulnerable to health and other hazards. Climate variability and change are linked to the emergence and re-emergence of infectious diseases, including disease incidence, transmission, and outbreaks. The National Health Policy of 2012 mandates that all health facilities should institute appropriate systems of care to deal with emergencies, disasters, epidemics and outbreaks.

The relationship between emergency planning in the health sector and the wider emergency management sector is detailed in the Health Emergency and Disaster Contingency Plan (HEDCP, 2016). Recognizing that preparedness is key to an effective response to unpredictable emergencies, over the years the Government has made health emergency preparedness and response a national priority.

Capacity development for pandemic preparedness

As a State Party to IHR (2005), Bhutan has been developing its surveillance and reporting mechanisms to comply with the Regulations. For years, the WHO Country Office has been working with the MOH in strengthening the country’s health system so that it can adequately respond to health emergencies. Utilizing the IHR self-assessment tool developed by WHO, the MOH monitored the progress of IHR implementation and identified gaps and ways forward to strengthen the country’s IHR core capacity.

In 2017, Bhutan carried out a Joint External Evaluation (JEE) to assess the country’s capacity to implement IHR (2005). Looking at the country’s capacity to detect, assess and respond to public health emergencies, JEE identified several areas requiring substantial development to fulfil Bhutan’s IHR (2005) obligations. These included integration and analysis of surveillance data, the emergency operations programme, and health personnel mobilization. Translating the JEE findings into action, WHO has been providing technical and financial assistance to the Government to strengthen the surveillance capacity of the Royal Centre for Disease Control, to scale up the national laboratory’s biosafety from level II to level III, to develop the national health emergency contingency plan, to facilitate training for the all-important sectors, and to introduce medical camp kits, now serving in influenza clinics across the country. The development states of these aspects have become the starting blocks for the current development of the country’s National Health Policy Plan.

During the COVID-19 pandemic, with WHO support the MOH has improved the ability of the Royal Centre for Disease Control to conduct real-time event-based surveillance as a part of the country’s Early Warning, Alert and Response System (EWARS). Bhutan has also strengthened the systems related to laboratories, Points of Entry (POEs), the capacity to deal with zoonoses and the implementation of food safety. The Government has additionally established a Centre for COVID-19 Integrated Influenza Surveillance.

Timely simulation

Given the high frequency of global mobility and increasing travel from and to Bhutan, the Government recognized a strategic need to strengthen the capacity of the main POEs. Hence, two months before COVID-19 was declared as a global Public Health Emergency of International Concern, the MOH decided to conduct a simulation exercise at the country’s main gateway: Paro International Airport. The purpose of the exercise was to assess

---

Responding to the COVID-19 pandemic: 
WHO’s action in countries, territories and areas, 2020

The exercise, held on 6 November 2019, simulated the country’s response to a new strain of coronavirus that was emerging in Thailand. The simulation tested the coordination of efforts, preparedness and response of different national actors working at the airport such as customs, immigration, airport authority and personnel, airlines, Department of Road and Air Transport, and the Bhutan Agriculture and Food Regulatory Authority (BAFRA). Through the expertise of WHO experts, relevant Bhutanese health teams observed and learned about procedures for assessing risks, defining appropriate algorithms for referral, and responding to an infectious outbreak based on a public health approach. The Airport Public Health Contingency Preparedness Plan was finalized, allowing the country to be better equipped to use the newly gained skills in a real situation when COVID-19 emerged.

Harmonious efforts in curtailing COVID-19

Rapid response

The first cases of COVID-19 in Bhutan were announced on 6 March 2020 and on 20 March 2020, involving a 76-year-old male tourist and his 59-year-old female partner respectively, who had arrived in Bhutan from the Indian state of Assam on 2 March 2020.

By the time Bhutan announced its first COVID-19 cases, WHO had assisted the Government to set up thermal scanners at the Paro International Airport, thus enabling the country to monitor Bhutanese citizens returning from different countries. To contain the spread of COVID-19, Bhutan imposed a temporary restriction on the entry of tourists, a bold move as tourism is the second-largest driver of the economy after hydroelectric power.

COVID-19 sample collection team in the field.

Following WHO guidance, Bhutan implemented the National Preparedness and Response Plan for Outbreak of Novel Coronavirus, while all health facilities, including the Basic Health Units and other primary health care providers, activated their Public Health Emergency Contingency Plans. For better contact tracing the country has developed an app called “Druk trace”. Anyone visiting shops, hotels, banks or taking taxis or public transport needs to scan a code placed in these facilities. This allows tracing in the event of local transmission. As WHO was releasing more guidelines on COVID-19, the MOH established a multisector Technical Advisory Group to adopt WHO technical documents for COVID-19 responses in the local context. As a result, guidelines and standard
operating procedures are in place, and a national COVID-19 response team has been formed and is working 24/7 to monitor the situation across the country.

There are four PCR laboratories in different parts of the country for conducting tests of all suspected COVID-19 cases, including those coming from countries affected by COVID-19. The pandemic response also engages the animal health sectors. Both human and animal health sectors closely collaborate and exchange information and knowledge on RT-PCR testing and its results.

To minimize the risk of infection in the hospital setting and to ensure a continuum of care, the Government established influenza clinics away from the main health care centres. This allowed patients with influenza-like symptoms or COVID-19 signs and symptoms to seek care in specially designated facilities and reduced the risk of exposure for other patients.

People with suspected or confirmed COVID-19 must undergo quarantine or self-isolation. Under the direct command of the King, the Royal Guest House in Mongar was transformed into a COVID-19 treatment centre, consisting of an isolation ward, intensive care units along with ventilators, and an operating theatre. The Government worked with the manager to use the hotel for quarantine facilities and paid for every room used.4

Stopping transmission where it begins

A strong sense of national solidarity is shown by all sections and people in Bhutan. From farmers coming forward and donating their hard-earned cash crops, and people from all walks of life donating in both cash and kind to support the Government. Businesses and hoteliers have offered their hotels to be used as quarantine facilities. People are volunteering in many ways to support the Government response. Some volunteers provide meals to people working on the front line.

On 23 March, Bhutan closed all its borders while still allowing Bhutanese citizens residing elsewhere to return to their home country.5 On every border post, quarantine facilities with isolation rooms and testing capacity were set up. Every incoming person was tested and quarantined for a minimum of 21 days. Volunteers of DESSSUP (Guardians of Peace and Harmony) became the managers of the quarantine facilities. They also support the police and army in patrolling the borders, specifically to monitor and report on illegal crossing and trade.

The King visits the borders to monitor high-risk areas along the borders and other districts. He personally supervises the COVID-19 preparedness and response in-country. Community members take an active role in ensuring that any transmission of COVID-19 is stopped at the border by contributing their resources to the facilities. Villagers help to set up the quarantine zones in villages, with makeshift isolation huts built of bamboo, and some

5 http://www.moh.gov.bt/border-gates-to-close-from-today/
help the official guards to patrol the borders. Early in August, a person who had a history of coming in close contact with people in Thimphu and Paro was tested COVID-19 positive in Gelephu. In response the Government announced a lockdown on 11 August. All of the case’s contacts were traced and found negative. The next day, another person was tested COVID-19 positive in the dry port area in Phuntsholing, along the international boundary. The Government has introduced a full programme of contact tracing. The first phase of mass screening is now running, with the collection and testing of 17,000 samples from Phuntsholing households. It is planned to screen the entire population of Phuntsholing in the second phase.

Holistic continuous approach

The King of Bhutan is heavily involved in the country’s response to COVID-19, monitoring every part of the measures, and ensuring that the country undertakes the best effort despite limited resources. The King has been repurposing royal facilities, a gesture that motivates the citizens to make contributions to support the COVID-19 response. Government officials and Members of Parliament contribute a part of their salary to finance the response.

To mitigate the shortages in the health workforce, around 600 back-up volunteers were trained to carry out health screening, and it is planned to train 5000 more. The MOH recalled doctors who had gone abroad and hired resigned doctors as part of the effort to support the COVID-19 response and provide essential health care services.

With health being a priority, the country’s leadership understands the principles of emergency preparedness and disease outbreak response and relies on technical advice from WHO in decision-making. The Prime Minister, Foreign Minister, Finance Minister and Health Minister all have a public health background and consequently have been able to gain the trust of the people and ensure compliance with Government advice on preventive measures.
The coordinated response has been bolstered by the nation’s traditional communal values, whereby all levels of society, including the royal family, have acted in unison to observe social distancing and support other response measures.

Risk communication activities are conducted consistently. Information and messages are easily found on the websites of government ministries, and there are regular updates in social and printed media. People are continuously reminded and encouraged to implement preventive measures. The police and DESSUP perform 24/7 monitoring of the streets, health care centres, and various checkpoints to ensure that people properly follow government advice regarding COVID-19.

The extensive support of the World Health Organization

“In the WHO Country Office we are all working to achieve COVID-19 preparedness and response, and we are working in a practical way on the ground. I collaborate closely with the Minister of Health, advising the Government on the different aspects of the public health emergency, and our staff work long hours, joining the surveillance team, facilitating training, managing logistics, helping with risk communication activities, and more. Meanwhile, the main tasks for specific programmes are being maintained.”

Dr Rui Paulo De Jesus, WHO Representative to the Kingdom of Bhutan.

Three levels of WHO

During the work for preparedness, the onset of the COVID-19 outbreak, and the current responses to minimize the impact of COVID-19, WHO is supporting the Government. The evidence-based approach taken by WHO and the Government’s trust in WHO have led to reliance on WHO’s ability to provide evidence, references and guidelines on fighting the new virus. The WHO Country Office has been intensely coordinating and collaborating with the Regional Office and Headquarters to provide much-needed assistance. Days after Bhutan announced its first case, WHO mobilized the South-East Asia Regional Emergency Fund (SEAREF) from the WHO South East Asia Regional Office to support the MOH in responding to COVID-19. WHO shipped in consignments of reagents for COVID-19 testing, provided personal protective equipment, and procured medical equipment necessary for case management.

The MOH worked with WHO to establish the SOPs for minimizing transmission at POEs and providing technical inputs into the development of the policy for travel restrictions. In the field, WHO set up thermal scanners and trained health workers to build a safe isolation centre. To develop the capacity at provincial level, WHO supported a table-top simulation exercise for a COVID-19 outbreak at Lhamoistingkha Dungkhag.

WHO supported the MOH to procure RNA viral extraction kit to strengthen testing capacity, strengthen risk communication, scale up response capacity including case management, laboratory diagnosis and infection prevention and control (IPC), improve the capacity for quarantine, contact tracing and surveillance at POEs, and enhance multipronged approaches with stakeholders.
Responding to the COVID-19 pandemic:
WHO’s action in countries, territories and areas, 2020

WHO timely support

<table>
<thead>
<tr>
<th>Before COVID-19 emerged</th>
<th>• A POE simulation exercise at Paro Airport (6 November 2019)</th>
</tr>
</thead>
</table>
| Before the first case of COVID-19 detected in Bhutan | • Procurement of seven sets of medical camp kits (MCKs) before COVID-19 cases found in Bhutan  
• Provision of the first batch of medical logistics (PPEs, RT-PCT reagents, VTMS and extraction kits (Feb 2020)) |
| During lockdown | • Provision of the second batch of medical logistics (PPEs; medical respirator, KN95, and surgical masks; goggles), arriving on the day the Government announced the lockdown (11 August)  
• Provision of a microcentrifuge on the day the MOH planned to do a mass screening covering all persons in Phuntsholing, a COVID-19 high-risk area (15 August). |

The convening role of WHO in UNCT and partnerships

UN Agencies and international development partners play valuable roles in assisting Bhutan to adequately respond to COVID-19. WR is a member of the Security Management Team (SMT), where he updates the members on the COVID-19 situation in-country and globally. He also provides technical inputs by supporting other UN partners to support the country in response to COVID-19. One of the technical officers is a supply coordinator, helping, along with all the UN partners, to support the Government in ensuring that adequate PPE and critical equipment are provided in a timely manner. As UN supply coordinator, he makes sure that there is no duplication in support provided by UN partners so that limited resources are well utilized. WCO also coordinates meetings between MOH and UN partners. A technical officer in WCO works closely with UN colleagues in supporting the MOH response to COVID-19.

The three-level coordination and collaboration within WHO gives the Country Office the confidence and the means to guide other UN agencies within the United Nations Country Team (UNCT), hand in hand with the UNRC, and to work with partners in providing substantial support for the COVID-19 response. WHO leads the health agenda within the UNCT to provide suitable medical and logistic support. WHO works with UNCT and the Technical Advisory Group (TAG) members to develop the UN Advisory Paper on Immediate Socioeconomic Response to COVID-19 in Bhutan. A comprehensive assessment is in progress and WHO has contributed inputs on the NCDs and the country’s essential services.

Assuring the health of the people

By 25 August there were 156 confirmed cases of COVID-19. There have been no deaths, while 117 people confirmed as COVID-19 positive have recovered. In the health sector, the Government is endeavouring to protect the population from the threat of COVID-19 by providing essential health services. In the broader context, Bhutan must cope with the socioeconomic impact of the closing of its borders and decreasing economic activities.
Psychosocial support

The country’s situation puts people under pressure and in need of mental health support. As psychological well-being is one of the nine domains of Gross National Happiness (GNH), mental health services are vital. Under the technical guidance of WHO, health care workers and social workers are trained to provide mental health counselling down to the district level. During the COVID-19 pandemic, a Mental Health Task Force was created, led by retired psychiatric and mental health counsellors, with WHO experts providing technical backstopping and advice as needed.

The Task Force has trained over 15,000 volunteers and health workers on Psychological First Aid (PFA) and provides 24/7 counselling services, especially to people in quarantine facilities and those who have mental distress due to the COVID-19 pandemic. Five hotline numbers are available, and there are two other numbers provided specifically for elderly persons. The effective utilization of the hotlines has yet to be assessed.

Sustaining provision of essential health services

In 2017, WHO handed over seven medical camp kits (MCKs) to the MOH as part of its support for preparedness for emergencies. In the current year, responding to COVID-19, WHO handed over seven more MCKs. Unlike the common pattern of repurposing the existing health facilities for COVID-19, Bhutan makes use of the influenza centres established for COVID-19 to intensify TB detection. In its effort to increase COVID-19 detection, the 54 walk-in influenza clinics examine people with cough and fever symptoms. The MOH takes the opportunity to collect sputum samples of all TB suspects and plans to continue using the clinics as TB screening facilities. The MOH also pairs the provision of the essential health services with risk communication activities, particularly in the areas where the risk of COVID-19 transmission is high. Supporting the MOH to ensure the continuity of essential services during the pandemic, WHO has recruited six retired specialists, 20 laboratory technicians, and 18 hotline staff to work in MOH facilities.

WHO also donated noncommunicable disease kits that could meet the needs of 10,000 people in three months. The kits contain essential oral medicines, basic diagnostic equipment, renewables, and additional products such as insulin, for people with hypertension, diabetes, cardiovascular diseases, chronic respiratory diseases, and cancer. WHO, along with other UN partners, started working on making WASH facilities available in all health care facilities.

The tasks ahead

Maintaining the essential and inclusive health services is important for Bhutan. The country should be able to maintain its 90% immunization coverage and could try to make the most of current technologies so as to extend the reach of its health services. A web-based telemedicine system, which operates at 24 sites, is being developed. This type of service will be useful during a public health emergency like the COVID-19 pandemic. With support from the Asian Development Bank and WHO, Bhutan has completed phase 1 of its digital health development, establishing the necessary infrastructure and capacity. Phase 2 (2020 – 2023) will includes transforming primary health care to enable the development of a public health system that consolidates human and animal health surveillance under the One Health framework.

COSTA RICA

Key areas: 🌐 🍁 🌽 🍼 🌟 🧘‍♀️ 🏠 🌐

PAHO/WHO Costa Rica works hand-in-hand with national authorities to overcome the challenges of the COVID-19 pandemic: protecting the health of the country

At the end of May 2020, the President of Costa Rica and the Director-General of the World Health Organization (WHO) launched the “COVID-19 Technology Access Pool,” a platform for sharing data, knowledge and intellectual property and for facilitating equitable access to health products that will save lives in the context of COVID-19. This high-level political event was attended by the Prime Minister of Barbados, Mia Mottley, the Secretary of State of Norway, Aksel Jacobsen, and leaders of the UN, academia, industry and civil society. Since then, Costa Rica has become a leader on equitable progress in the international response to the disease.

Located between Nicaragua and Panama in Central America, Costa Rica is composed of three types of territorial entity: 7 Provinces, 81 Cantons and 463 Districts. Of the country’s 5 million inhabitants, 77% live in urban areas. Registered migrants, of which 75% are of Nicaraguan origin, comprise 9% of the population, the highest percentage of migrants in the Latin American and Caribbean region. In 2018, adults over 65 made up 8% of the population; this proportion is expected to grow to 13% by 2030 and to 18% by 2045. Since the beginning of the pandemic and in order to tackle it effectively, Costa Rica has taken account of the diversity of the population.

COVID-19 in Costa Rica

Spread of the pandemic

On 6 March the first COVID-19 case in Costa Rica was confirmed. Having activated the protocols for epidemiological health emergencies as early as January, the country had already started preparing for the arrival of the virus. By 8 March, the Ministry of Health (MOH) and the National Commission for Risk Prevention and Emergency Preparedness (CNE) declared a nationwide yellow alert. In addition to having existing preparedness plans for potential pandemics, based on previous experience with influenza, AH1N1 influenza and SARS, Costa Rica counts with a National System for Risk Management. This includes operational and technical structures that are deployed upon the declaration of alerts or states of emergency related to adverse events.

1 Comisión Nacional de Prevención de Riesgos y Atención de Emergencias (CNE).
Three days after the appearance of the first COVID-19 case, the Government activated the Emergency Operations Centre and over a dozen technical sectoral working groups. The main actions in health began with the activation of the Health, Water and Sanitation Operational Working Group and the Epidemiological Situation Room, coordinated by the MOH and, during the first weeks of the emergency, located within the PAHO/WHO facilities. On 16 March, after confirmation of 35 cases in 5 different Provinces, and following recommendations by CNE, the President declared a state of national emergency.

The spread of COVID-19 was moderate between March and June but infections subsequently accelerated significantly, resulting in the declaration of community transmission by early July. As of 27 August, there were 37 272 cases and the country was in fourth place by percentage weight of cases in the Central American subregion (12.4%) and in fifth place by percentage weight of COVID-19 deaths (4.89%). There were 693.1 cases per 100 000 inhabitants, the second highest cumulative incidence rate in Central America after Panama, according to information reported to PAHO/WHO by the countries of the subregion.

PAHO/WHO’s support to the MOH in tackling COVID-19

Since initial information was shared by WHO, the MOH has been at the forefront of the response, coordinating actions to tackle the pandemic through the Directorate-General of Health, the Directorate of Health Surveillance, and the Directorate of Health Services, with technical support from PAHO/WHO.

As part of the initial actions, on 10 February PAHO/WHO coordinated a COVID-19 preparedness and response simulation exercise with the national authorities. This exercise enabled the development of an interagency protocol to address cases, as well as the development of a risk communication strategy. As a result of the first scenarios and projections presented, a Working Group on the Situation of Health Services (MSSS)² was created, led by the MOH and with the participation of PAHO/WHO. Its functions are to conduct impact analyses with respect to health service capacity in the face of COVID-19 and to develop an adequate national response to the disease.

This working group operates with the Research Centre for Pure and Applied Mathematics (CIMPA)³ of the University of Costa Rica, the MOH, and the Costa Rican Social Security Fund (CCSS)⁴ in the development of mathematical models that serve to analyse the transmission dynamics of SARS-CoV-2, to simulate the effect of public health measures, and to project the possible course of spread of the epidemic. Currently, the group uses a network model that incorporates multiple overlapping transmission networks.

---

2 Mesa de Situación de Servicios de Salud (MSSS).
3 Centro de Investigación de Matemática Pura y Aplicada (CIMPA).
4 Caja Costarricense de Seguro Social (CCSS).
layers of information, ranging from nodes representing individuals in a certain population to their contacts, social relationships and implications. The projections generated have been the primary input for decision-making by the authorities in their response to the pandemic.

In order to ensure diagnostic laboratory capacity specific to the detection of SARS-CoV-2, PAHO/WHO led capacity-building training for the National Reference Centre for Virology of the Costa Rican Institute for Research and Teaching in Nutrition and Health (INCIENSA). This training focused on testing as well as on protocols to detect and diagnose COVID-19 through molecular technology. The Centre has been able to run diagnostic tests since 26 February.

Weeks before the first COVID-19 case was reported, PAHO/WHO was part of Costa Rica’s interagency team, which included MOH, CCSS, CNE and the 9-1-1 Emergency System, and developed the national strategy and action plan for novel coronavirus risk communication. PAHO/WHO is also part of the Information System for Prevention and Preparedness of Emergencies (SIPAE), a technical advisory committee focused on the management of public information and risk communication. SIPAE is made up of communicators from public institutions, autonomous institutions and academia. Through SIPAE, PAHO/WHO provides support in the development of communication actions to transparently inform the population about risks and to guide them in behaving adequately in different threat or multi-threat scenarios. PAHO/WHO links SIPAE and the United Nations Interagency Communication Group for the implementation of risk communication actions meeting the country’s needs.

PAHO/WHO’s contributions include the provision of personal protective equipment (PPE), diagnostic supplies, medical equipment, computer and telecommunications equipment, and personal hygiene and cleaning supplies needed to tackle COVID-19.

At the request of the MOH, the United Nations System activated the Health Cluster to respond to humanitarian crises in the context of COVID-19, with PAHO/WHO as the Technical Secretariat. This was to ensure that all UN cooperation agencies and organizations of the humanitarian aid network would operate in conjunction with one another to address the needs prioritized by the national health authorities.
Emergency calls in the pandemic: a mental health crisis

The health, social and economic impacts of COVID-19 have exacerbated the socioeconomic conditions that existed before the pandemic, such as precarious public health provision and the poor state of mental health. Among other actions, PAHO/WHO has provided support to the Mental Health and Psychological Support Working Group for the incorporation of community-based communication. The PAHO/WHO Country Office has also supported the development of communication campaigns and materials related to: self-care (aimed both at the general population and people at the front line of the pandemic); domestic violence in the context of voluntary confinement; bonding emotionally with loved ones despite physical distancing; telephone lines for psychological support; xenophobia; and discrimination and violence against people who have tested positive for COVID-19.

Changes in daily life

The response to COVID-19, involving the restrictions imposed since the beginning of March, has affected the daily lives of all citizens. Less than a week after the first confirmed case, mass events were banned, teleworking for the public sector was required, and some schools with a high risk of contagion were closed. By the end of the same month, lessons had been suspended throughout the country, the closure of borders had been announced, the operation of bars, restaurants and casinos had been prohibited, beaches and national parks had been closed, and a great part of commercial activity was suspended (with exceptions for the provision of food and essential services). Automobile restrictions for health had been established, and a large proportion of citizens were complying with the Government’s call for voluntary confinement at home.

As the pandemic progressed, the 9-1-1 Emergency System (SE9-1-1) started receiving inquiries about COVID-19 and requests for humanitarian support and help in emotional situations that were outside the system’s scope. Consequently, on 13 March the MOH created a free hotline (LAC-1322) which provided information on COVID-19 and on measures taken by the Government, clarifying general queries regarding the pandemic. In response to the observed need for psychological care evident in calls to LAC-1322, MOH’s Technical Secretariat of Mental Health (STSM)8 proposed the creation of a Psychological Support Office (DAP)9 to deal with queries related to emotional situations requiring specialized psychological support. To this end, the MOH reached out to the College of Professionals in Psychology of Costa Rica (CPPCR)10, which immediately offered participate.

Psychological Support Office (DAP): protecting mental health during the pandemic

The CPPCR Board asked for members to express their willingness to provide volunteer telephone counselling services and thus to provide psychological first aid and crisis interventions in the context of the COVID-19 pandemic. While the CPPCR prepared a volunteer profile outlining required competencies and skill, the MOH Technical Secretariat of Mental Health developed specific protocols of mental health care on the basis of PAHO/WHO guidelines.

Selected volunteer psychologists received training on the functions of the national emergency system, capacity-building of psychological care in the context of COVID-19 and the strengthening of skills to address specific

---

8 Secretaría Técnica de Salud Mental (STSM).
9 Despacho de Apoyo Psicológico (DAP).
10 Colegio de Profesionales en Psicología de Costa Rica (CPPCR).
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

issues. Among other topics, PAHO/WHO provided support to the DAP in capacity-building on matters such as psychological first aid, grief counselling, psychopharmaceuticals, addressing suicidal behaviour, managing anxiety, and providing care for migrants and refugees. The DAP operates 24 hours a day all week and permanently retains two professionals and supervision groups that can provide support with monitoring services in accordance with specific cases. The supervision team, which comprises four psychologists with clinical experience and a recognized track record, also works voluntarily for the DAP. The DAP’s volunteer psychologists are among the heroes of the response to COVID-19.

Since March, calls to SE 9-1-1 or 1322 LAC which are classified as requiring mental health support are forwarded to the DAP. Upon receipt they are filtered again and a secondary classification is made by sex, age group (minors, adults and older adults), depressive or anxious symptoms and the main reasons for the calls. Issues by callers are so varied that almost 100 categories have been established. The DAP deals with all calls classified as needing psychological support, including those related to suicidal ideation, behaviour alteration, mental emergencies and intoxication, among other things. All calls made to these numbers are free.

A support team of specialized psychologists is also made available through the DAP. After the first call, this team follows up on specific cases that warrant additional monitoring for up to three additional calls. To ensure effectiveness and efficiency of the DAP, service audits are planned in the short term by the MOH Technical Secretariat of Mental Health. Through this process, some cases requiring subsequent interinstitutional support have been detected and transferred for follow-up.

The reach of the Psychological Support Office (DAP)

Although the DAP’s scope of care is national, requests have been received to serve Costa Ricans abroad who have not been able to return home. Some, for instance, have had to remain in Brazil due to the closure of borders. In addition, the DAP has expanded its scope, now providing support for prison staff and operators of SE 9-1-1 and LAC 1322. Furthermore, through lessons learnt from the DAP, support has been provided to Nicaraguan professionals on guidelines for generating intersectoral and institutional alliances with a view to establishing voluntary services.

Cross-border areas and maintenance of essential health services

In addition to actively tackling the pandemic and caring for the mental health of the population, the MOH and PAHO/WHO have demonstrated abilities to respond to varied needs during the emergency. Addressing health at border areas and maintaining efforts against malaria are examples of these abilities.

For example, following a request from the Government, PAHO/WHO, together with IOM and UNHCR, has led the preparation of a health cooperation plan in the context of COVID-19 to “Care for populations in conditions of vulnerability in cross-border areas during the COVID-19 pandemic, including the north and south areas”. This proposal seeks to collaborate with the national, regional and local authorities in a comprehensive health response to COVID-19 at the borders of the country, with emphasis on the vulnerable cross-border population, including people in need of international protection. At the northern and southern borders, PAHO/WHO is supporting the
Integrating responses to malaria and COVID-19

Aware of the imminent impact that COVID-19 could have on the fight against malaria, the Country Office shared recommendations from the Regional document “Measures to ensure the continuity of the response to malaria in the Americas during the COVID-19 pandemic” with the national technical malaria team. PAHO/WHO has optimized the management of malaria supplies (medicines, rapid diagnostic tests (RDTs), long-lasting insecticidal nets (LLINs), and insecticides for indoor residual spraying) and has worked to protect the health of everyone involved in the fight against malaria. To this end, PAHO/WHO has assisted with the estimation of needs and with donations of PPE for health officers who carry out detection, diagnosis, treatment administration, case investigation and response to malaria, including vector control (totalling 71 315 units of masks, gloves and face shields).

Additionally, considering the limitations in the global supply chain due to circulation restrictions in most countries, airport closures, cancellation of commercial flights, and restrictions on the export of some products, PAHO/WHO has provided technical support in the preparation of specifications for strategic purchases. This included 8000 malaria RDTs and 6000 LLINs, providing support for the management of purchases and their prompt delivery. In order to avoid shortages, PAHO/WHO has assisted with obtaining chloroquine through the procurement processes of the PAHO/WHO Strategic Fund, as part of the joint procurement actions for antimalarials in the 2020-2021 period.

Other technical cooperation during the pandemic

The PAHO/WHO Country Office has continued supporting other priority issues on the national agenda, especially in relation to: tuberculosis, HIV, arboviruses, influenza, cancer, tobacco consumption, alcoholism, human resources for health, and care of vulnerable populations such as Indigenous peoples, persons deprived of liberty, persons experiencing homelessness, and older adults in long-term care facilities, among others. Through this support, PAHO/WHO is contributing to the maintenance of regular services and of a comprehensive approach to health in the country.
Towards the future

Considering the sharp increase in COVID-19 cases in recent months, PAHO/WHO is committed to continue supporting the MOH in expanding the capacities of health personnel in all service networks and in deepening health surveillance with strong participation in the first level of care and with community-based actions. Support will also continue on other public health matters that are being neglected due to the COVID-19 pandemic. Examples include some communicable and noncommunicable diseases, and the expansion of comprehensive health services and elective surgery. PAHO/WHO also seeks to help with preparations for the introduction of a COVID-19 vaccine: a plan will have to be designed whereby the country has equitable access to a safe and effective vaccine.

As the context of the pandemic changes, PAHO/WHO will continue working hand-in-hand with the Government to protect the health of the people, respond to rising needs and priorities, and overcome the disease. In addition to the technical cooperation provided in matters of planning, laboratories, case management, reorganization of health services, risk communication, and the care of vulnerable populations, donations in kind to different institutions continue to be part of PAHO/WHO’s response to the COVID-19 emergency.
LEBANON

A story of World Health Organization (WHO) support for health system resilience in a complex multiple crisis setting

Lebanon: a complex setting with multiple crises

Lebanon has been facing a growing number of political and economic challenges for several years. Over the past 3 decades, Lebanon has experienced repeated instabilities: a sluggish recovery after a devastating 15-year civil war that ended in 1990, security incidents (assassinations and military attacks), and a highly volatile and agitated political context.

Since 2011, the Syrian crisis has added to the country’s continued political disruption, with Lebanon currently home to almost 2 million refugees, including 1.5 million from Syria and more than 200 000 from Palestine. Lebanon has the highest per capita concentration of refugees in the world, accounting for almost a third of the total Lebanese population. With the support of the United Nations (UN) and nongovernmental organizations (NGOs), Lebanon was committed to offer shelter and health services without discrimination to all refugees and migrant workers. However, the Syrian refugees added a significant burden on the health system, increasing demand on primary health care by about 40% and on hospitals by about 35% over a short period of time.

In 2019, financial and economic deterioration, caused by a rapid devaluation of the national currency against the United States dollar, pushed about 30% of the Lebanese middle class into poverty. This has caused repeated riots and protests since 17 October 2019. The impact of this unprecedented financial crisis and the security instability had serious repercussions on the health system, reflected in the hospital sector being unable to purchase medications and medical equipment and supplies, and a reduced purchasing capacity for ambulatory care. Hence, a sharp decrease in the use of health services was observed, which led to the need to reduce the number of hospital beds and lay off a significant number of nurses. It also led to the migration of experienced health personnel, and progressive shortages of critical and chronic medications and medical supplies, jeopardizing the accessibility, availability and quality of health care.

The situation was further aggravated by the current COVID-19 crisis. Although Lebanon was initially capable of controlling the epidemic spread, it witnessed a sharp acceleration of the outbreak, including community transmission. This situation presents a challenge in terms of access to COVID-19 care, because the public health system does not have the capacity to absorb all cases expected, and the private system is suffering from extremely strained financial capacity. The lockdown measures further reduced use of the health services, which in turn reduced the financial sustainability of the health facilities.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

On top of the mounting number of COVID-19 cases, on 4 August 2020 the massive explosion at the Beirut port caused over 178 reported deaths, injured more than 6500 people, and displaced about 300 000 people. About 120 patients were in a critical condition because of the blast. Ongoing political unrest resulted in additional protests throughout the capital city, and clashes led to over 200 people needing medical treatment on site or in hospital in the days following the blast. In addition, the blast caused significant damage to an already fragile health care system. Three major hospitals in Beirut were totally incapacitated, and three others were partially damaged, causing a partial disruption in their services resulting in the loss of 500 hospital beds. According to a WHO-led rapid assessment, 23 primary health care centres were damaged, four of which were destroyed, affecting access to health care for 160 000 patients in their catchment areas. Medical equipment, supplies, medications and personal protective equipment (PPE) inside the affected health facilities were also destroyed, lost or damaged.

Public health sector facing financial burden due to private sector constraints

Lebanon’s health system has traditionally relied heavily on public–private partnerships, with more than 80% of the health services provided by the private sector. The Ministry of Public Health (MoPH) is the regulator and purchaser of services from the private system, and the insurer of last resort for the about 50% of the population that is uninsured. This creates a heavy burden on public health financing. With the advent of the triple crisis, both the public and private health sectors are facing barriers in importing medicines and equipment, as well as much needed human resources. Private hospitals have already been downsized and have reduced capacity due to the financial crisis; following the government-imposed lockdown, public health resources are even more constrained.

WHO’s work in Lebanon in its emergency preparedness over recent years has helped the country’s response to the multiple crises

Since 2007, and with the ratification by the Government of Lebanon of the International Health Regulations 2005 (IHR), the WHO Country Office (WCO) in Lebanon engaged in supporting the national capacity for emergency preparedness and response. In 2016, Lebanon underwent a joint evaluation of the IHR core capacities to identify the most urgent needs within the country’s health security system; to prioritize opportunities for enhanced preparedness, detection and response capacity-building; and to set national priorities and allocate resources based on the findings. Following the evaluation, the Government of Lebanon, with the support of WHO, worked on the proposed recommendations to enhance the country’s emergency preparedness. Specifically, the WCO worked with the government and the public health sector to strengthen hospital capacity, including that of the Rafik Hariri University Hospital (RHUH); for example, by upgrading the laboratory facilities with polymerase chain reaction (PCR) machines, building a negative pressure room and capacity-building with staff training. In 2019, the country also bought, as part of establishing the hazmat teams, a large supply of PPE, which came into immediate use at the beginning of the COVID-19 outbreak. This process was a success and actively prepared the country for the COVID-19 pandemic. At the start of the outbreak in Lebanon, at least one main national referral hospital was ready for testing and was providing care for COVID-19 patients.
Reaffirming WHO leadership

From early in the response to COVID-19, WHO worked closely with the government and was included in the national emergency crisis team, led by the Prime Minister. This recognition by the government allowed the WCO to move forward efficiently with mobilizing resources and strengthening the health system. WHO is the lead agency in the response to COVID-19, as designated by the resident and humanitarian coordinator. As part of the emergency response team, WCO was included in the national Task Force for COVID-19 response, which was directly affiliated with the office of the Prime Minister. This allowed WHO to provide sustained technical advice on issues of the COVID-19 strategic response. Similarly, WHO leads the health sector response to the Beirut port explosion.

Timely participatory response planning

The Government of Lebanon took a proactive position in developing a national response plan to COVID-19. The UN agencies developed the Lebanon Emergency Appeal (LEA), in line with the national response plan. Both plans have focused on treating and offering the same care and humanitarian support to all residents of Lebanon, with one strategy for all, regardless of status – thereby reinforcing a key objective of the LEA, which is to ensure protection for women and girls, refugees and migrants, people with disabilities, older people and other vulnerable groups (see Box 1).

Box 1. The LEA for COVID-19 is articulated around four priorities, led by different UN agencies

- Support the preparedness and response capacity of the Lebanese health system in coping with the COVID-19 emergency – led by WHO.
- Strengthen the engagement of and communication with communities, support good hygiene practices and ensure COVID-19-specific support services – led by the United Nations Children’s Fund (UNICEF).
- Ensure uninterrupted delivery of critical assistance and services to the most vulnerable communities affected by the Syrian crisis, including refugees and host communities, as foreseen in the Lebanon Crisis Response Plan 2017–2020 (LCRP) Business Continuity Plan – co-led by the UN Refugee Agency (UNHCR) and the UN Development Programme (UNDP).
- Expand support to vulnerable population groups not included in the LCRP, in need of humanitarian assistance owing to the combined socioeconomic impact of the economic and banking crisis and COVID-19 – co-led by the World Food Programme (WFP) and the UN Relief and Works Agency for Palestine Refugees in the Near East (UNRWA).

Similarly, WHO, in close coordination with the UN Office for the Coordination of Humanitarian Affairs and the UN Resident Coordinator’s Office (RCO), led the development of the health sector flash appeal for the Beirut port explosion humanitarian support. Estimates for health support in the flash appeal were based on a rapid damage and needs assessment targeting the affected hospitals and primary health care centres, conducted by WHO 4 days after the blast. Similarly, WHO led the social services pillar of the Lebanon Reform, Recovery and Reconstruction Framework (3RF) plan, which was developed in close collaboration by WHO, the World Bank and the European Union, under the coordination of the RCO.
Readiness for patient diagnosis and care

The decade of support by WHO to RHUH paid off at the advent of the COVID-19 crisis, when this was the only hospital fully equipped to care for COVID-19 patients, with isolation settings, well-trained intensive care unit (ICU) staff, stocks of PPE, and fully functioning laboratories with PCR and molecular biology capacity. Moreover, before the first case of COVID-19 was identified in the country, WHO, through its Dubai hub, had secured diagnostic tests. When the first cases of COVID-19 were detected, the public health sector was prepared and able to react immediately. On 21 February 2020, upon suspicion of the first case of COVID-19, Lebanon was able to test and confirm infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) within a few hours. In addition to providing equipment and reagents, WHO has supported improvements in laboratory quality; thus, the RHUH and five university hospitals became certified by the WHO External Quality Control (EQA) system, an important step in the COVID-19 response. A total of 25 laboratories are now enrolled in the WHO EQA; in parallel to this, WHO is currently supporting the establishment of a national EQA programme in Lebanon, aimed at monitoring the quality of testing in the 66 laboratories designated for reverse transcriptase (RT) PCR testing.

Early in the COVID-19 outbreak, WHO conducted a detailed assessment of the 27 public hospitals and 42 private hospitals, in terms of laboratory capacity, ICU care, and infection and prevention control (IPC) standards. Accordingly, WHO “adopted” 11 public hospitals (one per governorate) to upgrade their capacity for provision of adequate care; initial support focused on the provision of equipment and training on standard operating procedures (SOPs) for safety and IPC. In addition, through a project supported by the KfW (i.e. with funding from Germany), WHO is also filling the gap in terms of human resources for the ICU (nurses and nurses’ aides).

WHO was the first agency to procure medical supplies and trauma kits to assist hospitals in providing trauma care for casualties of the Beirut port explosion. Less than 48 hours after the explosion, WHO delivered highly needed urgent support to the 10 hospitals that absorbed most of the casualties, in the form of 10 sets of medical supplies, surgical supplies and trauma kits. In the first 10 days after the blast, WHO provided seven shipments of 64 tonnes of health supplies (surgical kits, trauma kits and PPE), some of which was donated by the governments of Ireland, the Russian Federation, the United Arab Emirates and the United Kingdom of Great Britain and Northern Ireland, with the rest (45 tonnes) coming from the WHO hub in Dubai. These supplies were immediately dispatched to 12 public and 15 private hospitals around the country. WHO’s response to the blast is ongoing, with a shift towards using more public and private health care facilities to accommodate COVID-19 cases because the numbers have increased exponentially, as at August 2020. WHO is further strengthening the public health sector by supporting 10 of the country’s 27 public hospitals to upgrade their medical laboratories and blood banks, create isolation wards, increase ICU bed capacity, fill gaps in critical human resources for health and build capacity further to respond to health emergencies.

Capacity-building and innovation: the hospital twinning project

Several emergency medical teams (EMTs) were deployed in the country after the Beirut blast, to assist in trauma care; however, the EMTs arrived at a time when the Lebanese health system had already provided all the trauma care needed. The WCO team seized the opportunity provided by the presence of these EMTs to redirect them towards supporting a few public hospitals in terms of improvement of COVID-19 care, because most of these EMTs were experienced in such care. The EMTs usually stay for a short time; hence, the team proposed to develop a project for “nationalizing the EMT”: the hospital twinning project. In the twinning project, which is based on the
long-standing public–private partnership model, university private hospitals (which are usually evidence-based, high-expertise, high-technology settings) provide direct coaching to the teams working in the public hospital ICU. Six university hospitals are enrolled in the project, providing technical support and training and transfer of knowledge and know-how to the 11 public hospitals “adopted” by WHO. The project is funded by WHO, and is hosted at the Middle East Academy for Learning Health Systems (MEDALS), which is a hub for knowledge transfer, supported by WHO through a tripartite agreement between WHO, MoPH and Université Saint-Joseph de Beyrouth/Institut Supérieur de Santé Publique.

Addressing the most vulnerable populations: an adapted COVID-19 response

The multiple crises exacerbated the vulnerability of certain population groups, especially migrant workers. In Lebanon, these workers found themselves at increased risk of COVID-19 for various reasons, such as cramped living conditions, inability to return to their home countries (with insufficient support from their embassies), and a lack of resources from the International Organization for Migration. A first cluster of cases was reported among a group of migrant workers at a time when the community isolation sites were not yet ready to accommodate the 200 cases that needed to be isolated. However, in response to a request from the government, UN agencies and NGOs worked together to handle positive and suspected COVID-19 cases among the migrant population. Two community-based quarantine sites were rapidly established in Hamra, Beirut, in response to an outbreak of COVID-19 at the end of May 2020. WHO ensured adequate human resources, and the supervision and monitoring of suspected cases; WHO also collaborated with Doctors Without Borders for testing and tracing. Language was a major barrier, with most migrants speaking neither English nor Arabic. Therefore, all materials (e.g. brochures about the disease, protection measures, referral mechanisms and available services) were translated into different native languages of the largest communities of the migrant workers; these materials were extremely well received.

At the end of the quarantine period, WHO rolled out a rapid protection assessment to understand any protection issues related to the migrant workers’ care and overall stay within the facilities and related concerns, and to provide information to migrants on the protection services available to them. The results showed that the operation had been very successful, with the migrants feeling supported. A total of 93% responded that they felt comfortable and safe during their stay at the quarantine facility, and that neither they nor anyone they knew experienced any threats, harassment or abuse during their stay. Reported discrimination remained low, with only 2% (1 person) reporting that they themselves or someone they knew felt uncomfortable because of their nationality or skin colour during their stay in the quarantine facility; also, only 5% (2 people) reported that either they or someone they knew were unable to access the quarantine site due to their legal status.

Following this first experience, a total of 42 community isolation sites have been assessed and supported to become designated potential isolation sites; necessary referral SOPs have been developed, as well as protection guidelines and monitoring tools. To date, a total of 11 community isolation sites have been operationalized, with WHO providing nursing staff (>6000 nursing days to date). The WHO support is complemented with support from UNICEF for PPE and hygiene kits, from UNDP for logistics, and from WFP and NGOs (international and national) as well as some municipalities for food and other requirements.

Transparent and regular credible communication

The WCO placed an additional focus on information and misinformation, sharing daily briefings and a monthly newsletter, as well as twice-weekly situation reports to the government, the UN, WHO headquarters and partners. By ensuring that information about, for example, numbers of cases, deaths and infection among health care workers was widely shared, the WCO supported the government in taking a transparent approach. The WCO also issues a donor briefing every 2 weeks with infographics and statistics from different areas of the country. These briefings provide a picture of the progress that is being made, and have been well received by the donors and the UN community. The WCO is now undertaking new rounds of fundraising to prepare for the second wave of the pandemic, expected around September 2020. To fight misinformation, the WCO launched “How to fight the
COVID-19 infodemic” in July 2020, to raise awareness of the rise in misinformation and its consequences, and to provide advice on how and where to look for reliable information.

Immediately after the Beirut port explosion, WHO collaborated with the American University of Beirut (AUB) air pollution research centre to produce an awareness brochure regarding individual mitigation measures related to nitrous oxide exposure. A week later, WHO collaborated with the Beirut blast group, hosted at the AUB Faculty of Health Sciences, to issue an awareness brochure on asbestos exposure.

Local procurement, and rapid and cost-effective solutions for PPE and diagnostics

When the COVID-19 outbreak landed, Lebanon was experiencing political and economic instability and changes in the government cabinet, complicating the decision-making processes. However, WHO needed to act quickly, particularly because Lebanon is not self-sustaining in the manufacture of medical equipment or products, relying on imports for 97% of its health care needs. The country’s health care system operates mainly through private health care (80%), which means that private hospitals usually hold about 4 months of stock of medical equipment and supplies. With the closure of borders and importers due to COVID-19, the WCO worked together with WHO headquarters to implement local procurement and access kits, reagents and critical equipment from private local companies, including 18 ventilators and four X-ray machines. Local procurement was extended to PPE, which was manufactured locally based on WHO standards and qualifications. This approach was successful and helped to secure critical material while saving time and money from transport. This led to the rapid capacity-building of the public health system; also, major public hospitals were able to build independent COVID-19 emergency units and wards.

Maintaining continuity of care

Before the advent of the COVID-19 outbreak in the country, and with riots intensifying from October 2019 (resulting in repeated road blocks), early in November 2019, WHO initiated a monthly monitoring of critical health indicators, including use of general primary health care services; vaccination; hospital admissions; mortality among women, children and neonates; and mental health. With the pool of vulnerable populations increasing and the country’s resources decreasing, WHO undertook active fundraising to ensure that critical services are not interrupted, including access to chronic disease medications to about 92 000 of the most vulnerable patients with noncommunicable diseases and access to acute medications for some 350 000 beneficiaries. In addition, the first phase of the national measles campaign, supported by WHO jointly with UNICEF, was successfully implemented as planned, despite the riots and the COVID-19 movement restrictions; this phase reached more than 300 000 children aged under 10 years in the most deprived regions of the country.
The resilience of the health system, before, during and after the crisis

If Lebanon had a rigid governance system, the many and almost simultaneous crises in Lebanon would have caused a total collapse of the health system. In fact, the health system has demonstrated a remarkable flexibility and capacity to withstand pressure. Among the many factors contributing to this resilience, the most important are:

- a pre-crisis emergency preparedness and capacity-building, heavily supported by WHO, and documented lessons learned from previous emergencies;
- the public–private partnership, built on a long-standing collaborative governance, adopted by the MoPH, which includes a clear role for NGOs in service provision and health promotion; a high-technology, high-quality private system being readily available; and affordable access to the public system for the most vulnerable populations;
- the prompt donor commitment to respond to urgent and critical health needs;
- the immediate restoration of health facilities and commitment to continuity of care, with a focus on primary health care, to decrease morbidity and mortality, and ultimately reduce the health bill; and
- leveraging of humanitarian support with development intervention to build the long-term capacity of the health system, with a special focus on upgrading the public sector for better sustainability of health services.
Malaysia

Key areas:

Strong preparedness and leadership for a successful COVID-19 response

Emergency preparedness combined with rapid and robust health security measures facilitated a systematic and informed response to COVID-19 in Malaysia.

Proven preparedness

Malaysia is an upper-middle-income country with strong capacity and self-sufficiency in outbreak preparedness and response, as evidenced by its previous experiences with a range of infectious disease outbreaks. The country’s response to epidemics such as the severe acute respiratory syndrome (SARS) 2002–2003 and the Middle East respiratory syndrome coronavirus (MERS-CoV) in recent years, coupled with the implementation of the Malaysia Strategy for Emerging Diseases and Public Health Emergencies (MySED), has shaped and strengthened the country’s robust structure to prevent, prepare and ensure a rapid response to public health emergencies and for recovery. Malaysia has complied with International Health Regulations (2005) (IHR) core capacity requirements since IHR entered into force, and has established monitoring and surveillance activities for detection of influenza and emerging infectious diseases. In addition, Malaysia spent a year preparing for and participated in a Joint External Evaluation (JEE), facilitated by the World Health Organization (WHO) in October 2019. The JEE is a voluntary, collaborative, multisectoral process to assess country capacities to prevent, detect and rapidly respond to public health risks, whether occurring naturally or due to deliberate or accidental events. The JEE helps countries to identify the most critical gaps within their human and animal health systems, in order to prioritize opportunities for enhanced preparedness and response. The findings of the JEE ultimately reinforced the country’s strong existing health security system, which was prepared for multisectoral health emergencies and has the surveillance capacity to detect and respond to emergencies promptly.

Before the pandemic, the government and health authorities took important steps to bolster Malaysia’s capacity for health emergency and disaster preparedness, which then played a crucial role in the response to COVID-19. Among these steps was implementation of MySED II and establishment of the national Crisis Preparedness and Response Centre (CPRC). The CPRC is the Public Health Emergency Operation Centre for Malaysia’s Ministry of Health (MoH); it is located within the Disease Control Centre, and is the lead agency for disasters involving health.
The CPRC’s standard operating procedures (SOPs) guide MoH staff in the management of all potential crises and disasters, and are a key part of the overall strategy to prepare for effective management of disasters, outbreaks, crises and emergencies. The CPRC closely monitors reports of emergencies nationwide via a robust early warning system, and subsequently coordinates preparedness planning, resource management and the health sector response. When Malaysia received information about the transmission of an unknown respiratory infection in December 2019, the government anticipated the spread of the disease and enhanced its surveillance accordingly. The CPRC coordinated the National Plan for COVID-19, receiving strong support on the implementation of non-pharmaceutical interventions (NPIs) from the National Security Council (NSC).

Assessing health system capacity

Malaysia’s health system has been acknowledged for its strong infrastructure and well-trained workforce, which provides high-quality care. The health system is publicly funded and run by the government, in conjunction with a strong private sector, and Malaysia is one of the nations that has achieved universal health coverage for its population of 32 million. This strong system provided a stable foundation for scale-up when COVID-19 was reported in the country. Health capacity was swiftly enhanced to meet both anticipated and emerging demands, as the government operationalized the CPRC at the national and state levels, mobilized for the recruitment and redistribution of health care personnel according to high workload areas and more. The WHO Representative Office for Malaysia, Brunei Darussalam and Singapore provided any requested support to the MoH in its efforts to visualize and determine a longer term goal for the response.

The capacity of the existing health systems for the current number of cases and for anticipated peak periods was assessed using a model developed for Malaysia by the WHO Regional Office for the Western Pacific. The findings of the assessment, reinforced by additional data and advanced modelling, served as a basis for the government’s decision on the allocation of facilities as treatment, quarantine and isolation centres, and for evaluating the effects of NPIs to reduce the infection reproduction number. The assessment also allowed Malaysia to estimate needs for additional laboratory supplies and personal protective equipment (PPE), bolster health system capacities and further prepare for the pandemic response.

Initial response

The COVID-19 outbreak in Malaysia has occurred in two waves. The first wave started with three cases imported from China via Singapore on 24 January 2020, resulting in just 22 cases by mid-February. The second wave, which began on 27 February 2020, was greatly reinforced by transmission at a religious mass gathering in Sri Petaling, Kuala Lumpur, attended by about 14,500 Malaysians and 2000 non-Malaysians. The first death from COVID-19 in Malaysia was reported on 17 March 2020.

In February, Malaysia ramped up its COVID-19 response capacity, including an 86% increase in diagnostics laboratory capacity, an 89% increase in critical care bed capacity and a 49% increase in the number of available ventilators.

At the start of the outbreak, WHO instituted an incident management system to provide critical support in the areas of partner coordination, information and planning, technical expertise, and operational support and logistics. In collaboration with the MoH, WHO provided a strategic platform for all COVID-19 response related activities. The WHO Country Office (WCO) has participated in strategic discussions with national and state health authorities, partners and stakeholders; provided evidence-based information and policy advice; and supported other key activities, including NPIs, risk communication and community engagement (RCCE).
Case detection and quarantine

In an immediate attempt to curtail transmission, Malaysia closed borders and allowed only Malaysians to enter the country, followed by a mandatory 14-day quarantine. In addition to strong contact tracing activities, a COVID-19 testing strategy was developed, focusing on testing the contacts of known clusters of cases, irrespective of whether they show symptoms or are asymptomatic. Malaysia enforced the “Search, Test, Isolate, Treat and Quarantine” strategy to uncover suspected cases of COVID-19 in the community. The government determined that all individuals who test positive for COVID-19 would be hospitalized for at least 14 days, even if asymptomatic. Since the onset of the outbreak, Malaysia has established 140 quarantine centres in different parts of the country, with the National Disaster Management Agency (NADMA) monitoring the facilities.

In addition to the traditional testing of a person under investigation and close contacts, Malaysia employs comprehensive testing strategies targeted towards high-risk groups. WHO supported the initial provision of reverse transcriptase polymerase chain reaction (RT-PCR) test kits and testing protocols. The ramping up of laboratory capacities is ongoing. During the COVID-19 pandemic, Malaysia has conducted more than half a million tests. The MoH’s COVID-19 laboratory network, led by the Institute of Medical Research and the National Public Health Laboratory, has expanded testing capacity for COVID-19 to more than 50 laboratories in both the public and private sectors.

WHO has also supported the monitoring and interpretation of epidemiological information for outbreak trends, including analysing COVID-19 trends among influenza-like illness and severe acute respiratory infection samples as part of multisource surveillance. These data were used as supporting evidence to assess effectiveness of interventions such as the movement control order (MCO).

Movement control order

Acting in response to the rapid transmission of the COVID-19 virus among participants of February’s religious mass gathering in Sri Petaling, the Government of Malaysia issued an MCO on 18 March 2020. The MCO was a multiphase response that comprised six distinct phases and six critical measures. As shown in Fig. 1, there were four individual and gradual transitions of the MCO, followed by a conditional MCO (CMCO) and a recovery MCO (RMCO), all of which applied nationwide, and considered restrictions to travel (overseas and domestic) and large gatherings, and closures of government and private premises, and educational institutions. An extended MCO (EMCO) was also developed for application to specific areas experiencing clusters of cases or any significant outbreak.
In the initial phase, MCO measures included complete prohibition of people from moving outside their houses or attending mass gatherings, and restrictions on all domestic and international travel. Academic institutions, and public and private premises were all closed. During this phase, the Royal Malaysian Police were mobilized to support the enforcement of the restrictions. As the outbreak progressed, the various phases of the MCO allowed for a flexible response to the national situation, adapting restrictions to reflect the current epidemiological situation. The MCO helped to reduce the number of COVID-19 cases from an average of 170 new cases per day in the first week of April to 74 in the last week of April 2020.\(^1\) Owing to the continuous transmission within specific areas of the country, particularly in high-risk parts, EMCOs were implemented for more targeted and restricted short-term (14 days) response measures that did not apply nationally.\(^2\)

Complementing the MCO, the MoH received full support from WHO on the implementation of NPIs, through frequent development of informational, educational and communication (IEC) materials, and technical guidance for planning, implementation and evaluation of activities. WHO also supported surveillance and data collection, processing and analysis. The data have multiple uses; for example, they enable WHO to provide evidence-based recommendations regarding the risk of resurgence if the MCO is loosened too soon. In addition to tailored support from the WCO, regional and global strategies were shared to help the MoH identify and calculate the key variables in making decisions regarding lifting movement restriction.

**Risk communication and community engagement at the heart of NPIs**

The Malaysian Government went to great lengths to ensure a comprehensive approach to risk communication and community engagement (RCCE), working to establish trust with the population and provide transparency regarding the COVID-19 situation, with the full support of WHO for a whole-of-government and whole-of-society

---

1. WHO’s Technical Cooperation for COVID-19 Preparedness and Response in Malaysia (04), WHO Representative Office for Malaysia, Brunei Darussalam and Singapore, 14 May 2020.
approach. Malaysian authorities established and promoted trusted sources of information early in the response, to ensure that the public had access to timely and accurate information on recent COVID-19 developments, and to offset the risk of an infodemic. At the height of the epidemic, two daily media briefings convened by top officials were held to update the public on the COVID-19 situation in the country; later, this was condensed into briefings that occurred three times a week.

In addition to providing trusted sources for information, the government focused efforts on developing mass media campaigns, conducted media monitoring and research on public insights and opinion, strengthened coordination with United Nations (UN) agencies and partners, and gave continuous briefings to diplomatic missions. It also developed SOPs for RCCE campaigns, and focused on strategic communication planning.

Social media platforms and mobile applications became a powerful channel for RCCE outreach, especially when paired with creative content and strategic messaging to reach the culturally diverse community using as many channels of communication as possible. On a daily basis, the NSC sent mass text messages via SMS to all numbers registered in Malaysia, to provide updates on policies and regulations, reminders on current precautions and NPIs, and health advice and recommendations. The NSC also developed a social media application, Telegram, to allow for rapid access to breaking news and information on COVID-19-related regulations.

Malaysia is a country rich in culture originating from its four major ethnic groups (the descendants of Malay, South Asian, Arab and Chinese) and indigenous communities. Islam is the faith largely practised by most (61.3%) of the population, followed by Buddhism (19.8%), Christianity (9.2%) and Hinduism (6.3%). The outbreak coincided with a number of important religious observances across the country, and WHO recognized that religious and spiritual leaders are a key source of support, comfort and advice for the communities they serve, and can play a life-saving role in encouraging healthy practices and offering guidance in a time of uncertainty. Therefore, WHO collaborated with its partners to develop an RCCE strategy aimed at considering and addressing these cultural and faith-based norms and practices. This further supported the government’s efforts to deploy an inclusive and tailored approach, to better protect communities throughout the pandemic.

Additionally, tailored IEC materials and messages were developed to meet the evolution of the outbreak and address emerging priorities. Tailored materials included advice and guidance for caregivers and guardians, businesses seeking to reopen safely as the MCO transitioned, senior citizens and those groups at highest risk of infection, parents and children preparing for the return to school, and health care workers. The materials were often translated into multiple languages (e.g. Malay, Burmese, Rohingya, Somali, Tamil, Tedim and Urdu).

---

MCO: movement control order; RCCE: risk communication and community engagement; RMCO: recovery movement control order; UN: United Nations; WG: working group; WHO: World Health Organization.

Looking ahead: use of mathematical models in planning for health care capacity preparedness

In April 2020, with the support of the WHO Regional Office for the Western Pacific, the WCO coordinated a collaboration between the MoH’s Malaysian Health Technologies Assessment Section and a consortium of mathematical modellers from Australia’s Kirby Institute (University of New South Wales) and Monash University. The aims were to apply the use of mathematical models to simulate the transmission dynamics of COVID-19 to reflect the situation in Malaysia using data on notified cases and deaths and on NPIs, and to project future transmission scenarios and trajectories based on expected changes in the implementation of the NPIs.

These projections, in turn, allowed the modellers to extend the projections to health system requirements, such as hospital beds and intensive care unit capacity, under different future scenarios. Most importantly, this includes quantifying the requirements of the health care system in the event of a resurgence of infections. The projections are updated on a weekly basis, and the knowledge helps to inform decision-makers about the likelihood of a resurgence and the preparedness of the health care system to cope, and the factors and information sources that need to be taken into consideration.

Essential health services – managing concurrent outbreaks

In addition to dealing with COVID-19, Malaysia was also responding to a polio outbreak that was declared in December 2019 after the virus had been absent in the country since 1992. Immunization campaigns had to be halted or delayed to handle the burden on the health system of COVID-19. WHO, the UN Children’s Fund (UNICEF) and other partners are working in collaboration with the MoH to control the outbreak, through enhanced surveillance, case detection, risk communication and the resumption of the immunization response. Thanks to this joint effort and Malaysia’s adaptable and resilient health system, the country is one of the first to resume its immunization campaigns.

Malaysia conducted risk assessments based on the national dynamics of COVID-19 transmission, the health system capacities, and the public health benefit of proceeding with a polio vaccination campaign. As of June 2020, polio response activities have resumed in Sabah State and the Federal Territory of Labuan. Currently, polio immunization campaigns are underway in every district, to reach all children aged under 13 years, regardless of their previous immunization status.

Ongoing steps

The overstretched health care system is a challenge that countries face as the COVID-19 pandemic continues. Although Malaysia has an adequate health care workforce – with one doctor for every 530 people and one nurse for every 304 people4 – the country will work to develop a contingency plan so that the health system is in a position to cope with case resurgence and long-term effects of the outbreak.

Now that movement restrictions have been eased, health authorities are working to resume essential health services, particularly vaccination. The government and its partners seek to ensure that all children, whether or not they are citizens, will have access to multiple doses of polio vaccine. They have also reinforced surveillance systems to detect the presence and circulation of poliovirus in the environment, because poliovirus can be spread through contaminated water or food. Health centres have implemented robust infection, prevention and control measures at health care clinics, and have ensured that preventive measures are in place (e.g. physical distancing, use of masks and hand hygiene), to encourage parents and caregivers to get routine immunizations for children.

4 Health Facts 2019, the Ministry of Health, Malaysia.
WHO works with the UN Country Team in supporting the response of UN agencies to COVID-19, and developing a proposal to UN headquarters to attain support for the UN Socio-economic COVID-19 Response in Malaysia. WHO also facilitated Malaysia in joining the WHO coordinated Solidarity Trial. Nine sites in eight states have been identified to participate in this trial, which involves the testing of the following drugs as potential treatments for COVID-19: remdesivir; a combination of lopinavir and ritonavir; lopinavir and ritonavir plus interferon beta; and chloroquine. The protocol was approved and regulatory approval has been obtained for importation of study drugs for nine participating COVID-19 government hospitals. Malaysia was the first country in Asia to start enrolling patients to the Solidarity Trial.

Although the current numbers are low, the risk of COVID-19 spread is still high; nevertheless, the lifting of the MCO and the introduction of the “new normal” may result in people being less vigilant about adhering to NPIs. RCCE efforts encourage people to maintain their precautionary practices as recommended, and community perceptions surveys are being conducted to evaluate and re-strategize RCCE activities. Also, the country continues to be vigilant in its response, extending the RMCO until 31 December 2020. Additionally, WHO and partners will continue to support the government to adapt and develop messaging to reinforce the adoption of any forthcoming measures, as well as continuing outreach to risk groups and expanding to the general population as the outbreak evolves.
MOROCCO

Key areas: 🏥 العربية 📈 📞 🌐 🕵️

Well prepared for an early response and a whole-of-government approach to combat COVID-19

The COVID-19 outbreak in Morocco

The first case of COVID-19 in Morocco was detected on 2 March 2020 in a Moroccan national returning from Italy. By 13 March, the first case of local transmission was reported in a close contact of an imported case. By the end of March, the total number of laboratory-confirmed cases had reached 638, with 37 deaths, and, by the end of May, there were nearly 7800 cases and 204 deaths in the country of 36 million people.

As detailed below, the country's health sector moved swiftly to prevent and then contain transmission of the virus in Morocco – even before the first case was detected – by quickly ramping up COVID-19 surveillance and testing capacity and by preparing or building hospitals to handle large numbers of cases (Fig. 1). At the same time, the Government enacted a series of measures restricting people’s movement and actions, including closing air, sea and land borders on 15 March and – after declaration of a state of medical emergency on 19 March, when only 63 cases had been reported – closure of most businesses and public spaces, a travel ban within the country and a lockdown in which people were confined to their homes except to obtain food and other essentials upon approval by a neighbourhood authority. Masks were mandated in early April.

The relatively flat epidemic curve (Fig. 1) until mid-June, the sharp decrease in the weekly rate of deaths from COVID-19, from 0.15/100 000 in early April to 0.01/100 000 by the end of June, and the reduction in the case fatality rate during this period (Fig. 2) all indicate a successful approach to controlling the outbreak during the first few months. According to one analysis, Morocco’s early, comprehensive response under strong leadership avoided 300 000–500 000 cases and 9000–15 000 deaths between the beginning of the epidemic and mid-May 2020.

Once restrictive measures began to be eased, however, starting in areas of the country where COVID-19 was considered to be well under control (“zone 1”), the numbers of cases and deaths climbed. This was due mainly to large clusters among workers in industrial and commercial settings, such as fish processing factories and strawberry packing plants, where mass testing was initiated once the businesses reopened and where workers often live in poor, crowded conditions. Most new cases, however, are in younger people and are asymptomatic or mild. As of 4 September 2020, there had been nearly 66 000 confirmed cases – 86% of which occurred after 18 June – and 1253 deaths. This resurgence in numbers of cases led to a new travel ban between major cities and a return to lockdown measures and business closures in high-incidence cities.

---

1 Indexmundi. Stockholm: European Centre for Disease Prevention and Control; 2020 [https://www.indexmundi.com/coronavirus/country/ma].
2 Estimate of the Directorate of Epidemiology and Disease Control in the Ministry of Health presented by Dr M. Merabet
This case study details the actions Morocco took in the health sector and beyond, in a whole-of-government approach. It also describes how WHO’s past and current support, especially in surveillance, laboratory testing and pandemic preparedness, allowed the country to mount an early, effective response and to maintaining essential health services.
Early actions and rapid scaling up by the health sector

Initial planning and surveillance

As soon as the outbreak was reported in China, the Moroccan Government activated systematic surveillance at ports of entry, and, by 26 January 2020, the country’s national influenza reference laboratory in the National Institute of Hygiene had begun PCR testing for potential imported cases. The Ministry of Health was aware that the virus could spread quickly and overwhelm the health system and prepared a comprehensive national COVID-19 surveillance and response plan by 27 January, more than 5 weeks before the first case was detected in the country. The plan lays out procedures for epidemiological surveillance and contact-tracing, case detection and management, governance and coordination (including activating national and regional emergency operations centres and rapid response teams) and information and communication in order to limit introduction of the virus into the country and contain its spread, detect cases, organize a national response and reinforce infection prevention and control in health facilities.

Activation of emergency governance and coordination mechanisms

The Government activated or established three committees early on to ensure strong governance and coordination of the response: the inter-ministerial COVID-19 Steering Committee, the Scientific and Technical Committee (originally established for influenza outbreaks) to oversee and approve guidelines and protocols for surveillance and case management and the Economic Monitoring Committee, established in mid-March once the social and economic consequences of the outbreak became more apparent. The Scientific and Technical Committee, consisting of prominent national scientists and medical experts, monitored the latest scientific evidence, guidelines and global recommendations to ensure that national treatment protocols and other policies and directives from the Government were based on sound evidence and the fast-changing information on this novel coronavirus.

Ramping up testing for early detection of COVID-19 infections

At the beginning of the outbreak, only two national laboratories – the National Influenza Centre in the National Institute of Hygiene and the Pasteur Institute – had the capacity for PCR testing, with laboratories responsible for the north and the south of the country, as outlined in the COVID-19 plan. Within 2 months, 26 laboratories and five military or police laboratories were conducting testing with PCR or GeneXpert machines. By 22 May, Morocco
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

was able to conduct 10 000 tests a day, and, by the end of June, nearly 650 000 tests had been performed. By the end of August, an average of 20 000 tests were being conducted each day.

This rapid increase in testing was the result of training and technical assistance provided by staff at the National Influenza Centre to 24 laboratories in universities and regional and local hospitals throughout the country, eight of which were already sentinel sites for influenza surveillance. Increased testing was also possible because the Government rapidly procured test kits from overseas suppliers. With increased testing capacity, the Government implemented a comprehensive testing and contact-tracing programme, in which contacts considered to be at high risk were tested, and large-scale testing was conducted at worksites once industries began opening up in mid-June. Public access to COVID-19 testing was increased by establishing mobile laboratories for rural and other under-served areas and by providing rapid antibody tests at local primary health care centres (Box 1).

Box 1. Bringing COVID-19 services closer to the people

To improve the population’s access to COVID-19 testing services, especially in under-served areas, Morocco has deployed mobile COVID-19 testing laboratories in vans equipped with PCR machines. The first mobile unit was set up in mid-May by a university hospital and the National Influenza Centre. Two mobile COVID-19 laboratories now operate in three of the worst affected regions of the country (Casablanca Settat, Tangier Tetouan and Fes Meknes), which had performed more than 40 000 tests by the end of August.

To prevent further importation of the virus into Morocco once the border was reopened, the National Influenza Centre placed PCR machines on five passenger ships crossing from France in mid-July for on-board testing of passengers – essentially creating floating COVID-19 laboratories.

With the gradual relaxation of lockdown measures and the subsequent increase in cases since late June, the Moroccan Government will now provide COVID-19 screening and home surveillance at primary health care centres to ensure early care of COVID-19 patients. According to a circular issued by the Ministry of Health in mid-August, primary health care centres will screen suspected cases, including those referred by pharmacists and private physicians. Asymptomatic patients will be followed up at home by the centres’ staff to ensure that they quarantine safely, and symptomatic patients and those with risk factors will be sent to hospitals.

Ensuring sufficient hospital capacity to treat COVID-19 patients while maintaining other essential health services

The Government quickly set up isolation units for COVID-19 patients in hospitals throughout the country. At one point, it set aside nearly 14 300 beds in 72 public, military and private hospitals on the basis of an estimate of the potential magnitude of the outbreak. Two WHO recommendations for COVID-19 treatment facilities were followed: separate COVID-19 isolation units in hospitals and rooms with negative pressure. With funds from the country’s COVID-19 Solidarity Fund (see Box 2), the Ministry of Health provided hospitals with medical equipment, personal protection equipment (PPE) and other supplies to treat and isolate COVID-19 patients. By early May, the number of intensive care beds in the country had increased by 83%, from 1642 to 3000.

How WHO’s long-term support enhanced Morocco’s ability to respond to COVID-19 quickly and effectively

While the Government of Morocco has been self-reliant in responding to the COVID-19 outbreak, WHO was instrumental in strengthening the country’s capacity to prepare for and respond to pandemic influenza and other health emergencies over the past several years to ensure that the country could mount a rapid response. Support has been provided through the country’s pandemic influenza preparedness plan and by strengthening its core capacities to implement the International Health Regulations (2005). Within the pandemic influenza preparedness plan, WHO has helped build the country’s capacity in virology laboratory testing, epidemiological surveillance and risk communication.

Building viral diagnostic testing capability

With WHO support, including training of laboratory technicians, sharing of protocols and tools and procurement of PCR machines, reagents and other testing supplies, the National Institute of Hygiene National Influenza Centre became an influenza reference laboratory capable of conducting PCR testing, including for viruses with pandemic potential, and genetic sequencing of influenza viruses. Eight sentinel sites also acquired PCR testing capacity through the pandemic influenza preparedness plan. The national reference laboratory therefore could begin PCR testing for COVID-19 soon after the test kits became available, and the eight influenza sentinel laboratories started COVID-19 testing shortly afterwards.

Strengthening epidemiological surveillance

With technical and financial support from WHO to the pandemic influenza preparedness plan, integrated epidemiological and virological influenza surveillance is conducted at eight sentinel sites under the direction of the National Influenza Reference Centre and the Department of Epidemiology and Disease Control. In addition, 24 rapid response teams at national, regional and district levels have been trained to investigate and respond to outbreaks of pandemic influenza or new emerging respiratory pathogens. Data on influenza are now disaggregated by age, gender, location and other variables according to WHO standards and sent directly through the National Influenza Centre to the Global Influenza Surveillance and Response System.

After training by WHO, the Ministry of Health is using the WHO Pandemic Influenza Severity Assessment tool to assess the severity of influenza outbreaks to determine the timing, scale, intensity and urgency of response measures. This capacity is being used in the COVID-19 response, and a new protocol for surveillance of both influenza and COVID-19 is under development.

Planning risk communication and community engagement

The Ministry of Health held a workshop in December 2019, with support from WHO, to finalize a comprehensive plan for risk communication and community engagement for pandemic or seasonal influenza, an outbreak of Ebola virus disease or multiple hazards. The workshop was attended by 40 Government officials from health, agriculture and communications sectors, the military and the Royal police. The updated plan – the second to be developed in the Eastern Mediterranean Region – was used to prepare Morocco’s risk communication strategies for COVID-19, which included holding daily press briefings by the Ministry of Health to inform the public and to counter misinformation, and numerous educational videos on COVID-19 (several supported by WHO) on social media platforms, television, radio and a digital community information platform. Posters and flyers for specific audiences, such as employees and shoppers in supermarkets during the lockdown, users of public transport and immigrant populations, were broadly disseminated.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

WHO also supported a project to monitor social media (la veille médiatique) so that the Ministry of Health could respond rapidly to misinformation and false rumours to ensure engagement of the population in the national COVID-19 response.

Building national capacity to prevent and control cross-border spread of diseases and other health emergencies

The WHO Health Emergencies programme has worked with the Moroccan Government to better prepare for and respond to health emergencies, including strengthening its core capacities to implement the International Health Regulations (2005). Morocco was the third country in the Region in which a joint external evaluation was conducted (in 2016) to assess its implementation of the Regulations. The evaluation led to a multi-sectoral national security plan to address the areas found to require improvement, which forms the basis for WHO’s continued support in this area. WHO’s support for strengthening capacity at points of entry to screen for, detect and manage importation of potentially epidemic diseases has been especially relevant for the country’s COVID-19 response.

Box 2. A whole-of-government approach at the heart of Morocco’s COVID-19 response

Once it became apparent in March that the novel coronavirus was spreading locally and that many countries were struggling to treat patients and save lives, the Moroccan Government swiftly mounted a strong whole-of-government response to the pandemic. Prompted by a forceful message from His Majesty King Mohammed VI calling on all parts of the Government to work together to address the crisis, the response to the emergency is considered to be one of the strongest, most cohesive in the country’s history.

In addition to the health sector’s actions described above, the multi-sector response has included:

- Establishment of a special COVID-19 solidarity fund: At the initiative of His Majesty the King, a fund was set up on 15 March to cover the costs of medical equipment, supplies and upgrading infrastructure and also to provide financial support to businesses and households affected by the lockdown (see below). His Majesty personally made the initial pledge to the fund, which was quickly followed by donations from private companies, the public sector (including €450 million from the European Union) and individuals. By 1 July, the fund, directed by the Economic Monitoring Committee, had received pledges totalling 33 billion Moroccan dirhams (US$ 3.3 billion), including US$ 200 million for the Ministry of Health.

- Cash assistance to people who lost their employment during the lockdown: In addition to providing cash transfers to laid-off workers in the formal sector through the National Social Security Fund, the Government used the COVID-19 solidarity fund to provide unconditional weekly stipends in early April to beneficiaries of the national medical insurance programme for the poor. Cash transfers were sent through this programme to 2.3 million households. An additional 2 million households in the informal sector also received cash payments.

- Mobilizing private industry to produce critical medical supplies: Morocco’s textile industry – consisting of 1 600 companies and 185 000 workers – was urged by the Government in early March to make medical masks and other PPE in anticipation of a surge in COVID-19 cases. Within 3 weeks, factories were producing three million masks per day that met Government specifications, which were initially distributed to 70 000 local shops through the networks of two dairy companies and sold for a fixed price (US$ 0.10). By early May, production had increased to seven million masks a day, making a national mandate on wearing masks more feasible. The petrochemical industry was pressed into service to produce hydroalcoholic gel.

The country has produced enough masks, gel and other PPE to meet not only its domestic needs but also to donate these items to 15 other African countries, as instructed by the King. More than eight million Moroccan-made masks, 30 000 L of disinfectant gel and hundreds of thousands of medical coats, caps and other PPE have been donated.

- Leveraging diplomatic ties to procure critical supplies: A key factor in the rapid expansion of COVID-19 testing and bed capacity was the country’s ability to procure test kits and medical equipment and supplies rapidly on the international market.

Continuing challenges as we move forward

With the surge in the number of cases after lockdown was lifted, Morocco must pay attention to its most vulnerable populations, who are not only people with chronic diseases and the elderly, who are at risk of severe disease, but also households living and working in difficult conditions, who cannot protect themselves from the virus. The challenge will be to balance economic imperatives with the public health measures necessary to combat the COVID-19 pandemic.

Box 3. Supporting continuity of essential health services during a pandemic

The WHO Country Office in Morocco, cognizant of the toll that COVID-19 and lockdown measures would have on the demand for and provision of maternal and child health and other essential health services, started supporting the Government early in the outbreak to develop strategies and interventions to ensure that these services continued despite the challenges posed by the pandemic. Indeed, consultations at an emergency room in a major children’s hospital in Rabat fell by 74% between mid-March and mid-April as compared with the same period the previous year.7

WHO support has included working with other United Nations agencies to assist the Government in developing COVID-19-specific protocols and training for medical professionals in the prevention of transmission while providing delivery and newborn care. Two interactive webinars have been held on this topic, attended by a total of 700 nurses, midwives, doctors and managers of mother and child health services, and facilitated by specialists from the WHO Reproductive Health Collaborating Centre in Rabat. The training covered topics such as procedures for childbirth and caesarean section for women with suspected or confirmed COVID-19, care of infants with COVID-19 and breastfeeding practices during COVID-19.

WHO continues to support the Ministry of Health in devising strategies to ensure that other essential services continue, such as cancer treatment and palliative care (e.g. by ensuring that transport is safe and waiting times are reduced), and care for noncommunicable diseases (through telephone consultations and check-ups). WHO with UNFPA and other partners has submitted a proposal to the United Nations COVID-19 Multi-partner Trust Fund to support continuity of mother and child services through interventions such as telemedicine, mobile health services and continuing medical education by remote learning.

MYANMAR

Key areas:

Driving collaboration to respond to an evolving pandemic

As part of Myanmar’s triple transition – towards lasting peace, federal democracy and socio-economic development – the Government and development partners are collaborating on many fronts, including health. WHO has been one of the strongest supporters of the country’s work to improve the health of its peoples. Now, in the COVID-19 pandemic, WHO is helping the country and partners to respond swiftly and decisively to this continuing global threat.

Health in Myanmar

Myanmar shares borders with China, the country where the novel coronavirus, Sars-CoV-2, first emerged. A large, diverse country, Myanmar also shares borders with the Lao People’s Democratic Republic and Thailand and with Bangladesh and India. Myanmar’s capital was moved from Yangon to Naypyitaw in November 2005, although Yangon remains the country’s commercial centre and the most populated conurbation, with approximately eight million people. About 70% of Myanmar’s population lives in rural areas, some of which are very remote.

Health services in Myanmar are provided by about 1350 hospitals and about 2230 primary and secondary health facilities.1 The ratio of health care workers per 1000 people, at 1.33 doctors, nurses and midwives, is still below the WHO recommended threshold of 2.3.2 The provision of health care is challenged not only by the shortage of human resources but also by protracted humanitarian situations in the country and areas of limited access for national government and international agencies, including those that provide health services.

Engaging government and society from the beginning

In early January 2020, the Minister of Health and Sports and the WHO Representative to Myanmar discussed the emergence of “cases of pneumonia of unknown cause” reported from Wuhan, China. The Ministry of Health and Sports (MoHS) was already increasing surveillance, with early advice from the WHO Regional Office for South-East Asia and the WHO Country Office in Myanmar. The Government set up the Intersectoral Central Committee for COVID-19 Prevention, Control and Treatment, which was initially chaired by the ministers of International Coordination and of Health and Sports.


WHO Representative to Myanmar, Dr Stephan P. Jost, led a coordination meeting with partners on the COVID-19 response at the WHO Office in Yangon on 7 February 2020. Photo credit: WHO Myanmar
The WHO Representative to Myanmar convened forums to coordinate partners’ activities through existing coordination mechanisms. Weekly meetings were held, initially led by WHO and later hosted by the MoHS. The meetings brought together partners from humanitarian and development organizations, health and non-health sectors, bilateral, multilateral and international nongovernmental organizations and civil society to exchange information and discuss collaboration and support for Myanmar’s COVID-19 preparedness and response. Coordination meetings were held on a virtual platform, with strict observation of social distancing, from the 10th partners meeting on 26 March 2020, after the first confirmed case was reported in Myanmar on 23 March 2020.

The Government quickly increased surveillance and monitoring of COVID-19 at points of entry. On 1 February, Myanmar closed its borders with China and suspended visas on arrival for visitors from China to mitigate early importation of COVID-19. In the same month, the MoHS proposed a COVID-19 preparedness and response costing US$ 5 million to enable the country to implement public health measures to prevent and contain COVID-19 at an early stage. WHO provided operational support for activation of national and sub-national health emergency operations centres.

Building on the initial proposal, WHO supported the MoHS in developing a health sector contingency plan outbreak response on COVID-19 and other emerging respiratory disease according to the WHO Strategic Preparedness and Response Plan. The plan was finalized and endorsed in April. At this stage, Myanmar was yet to establish testing capacity, and WHO supported the MoHS in sending samples to the National Institute of Health in Bangkok, Thailand.

On 14 March,3 H.E. State Counsellor Daw Aung San Suu Kyi was appointed to lead the National Central Committee on Prevention, Control and Treatment of COVID-19. This Committee supports a whole-of-government response and facilitates collaboration of civilian and defence medical services, partners and civil society organizations. When the first two cases of COVID-19 were detected in Myanmar on 23 March 2020, the Committee was prepared (Fig. 1).

Fig. 1. Timeline of COVID-19 preparedness in Myanmar

WHO: convening partners, advocating collaboration, providing support

WHO established three subgroups to streamline coordination of COVID-19 preparedness and response and to ensure a more effective response. The subgroups, chaired by the MoHS, with technical experts in the WHO Country Office as co-chairs, address:

- surveillance and laboratory diagnostic capacity,
- case management and infection prevention and control and
- risk communication and community engagement.

The humanitarian cluster system is formally active in Myanmar, and WHO co-leads the health cluster with the MoHS to respond to humanitarian crises. This long-standing engagement with humanitarian organizations ensures a response for vulnerable populations.

Within the United Nations Country Team, the Operations Management Team became the COVID-19 Task Force, comprising the Resident Coordinator’s office, the United Nations physician and WHO, to strengthen coordination and operational readiness among United Nations agencies. The task force is led by the country director of the World Food Programme, and WHO provides guidance. The Operations Management Team drives the United Nations Country Team response to COVID-19 and helps United Nations staff and their families in the unprecedented situation.

In support of the Country Team, WHO is engaged in developing the United Nations framework for the immediate socio-economic response to COVID-19, leading the health pillar and ensuring that there is no overlap with the country’s COVID-19 preparedness and response plan. It has been agreed that the health pillar in this framework will focus less on activities related directly to COVID-19 and concentrate on ensuring the continuity of non-COVID-19 services, mid- and long-term health system strengthening and supporting policy-making, strategies and structures. WHO is also mobilizing resources for the MoHS, including US$ 18 million from the Global Fund to Fight AIDS, Tuberculosis and Malaria, to mitigate the impact of COVID-19 on services for these diseases.

Surveillance and laboratory strengthening

The laboratory and surveillance group is identifying and finding solutions to problems in testing and assists operational aspects of surveillance, detection and testing. A testing strategy has been developed as a “living document”, which is updated every other week to ensure that the strategy and guidelines are in line with the latest scientific evidence. The same mechanism is used for surveillance. The limited testing capacity and strict testing criteria in the early phase of the pandemic, between March and May 2020, were quickly improved. WHO is discussing conducting prevalence surveys to obtain more information for containing the outbreak.

WHO facilitated repurposing of the GeneXpert test platforms, usually used for TB and HIV, to accelerate COVID-19 testing. Health staff have been trained to operate the machine. WHO, with the United Nations Office for Project Services, provided the first 10 000 GeneXpert cartridges. Additional resources were mobilized from the Global Fund for GeneXpert cartridges, laboratory supplies, sample transport, waste management and training. World Food Programme humanitarian flights brought the cartridges and other laboratory equipment and supplies to Myanmar, with financial support from the European Union and the Embassy of Switzerland.

A special World Food Programme flight brought WHO medical supplies to Myanmar for its fight against COVID-19. Photo credit: Ma Ohnmar Myint
From no domestic capacity for testing for COVID-19, Myanmar now has a network of laboratories with a total capacity of 3700 tests per day. Four laboratories are in civilian facilities and three in military facilities. Twenty-six other sites are also conducting testing with GeneXpert machines, most of which are in hospitals. There are three laboratories in Yangon, three in Naypyitaw, one in Mandalay and one in Mawlamyine. The MoHS plans to extend the capacity to other hospitals to which GeneXpert equipment may be reallocated and to other cities, including Taunggyi (Shan State), Myitkyina (Kachin State), Loikaw (Kayah State) and Dawei (Tanintharyi region). WHO supported the MoHS in designing testing strategies, using the laboratory information system, training and providing supplies, including tests and consumables.

With WHO technical support, Myanmar joined a WHO-facilitated global sero-surveillance study, which could provide better scientific estimates of the burden and optimize the COVID-19 response.

**Case management and infection prevention and control**

The group working on case management and infection prevention and control is supporting national and local health authorities, including visits to three hospitals in the Yangon region to assess and provide technical support in case management. In collaboration with the WHO Regional Office, the Country Office trained 20 front-line medical doctors in care and case management of severe acute respiratory infections to improve the quality of pre-intensive care. A second set of courses began in September 2020. An additional goal is to provide trained young doctors with skills and expertise to further develop health care in Myanmar. Training in infection prevention and control is also conducted for doctors and nurses, facilitated by WHO and the MoHS. As the leading agency in health, WHO provides technical advice on COVID-19 diagnosis, treatment and case management, working with the MoHS to keep doctors up to date on the science of COVID-19.

To encourage timely, accurate data collection for decision-making, WHO has provided equipment such as computers and mobile phones to allow hospitals to set up a data system for collecting information on clinical management, to analyse the data and use the results to improve the quality of care. Under the leadership of WHO, the group supports the development and regular updating of clinical guidelines and fever clinic guidelines (for monsoon-related diseases), mobilizes resources and coordinates donors to support hospital preparedness, including improving hospitals’ capacity to provide care for COVID-19 patients. The number of intensive care beds increased from 101 in April to 316 in September and the number of mechanical ventilators from 66 to 238. WHO advocates for investment in hospital preparedness with partners like the Global Fund, the Asian Development Bank and the World Bank.

**Risk communication and community engagement**

The coordination group for risk communication and community engagement is chaired by the MoHS and co-chaired by WHO and UNICEF. The members are representatives of seven United Nations agencies and of 32 donors, international and national nongovernmental organizations, civil society organizations, faith-based organizations and communication experts. An online mapping dashboard is available to visualize who does what and where. The group meets every 2 weeks, or when required, to review their work, identify context-specific messages and discuss issues and challenges. The group has helped all partners to communicate better to the public on containing COVID-19, particularly on why and the how to protect individuals, their families and the community from COVID-19.
The framework for risk communication and community engagement was developed by 8 March, before the first case was detected in Myanmar, and was used to finalize the strategy and implementation plan by 8 April. The plan guided the development of materials and definition of the target audiences, channels of communication and priority geographical areas. WHO and partners are promoting messages on the “3Ws” – wash your hands, watch your distance and wear a mask – and the “3Cs” – avoid crowded places, close contacts and confined, poorly ventilated areas. Numerous guidelines and announcements were issued to the public. Partners collaborated in the dissemination of material to different parts of the country and complemented the work with mass communication on public health measures by the Government, such as the suspension of the Water Festival, the largest, longest festival in Myanmar, other mass gatherings and home confinement in different parts of Myanmar. The WHO Representative meets the media to convey messages on COVID-19, and the interviews have featured in numerous print and digital media.

The group is also managing the “infodemic” by monitoring print, digital and social media to identify rumours, misinformation and concerns to prevent counterproductive public behaviour and hindrance of the COVID-19 response. WHO, UNICEF, the United Nations Office for the Coordination of Humanitarian Affairs, the United Nations Information Centre, UNFPA, UNDP and the Myanmar Tech Accountability Network assist the MoHS in monitoring print, digital and social media. A “myth-busting” operation is conducted in the Country Office on its website and Facebook page. Monitoring and information from WHO helps partners to stop rumours and myths from trending in social media.

The MoHS, the Department of Medical Research and the Myanmar Medical Association host a COVID-19 call centre, from which the public can obtain correct information on COVID-19. The public can also access information and COVID-19 communication materials from a hub created by the MoHS, WHO, the Myanmar Information Management Unit and partners. The MoHS also provides surveillance information, announcements, communication materials and guidelines on the Viber social chat and call application. Over 1.5 million subscribers receive information at least twice a day. To ensure correct information for journalists, the United Nations Office for Project Services, UNESCO and Internews Agencies have developed media guidelines and informed local journalists about COVID-19.

The MoHS, WHO, UNICEF and partners have conducted numerous community surveys to measure the impact of risk communication and community engagement. In one survey, 100% of respondents were aware of COVID-19, and over 80% practised the recommended preventive behaviour. As COVID-19 progresses, the group will continue to deliver timely, tailored messages to the public.
Coordination among development and humanitarian partners in the COVID-19 response

The WHO Country Office and the MoHS co-chair the National Health Cluster coordination platform for humanitarian organizations. The platform has existed for years and was therefore able to support COVID-19 preparedness and response. The platform does not replicate WHO’s Emergency Response Framework but adequately coordinates the humanitarian response to COVID-19.

A COVID-19 partners coordination forum was convened on 31 January for the media, bilateral partners, local travel and tourism agencies, the private sector and others to discuss support by development and humanitarian organizations. About 70 organizations or entities that participate in national health cluster meetings and 114 organizations working in COVID-19 preparedness and response in health, development and humanitarian activities participated. An inter-cluster coordination group provides support for shelter, water and sanitation in areas in which there are humanitarian operations.

WHO has provided basic orientation on COVID-19 in the field for front-line workers in hard-to-reach areas, including areas not controlled by the Government, in collaboration with the United Nations Office for the Coordination of Humanitarian Affairs. WHO contributed to an addendum on COVID-19 for the 2020 Myanmar humanitarian response plan to support preparedness and response in areas in which humanitarian organizations are serving vulnerable communities.

Maintaining essential health services

The shortage of human resources for health in Myanmar has limited maintenance of essential health services, although the Government and WHO are attempting to do so. Immunization services, for example, which were interrupted for 6 weeks from late March to mid-May, were fully resumed on 1 June. More children have since been vaccinated than were vaccinated during the same period in 2019, indicating a significant catch-up. WHO and UNICEF are collaborating with the health authorities to overcome the limited human resources, and essential public health programmes have resumed. A public event was held for World Hepatitis Day. Myanmar is now preparing to scale up detection capacity in view of the return of migrants from China and Thailand. With WHO, public health programmes are preparing guidelines and tailored interventions. WHO facilitated mobilization of US$ 18 million to mitigate the impact of COVID-19 on services for TB, HIV and malaria and to help maintain essential health services in these collaborative programmes.

Further work on the COVID-19 response and essential health services

As of 9 September 2020, almost 181 000 specimens had been tested for COVID-19, and 1807 cases were laboratory-confirmed. The case fatality rate was close to 0.7%, and 460 confirmed cases have been discharged from hospital care. In the first 5 months after the first case was detected in the country, 400 cases of COVID-19 were reported, and a local case was reported on 16 August 2020 in Rakhine State where humanitarian operations are under way. A large increase in the number of cases was seen between the last week of August and the second week of September, mainly in the Yangon region and Rakhine State. The highest number of cases reported in a 24-h period was 191 cases on 8 September. The public health and social measures implemented in response included stay-at-home orders in Rakhine State from 20 August 2020 and in seven townships of the Yangon region from 2 September 2020.

“The success of Myanmar, so far, is attributed to early swift action, taken by whole-of-government in a whole-of-society approach. At the same time, as the pandemic evolves, the key challenge will be to sustain this”

Dr Stephan P. Jost, WHO Representative to Myanmar.
The Government has harnessed the potential of both civilian and military medical services and will continue to do so to contain the spread of COVID-19, with concerted work by health and humanitarian partners to extend the reach to areas where control of COVID-19 and care of infected people should be improved. Additional support was mobilized to protect health workers in delivering TB, HIV and malaria services and also to reinforce the COVID-19 response, including 20 GeneXpert machines and cartridges to increase testing capacity.

WHO is working with partners to ensure the necessary logistics for detection and to address all the pillars of the national COVID-19 response plan, including personal protective equipment, reagents, test kits and maintenance of efficient essential health services. The United Nations Country Team in Myanmar prepared a COVID-19 preparedness and response plan for the MoHS contingency plan for response to COVID-19 and other emerging respiratory diseases in Myanmar, and WHO is using the opportunity to assist Myanmar in strengthening its health system. A MoHS–United Nations task force was formed to write an addendum to the Myanmar contingency plan and the United Nations preparedness and response plan to extend their duration beyond 30 September 2021.

As health is a function of several aspects, the United Nations Country Team with WHO support has completed a framework for an immediate socio-economic response to COVID-19 for Myanmar to help mobilize resources. This is crucial in terms of determinants of health and overall support for Myanmar.
NORTH MACEDONIA

Key areas:

An early, active COVID-19 response with WHO support

As soon as information about an outbreak of a new pathogen was declared in Wuhan, China, North Macedonia scaled up its capacity to detect, trace, prevent, treat and reduce transmission. The country initiated all-of-government action to fight the new coronavirus, scaling up emergency response mechanisms in all sectors, with the full support of WHO. The Government activated its national crisis management unit, consisting of ministers and headed by the President of the Republic, to ensure that the response to COVID-19 was multi-sectoral. A formal declaration of a state of emergency was issued on 18 March. The health response was led by the Minister of Health with scientific advice from the National Commission for Infectious Diseases, in which WHO is a recognized member with an advisory role. The minutes of the daily meetings of the Commission have become the basis for Government decisions. The WHO Country Office continues to serve as a link between the Commission’s experts and worldwide technical expertise, ensuring the required qualification for rapid response to emerging needs.

On the basis of daily updates from WHO, the Government of North Macedonia started preparing for the pandemic in January 2020, several weeks before the first case of COVID-19 (imported from northern Italy) was confirmed, on 26 February 2020. WHO promptly provided technical support and supported specialized national capacity in areas including early identification and surveillance, laboratory testing and readiness measures at the two airports and border land crossings. In accordance with WHO guidance, strict infection control measures were imposed in all health facilities, including long-term health care centres, such as prohibiting visits to geriatric facilities. This single control measure spared the vulnerable elderly population from an explosive outbreak of COVID-19, such as seen in other countries. As regular visits to general practitioners in primary health care centres were halted, the Government enabled systematic extension of prescriptions for patients with chronic conditions and remunerated doctors for telephone consultations. As the Government limited non-COVID-19 medical consultations, except in utmost emergency, local nongovernmental organizations, such as the Macedonian Red Cross, were mobilized to care for elderly and disabled people and supply the required amenities so that they did not have to leave their homes. All COVID-19 testing and care were provided at Government expense, regardless of the type of insurance or the ability of the patient to pay.

WHO supplies delivered to an infectious diseases clinic (left) and to the virology laboratory at the Institute of Public Health (right). Photo credit: WHO North Macedonia
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Global demand for test kits and personal protective equipment exceeded the supply, and North Macedonia could not meet its needs locally. WHO mobilized internal resources to provide personal protective equipment and other lifesaving materials for North Macedonia. As stated by Dr Jihane Tawilah, WHO Representative in North Macedonia:

Probably, we were the first in western Balkan to have a COVID-19 case confirmed, and if the WHO and North Macedonia government had not moved ahead and had not gotten the laboratories ready since January, we would have been in a very bad situation. We had capacities built into readiness mode.

The Ministry of Health, United Nations agencies and external partners continuously sought advice from WHO on quality assurance of equipment and supplies and the best COVID-19 interventions. WHO conducted needs assessments and developed repeatedly costed supply lists to enable the country to estimate its procurement needs and submit requests to donors.

Early in the outbreak, up to 20% of all COVID-19 cases were reported among medical personnel, with half of them in primary health care facilities. This indicated shortages and poor use of personal protective supplies and poor emergency preparedness at first levels of care. WHO therefore organized five online courses in local languages on contact tracing, infection control and care and improved nurses’ capacity as first responders for COVID-19. Between May and August 2020, 3805 health professionals, mainly doctors, had taken the courses. The courses were monitored and accredited as continuous professional education in an innovative digital system created by WHO, the e-health directorate and the Macedonian Doctors’ Chamber. Further seminars and courses are conducted online, in laboratory testing, infection control and prevention and COVID-19 care in hospitals.

After the country faced several peaks and reported the highest rates of mortality from COVID-19 in the western Balkans, the Government intensified its collaboration with WHO and other development partners to respond to the pandemic. On the basis of the experience of other European countries and WHO guidance, WHO Country Office staff disseminated information and knowledge daily in press releases, media interviews, remote conferences, high-level information and advocacy meetings and training.

Public health measures were introduced early on, including banning mass gatherings, closing educational facilities and instituting a curfew on 10 March 2020, only 12 days after the first case and before the first death was reported in the country (20 March 2020). By the end of March, however, COVID-19 had spread across the country after increasing numbers of imported cases. The country worked to ensure surge hospital capacity by reassigning health personnel and increasing the number of hospital beds. WHO facilitated strengthening of epidemiological investigation capacity. Building on the harmonious partnership with the Ministry of Health, an early, vigorous COVID-19 risk communication campaign was disseminated on all possible communication channels, including social media and television. Initially, the public responded positively by complying with and showing strong trust in the Government’s prevention measures; however, by summer, the restrictive measures were loosened because of public fatigue and the economic impact, resulting in a resurgence of cases. In April, the Government launched the “StopKorona!” app, which alerts users if they have been in contact with a positive case of COVID-19. Unfortunately, the application was not widely used (15–20% uptake).
Overall, the Government’s response was early and agile, with a whole-of-society response and extraordinary dedication from health workers and public health officers. By the end of August, the Ministry of Health had set up the first epidemic and public health emergency operations centre, increased testing capacity from 100 to 2000 tests per day, extended and repurposed health facilities and human resources, promptly communicated daily health messages and ensured identification and isolation of cases. In just a few months, the number beds allocated to COVID-19 patients had increased from 4 in the capital to about 4000 throughout the country.

COVID-19 highlighted some positive attitudes: transparent decision-making during a crisis, trust in WHO and international partners to provide the necessary support and reliance on and willingness to engage WHO as the main international health authority and coordinator of all possible aspects of the country’s fight against the pandemic. Dr Tawilah said

**COVID-19 is making people reinvent themselves every single day to adjust to new reality. Since the start of the pandemic, the national team of North Macedonia has demonstrated diversity of efforts, flexibility and creativity in its response to challenges that COVID-19 brought about.**

Central to the national effort was a harmonized, synergistic, strong partnership between WHO and the Ministry of Health, which collaborated in planning and adapting WHO guidelines to national instructions. WHO continues to support the Ministry in estimating needs and building capacity by providing timely technical evidence for fact checking, epidemic monitoring and analysis, technical training and risk communication.

**COVID-19: revealing new gaps and trying new approaches**

North Macedonia’s score on the Global Health Security Index was 39.1 in 2019, placing it 90th of 195 countries. The country’s capacity for detection and reporting, including laboratory systems, real-time surveillance and reporting, the epidemiological workforce and integration of human, animal and environmental data is considered moderate, with a score just below average (41.7, average of 41.9). A joint external evaluation of implementation of the International Health Regulations (2005) in 2019 identified several areas that required further attention: biosafety and biosecurity, information systems, health workforce, multisectoral collaboration, risk communication and national coordination. North Macedonia revived its emergency response preparedness in 2020 by reactivating the national International Health Regulations committee and emergency simulation exercises, supported by WHO, to strengthen the country’s core capacity.

In August 2020, the Ministry of Health established a new Epidemics and Public Health Emergency Operations Centre at the Institute of Public Health to track the epidemic, inform policy, trigger control measures, combine early warning with risk assessment and respond. The Centre is a concrete step for staying ahead of the virus and proactively identifying, tracking and stopping the outbreak. One of the first outputs of the Centre is a unified national and subnational dashboard with real-time early indicators.¹

A telehealth component is being added to the national system for electronic health information (Moj Termin), with WHO support. This new digital functionality will allow doctors to practise and document remote care. When

necessary, patients can receive health care at home, which will reduce the long queues at primary health care facilities and thus also reduce the potential spread of the COVID-19 virus and other respiratory pathogens.

WHO helped to introduce the “Health workforce estimator”, another WHO tool for the COVID-19 response. This tool enabled the Government to identify gaps in the health workforce structure and numbers. It also highlighted overall weak links among the levels of the health care system, prompting improved, integrated collaboration for better health outcomes and a more resilient health system. A permanent digital roster of the health workforce is being constructed to ensure that it matches the needs for health services geographically and for managing and planning staff surge capacity.

A unified data system and better analytical capacity were considered crucial for a more granular response at local level. Thus, WHO supported creation of a unique, live register of COVID-19-positive patients, with all information, from contact tracing, testing and care, for better tracking, monitoring and analysis of data.

**Evidence-informed advocacy**

For more than 10 years, North Macedonia received no external donation for health systems strengthening, and the health system had to be equipped to meet the demand for COVID-19 treatment, while ensuring the continuity of essential health services. Health outcomes in North Macedonia continue to be poor, and noncommunicable diseases are prevalent. A significant decrease in vaccination rates has been observed in the country in recent years. These trends are generally considered to be due to suboptimal primary health care and nursing and public health practices.

Throughout the epidemic, WHO continued to answer queries and orient the support of United Nations agencies and other international partners to the real needs of the Ministry of Health identified in a series of field assessments in different areas and negotiation for the required support. Despite the negative consequences of COVID-19, it provided WHO with an opportunity to revive donors’ interest in investing in the country’s health sector. When ambassadors and representatives of international organizations began to express interest in funding activities, WHO provided transparent data and an objective picture of potential opportunities and risks.

The country also required better instruments to understand the development of the pandemic, beyond morbidity and mortality indicators, to better understand how people behave and make decisions in a pandemic. WHO therefore conducted surveys of behaviour. Dr Tawilah said,
For the first time, people were asked how they felt and what they think about the situation, they received the possibility to tell if they believe the messages they hear from the government. The results of our studies showed that the epidemic risk communication should be redesigned. Risk communication should start from the very beginning of an outbreak and should be worked out in a continuous way.

The Government decided to use the WHO survey tool systematically and is redesigning response policies with the data collected in the two rounds. The surveys will be repeated until the end of December. They benefit both the United Nations and other partners that are supporting risk communication and mobilizing communities.

WHO has led the first pillar of the United Nations socioeconomic impact framework, “health first”, and established an innovative matrix of indicators to measure and monitor trends in the health and socioeconomic impact of COVID-19.

Going forward: ready to shift the COVID-19 response gear and respond to the impact

Challenges remain. The response of the health sector has come at a cost of erosion in the coverage and availability of routine health services, which appears to be more pronounced at peripheral level. Another challenge is that people consider being a patient or a contact a stigma because of the socio-economic implications, which has resulted in infringement of isolation measures and resistance to testing and disclosing contacts. The United Nations assessment of the socioeconomic impact of COVID-19 on North Macedonia indicates that the effect on the economy will be greater than that of the global financial crisis of 2007–2009. This will also influence the health sector. Financial and human resources will be required, and consideration should be given to task reallocation.

Better health sector preparedness, public health risk management and emergency planning are necessary to ensure the continuity of essential health services, including vaccination, and continuous testing of the health work force. Questions are being raised about the safety of a return to school and other activities while the country prepares for a second wave, expected in autumn 2020. WHO is therefore working with the Government to adapt, design and implement new response measures while critically reflecting on the achievements and challenges of the past months.

One of the main lessons learnt from the COVID-19 pandemic in North Macedonia is that pandemic preparedness is not the only requirement for an adequate public health response. An emergency response is only as effective as the health system’s first line of defence – primary health care, which must be alert and up to the task. Shortcomings in the primary health care system include not only supplies but also organization, staff mobilization, scope of practice and prioritization. WHO and the Ministry of Health aspire to stronger primary health care in a “one stop shop”, with a trusted nurse or doctor available and trained to give safe care and answer questions, regardless of the health situation. Primary health care should be the first place to which everyone can turn for early identification, services or information, using hospitals only when truly necessary.

We must learn from the crisis. Public health has also been revealed as a central pillar, not only for health but also for the economy and security of the country. WHO will focus further support on strengthening public health capacity centrally and in the regions, modernizing practice with technology, establishing an emergency dashboard and increasing epidemiological, contact tracing and risk communication capacity.

The country will undoubtedly have to shift to a response in which health threats and outbreak evolution are identified and tracked proactively, every single case is found and isolated and close contacts are identified to be quarantined in order to minimize and even interrupt transmission.

WHO stands by the Government of North Macedonia, as there will be no socio-economic recovery without strong health. WHO will continue to support North Macedonia in combating COVID-19, build transparent, effective partnerships and strengthen the country’s health system for better preparation for future pandemics.
RUSSIAN FEDERATION

Key areas: 🇷🇺      📊      📜      🔍      🕵️      📦

Strengthening community engagement and fighting the infodemic

The Russian Federation is one of the countries with the highest number of COVID-19 cases in the world. More than half of the total number of confirmed cases have been reported in the capital city, Moscow, and the rest have been reported across the country. The Russian Federation spans two continents and 11 time zones, and is home to over 146 million people. Coordination and information have been essential in the Russian Federation’s response to the epidemic.

The COVID-19 virus spread to the Russian Federation at the end of January 2020. For the first 2 months, the virus was well contained, thanks to the rapid implementation of a comprehensive package of public health and social distancing measures, including the restriction of border crossings, extensive testing, cancelling of events and gatherings, declaration of a non-working period and lock-downs. However, in early March, a popular vacation season, the Russian Federation began to see its first influx of cases. The first COVID-19-related death to be reported in the Russian Federation occurred in mid-March 2020.

During the first half of May 2020, the confirmed cases rapidly increased, doubling in 2 weeks and temporarily placing the Russian Federation as the country with the second-largest number of confirmed cases in the world. By early September 2020, the country had 1 million confirmed cases and about 17 000 deaths from COVID-19.

Universal health coverage – specifically, achieving access to quality health care for remote populations – has been one of the country’s highest priorities. The federal Ministry of Health (MoH) coordinates and develops policies, and the 85 federal units have autonomy and responsibility for organising and delivering health services. The Russian Federation has taken extensive action to ensure that the entire country is well prepared and able to adequately respond to the pandemic; in addition, the government has stepped up research efforts to develop a vaccine to fight the virus.

WHO has been working closely with the Russian Federation through the WHO Country Office, WHO Regional Office for Europe and WHO headquarters. The WHO Country Office has continuously shared with the MoH and public health bodies WHO technical documents related to the pandemic and the results of various global research. It has also facilitated and coordinated the participation of Russian representatives and experts in international initiatives, and facilitated WHO inputs to nationally developed pandemic response measures. The Russian Federation MoH promptly shared with international partners all nationally developed guidelines and documents, including various Russian language video materials developed for health professionals.

WHO and the Russian Government continue to work closely, and have collaborated on developing public communication materials to help dispel the myths, mistruths and conspiracy theories that spread quickly during times of uncertainty. These efforts have brought critical accurate and factual information to the Russian population.

WHO has been engaged in discussions with the relevant authorities, and has continuously disseminated technical documents and provided input on COVID-19-related issues to partners such as the MoH and the Federal Service for Consumer Rights and Human Wellbeing. Furthermore, WHO – through community engagement and collab-
oration with authorities, and in the spirit of a whole-of-government approach – has kept public health matters on the agenda, along with health issues that affect vulnerable populations. Ministries and authorities have responded positively to this collaboration.

The Russian Federation is an emerging donor country and is no longer a programme country for the United Nations (UN). The UN entities in the country now operate without the Resident Coordinator system, but have established partnerships that have been effective during the COVID-19 response. For example, agencies have jointly discussed how to best highlight the various aspects of COVID-19, and the effective responses and good practices the country has employed. Currently, 19 UN agencies are present in the Russian Federation.

Information – cure to uncertainty, medicine for myths

In times of crisis, there is a critical need for accurate and credible information. The WHO Country Office in the Russian Federation has actively provided information, complementing the efforts of the authorities to ensure that the Russian people receive accurate information about COVID-19. The government regularly shares important information on its decisions (legislative, regulatory and executive) with the public, and all government sessions related to COVID-19 have been broadcast, increasing transparency of the situation and response.

The Russian Government has ensured that its response to COVID-19 is closely aligned with WHO recommendations. Through its existing long-term partnership with the MoH, WHO has ensured that all relevant government institutions receive WHO COVID-19 updates, including information about risk factors and behaviours for noncommunicable diseases, mental health strengthening and maintenance of essential health services.

WHO has supported direct communication with the public through interviews, question and answer (Q&A) programmes, and awareness messages tailored to local circumstances and broadcast on television and radio in major cities and regions. At the height of the epidemic, more than 20 public communication events were held each week. To complement the authorities’ efforts to reach those who use social media channels and platforms for news and information, WHO developed COVID-19-related news.

In April 2020, an official account for WHO in the Russian Federation was created on Vkontakte (VK), the largest social media platform in the country. Staff of WHO’s Country Office closely monitor and respond to comments on the VK page, and use the page to disseminate correct and useful information. This interaction with the public has enabled a better understanding of the public’s sentiments around the pandemic, and has helped to identify information gaps and the circulation of misinformation that can affect people’s behaviour and potentially hamper the success of the epidemic response. Some WHO COVID-19-related posts on VK have received several million views and, by August 2020, the WHO VK account had over 34 000 subscribers from the Russian Federation and other countries.

As in other countries, a wealth of misinformation about the COVID-19 virus has been circulating in the Russian Federation. Immediately after the onset of the pandemic, WHO and the authorities worked together to strengthen public communication and fight this infodemic of misinformation.
WHO Russia and the City of Moscow Institute for Health Management have together conducted three rounds of behavioural insight surveys. The surveys have provided information on people’s perceptions of the measures put in place and the challenges people face; they have also provided insight on how to tailor the public health measures needed to contain transmission. In response to the growing need for accurate and up-to-date information, WHO shared recommendations and technical documents with the MoH. This information was also made available on the websites of the MoH and Rospotrebnadzor (the Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing).

Throughout the behavioural insight surveys, the WHO Country Office in the Russian Federation and the WHO Regional Office for Europe engaged in discussions with health authorities and supported their work during the pandemic, providing the latest information and technical advice.

### Russian Response

Russia triggered its emergency response system in high alert based on WHO’s information through IHR reporting system in January 2020.

National Action Plan based on intersectoral approach was activated and inter-ministeral working groups were established to direct and manage the country’s response preparations: to conduct inventory of resources, review potential scenarios and forecast needs.

Based on the response plan procurement of additional life-saving equipment and massive training of health professionals were started, and hospital bed capacity and needed man-power were prepared for.

COVID-19 policy response was coordinated by the President, and sessions led by the President were directly broadcasted for the utmost transparency. Each of the 85 regions assessed their epidemiological situation and created unique responses based on federal policies, strategies and technical advice.

A media and information campaign supported Government’s efforts. The Prime Minister’s Office was responsible for the information sharing.

### Keeping up with health and well-being

The MoH set up a three-level management response: an operational headquarters for health services at MoH level, working groups and federal remote consulting centres (which provided consultative services to all hospitals in the country for patients with severe COVID-19 disease). The MoH quickly set up a unified information system – the federal COVID-19 registry – to monitor the performance of the health service. The registry tracks every patient and includes information on the outcome of disease.

To make it possible to use new diagnostic tests, medicines and personal protective equipment (PPE), the specific regulations for emergencies were activated. These regulations enable an efficient and robust process for controlled approval of potential pharmaceuticals and diagnostics.

With WHO releasing more data on COVID-19 and its impact on health, the government prioritized the protection of older people and those with underlying health conditions and chronic diseases, asking those people to stay at home. However, staying at home resulted in reduced physical activity and adverse implications for overall health. To support the health and well-being of those strictly confined to their homes, and in the spirit of promoting health through the life-course, WHO – with the agreement of the Department of Health of the City of Moscow – supported the National Centre for Rehabilitation to develop exercise videos suitable for older people. These videos were broadcast on television and various social media platforms, generating millions of views; they also attracted many young people, who then encouraged older family members to exercise.

Maintaining essential health services while responding to COVID-19 has been challenging across the globe. Medical personnel have been reassigned to respond to the pandemic, resulting in reduced services or access to services in other parts of the health sector. Globally, people have been less willing than in normal times to
seek out medical services for other conditions during the pandemic. This is sometimes out of fear of visiting a health facility and potentially contracting the COVID-19 virus, but also out of consideration for the overstretched health services.

In the Russian Federation, most regions significantly reduced or entirely stopped providing routine immunization during the restrictive period. WHO has kept the importance of continuous service provision (particularly for health workers and children) on the agenda during the pandemic. As restrictions eased, immunization services were among the first to be fully restored.

Health authorities have been closely monitoring access to health services, particularly for those with cardiovascular disease or cancer. Although preventive and periodical examinations stopped, consultations with patients continued through primary health care and the use of telemedicine (a relatively new method of care). Analysis of the WHO survey on essential health services conducted globally, coupled with insights from key national experts during the first months of the pandemic, showed that this additional burden might last longer than the pandemic itself. This information contributed to decisions around easing restrictions and returning health facilities to their original purposes (rather than providing only COVID-19 treatments) as soon as possible.

Many people have stayed home and been in isolation for long periods of time, in response to government recommendations and the enabling of “non-working days”, and out of concern for the health of themselves and their loved ones. Restrictions on social interactions and routines can have a significant negative effect on mental health; hence, as a major part of the COVID-19 response, WHO works closely with partners in the mental health services space and the health care system to focus on mental health.

A widespread movement of volunteers has helped to alleviate issues that tend to disproportionately affect the most vulnerable, such as access to medicines and food supplies. Since the beginning of lock-down, volunteers have delivered produce and medicines to the homes of older people. WHO contributed to an assessment and advocated for the continuation of long-term and palliative care (including at-home palliative medical care). Efforts are also being made to optimize social care, which has been overwhelmed by the pandemic. WHO’s long-term project on suicide prevention has continued as normal, and software to monitor self-harm has been improved. Similarly, work on a pilot project that addresses dementia and family awareness for dementia patients has been made available online.

**COVID-19 vaccination research and development**

The Russian Federation made major investments in research and development for COVID-19 by responding to the calls made by the WHO Director-General and World Health Assembly (WHA) 73.1 resolution on COVID-19, which were strongly supported by national leaders, emphasizing the importance of science and research investments. The Russian Federation has developed a number of test systems and has started work on several COVID-19 candidate vaccines; it is also conducting clinical trials for several self-developed medicines.

The MoH has informed WHO of the Russian Federation’s readiness to join the Solidarity Trial on medicines. Discussions with authorities are ongoing for all types of WHO Emergency Use Listing (EUL) procedures, including requirements and information on potential candidate vaccines. The information system put in place in Moscow and other regions for COVID-19 patients will provide data for research on the cause of the disease, epidemiology
and other elements. WHO has kept in close contact with national health authorities and research institutions, and continues to provide key information and encourage further engagement of Russian researchers in publishing findings and sharing results on COVID-19 products as global common goods.

**Health System Response**

- The health system has strengthened its disease surveillance systems and rapidly increased testing. More than 36 million tests have been taken. The number of tests has increased from 2200 to 300 000 a day from the beginning of the pandemic to August 2020. Tests are analysed in over 800 laboratories across the country.
- Each of the Russian Federation’s 85 regions was asked to assess its own epidemiological situation; create unique responses to that situation based on federal policies, strategies and technical advice; and launch relevant non-pharmaceutical interventions, including social distancing and response measures.
- The capacity of public health and primary health care centres, hospitals and laboratories has been expanded. Hospitals have been reorganized, temporary hospitals have been set up and new hospitals have been constructed. More than 185 000 hospital beds have been prepared for COVID-19 patients countrywide.
- Adequate numbers of frontline health workers have been well trained in the early detection of COVID-19, treatment of the disease and use of PPE. Online courses for health professionals were organized and about 1.5 million health professionals were trained in the provision of standard care for COVID-19 (with the training based on regularly updated guidelines for prevention, diagnosis and treatment).
- The Russian Government allocated 170 billion rubles for the purchase of medical equipment, reprofiling of hospital bed capacity, payments to health care workers and direct support to regional health care service systems.
- The health industry reprofiled production and adapted to COVID-19 by producing 458 types of medical device, mainly PPE, that were registered for use in the Russian Federation during the pandemic.
- Massive strengthening of the network of epidemiologists supported strong case investigation and contact tracing at local and regional levels.
- The financial support to health care and social care workers, in addition to an increase in salaries, included specific ad hoc payments for frontline health care and social care workers.

**Government measures to mitigate impact**

- Medical services and health care for all who need it
- Measures to minimize the impact of quarantine on the population and business
- Increased unemployment payments
- Subsidies for families with children
- Prioritizing employment of young people
- Ensuring extra financial support for all health care and social care personnel working with COVID-19
- Speeding up technology and innovation development

**Keeping Their Voices Heard**

Working with national partners, a major goal of WHO in the Russian Federation is to keep the voices of the most vulnerable people in society on the agenda and heard.

Presentations have been made at several key technical meetings during the pandemic:

- Conference on Aging – COVID-19
- Sustainable Development Goal Forum on HIV
- Valdai Think Tank Club Policy Discussions
- Conference on oncology and maintaining key essential health services
- Update on COVID-19 and the role of WHO, to students of Sechenov Medical University
- Presentation to a UN international course on a multisectoral response and the role of young people
- Presentation to the Chamber of Commerce on occupational health and exposure to COVID-19
SAUDI ARABIA

Key areas:

Preparedness, strengthened by past experience, enabled an early and robust national response to the COVID-19 pandemic

As of 2 September 2020, the Kingdom of Saudi Arabia, with a population of more than 34 million people, has reported a total of nearly 317,000 confirmed cases of COVID-19 and over 3,900 deaths since the first case was detected on 2 March in a Saudi national returning from the Islamic Republic of Iran via a third country. However, since the peak of the epidemic from early June to mid-July, during which between 3,000 and over 4,000 cases were reported each day, cases have come down steadily to around 1,000 per day (Fig. 1). The daily death toll has numbered between 27 and 42 since early August, with an overall case fatality rate of 1.2%.

Fig. 1. COVID-19 epidemic curve in Saudi Arabia

The Government has been able to limit the spread of the outbreak and reverse the epidemic curve through early and prompt action involving the whole of government. In addition to mitigation measures, including the suspension of international flights, a lockdown in major cities, the closure of businesses and most public places (including schools, restaurants and mosques), and suspension of the Umrah (lesser pilgrimage) for all visitors, action taken by the health sector has had a major impact on reducing transmission of the disease. As a result of this action, described below, polymerase chain reaction (PCR) testing for COVID-19 has been readily available free of charge for anyone who wants it, including undocumented immigrants, since early in the outbreak.

The Government’s capacity to treat COVID-19 patients – both in hospitals and in outpatient clinics – has always exceeded the need, even during the period of peak incidence. A well established surveillance system was activated early on, starting at ports of entry, to detect COVID-19 infection and follow up for 14 days after arrival. The public has been kept well informed about the disease, the course of the outbreak and ways of reducing risk and seeking care through a wide variety of communication channels, including daily press briefings, social media and electronic platforms. With these systems and procedures in place to control the outbreak, the Government was able to hold the annual Hajj pilgrimage – albeit a much smaller and more restricted version – in mid-July, without a single COVID-19 case occurring among the participants.
A key reason for the country’s ability to mount a comprehensive, coordinated and quick response to COVID-19 has been its experience in preparing for and responding to health emergencies, including potential infectious disease outbreaks that might arise among the 2.5 million people who come to Mecca and Medina each year for five days during the Hajj – among the largest mass gatherings in the world. The health-related structures, systems and procedures that have been put in place for the annual Hajj, coupled with the lessons learned from the country’s experience with Middle East respiratory syndrome coronavirus (MERS-CoV) – a more deadly disease caused by another coronavirus – have put Saudi Arabia in a unique position to prepare for and respond to the COVID-19 pandemic. This case study explores key aspects of the response and how it was informed and strengthened by these past experiences, as well as the partnership with WHO in building the country’s capabilities in critical technical areas.

Early action to prepare for the response

In early January, as soon as the outbreak of a novel coronavirus was reported out of China, the Government of Saudi Arabia established an interministerial COVID-19 monitoring committee to follow global updates and prepare the country for the possible introduction and spread of the virus. The committee, chaired by the Minister of Health, consists of Government ministers from a range of sectors (education, interior, etc.) and top officials of key agencies, including the Saudi Food and Drug Authority and the Saudi Center for Disease Prevention and Control. The Saudi Government has long experience of using multisectoral committees to oversee events with health implications, including the national committee that oversees the annual Hajj involving the ministers for the Hajj, health, interior and transportation.

In addition, by 10 January – nearly two months before the first case of COVID-19 was detected in the Kingdom – the Ministry of Health finalized a COVID-19 preparedness and response plan, as well as the first version (since updated) of detailed operational guidelines covering all aspects of the response – from specimen collection and laboratory testing to case management, risk communication, contract tracing and quarantine requirements. The speed with which these documents were produced is explained by the fact that they were adapted from existing plans, including a national pandemic plan and influenza preparedness plans, which had been developed with WHO support.

Another early action to limit the importation of the virus – before international travel was suspended in mid-March – was to require all international travellers, including Saudi nationals, to quarantine upon arrival for 14 days (this period was later reduced), initially in dedicated quarantine facilities and hotels designated by the Government and later at home.

Rapid scale up of COVID-19 PCR testing

To ensure that all people who wanted a test – including those without symptoms – could be tested, the Ministry of Health rapidly expanded laboratory capacity for PCR and simultaneously increased the public’s access to testing sites. Initially, PCR testing for COVID-19 was limited to the National Health Laboratory in Riyadh which had become a reference laboratory for advanced diagnostics and had been accredited with WHO support, as well as three regional public health laboratories – with a total capacity of 1800 tests per day. Testing was quickly expanded to 10 additional regional laboratories, making a total of 14 public health laboratories that, as early as the beginning of July, were together able to perform more than 60 000 tests per day. To prevent possible bottlenecks in testing, the Government also began certifying private laboratories in early May (current total 51) to conduct COVID-19 PCR testing, after ensuring that they had the necessary equipment and capabilities. To increase testing capacity further, the Government entered into a contract in April with a Chinese company to establish six regional laboratories, including a mobile laboratory that can conduct 10 000 tests per day.
The Government created different avenues for people to get tested quickly, including the use of mobile technology. A COVID-19 service was added to the Ministry of Health’s 937 hotline for people experiencing COVID-19 symptoms. Doctors staffing the hotline, which served people in four languages (Arabic, Farsi, Urdu and English), determined whether a caller had suspected COVID-19 and directed them to one of the designated hospitals for testing and treatment, along with instructions on setting up an appointment through a mobile app (Mawid). Once stand-alone COVID-19 clinics were created starting in early June, as described below, people experiencing symptoms could go directly to one of these clinics to be tested without a prior appointment.

In contrast to many other countries, people without symptoms could also be tested at drive-through testing sites called Ta’kkad (“Assure”), starting in early to mid-June, when 21 centres were established. Appointments using an app (Sehaty) are required for testing through these sites, and results are available via the app within 24 hours. By the end of August, 32 Ta’kkad sites were operating in cities throughout the country.

Ensuring sufficient capacity to manage COVID-19 cases

During the early planning stage in January, the Ministry of Health, in anticipation of a surge in cases if the virus entered the country, designated 25 public hospitals as COVID-19 treatment and isolation centres. These hospitals – with a combined capacity of 80 000 beds, including 8000 intensive care (ICU) beds – had capabilities in infection prevention and control (IPC), isolation and care of patients with a highly infectious respiratory illness, including through prior experience of treating MERS-CoV cases. As a contingency plan, three temporary field hospitals were also set up in hotspots – a 500-bed facility in Jeddah and 100-bed facilities in Mecca and Medina. Within three months, the number of ICU beds had increased by 2200. The demand for COVID-19 beds never exceeded the supply and in fact, the field hospitals were barely used.

As the outbreak progressed, the Ministry of Health decided to establish stand-alone clinics (Tettaman) for outpatient diagnosis and treatment of COVID-19. This unique model – built upon the country’s shift towards primary health care and the establishment of 2500 primary health care centres – allows people with symptoms to walk into a clinic for COVID-19 testing and treatment without an appointment. Since the first Tettaman clinics were opened in early June, their number has grown steadily, reaching 238 throughout the country by early September 2020. Patients can also now receive care for COVID-19 in private facilities that have passed a Government inspection.

Strengthening disease outbreak preparedness and response capabilities in partnership with WHO to create a robust COVID-19 response

While Saudi Arabia required little direct assistance in many of the aspects of the response mentioned above because of its high level of economic development, WHO has provided technical assistance over the years in specific areas, including its support for health-related activities for the annual Hajj and the country’s response to the 2013 MERS-CoV outbreak. Examples of this support in recent years include working with the Ministry of Health in establishing a national network of public health laboratories, strengthening IPC practices in health facilities and contributing to the updated national guidelines on MERS-CoV. Below we highlight two additional technical areas where WHO has worked with the Ministry of Health – disease surveillance and report and risk communication –
that have been strengthened over the years and are examples of best practice during the country's COVID-19 response. Further information about the 2020 Hajj pilgrimage is also provided below.

Disease surveillance and reporting

The potential for health emergencies to occur during Hajj, as well as the 2013 MERS-CoV outbreak, prompted the Ministry of Health to establish a command and control centre in 2014 with WHO support, to coordinate and lead national responses to public health emergencies. Other WHO support to strengthen the country’s ability to detect and respond to potential disease outbreaks during the Hajj has included conducting a training workshop for national rapid response teams operating during the Hajj and supporting the implementation of an early warning and alert response system, both in 2018.

In addition, each year since 2015, WHO has worked with the Ministry of Health in preparing for and monitoring any health-related issues during the Hajj. The WHO Representative and two or three epidemiologists from the Regional Office for the Eastern Mediterranean work with the Ministry of Health to prevent and prepare for health emergencies among the pilgrims, monitor health conditions during the event to ensure that no infectious disease outbreaks occur, and issue a statement summarizing any health issues or events.

One manifestation of Saudi Arabia’s strong and responsive surveillance system was the active screening and testing that began on 17 April, with 150 teams being sent across the country to areas where new cases might be present, to take samples and conduct health education. This resulted in the early identification of many cases; in some instances, 60% of reported cases were detected by these teams.

Another major advancement prompted by the MERS-CoV outbreak has been the development of an electronic disease surveillance and reporting system, with WHO technical support. Since early on the outbreak, the Ministry of Health has produced daily summary reports on the number of cases, deaths, recoveries and tests that are available on the Ministry’s website and Twitter accounts. This information has also been displayed since mid-June on a Ministry of Health dashboard that is updated daily (Fig. 2).

Fig. 2. Government of Saudi Arabia COVID-19 dashboard
Risk communication

One of the most striking aspects of Saudi Arabia’s response to COVID-19 has been its multifaceted, well-coordinated communication campaign across media platforms to raise public awareness of the disease and epidemic, provide information on reducing the risk (e.g. through physical distancing, wearing a mask) and inform people about what they should do if they are experiencing symptoms, using simple and consistent messaging. This intensive campaign has included the production of dozens of public information and “explainer” videos distributed via mass media and social media channels; sending billions of SMS (text) messages in 17 languages about ways that people can protect themselves and their families; and having Government ministers, celebrities, academics and religious leaders send simple messages, such as “Stay home” and “Flatten the curve”, to their Twitter followers.

Also noteworthy has been the Government’s transparent and frequent communication during the COVID-19 crisis. The Government learned a key lesson from the MERS-CoV outbreak about the critical importance of keeping the public informed and being transparent. Consequently, the Vice-Minister – the main Government spokesperson for the COVID-19 response – has held daily press conferences since early March (now twice weekly) to present information on the course of the outbreak and action taken by the Government, and to respond candidly to questions from the media.

 Likely contributing to the improved communication strategies for COVID-19 was a two-day workshop on strengthening national risk communication for mass gatherings in July 2018, which was facilitated by a WHO expert from Geneva and attended by 50 participants from across the health sector, including the Supervisor-General and other members of the Ministry of Health Emergency and Disaster Management Department and organizations involved in the Hajj. This interactive workshop explored what communicating for health and other risks is about and went through the steps of facilitating risk communication processes during various events, with a focus on the Hajj. Participants practised designing compelling messages for specific events, communicating with the media (e.g. through role-playing), and preparing press releases. The workshop brought home the point that a strong risk communication campaign is critical to success in the response to a health emergency.

Organizing a successful, event-free Hajj in the middle of a pandemic

Despite the pandemic, the Saudi Government was confident enough to conduct a scaled-down version of the annual Hajj in mid-July, when COVID-19 cases were still high but starting to decline. Based on a risk assessment conducted by the national Hajj committee and discussed with WHO, the number of pilgrims was limited to 10,000 (compared with 2.5 million in a normal year), to allow for sufficient physical distancing and management and monitoring of their movements. To minimize the risk of reimporting the virus, the event was limited to people living in Saudi Arabia – with 30% of the slots given to Saudi nationals and 70% to non-Saudi residents. With health being a major criterion for selection of the pilgrims, all nationals were health-care workers and security personnel who had been infected with COVID-19 and had fully recovered, and who were thus presumably immune to the infection. All pilgrims had to be 50 years old or younger and have no chronic health conditions, while in addition non-Saudi residents had to be first-time pilgrims and have a negative PCR test result. The Government covered all travel, food, lodging and other expenses of the pilgrims.

In addition, the pilgrims were required to quarantine in hotels or at home prior to and following the five-day event, and were given wristbands connected to their phones to monitor their movements. They were also given their own prayer rugs and were required to practise social distancing when praying and walking around the Kaaba – rules that they learned through online sessions provided in different languages. As is true every year, health services were made available at the pilgrimage sites. No cases of COVID-19 were reported among the pilgrims.
Conclusion

The experience with COVID-19 in Saudi Arabia is an example of how good preparedness, along with a comprehensive, multifaceted response that simultaneously addresses the need to prevent the outbreak, detect and report cases, conduct laboratory diagnosis, manage cases and communicate with the public can be effective in controlling an epidemic. It also demonstrates how WHO can work effectively in a high-income country to guide policy and strengthen specific technical capabilities, at the request of the Government.

Using technology to improve the COVID-19 response

With 93% of the Saudi population already using the internet, the country has made excellent use of mobile technology to engage the public in the COVID-19 response and enhance their access to information, as well as testing and treatment services. While the use of social media, SMS messaging and other technologies to provide timely, accurate information to the public about COVID-19 has been described above, we highlight below some innovative mobile apps developed to assist individuals to access testing and treatment services for COVID-19 and provide contact-tracing. These apps can be accessed through multiple channels, including the Ministry of Health Facebook page and website, Saudi Press Association website and SMS and Twitter messages sent by the Government.

**Sehaty (“My health”):** persons without COVID-19 symptoms who want to get tested through the drive-through Ta’kkad testing sites must make an appointment using this application, which had earlier been created to promote healthy lifestyles among the population. The app sends an SMS with the date, time and location of the testing site, and sends the test results in another SMS. If the result is positive, the app automatically notifies the Ministry of Health, which follows up with the individual. Data costs are waived for users of this app.

**Mawid (“Appointment”):** already in use for making medical appointments at primary health care facilities. A COVID-19 component has been added to this app. The app walks the user through a self-assessment to determine whether he or she has the typical COVID-19 symptoms and, if the answer is yes, directs the user on the action to be taken.

**Tabaud:** a social distancing and contact-tracing app that helps people know through GPS signalling whether they have come in contact with an individual infected by COVID-19. Individuals can then use the app to notify others or to ask for help.

Saudi Arabia’s leadership role in mobilizing resources for the global COVID-19 response

As the current rotating President of the G20, Saudi Arabia has played a leading role in obtaining pledges from the G20 countries totalling US$ 500 million to fund the Strategic Preparedness and Response Plan (SPRP) for the global fight against COVID-19, with US$ 80 million going to WHO to support country, regional and global efforts to respond to the pandemic. The Kingdom itself, through the Ministry of Foreign Affairs, pledged US$ 80 million to the SPRP.

In addition, during the early days of the pandemic in March, the King Salman Humanitarian Aid and Relief Centre (KSRelief) – the country’s international development agency with which WHO has a close partnership – made a US$ 10 million donation to WHO to implement urgent measures to minimize the global spread of the disease and to support countries with vulnerable health systems with their preparedness and response. The agency provided an additional US$ 13 million to the WHO country office in Yemen to purchase critical medical supplies and equipment, including personal protective equipment for health workers, laboratory tests and trauma medication, to support the country’s readiness to respond to COVID-19.

In all, Saudi Arabia has to date provided US$ 103 million to WHO to combat the pandemic. The prominent role that the Kingdom has and will continue to play, through its G20 leadership and national institutions, is expected to strengthen its partnership with WHO further.
Key areas:  

A robust health system responding effectively to the COVID-19 pandemic

Sri Lanka’s response to the COVID-19 pandemic has been swift, decisive and coordinated, using a whole-of-society approach under the strong leadership of H.E. President Gotabaya Rajapaksa with technical guidance from the Ministry of Health and Indigenous Medical Services and the World Health Organization.

A health system prepared for a pandemic

“Universal health coverage and health security are two sides of the same coin” – Dr Tedros Adhanom Ghebreyesus, WHO Director-General, 17 May 2018.

Robust health system

Free health care for every citizen has been available in Sri Lanka since the 1930s. Through decades of national crisis, the Government has moved towards the goal of universal health coverage with the “good health at low cost” approach and developed a vigorous health workforce, with one doctor and two nurses per 1000 population.

The country’s population of 21.8 million, living across the nine provinces and 25 districts, has benefited from the strong preventive and curative health system. Sri Lanka has already achieved maternal, under-five and neonatal mortality rates which are less than half of the rates laid down in the 2030 Agenda for Sustainable Development targets. The country has successfully eliminated many diseases, including malaria, measles, rubella and mother-to-child transmission of HIV and syphilis.

Pandemic emergency preparedness

In the last decade alone, Sri Lanka has experienced over 11 000 emergencies. Although most of the incidents involve flooding, drought and strong winds, the Government has taken the initiative to develop the country’s preparedness and response capacity to all hazards within the framework of the International Health Regulations (IHR) (2005). WHO staff at all three levels of the Organization worked with Sri Lanka’s key national stakeholders to strengthen human resource capacity and systems capacity for chemical, biological, radiological and nuclear emergency management.


A joint external evaluation (JEE) was conducted in 2017, in which WHO subject-matter experts identified the areas that Sri Lanka needs to improve to strengthen the implementation of IHR (2005). The JEE recommendations acted as a reference for the development of Sri Lanka’s National Action Plan for Health Security 2019–2023.

**Strong leadership and effective coordination for prompt action**

Since the emergence of COVID-19 in Wuhan, China, the Ministry of Health and Indigenous Medical Services (Ministry of Health) has received strong political support from the President of Sri Lanka. On 27 January, the first case of COVID-19 was detected in Sri Lanka, from a 44-year-old Chinese person visiting from Hubei Province, China. The President immediately took the lead of the national COVID-19 response. Using WHO guidelines as a reference, the Ministry of Health developed the Sri Lanka Preparedness and Response Plan for COVID-19 (SPRP).⁵

**A cohesive collaboration of different sectors and stakeholders**

In its response to COVID-19, Sri Lanka implemented a whole-of-government approach with four lines of operation: Tri-Forces (military), police and intelligence; medical and health care; community engagement; and economic and psychosocial well-being (Fig. 1).

**Fig. 1. Conceptualization of whole-of-government approach**⁶

In January, the President appointed a National Steering Committee to bring together a range of stakeholders from different sectors to support the COVID-19 response. The National Steering Committee includes the Ministry of External Affairs, Ministry of Defence, Ministry of Finance, Ministry of Ports and Shipping, Civil Aviation Authority, Department of Customs, Department of Immigration and Emigration, Disaster Management Centre, airports and consulates.

---


In mid-March, a Presidential Task Force was established to coordinate the COVID-19 response. This was headed by the Minister of Health, with the Director General of Health Services as the technical lead and the Commander in Chief of the Tri-Forces as the operational lead. In addition, the National Action Committee against COVID-19 was established to enhance coordination within the Ministry of Health, with the Directorate General of Health Services providing technical and operational leadership and guidance.

On 11 March, the Ministry of Health announced the country’s first local case of COVID-19, a Sri Lankan who works as a tourist guide. On 20 March, the Government declared a lockdown along with recommended public health measures in its effort to break transmission of the virus. The Government imposed restrictions on movement, except for essential services. These measures continued for eight weeks, coordinated by the Tri-Forces, police and national intelligence, to ensure public compliance.

Coordination with United Nations and health sector

The United Nations Resident Coordinator activated the humanitarian country team and designated the WHO Representative as the Chair of the health cluster, with the Ministry of Health and Civil Society Collective as Co-Chairs. The health cluster became a pivotal platform for State and non-State actors to share information, coordinate and collaborate in the implementation SPRP. To date, seven cluster meetings have been held, with over 30 organizations participating in the virtual meetings.

Accessible and proactive communication

The Health Promotion Bureau of the Ministry of Health, which is responsible for risk communication and community engagement (RCCE), worked closely with WHO and the United Nations Children’s Fund (UNICEF) from the start. An alliance was formed with local-level officials, to reach different community groups more effectively with correct and consistent information about COVID-19 transmission, the effects of the virus and effective prevention measures.

The Ministry of Health worked with WHO and the United Nations Resident Coordinator to monitor, identify and analyse rumours and misinformation. Mainstream media were engaged to help to dispel false information. In early March, the Government established a round-the-clock hotline to invite public feedback and communicate accurate information about COVID-19. A designated COVID-19 website was developed with all the information about COVID-19 in Sri Lanka,⁷ and a chatbot was launched to provide the most current evidence-based information.

WHO worked with numerous partners to develop and disseminate various RCCE materials. In view of the multicultural population of Sri Lanka, all communication content and materials were developed in the three official languages of Sri Lanka: Sinhala, Tamil and English.

---

Community and religious leaders, musicians and celebrities, youth groups and volunteers all engaged in RCCE activities. The Food and Agriculture Organization of the United Nations and the World Food Programme supported the development of food safety measures for markets. WHO supported the Government in developing and disseminating information about infection prevention and control (IPC) in quarantine centres.

WHO mobilized resources from the Australian Government (Department of Foreign Affairs and Trade) through the United Nations Multi-Donor Trust Fund to implement, with the Civil Society Collective and Sarvodaya, a community engagement project in selected high-risk districts. The project component includes activities which aim to engage and sensitize vulnerable communities, address stigma and discrimination and strengthen the participation of women and girls in decision-making in the COVID-19 response.

During the height of the epidemic in the country, the Director General of Health Services, Army commander and police spokesperson provided daily morning and evening updates to keep people informed and prevent panic. In addition, daily situation reports on COVID-19 were published by the Epidemiology Unit of the Ministry of Health on its website. The Health Promotion Bureau and WHO also provided the latest information on COVID-19, guidelines and mythbusters.

The Ministry of Health is now working with WHO and the Government Medical Officers’ Association to launch a DReAM social marketing campaign for the new normal, using different platforms like national television, billboards, radio, local public-address systems, posters and stickers.

DReAM stands for:
- **D** – Distancing (physical distancing)
- **Re** – Respiratory etiquette (cough/sneeze using the inner side of your elbow and not directly in front of you)
- **A** – Aseptic techniques (handwashing, using hand sanitizer, avoiding touching your face)
- **M** – Mask (proper wearing of a facemask and its proper disposal)

DReAM poster developed by WHO and the Ministry of Health.
Scaling up surveillance and rapid case investigation – on the lookout for COVID-19

Sri Lanka’s strong surveillance and containment practices date back to 1897. Since that date, Sri Lanka has shown successful results by eliminating several communicable diseases. The country’s resilience as a nation was proven by its response to the devastation of the Boxing Day tsunami in 2004.

Contact-tracing and management

The national Epidemiology Unit, the focal point of surveillance in the Ministry of Health, has a large technical capacity for implementing surveillance through the district and divisional technical units. The Epidemiology Unit was made the lead agency for the surveillance mechanism for COVID-19 across Sri Lanka’s nine provinces, involving regional and district epidemiologists, medical officers and public health inspectors.

Across Sri Lanka’s provinces and districts, directors and staff of the provincial health services, regional epidemiologists, medical officers of health and public health inspectors joined the detection efforts. The State Intelligence Service stepped up its activities to identify the second and third circle of contacts of confirmed COVID-19 cases. This work has been instrumental in Sri Lanka’s success in COVID-19 case detection and containment.

For every person who tested positive for COVID-19 or fitted the COVID-19 case definitions, all close contacts were tested for COVID-19. Even those without COVID-19 symptoms are required to quarantine for 14 days. COVID-19 test results and institutional or hotel quarantine are mandatory for Sri Lankan nationals returning to their homeland and for any foreigners visiting Sri Lanka.

Containing the spread through effective vigilance at points of entry

In response to COVID-19, the Government has scaled up its capacity to detect the new disease at the country’s points of entry by operationalizing the National Public Health Contingency Plan for designated airports and the Public Health Emergency Preparedness and Response Plan for seaports. The National Intelligence Service and Tri-Forces stepped up its activities to identify the second and third level contacts of confirmed COVID-19 cases. This work has been instrumental in Sri Lanka’s success in COVID-19 case detection and containment measures.

Initially, returnees and the close contacts of COVID-19 cases were primarily quarantined free of charge in Government-operated quarantine facilities. The initial 58 quarantine centres could host 3000 people. The Government has expanded quarantine capacity to 72 quarantine centres which include 42 pay-and-stay hotels and 20 hostels attached to Government facilities such as agriculture, Ayurveda and training schools. There are now 119 quarantine centres in Sri Lanka that, in total, could accommodate 10,000 people. The Tri-Forces of the Army, Navy and Air Force were assigned with the public health staff to implement the detect-trace-isolate process and to manage the quarantine centres.

Scaling up laboratory capacity while contributing to testing for SARS-CoV-2

In late January 2020, the National Influenza Centre of the Department of Virology, Medical Research Institute (MRI) of Sri Lanka, established an in-house molecular test for the SARS-CoV-2 virus that causes COVID-19 and validated the method through the WHO Coronavirus Reference Laboratory, University of Hong Kong (HKU), achieving 100% concordance of the results.

Guidelines on performing the polymerase chain reaction (PCR) test in the private sector was issued in March. As of 1 June, Sri Lanka has 22 laboratories supporting COVID-19 testing. Four laboratories in the private sector
have been opened so far, in addition to six laboratories under the Ministry of Health and four in medical faculties. In the same month, after collaborating with the Sri Lanka College of Microbiologists and WHO, the Ministry of Health issued a laboratory strategy for COVID-19. A PCR testing laboratory has also been established at Bandaranaike International Airport for testing incoming passengers before they are sent to the quarantine centres.

With the support of international partners, Sri Lanka had the requirements for testing available, even when commercial assays were limited. WHO supported the provision of test kits, supplies and equipment for the testing. WHO also supported designing of an information-technology-based data system to capture laboratory data from COVID-19 testing. With the rapid development of laboratory capacity, daily testing capacity has increased to 3000 tests per day. Similarly, the testing strategy was changed from passive to active surveillance in May 2020.

Sri Lanka has taken a step further in making the most of its laboratory capacity by commissioning two Unity serosurveillance studies based on a protocol that was established by WHO. The studies aim to generate scientific data on the epidemiological parameters of COVID-19. The studies also cover COVID-19 transmission patterns, immunity, severity, clinical features and risk factors for infection to understand and control the COVID-19 pandemic. The two serosurveillance studies are conducted among the infected Navy personnel and their close contacts in the COVID-19 outbreak at a naval base in Welisara, where 363 cases and 263 close contacts were investigated; and among the 107 infected and 901 close contacts and 1614 non-close contacts in an outbreak on the premises of Colombo Municipal Council. Creating more evidence to understand COVID-19, MRI collaborated with HKU and the Centre for Dengue Research at the University of Sri Jayewardenepura, to conduct genomic sequencing of virus strains detected in Sri Lanka.

To ensure the quality of PCR testing for SARS-CoV-2, WHO facilitated the validation of four laboratories in the public sector through the WHO-supported External Quality Assessment Project (EQAP) by HKU in June 2020 with a score of 100%, assuring high-quality laboratory diagnosis. An additional 18 laboratories have been enrolled in EQAP.

Ensuring infection prevention and control measures

At the beginning of the pandemic, when personal protective equipment (PPE) supplies were limited, WHO provided PPE to protect frontline workers. In March, the Government called on Sri Lankans for support in the local manufacture of personal protective items. The local apparel industry, women’s groups and the Sri Lankan Army and Air Force took part in manufacturing the protective items. Except for N95 masks, Sri Lanka is self-sufficient in production of PPE.

Early in the pandemic, to enable health-care workers to manage COVID-19 patients effectively, the Ministry of Health trained 750 nurses to manage severe cases and provide intensive care (ICU) support. For medical doctors, WHO and the Sri Lanka Medical Association conducted an awareness session on COVID-19 infection and management. The Ministry of Health also developed a set of training modules on IPC for COVID-19 by adapting the WHO guidelines to the Sri Lankan context. The nine-module training package for health workers is available in the three official languages and for long-distance learning.

Currently, WHO is supporting the Ministry of Health in developing an electronic learning management system which covers all basic training programmes in training centres and in-service training units, including the Family Health Bureau, Epidemiology Unit, National Institute of Infectious Diseases, National Institute of Mental Health, Directorate of Health Care Quality and Safety, National Institute of Health Sciences and National Blood Transfusion Services.

The in-service training programme will offer short courses through its platform, available to all in-service personnel and existing frontline health-care providers. Since these training modules are written in English and developed by focal agencies with guaranteed standards, they can easily be linked to the OpenWHO platform and WHO.
Academy so that other countries in the Region can learn from the practices that have brought Sri Lanka success. WHO will further support the in-service training programme with information technology (IT) hardware and capacity development for the trainers.

To prevent transmission of the virus in workplaces, the Ministry of Health has also released guidelines for Government offices and other work settings to follow on resumption of normal activities and the return to work during the opening of districts. Similarly, guidelines for restrictions related to travel and mass gatherings were developed by the Government. Furthermore, in mid-April, the Government made wearing a facemask compulsory in public.

**Strengthening case management capacity of health facilities for COVID-19 patients**

The National Guidelines for the Management of COVID-19 cases were issued well before the first COVID-19 case was detected in the island. The case management applies three-tier categorization: mild cases in isolation areas; moderate cases with additional oxygen supply in isolation areas with resuscitation facilities; and critical cases in isolation areas with ICU facilities.

A rapid assessment of secondary and tertiary health facilities was conducted by WHO to provide information for surge capacity planning. The three-tier approach was used to calculate the necessary capacity, on the assumption that 20% of patients potentially progress to severe cases and 5% of them will require ICU beds. Initially, 12 hospitals across the country were designated for isolation. The number has increased to 39 with the capacity to isolate 1587 patients. Although, in January, the only treatment centre in Sri Lanka was the National Institute of Infectious Diseases in Colombo, with 10 ICU and 30 high-dependency units, now the entire country has a total bed capacity exceeding 2500, with 100 ICU beds available in the 12 designated hospitals. With the declining number of cases, the Government has four designated hospitals readily available for COVID-19 treatment in the event that new cases increase again.

The Sri Lanka response to COVID-19 is supported by a nationwide “Suwaseriya” Ambulance Service (toll free number – 1990) that can transport COVID-19 patients quickly and safely to designated isolation hospitals. On average, the response time for the 1990 ambulance service is 8 minutes and 23 seconds in the Western Province and 11 minutes and 25 seconds in the rest of the country (2019).  

**Partnerships for operational support**

As the Chair of the United Nations health cluster team, the WHO Country Office in Sri Lanka has been actively engaged with the Ministry of Health, United Nations agencies, development partners, civil society and other stakeholders, in providing timely and evidence-based advice on strategic preparedness and response to COVID-19. WHO supported the Ministry of Health in developing the SPRP and mapping the country’s resource gaps and resource mobilization for COVID-19.

Joining the collaboration of WHO and the Government of Sri Lanka were a multitude of partners, including the World Bank, Asian Development Bank, European Union delegation, Government of China, Government of Japan, United Kingdom, Norwegian Embassy, German Embassy, the Australian High Commission, Australian Department of Foreign Affairs and Trade (DFAT), United States Agency for International Development (USAID), Global Fund to


"WHO is a trusted partner, working closely with the Ministry of Health and all relevant stakeholders for an evidence-based response to COVID-19 in Sri Lanka"

Dr Razia Narayan Pendse, WHO Representative in Sri Lanka
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Fight AIDS, Tuberculosis and Malaria and United Nations agencies. Their contribution includes effective planning, coordination, assessment, analysis, strategy, standards, advocacy, resource mobilization and monitoring.

**Swift technical, operational and logistics support**

WHO is represented on the Presidential Task Force on COVID-19 to provide evidence-based technical advice for the Government, stakeholders and partners.

On the logistics front, using the WHO Disease Commodity Package and COVID-19 Kit, WHO supported the Ministry of Health in conducting a country inventory review of supplies, assessing the logistics system and mapping Sri Lanka’s resources. The Ministry of Health reviewed the supply chain control and management system for medical supplies and other essentials; reviewed procurement processes; assessed the capacity of suppliers to meet increased demand; and established a central stock reserve in Colombo. WHO undertook to support the further strengthening of the logistics system by facilitating a systematic review of processes and developing a roadmap for implementation.

Assisting the Government in strengthening the capacity of the Epidemiology Unit and surveillance at the provincial and district units, WHO provided IT equipment and enhanced internet connectivity particularly in 50 sentinel sites for severe acute respiratory infections and influenza-like illnesses surveillance and 365 medical officer of health units at divisional level.

The Country Office has mobilized approximately US$ 6.5 million for the direct health sector response, of which US$ 2 million is in the pipeline. To date, about US$ 2 million has already been spent to support the implementation of the SPRP in planning, surveillance, case management, laboratory strengthening, RCCE, IPC and research. The World Bank has pledged US$ 128.6 million for the implementation of the SPRP, medium-term preparedness of the health system and equipment for health facilities. The Asian Development Bank has reallocated US$ 15 million to Sri Lanka to strengthen the capacities at points of entry and national laboratories. WHO will also provide technical advice for the implementation of the SPRP.

WHO takes the role of facilitating and coordinating support for COVID-19 response from different agencies to the Government of Sri Lanka. With DFAT, WHO donated medical equipment, worth of US$ 578 379, to be distributed by the Ministry of Health to 19 ICU hospitals. Through WHO, DFAT contributed AUS$ 600 000 to SPRP to strengthen surveillance, case management and national laboratories. Adding to this donation, WHO provided laboratory equipment and consumables to the value of US$ 108 337 to the Biomedical Engineering Unit and supported quality validation in State laboratories. Supporting testing further, 40 000 COVID-19 test kits have been given to the Ministry of Health and 40 000 more are in the pipeline.

An additional US$ 100 000 has been provided by DFAT for WHO through the United Nations Multi-Donor Trust Fund. This support was specifically allocated for community engagement with the nongovernmental organization Sarvodaya.

With USAID, WHO facilitated the donation of 200 portable ventilators and additional equipment to the Government. USAID funding for WHO was utilized for strengthening surveillance, expanding testing capacity in laboratories and assisting partner coordination, planning and operational support.
The European Union is providing €2 million (US$2.17 million) for WHO to assist Sri Lanka in managing COVID-19 cases; to participate in research and global evidence generation initiatives; conduct risk communication activities and promote community engagement; and maintain the delivery of essential health services during the COVID-19 pandemic, specifically for psychosocial and mental health services.

On 16 March, WHO headquarters launched the COVID-19 Partners Platform, in which countries, implementing partners, donors and contributors could share information about the COVID-19 situation in Member States and their responses, aligned with the nine public health pillars. This Partners Platform provides real-time information about the financial, logistics and human resource needs of each Member State so that the other collaborators could give their support accordingly. The Incident Management Support Team of WHO coordinates with the Government and development partners to collect detailed information for the Platform. Sri Lanka has actively and regularly updated the Platform and established strong coordination with national authorities, the United Nations country team and partners.

Leadership in the United Nations country team

WHO chairs the core United Nations technical team for COVID-19 preparedness and response and connects the Government with other United Nations agencies, bilateral and multilateral partners and the diplomatic community.

Within the United Nations family, WHO collaborates with UNICEF and the United Nations Office for Project Services to facilitate international and local procurement of goods and equipment for the immediate COVID-19 response. The United Nations Development Programme mobilized around US$1 million and reprogrammed around US$7 million to respond to the country's COVID-19-related priorities, including procurement of test kits, provision of PPE and improvement of health-care waste management. Technical equipment worth 45 million Sri Lankan rupees was handed over by the International Organization for Migration (IOM) to Bandaranaike International Airport to strengthen measures at points of entry. IOM also assists daily monitoring of the operational status of points of entry, internal mobility and travel restrictions and uploads the information to the IOM global Displacement Tracking Matrix. IOM also worked with the United Nations High Commissioner for Refugees to disseminate COVID-19 risk communication materials to refugees, asylum-seekers and migrant returnees.

The office of the United Nations Resident Coordinator activated the United Nations Humanitarian Country Team to develop a platform to map partners’ support for the SPRP, identify gaps and key priorities, ensure equitable and fair access to services, especially for vulnerable populations, and exchange information to harmonize the assistance provided. A United Nations advisory paper on the immediate socioeconomic response to COVID-19 in Sri Lanka was developed by the wider United Nations country team and submitted to the Presidential Task Force in June under the leadership of the Resident Coordinator. WHO took the lead in developing the health pillar: protecting health systems and services during the crisis. For Sri Lanka, the first strategic priority is to sustain the health sector response to COVID-19 while ensuring health-system capacity to deliver essential services and build resilience against future shocks, with adequate and sustainable financing. This complements the other priorities on social protection, economic support, social cohesion, community resilience and macroeconomic response for recovery.

11 Country-level coordination, planning, and monitoring; RCCE; surveillance, rapid response teams, and case investigation; points of entry, international travel and transport; national laboratories; IPC; case management; operational support and logistics; maintaining essential health services and systems. See: COVID-19 Strategic Preparedness and Response Plan: operational planning guidelines to support country preparedness and response. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/draft-operational-planning-guidance-for-un-country-teams, accessed 18 December 2020).

Ensuring the continuity of essential health services

Sri Lanka’s central, provincial and local governments ensured that essential health services continued despite the COVID-19 outbreak response and lockdown. The Government identified the routine and elective health services that could be delayed or relocated. It ensured that, across the country, essential medicines and medical supplies were available, mechanisms were in place to maintain the supply chain, and that by redistribution of staff and task-sharing, the health-care personnel had the capacity to provide care.

The Ministry of Health and WHO, along with other professional bodies, developed guidelines on the provision of essential and emergency care for pregnant, postpartum women and newborn babies, while protecting them and health-care workers from COVID-19 infection. With COVID-19 transmission and lockdown in mid-March, immunization activities for children and pregnant women were suspended, except for BCG vaccination. As cases across the country stabilized in mid-April, the Ministry of Health released guidelines for the resumption of immunization services for all children and pregnant women towards 20 April. The immunization gap was completely covered by mid-May through extended clinic hours and extra clinic days.

Nutrition supplements for pregnant mothers and children under 5 years were continuously delivered to targeted households, using health as well as non-health field workers.

In an attempt to maintain the delivery of essential health services in the pandemic situation, the Ministry of Health has issued guidelines to maintain malaria testing and surveillance, sputum testing for tuberculosis and supply of antiretroviral drugs for people with HIV/AIDS. This year, 25 444 suspected dengue cases were reported to the Epidemiology Unit from around the island. The Ministry of Health has developed a special instruction on triage for dengue fever patients.

During the eight-week lockdown, noncommunicable disease clinics were closed. The Government guaranteed that people with chronic diseases would have a sufficient supply of medicines and initiated a system in which medicines were prepared by pharmacists at hospitals and the refill packages were delivered using the country’s postal service. For people who use private-sector health facilities, the Ministry of Health worked with the Pharmacy Association and the Pharmaceutical Organization to develop a system where patients could order their drugs online and have them delivered to their homes by online suppliers. In April, people with diabetes began receiving home deliveries of insulin. For the health staff to consistently monitor the condition of people with noncommunicable diseases, field health staff measure their blood pressure and blood sugar at the doorstep of their houses.

For people who need continuous medication for their existing mental health conditions, the same medicine delivery mechanism was used as for noncommunicable diseases. The Directorate of Mental Health deployed the community mental health staff to keep providing home-based care as required, while adhering to the public health preventive measures.

The unprecedented situation caused by the COVID-19 pandemic could have implications for people’s mental health. Recognizing this, in mid-March, WHO and the Directorate of Mental Health worked with the mass media to address the issue, promote the importance of psychological well-being and raise awareness of the availability of mental health services.
Ongoing response to the COVID-19 pandemic

In contrast to numerous countries around the world which have witnessed the doubling of infections in a few days, it took Sri Lanka 92 days to report 600 cases. As of 23 August 2020, Sri Lanka has had 2947 COVID-19 cases. The case fatality ratio is 0.40% (12 deaths) and the recovery rate is 95.2%. There has been no patient under intensive care for the last four consecutive weeks, except for one person who passed away on 23 August 2020. The statistics reflect the country’s ability to respond to an epidemic, saving lives and protecting its population. The proactive and rapid preventive strategies that were implemented and the combined public health approach, with strong leadership and a whole-of-society approach, have helped Sri Lanka to achieve the position it is in today.

Key to this success is Sri Lanka’s health-system performance and the Government’s commitment to providing free health care for everyone. Its legacy of achieving good health at low cost through early investments in health has been crucial in its effective response to the COVID-19 situation. It is known that countries that are closer to achieving universal health coverage, including Sri Lanka, have been able to mobilize existing infrastructure and systems to implement community-level disease prevention and control measures such as risk communication, testing, contact-tracing and isolation. Moreover, citizens infected with COVID-19 have been able to seek treatment without further economic losses.

The maintenance of other essential health services at an optimum level despite the pandemic is facilitated by the extensive network of health facilities available within 3 km of every household in the whole island. This is supported by a strong public health system, a committed frontline workforce and the Sri Lankan people’s good health-seeking behaviour and high literacy rate, at 98.78%.

Moving into the post-lockdown phase, Sri Lanka has started to reopen its economy and position itself to reopen its borders in the coming months. To do this,

Mental health and psychosocial activities of the Directorate of Mental Health with WHO support

- Ministry of Health helpline for case-to-case support and comfort for frontline staff and their families
- Guidelines for health administrators to promote the mental well-being of health-care workers, in collaboration with the Sri Lanka College of Psychiatrists
- Training of quarantine centre staff on providing mental and psychosocial support to the people in their facilities
- Support people facing withdrawal due to reduced access to tobacco, alcohol and other support substances, and those who want to quit drug use
- Developed a psychosocial well-being package for schools, including a teacher guideline covering anxiety management, practical steps for stress management and development of positive coping skills for students, in collaboration with the Ministry of Education

“The pandemic highlights the urgent need for all countries to invest in strong health systems and primary health care as the best defence against outbreaks like COVID-19 and against the many other health threats that people around the world face every day”

Dr Tedros Adhanom Ghebreyesus, Director-General, WHO

Resuming economic activity in the “new normal”. Photo credit: United Nations Sri Lanka
the country has embarked on a social marketing campaign to encourage people to protect themselves and others by continuing to implement the same preventive measures, such as physical distancing, regular handwashing and wearing of facemask. The Ministry of Health has also released guidelines for Government offices and other settings as normal activities gradually resume.

Adherence to public health and social measures was tested during the recent general election in the country. The Ministry of Health banned large public gatherings, but allowed campaigning to take place after developing extensive election guidelines. The election was successfully conducted island-wide without any amplifying event. It is one of Sri Lanka’s biggest success stories and illustrates just how far the country has come in controlling this deadly virus.

The Government is also committed to continuing its efforts in finding, isolating, testing and treating cases, as well as tracing and quarantining contacts. Services targeted at vulnerable populations, especially pregnant mothers, newborn babies and people with communicable and chronic diseases, are prioritized to ensure uninterrupted access at the time of need.

Sri Lanka has successfully controlled the COVID-19 epidemic in the country through its earlier investment in a robust and resilient health system. It is important to pay critical attention to protecting the gains in this area and continue to explore opportunities to strengthen further its future preparedness to deal with future epidemics and public health emergencies such as natural disasters, dengue and other emerging threats. With strong political leadership, committed and capacitated health workers, empowered communities and coordinated support of development partners, the country can withstand and be better prepared for future health emergencies.
ZIMBABWE

Key areas:

Whole-of-government leadership complemented by strong engagement of partners and stakeholders underpins the national COVID-19 response

The current economic, social and health-sector context

Zimbabwe reported its first COVID-19 case on 20 March 2020, a case imported from the United Kingdom. The subsequent spread of the virus until mid-July was mainly due to transmission from such imported cases (people arriving from countries with widespread community transmission). However, from the second half of July onwards, Zimbabwe experienced an escalation in the rate of local transmission. As of 7 September 2020, Zimbabwe has reported 7298 confirmed cases and 210 deaths, with 58% of cases occurring in its two largest cities – the capital Harare and Bulawayo – and locally transmitted cases accounting for 82% of the total. The case fatality rate stands at 2.9%, while the national recovery rate is currently 75%.

Even before the onset of the COVID-19 pandemic, Zimbabwe was experiencing climatic and economic shocks that contributed to increasing humanitarian needs within its borders.1 The country experienced devastating droughts in 2018 and 2019; furthermore, it was struck by Cyclone Idai in March 2019, together with Malawi and Mozambique. The effects of these natural disasters have been aggravated by macroeconomic problems, including hyperinflation, and by April 2020 it was estimated that 7 million people living in both rural and urban areas across the country required humanitarian assistance, including food aid.

Despite these challenges, Zimbabwe has made considerable headway on key components of the COVID-19 response – notably on planning and coordination, laboratory testing, disease surveillance and contact tracing. This has been the result of strong commitment at the highest political level, with President Emmerson Mnangagwa demonstrating vigorous leadership. In line with WHO guidance, a whole-of-government, whole-of-society response, overseen by an interministerial task force, was launched. Well-coordinated technical, financial and logistic support from international partners, the private sector and civil society complemented the determined action taken by the Government.

WHO’s focus has been on supporting the Government and partners to adapt global COVID-19 frameworks, guidance and protocols to the Zimbabwean context; coordinating with partners from the United Nations (UN) system, bilateral agencies, international financing institutions, national and international nongovernmental organizations, civil society and academia to support the national COVID-19 response plan; and providing, together with partners, assistance in specific technical areas (such as laboratory testing, surveillance and infection prevention and control (IPC)). This assistance has involved working at all levels of the national health system – from the national to the provincial and district levels.

Early action to establish a COVID-19 management structure and plan the response

In early February 2020, soon after WHO declared the COVID-19 outbreak a public health emergency of international concern, the Government organized an interministerial meeting on COVID-19 preparedness. The outcomes of this meeting fed into the development of a national COVID-19 preparedness and response plan. In February, too, WHO supported the Ministry of Health and Child Care in conducting a review of: (a) the capacity of facilities at the main points of entry and hospitals to handle COVID-19 cases; (b) the country’s preparedness and response plan for pandemic influenza; and (c) the recommendations from the independent external evaluation conducted in 2018 of Zimbabwe’s core capacities for implementation of the International Health Regulations (2005) and from the simulation exercises performed in 2019 to strengthen those capacities. The conclusions of these reviews also informed the finalization of the national COVID-19 preparedness and response plan.

The finalized plan was launched by the President on 19 March 2020, two days after he had declared a national state of disaster and a day before the first COVID-19 case was detected in the country. On 30 March, a 21 day nationwide lockdown was imposed, which was subsequently extended by 14 days. (Night time curfews were later implemented in July, in response to a spike in cases.) The President swiftly established an interministerial task force, chaired by one of the country’s two Vice Presidents, to coordinate the COVID-19 response on the basis of a whole-of-government approach. In May 2020, the position of Chief Coordinator of the National COVID-19 Response was established within the Office of the President and Cabinet.

The public health response to COVID-19 in Zimbabwe was structured around nine pillars, each corresponding to the technical areas outlined in the national response plan (such as national laboratories, surveillance, risk communication and IPC). The activities undertaken under these pillars included: enhancing surveillance and activating provincial and district-level rapid response teams (RRTs); identifying and refurbishing isolation and treatment facilities for COVID-19; setting up a network of quarantine centres; scaling up laboratory testing; and implementing a risk communication strategy. Each pillar, headed by a senior government official, included representatives from the Ministry of Health and Child Care and other ministries, bilateral and multilateral partner agencies, civil society, the private sector and academia. WHO was represented in all nine pillars. The entities implementing the activities under each pillar reported to the weekly coordination meeting chaired by the Permanent Secretary of the Ministry of Health and Child Care. A detailed three-month operational plan was later developed (in May), with the support of WHO and other partners.

Building laboratory testing capacity

In a relatively short period of time, Zimbabwe has been able to expand the number of laboratories conducting COVID-19 testing from one – the National Microbiology Reference Laboratory (NMRL) – to 33 by early August. This rapid expansion in capacity was made possible by the national response plan’s strong laboratory pillar, headed by a scientist from the Ministry of Health and Child Care; effective collaboration between the partners on providing technical, financial and material support; and the fact that many of the laboratories already had the machines and expertise in place to conduct polymerase chain reaction and GeneXpert testing, which they had been doing for HIV and tuberculosis.
COVID-19 testing began at the NMRL in February on a small scale (five tests per day), after one laboratory technician had been duly trained in South Africa. Once the laboratory pillar under the national response plan was established in early March, the Ministry of Health and Child Care and the NMRL, together with WHO and the United States Centers for Disease Control and Prevention (CDC), conducted an assessment of the country's public and private laboratories to determine their readiness to perform COVID-19 testing. An international WHO consultant worked very closely with the Ministry and partners to develop a national COVID-19 testing strategy. This informed subsequent training and the scaling up of testing, which was done in phases using a tier-based approach, starting with the NMRL (tier 1); five other national or academic laboratories, including the National Tuberculosis Reference Laboratory and the National Virology Laboratory (tier 2); and, finally, provincial laboratories (tier 3).

Using testing guidelines and protocols developed with WHO and CDC assistance, the laboratory training programme began in March for seven scientists at the NMRL, facilitated by WHO and the CDC. Training was then provided to 14 staff from the five laboratories in the second tier, again facilitated by WHO and the CDC, and by April these laboratories were all supporting the NMRL with COVID-19 testing. From May onwards, the training was expanded, with the assistance of the Clinton Health Access Initiative, to eventually 22 provincial laboratories – mainly on the GeneXpert machines already in use there.

Several private sector laboratories were also approved for COVID-19 testing, following assessment visits, training and the conclusion of agreements with the Government (facilitated by WHO), whereby they committed themselves to adhere to the national testing protocols and to report their test results daily using the government reporting system. A total of 33 public and private laboratories are now capable of COVID-19 testing, and between 1000 and 1600 tests are being conducted per day, with a priority on testing those returning from other countries, patients newly admitted to hospital, those experiencing symptoms and the contacts of cases. The country has not yet reached its goal of performing 2000 tests a day, owing to gaps in the collection of samples from the target groups and also supply chain issues. WHO, together with other partners, continues to support the laboratories, conducting supervisory and training visits to all provinces and helping to ensure timely and accurate reporting of test results.

Enabling the detection, tracking and real-time reporting of COVID-19 cases

While COVID-19 surveillance varies in quality across the country, several provinces have made excellent progress in case detection and contact tracing, with ongoing technical support provided by WHO. The Country Office worked with the Ministry of Health and Child Care at the national level to develop COVID-19 specific surveillance tools (such as forms for case investigation, contact line listing and contact monitoring), and helped to train the provincial RRTs in COVID-19 surveillance. These in turn trained district RRTs as part of a cascade training strategy.

In well-performing provinces where WHO has provided support, including Masvingo and Mashonaland East, the RRTs actively investigate suspected cases who have been identified in local communities (for example, through rumours), at points of entry and at health facilities; collect a specimen from each case for laboratory testing; and complete an electronic case investigation form, which includes information on the case’s close contacts. They are supported by a network of environmental health technicians – the backbone of the surveillance system at the local level – who carry out much of the tracing and follow up of contacts. Effective contact tracing practices in
provinces such as Mashonaland East have led to the identification of the majority of confirmed COVID-19 cases in these areas (see box).

The advances in surveillance and contact tracing in these provinces have been the result of on-the-job training, mentorship and supportive supervision provided jointly by the Ministry of Health and Child Care and WHO through field visits. In Masvingo Province, for example, a joint team from the Ministry and WHO worked side by side with local RRTs in six districts to collect information missing from case investigation forms and initiate contact tracing, even visiting the homes of identified cases in some instances. Similar on-the-job training took place at an isolation centre in Mashonaland East Province, whose staff previously were completely unfamiliar with the case investigation process or forms.

Contact tracing in Mashonaland East Province: an example of best practices

Once a case is confirmed at the provincial laboratory and a case investigation form filled in, which includes information on close contacts, a team made up mainly of environmental health technicians undertakes home visits to the contacts. The team asks them about symptoms, checks their temperature and gives them instructions on quarantining for 14 days, mainly in their homes. A clinician from the relevant district’s rapid response team collects a specimen from the contacts for testing if asymptomatic, and the contact tracers conduct follow-up home visits every day to check for symptoms and ensure that the contacts are quarantining safely. It is always the same team that conducts the follow up visits during the entire quarantine period so as to build trust and establish a rapport with the contacts. Data from the initial and follow-up visits are entered electronically on an Open Data Kit (ODK) platform using tablets and sent to databases at the provincial and then national level.

From the end of March to 2 August 2020, the contact tracers in the province had visited 916 contacts and managed to collect specimens from, and follow up, around 80% of them for the entire 14 day quarantine period. The fact that only around 20% of contacts were lost to follow-up can be attributed to the involvement of community leaders, who helped to educate residents about contact tracing and its importance in controlling the outbreak, as well as to the diligence of the contact tracing teams.

Of the 172 cases confirmed over the past four months in the province, 94 (or 55%) were found through the contact tracing process.

Apart from the provincial and district-level response activities, WHO has worked closely with the Ministry of Health and Child Care on compiling and analysing surveillance data collected from each province and producing daily and weekly situation reports. In addition to reporting the total number of cases and deaths by province – both new and cumulative – the reports break down cases and deaths by sex, age and type of transmission (imported vs. local). They also include incidence and mortality rates disaggregated by location, test positivity rates and other information that can guide actions and policy.
Continuing challenges and the way forward

The Government and partners, including WHO, need to maintain the positive momentum and continue to tackle existing and new challenges. The clear leadership provided by the interministerial and provincial task forces on COVID-19, along with other intersectoral coordination committees, should be preserved. Partnerships should be expanded at all levels to include more community-based civil society organizations and to make full use of the skills of those who have completed the various training programmes. More operational resources for the provinces and districts need to be mobilized. There is also a need for greater focus on curtailing local transmission in the high risk provinces of Harare, Bulawayo, Matabeleland South, Midlands and Manicaland. This would involve strengthening coordination, partnerships, operational planning (including budgeting), data analysis to inform the response, and documentation. Provincial and national intra action reviews of the COVID-19 response are urgently required. WHO can provide guidance on conducting such reviews, for which powerful tools have recently been developed.
ETHIOPIA

Key areas:

Mounting an effective COVID-19 response while maintaining essential health services

WHO identified Ethiopia in January as one of 13 African countries to prioritize for preparedness for COVID-19 due to its 35 direct flights per week to China and its status as a major transportation hub in Africa, with the international airport in Addis Ababa the third busiest on the continent. Several other factors and conditions in the country also put Ethiopia at increased risk of a widespread COVID-19 outbreak that could overwhelm the health system’s ability to respond sufficiently. The country currently has more than 2 million internally displaced persons (IDPs) and around 770,000 refugees and asylum seekers – making it host to one of the largest refugee populations in Africa – living mainly in collection centres and camps under crowded conditions that are ideal for spreading the virus. Ethiopia has also been experiencing numerous health emergencies that, along with a significant shortage of health workers, put further strain on the health care system and its ability to respond to the COVID-19 pandemic. These emergencies include a series of measles outbreaks, a cholera outbreak in a remote southern part of the country, and an outbreak of vaccine-derived polio virus type 2 in several regions which has caused 32 cases of paralysis since it began in 2019.

Nonetheless, this country of 110 million people – the second largest in Africa – has been able to mount an early and comprehensive response to COVID-19, with technical and financial support from WHO and many other partners. This response has been characterized by decisive, coordinated actions involving multiple sectors of the Government, and by a major emphasis on maintaining essential health services and programmes while also combating the outbreak.

Since the first case of the disease was confirmed on 13 March 2020, Ethiopia had reported nearly 78,000 laboratory-confirmed cases by 4 October – around half of them in Addis Ababa – and 1,222 deaths. This translates to a relatively modest rate of 11 deaths per 1 million population. The number of new reported cases per day declined from 1,100-1,800 at the peak of the outbreak in mid- to late August to around 600-880 in the second half of September.

WHO has been a major partner to the Government in preparing for and responding to this pandemic, supporting all major components of the response. These range from conducting assessments and developing preparedness and response plans to enhancing screening and safety procedures at airports and other points of entry; establishing and scaling up COVID-19 laboratory testing; enhancing surveillance and contact tracing; strengthening infection prevention and control (IPC) and case management of COVID-19; and ensuring the continuity of essential health services. They also included a wide-ranging risk communication and community engagement campaign that, among other things, has involved the sensitization of a million religious leaders, personnel from thousands of hotels and restaurants, and IDPs in 95 collection centres. In this brief case study we highlight only some of the more noteworthy areas of the response and WHO’s role in supporting them.
Early and quick actions to prepare for COVID-19

Realizing the potentially devastating impact that a major COVID-19 outbreak could have on the country’s health system and socioeconomic development, and drawing on the expertise and systems it had put in place in strengthening its International Health Regulations core capacities and in preparing for Ebola and pandemic influenza outbreaks, the Government set in motion a series of rapid actions to prepare for the importation of the virus and limit its spread soon after the first reports of the disease came out of China. WHO and the Federal Ministry of Health (MOH) conducted a COVID-19 rapid risk assessment in late January, which determined Ethiopia to be at “very high risk” of an outbreak due to its air links with China and the limited response capacity of the health system.

On the day the assessment report was issued (27 January), the Ethiopian Public Health Institute (EPHI) – a technical agency under the MOH responsible for managing public health emergencies – activated its Public Health Emergency Operations Centre (PHEOC) to manage the day-to-day operations to prepare for and respond to the outbreak. This was three days before WHO declared COVID-19 a public health emergency of international concern and before any cases were reported in the country, which normally occurs before the PHEOC is activated. A Public Health Emergency Task Force, led by the Minister of Health, was also established to guide and oversee the health response to COVID-19.

Also at this time the Ministry of Health, with WHO support, prepared a three-month preparedness and response plan for the novel coronavirus, based on an assessment of the capacity and needs (personnel, infrastructure, equipment and supplies) for each component of the response. This initial plan, published on 1 February, detailed the actions and budget requirements for Scenarios 1 (no confirmed cases yet in-country) and 2 (limited, low-level transmission). The plan focused on strengthening early detection of the disease (through enhanced surveillance and by establishing local laboratory testing capacity), increasing the capacity to rapidly isolate and appropriately care for cases, increasing awareness and informed local decision-making through risk communication and community engagement, and strengthening leadership and coordination.
By early February, the number of flights from China had been reduced and a strict passenger-screening protocol was introduced at the Addis Ababa Bole International Airport and other points of entry. WHO worked closely with the PHEOC to implement safety measures at the airport in Addis Ababa and raise awareness among passengers and employees on ways to minimize their risk. These activities included preparing informational materials for distribution on aircraft and in the airport, conducting training for airport ground personnel and 1500 Ethiopian Airline crew members about the disease and safety precautions, and building a temporary isolation facility at the airport for suspected cases.

It was another month and a half before the first case of COVID-19 was confirmed (on 13 March). This led to the establishment of a National Ministerial Committee set up by the Prime Minister to lead and coordinate the Government’s multisectoral response along with parallel multisectoral task forces (or “emergency coordination centres”) at the regional and district levels. Within two weeks after confirmation of the first case, a series of measures to contain the virus was put in place, including the closure of schools, sporting events and public gatherings; the suspension of Ethiopian Airlines flights, initially to 30 countries and then to 80; a mandatory 14-day quarantine for all persons entering the country; and the closing of all land borders. A national emergency was declared in early April but the Government never imposed a nationwide lockdown.

The Ministry of Health, again with WHO and other partner assistance, prepared a second three-month COVID-19 plan, this time under Scenario 3 (an expanded outbreak), although only 12 cases had been confirmed in the country by the time the plan was finalized in late March. This plan, which called for scaling up and intensifying response activities, was based on modelling conducted by a British university with input from the MOH, EPHI and multiple partners (including the WHO country and regional offices), to estimate the magnitude of the outbreak under different assumptions and the consequent needs for facilities, beds, equipment, supplies and human resources.

Ramping up laboratory testing for COVID-19

Laboratory testing for the SARS-COV2 virus that causes COVID-19 began in Ethiopia on 7 February, after two scientists from the National Influenza Laboratory at the EPHI returned from training in COVID-19 testing procedures at the Pasteur Institute in Dakar, Senegal, supported and arranged by WHO and the Africa CDC. These scientists, in turn, became master trainers for others in this Laboratory and later in other laboratories. WHO helped to adapt global laboratory guidelines for Ethiopia, supplied the initial reagents and test kits to this Laboratory, provided hands-on mentoring by a laboratory scientist from the Country Office, and helped to institute a quality control system, including sending random samples to the National Institute for Infectious Diseases in South Africa for confirmation.

By March, the MOH recognized the need to expand testing to other laboratories in Addis Ababa and throughout the country to meet anticipated demand. This expansion in COVID-19 testing began with three other national laboratories (bacteriology, malaria and HIV) within the EPHI and progressed to additional laboratories in Addis Ababa and beyond. WHO’s support was critical in this expansion, and included helping to identify and assess laboratories capable of COVID-19 testing (using a WHO laboratory assessment tool), developing a laboratory training package, and taking part in the training and supportive supervision (with US CDC) of technicians in laboratories throughout the country.
The expansion of COVID-19 testing occurred relatively rapidly. While only the National Influenza Laboratory was conducting testing by mid-March – with a capacity of around 200 tests per day – by May, when the interim national laboratory strategy was released, 19 laboratories were conducting more than 5000 tests daily, and by mid-July 45 laboratories were involved. By September, 52 laboratories were conducting PCR testing for COVID-19, including national reference laboratories, regional public health laboratories, university laboratories, and research institutes, with a combined capacity of more than 20 000 tests per day. The country thus surpassed the targets it set in the interim laboratory strategy of 50 laboratories with a total capacity of 15 000 tests per day.

While there have been issues with the supply chain for test reagents and other consumables, this expansion in laboratory testing made it possible for the Government to implement the month-long ComBAT strategy in August to accelerate the detection and testing of suspected cases of COVID-19 as well as other response activities (see box). The current capacity has also made it possible for the Government to test all those who are required to be tested, as per the laboratory strategy, including all suspected cases, people with respiratory illnesses, the contacts of confirmed cases, all people in quarantine at the end of the period, and health care workers who have been exposed. As of 6 October more than 1.3 million tests for the SARS-COV2 virus had been performed nationally.

To ensure an adequate and steady supply of COVID-19 test kits and reduce the country’s dependence on foreign suppliers, Ethiopia opened a facility in mid-September to produce up to 10 million test kits per year in partnership with a Chinese company.

Ensuring sufficient capacity to manage COVID-19 patients and those potentially exposed

Augmenting health facilities to handle a surge in demand

The Government realized early on that health facilities were not adequately prepared to handle a COVID-19 outbreak on the scale predicted by the models, and that current bed capacity was inadequate. As an initial step, a subgroup of the case management pillar in the PHEOC’s incident management structure mapped out all of the country’s hospitals and bed capacity to determine the gaps in coverage. The MOH decided to designate certain hospitals as COVID-19 treatment centres to enable other health facilities to continue to provide regular health services and prevent them from being overwhelmed with COVID-19 patients. In an effort to reduce the burden on the country’s overstretched and understaffed health workforce, a new category of isolation centres was created for people testing positive for COVID-19 but who were asymptomatic. These isolation centres – typically university dormitories or sections of a regular hospital – do not provide treatment, but rather monitor patients regularly for symptoms, and send those who develop even mild symptoms to a COVID-19 treatment facility.
Responding to the COVID-19 pandemic: 
WHO’s action in countries, territories and areas, 2020

As of early October the Government had established and equipped 79 COVID-19 treatment centres containing nearly 14 000 beds, including a temporary 200-bed hospital in the largest public hall in Addis Ababa (Millennium Hall), as well as 345 isolation centres containing a total of more than 17 000 beds. This bed capacity is sufficient to meet the current demand for COVID-19 care, especially since the strategy of home-based isolation and care for mild and asymptomatic cases was introduced in August (described below). However, the total number of ICU beds in the country – at 653 – remains inadequate.

The MOH also decided a little later to set up separate fever clinics in designated primary health care centres to screen and evaluate them for COVID-19, pretriaging and segregating them from the rest of the facility to avoid transmission to other (non-COVID-19) patients (see next section).

Another major challenge arose from the sudden influx of thousands of Ethiopians working in neighbouring countries and the Eastern Mediterranean Region who were forced to return home during the pandemic. These returnees were required to be quarantined for 14 days upon arrival and to be tested for the virus before being released. In response, the Government, with the Ministry of Peace taking the lead, and in coordination with the health and education ministries, established 157 quarantine centres containing more than 49 000 beds in border areas and across the country to accommodate the returnees as well as others requiring quarantine (e.g. close contacts of confirmed cases). These centres – established in school buildings, university dormitories and other public buildings – monitor the returnees for symptoms and provide basic health services, including mental health support (with guidance provided by a WHO mental health specialist). Between 1 April and 28 August, more than 27 700 migrant workers arrived in Ethiopia and were housed in these centres.

WHO has provided wide-ranging support to the Government in establishing the different types of facilities set up to respond to the outbreak, both at the national level and in each of the regions through region-based field coordinators and their teams, which have increased up to threefold in size through the deployment of staff repurposed for the response. This support has included helping to identify, assess the readiness of, equip and refurbish the treatment, isolation and quarantine centres; assisting with the training of their staff, as appropriate, in COVID-19 screening and case management, IPC and WASH practices, and data collection and management; and assisting with monitoring and evaluation of the facilities. In July, the MOH awarded the WHO Country Office a Certificate of Appreciation in recognition of its contribution in setting up the temporary hospital at Millennium Hall.

Deploying a surge of health workers for the outbreak

Setting up health facilities and beds to respond to the outbreak is not enough to ensure the adequate care of patients if there are not sufficient numbers of health care workers to care for them. Ethiopia has experienced a chronic shortage of health personnel for years, even with the reforms in the past two decades that created a new workforce of 42 000 community-based Health Extension Workers (HEWs) who provide door-to-door primary health care. Recognizing this potential bottleneck and the need to maintain other essential health services during this crisis, the MOH announced in February a national effort to recruit 45 000 health care workers of different categories to supplement the approximately 104 000 health professionals currently working in the public health sector. WHO assisted the MOH in forecasting the numbers of different types of workers needed, using a simulation tool to estimate the impact of the virus, and in determining where to send them (e.g. to areas with health worker shortages).
To date, more than 23,000 medical doctors, nurses, health extension workers and others — primarily retirees, trained volunteers, unemployed health workers and those from the private sector — have been hired and deployed to health facilities throughout the country to provide both COVID-19 and non-COVID-19 health services.

**A shift towards home-based isolation and care for asymptomatic and mild cases**

To further relieve the burden of COVID-19 on the health system, and in recognition that an estimated 90% of COVID-19 positive cases in Ethiopia are asymptomatic or mild, the Ministry of Health announced in August a major shift to home-based isolation and care (HBIC) for such cases. Under this strategy, COVID-19 patients who meet the eligibility criteria for home-based care are followed up daily by phone and weekly during home visits by a woreda-level (district-level) team of community health workers and volunteers. Those who develop symptoms are then evaluated by a rapid response team and sent to a health facility.

This major effort has involved developing a national HBIC implementation guide, based on WHO guidance; setting up a national COVID-19 HBIC coordination and support team, as well as parallel teams at the regional level; developing an M&E system; and conducting a communication campaign to inform the public about this policy change. WHO has been involved heavily in the planning and roll-out of this strategy, including supporting the development of the implementation guide, the training of rapid response teams and health workers at the regional level, and the development of HBIC performance indicators. Since implementation of this strategy began the end of August, more than 20,300 confirmed COVID-19 cases had been isolated and monitored at home by 5 October.

**An equal focus on controlling COVID-19 and maintaining essential health services and programmes**

From early on in the pandemic, the Ministry of Health has been aware of and concerned about the potential impact of COVID-19 on other essential health services and programmes. The National COVID-19 Task Force includes an essential health services coordinator, and the Ministry has monitored the utilization of health services and key health indicators since the beginning through detailed weekly reports generated by the DHIS2 system.

Once the first COVID-19 cases were confirmed in the country, health facilities began preparing for the outbreak, negatively affecting the availability of many essential health services. This led to a sharp decline in health care utilization in March and April, including outpatient and inpatient emergency visits.

In response, the MOH adjusted its strategy to include the continuity of essential health services as a key component of the COVID-19 outbreak response. In April the Ministry prepared an “Implementation Guide for Non-COVID-19 Essential Health Services in Ethiopia during the COVID-19 Pandemic”, which outlines the steps health facilities at all levels must take to ensure that the full range of essential health services continue, including safety protocols to prevent COVID-19 transmission. To ensure that COVID-19 activities (led by the EPHI) and essential health services (led by the MOH) are given equal emphasis under one chain of command, essential health service coordinators were added to the COVID-19 task forces from the regional level to the zonal and district levels.
The designation of COVID-specific hospitals – enabling other health facilities to focus exclusively on regular health services and helping ease the public’s fear of getting COVID-19 when seeking health care – was also critical to maintaining essential health services during this crisis, as was the surge in health workers described above. Messages were also communicated to the public about the Government’s efforts to make health facilities safe for patients to visit. Another means of ensuring patients’ safety, as mentioned above, was the establishment of separate fever clinics within designated primary health care centres to handle COVID-19 cases and keep them segregated from other patients. All patients are “pretriaged” before entering the health centres and those suspected of having COVID-19 are sent directly to the fever clinic.

As a result of the Government’s management of the COVID-19 outbreak and its priority in maintaining other health services and programmes, the MOH was able to conduct a mass measles vaccination campaign in July – despite a rise in COVID-19 incidence during this time. More than 14 million children aged from 9 to 59 months were vaccinated during the campaign, which was extended to prevent crowding at vaccination points and involved special precautionary measures (e.g. screening of all children for symptoms) to minimize COVID-19 transmission. A mass vaccination campaign in response to the vaccine-derived polio virus outbreak is also taking place in six regions, with Round 1 completed in late September.

The MOH has continued to closely monitor the population’s use of essential health services on a weekly basis, and, since March, has produced monthly monitoring reports with detailed data on trends in utilization of a range of maternal health, child health and disease prevention and control services. The results of these efforts have been promising. While the use of health services is still lower in some areas hit hardest by the epidemic, utilization rates for many services in the country overall have rebounded since May (Fig. 2) and in some cases, have exceeded the rates from a year earlier. For example, the percentage of infants fully immunized in June 2020 is 8% higher than in June 2019, and, after dropping in April, coverage of the first dose of measles vaccine recovered and is now 10% higher than in June of last year.

Fig. 2. Trends in the use of maternal health services before and during the COVID-19 outbreak
Through its essential health services pillar, which includes experts in maternal, neonatal and child health, immunization, and universal health coverage, WHO’s Incident Management Team supported many aspects of this effort and seconded a technical officer to the State Minister of Health’s office to assist with monitoring essential health services. WHO is now assisting the MOH in determining the resources needed to continue essential health services for the next nine months and in preparing a detailed operational plan and budget.

How WHO has provided effective and rapid support to Ethiopia in responding to the COVID-19 epidemic

The WHO Country Office moved early to assist the Government in preparing for and responding to COVID-19. It set up an Incident Management Team in January – nearly two months before any cases were confirmed in the country – to initially help the EPHI improve its readiness to handle a potential outbreak. The team eventually included more than 80 technical officers and support personnel, with seven technical experts provided by the African Regional Office (Fig. 3).

The Incident Management Team benefited from the experience that several of the technical officers had in responding to the Ebola outbreak in West Africa. This gave them a head start in providing strong technical support to the EPHI for the COVID-19 response, including, in some cases, preparing tools and protocols before such materials became available at the global level. Another critical factor in the Country Office’s support was the deployment of 12 field coordinators to each of the country’s regions, who provided on-the-ground support to the regional health bureaus on a continual basis and coordinated assistance from the team in Addis Ababa to the regions.

Fig. 3. Organogram of WHO/Ethiopia’s Incident Management Team for COVID-19
Concluding remarks

Ethiopia’s experience with the COVID-19 outbreak response highlights the importance of strong leadership, clear and comprehensive strategies, and strong community engagement as important tools in fighting a pandemic. Also key to the country’s response have been twice-monthly meetings to review the Government’s strategies, the epidemiological situation and trends in health service utilization, and the willingness and flexibility to make mid-course adjustments based on these reviews. The implementation guide for non-COVID-19 essential health services, for instance, was developed in response to a decline in the population’s use of regular health services, while the ComBAT strategy was a reaction to an increase in COVID-19 incidence and an anticipated further increase with upcoming holidays.

The country’s experience also underscores the fundamental importance of investing in IHR core capacities, public health and primary health care, as well as in laboratory and clinical management capacities to build health system resilience and improve preparedness for future events. Finally, strong and dedicated attention is needed to maintain the continuity of essential health services in order to prevent a reversal of the substantial gains in disease control that the country has made in recent years.

WHO’s role in preparing the UN country team for the COVID-19 pandemic

The WHO Country Office has played a leading role in assisting the UN community to adequately prepare for and protect its staff and their dependents from the impact of COVID-19. This has included the following activities:

**The UN/Ethiopia COVID-19 simulation exercise**

WHO served as the technical coordinator and supervisor for a COVID-19 simulation exercise held for the UN Country Team on 3 March 2020. The purpose of this table-top exercise, attended by 55 representatives from 20 UN agencies operating in the country, was to evaluate the current preparedness and response mechanisms of the UN system to manage a potential COVID-19 outbreak, identify weaknesses in these mechanisms, and strengthen its response systems and procedures. These included procedures for notifying the community about COVID-19 cases within its ranks, the management of suspected cases, lines of communication, and risk and media communication plans within the UN system. Key conclusions from the exercise included the need for individual agencies to prepare their own COVID-19 contingency and business continuity plans, and the urgent need to finalize and implement the UN Ethiopia COVID-19 contingency plan.

**UN Ethiopia COVID-19 contingency plan**

WHO contributed to the development of this plan and has a significant role in its implementation. The Country Office serves on all seven pillars delineated in the plan and has sole responsibility for the laboratories pillar. WHO is also responsible for developing and disseminating information on the current COVID-19 situation to the UN community on a regular basis, and – in collaboration with the UN Health Care Centre – in providing the UN with guidelines on travel advisories, reinforcing personal protection and hygiene guidelines, and implementing evacuation measures if and when needed.

**Training and informational sessions for the UN and international community**

The WHO Country Office organized numerous meetings and training and informational sessions for UN staff and the broader international aid community concerning COVID-19. These included town hall meetings with UN staff from more than 25 agencies to sensitize them on COVID-19; weekly COVID-19 sensitization and update meetings with the diplomatic community, donors and bilateral organizations, as well as for top management of the UN system; training of UN health personnel on COVID-19 case management, IPC, surveillance, laboratory diagnosis and risk communication; and training of UN security and cleaning staff on safety practices in the workplace.
GUATEMALA

Key areas:

Strengthening the public health system through collaboration among institutions and with partners during the COVID-19 pandemic

The Guatemalan Ministry of Public Health and Social Assistance (MoPHSA), with support from the World Health Organization (WHO) Pan American Health Organization (WHO Regional Office for the Americas) (PAHO/WHO), has invited all partners of the health sector to join the response to the COVID-19 pandemic. Thanks to collaboration among members of governmental and nongovernmental organizations, the private sector, civil society, international organizations and the media, innovative initiatives are being implemented, which are helping to strengthen one of the most vulnerable health systems in the region.

Guatemala and the challenges of the pandemic

Of the nearly 15 million Guatemalans, 40% self-identify as belonging to the Garifuna, Maya or Xinca ethnic groups. Despite the country being the largest economy in Central America, poverty affects almost 60% of the Guatemalan population, reaching 80% among indigenous and rural groups. Lack of access to quality primary health care (including water and sanitation), and chronic underfunding – with only 1.1% of gross domestic product (GDP) allocated to MoPHSA, and 54% of costs being out-of-pocket expenditures (the highest rate in the Central American region) – make it challenging for Guatemala to ensure that everyone can exercise their right to health, particularly in rural areas where the population is mainly indigenous. Chronic malnutrition (which affects almost 50% of children aged under 5 years), the double burden of disease¹ and the country’s high vulnerability to natural disasters represent important challenges as Guatemala addresses the COVID-19 pandemic.

Two important factors for PAHO/WHO’s provision of technical cooperation to the new health authorities were the start of a new government administration in January and a change in the team leading MoPHSA in June. On 13 March 2020, after confirmation of the first COVID-19 case in Guatemala, the country’s President, Dr Alejandro Giammattei – accompanied by the Cabinet of Ministers and the PAHO/WHO Representative – publicly announced the first measures of containment adopted in response to the emergency; these measures included physical distancing, restriction of mass events and limits to people’s mobility. Early uptake of these measures explains the slow spread of COVID-19 in the first 2 months in Guatemala. However, the impact of these early measures was reduced by weaknesses in the health system (especially with respect to primary care), coupled with the return to their communities of Guatemalans who had previously migrated to countries with high COVID-19 rates. By May and June 2020, the spread of COVID-19 had accelerated, with multiple simultaneous cases appearing, particularly in the department covering Guatemala City and its surrounding communities. This situation put enormous pressure on the health system, making it difficult to provide the necessary services. By the third week of September, the country recorded more than 90,000 cases and 3200 deaths.²

¹ The main causes of mortality in Guatemala are cardiovascular diseases, diabetes, acute respiratory infections and homicides.
² As of 30 September 2020, there were 92,413 cases and 3283 deaths.
To counter these challenges, Guatemala’s health sector has moved forward with a participative approach that includes its partners and other sectors. In its COVID-19 preparedness and response efforts (outlined below), and with the support of PAHO/WHO, Guatemala has demonstrated its capacity to respond to and strengthen its health system within the context of the pandemic.

Virtual information dashboard: timely access to epidemiological data for the population

Creation of an agile and accessible epidemiological information platform

Since the beginning of the emergency, the government has shared the progress of Guatemala’s response to the pandemic through media conferences, regular presidential speeches and daily infographics on social networks. These have been published by MoPHSA, and they show case numbers and distribution, as well as number of deaths due to COVID-19.

In April, MoPHSA identified the need to provide quick and efficient access to COVID-19 surveillance data, both to the population and to health professionals. Consequently, MoPHSA asked PAHO/WHO to create a tool that would optimize the use of epidemiologists while also paving a path towards better management of surveillance data in the country.

To support the health authorities on this matter, for a month, PAHO/WHO met frequently with MoPHSA’s Departments of Epidemiology and Management Information Systems in Health (SIGSA), and members of the Presidential Commission of COVID-19 (COPRECOVID). With support from bioinformatic data management specialists (who developed data-visualization tools), the COVID-19 Virtual Information Dashboard was created. The dashboard includes basic data viewing options (e.g. screened, confirmed and deceased cases), disaggregated by time (histogram – by date of issuance of results, sampling and onset of symptoms), location (map – by department and municipality) and demographics (by age and sex). Thanks to this tool, for the first time Guatemala’s population has access to complete and timely data on the epidemic’s situation.

MoPHSA and the PAHO/WHO Representative together launched the COVID-19 Virtual Information Dashboard at a media conference on 18 July 2020. Subsequently, the dashboard’s value as a source of information was presented through interviews and demonstrations to the media, reinforcing the benefits of this new way of presenting official data to the population. The high level of interest, with more than 100 000 visits to the site, left the dashboard inactive for 24 hours because the servers were overloaded – a problem that was solved promptly by the information technology (IT) technicians.

Virtual dashboard: how it works

The dashboard’s platform presents the data dynamically to all users, with the data being manually added from the databases of SIGSA and the Department of Epidemiology. The dashboard includes a “Last 24 hours” button, where users can review the data entered the previous day. It also provides assistance and tutorials for users, and allows users to download the COVID-19 database by municipality and date, to facilitate analyses.
The virtual dashboard is currently being optimized through daily data validation processes, which will provide information about health workers, symptoms of confirmed cases, chronic diseases of deceased cases, and data about indigenous communities and pregnant women. Also planned are automation of the information entry processes and the transfer of capacities from bioinformatics staff to MoPHSA personnel (including an intensive course to ensure continuity in the management of the site).

Key aspects of the success of this initiative are having the necessary skillset within the team in charge, being in constant communication with team members, and planning communication and education for the population. This progress in data management and wide dissemination of epidemiological information represents an important strengthening process of the COVID-19 response. The dashboard is also used by COPRECOVID for the implementation of the traffic light system (which represents the alert level by region of the country) of the pandemic situation, disaggregated by municipality.

Contact tracing: coordination between MoPHSA, the Municipality of Guatemala and international cooperation partners

COVID-19 in the capital city

More than half of Guatemala’s confirmed COVID-19 cases have been registered in the department of the country’s capital – a city that has about 3.5 million inhabitants and has high rates of violence, overcrowding and poverty in some areas. Despite strong efforts to track cases through home visits to confirmed contacts and provide medical care for confirmed cases, as the number of cases increased, there were not enough staff to support the population and contain transmission. Faced with this reality, a strategy for contact tracing and monitoring was an important part of MoPHSA’s national surveillance guidelines for COVID-19.

Following an increase in the diagnosis of simultaneous cases, MoPHSA and the Municipality of Guatemala – with the support of their partners – modified and adapted the protocol for management of diagnosed cases. For cases with mild and moderate symptoms, home quarantine was recommended because public hospitals were saturated. Given the limited reach and resources of the network of primary care services with respect to COVID-19 cases, most patients with mild symptoms were not seeking health care and remained at home without follow-up.

As a response, MoPHSA and the Municipality of Guatemala, with the support of PAHO/WHO, the United States (US) Centers for Disease Control and Prevention (CDC), and the US Agency for International Development (USAID) joined forces to implement a contact tracing and case follow-up pilot initiative.
Respiratory wellness centres to strengthen contact tracing

In this alliance, the Municipality of Guatemala proposed an initiative to open respiratory well-being centres (CBRs in Spanish) in strategic areas of the city. In the CBRs, a rapid antigen test is used to obtain an initial diagnosis. Clinical COVID-19 cases near the community are also identified (through virtual consultations and by referring moderate or severe cases to health services), and COVID-19 kits are presented to patients with mild symptoms, to support them in managing their symptoms at home.

The CBRs are connected with the Go.Data system – a PAHO/WHO platform that is managed in a call centre with contact tracers. The aims are: (1) to provide follow-up to COVID-19 cases identified in the CBR, and during their home quarantine; and (2) to identify, notify and monitor possible contacts of these cases.

In cooperation with the Municipality of Guatemala, two CBRs located in strategic areas in Guatemala City, and close to health centres, have begun a pilot phase to resume follow-up of cases and tracing of their contacts. An interdisciplinary team that includes contact tracers, medical personnel, social service personnel, epidemiologists and IT professionals enables the transfer of clinical data and phone numbers (collected during CBR visits) to the contact tracing team.

Whether through call centres or health centres, cases and contacts have access to medical personnel on a regular basis, to ask questions about their COVID-19 symptoms or other chronic illnesses. Cases and contacts can also be transferred to hospitals in a timely manner if symptoms worsen. They are also given access to other services such as social workers and psychologists. Contact tracers use Go.Data for the collection and visualization of the cases and to trace their contacts, thus strengthening COVID-19 surveillance.

MoPHSA developed a communication campaign to raise public awareness about the contact tracing strategy and the importance of quarantine. With the support of the PAHO/WHO, 15 contact tracers and supervisors were trained to perform follow-up calls to patients and contacts from the call centre headquarters within the Municipality of Guatemala. When needed, personnel from health centres directly follow up with confirmed COVID-19 cases.

PAHO/WHO has provided technical and financial support for the development of this strategy, for the monitoring of its implementation, and for the hiring of two contact tracer supervisors (an epidemiologist and
an informatician) who are exclusively dedicated to this initiative. In addition, computer equipment was donat-
ed to the two CBRs, to ensure optimal transfer of case notifications. For their part, the CDC and USAID have
provided financial and human resources, and technical support, which has contributed to the successful imple-
mentation of the strategy.

From 13 August to 24 September 2020, 730 COVID-19 cases (suspected or confirmed) were detected in the two
CBRs, including 85 confirmed through antigen testing. A total of 194 of their contacts have been followed up,
resulting in the detection of 18 secondary cases, which in turn has ensured that those cases receive the care they
need and are isolated as soon as possible.

The initiative has highlighted the difficulty of maintain-
ing quarantine measures in a country where 70% of the
population works in the informal sector. Nevertheless,
in 6 weeks of implementation, this project has made it possible to put in place the essential functions of
contact tracing and monitoring of cases that would not otherwise have been implemented successfully owing
to the weakness of primary health care. The call-centre system for the follow-up of contacts has been broad-
ly accepted by the population because it ensures a constant relationship between the individual and the
health sector. However, without the resources, equip-
ment and capacity-building, capturing notifications at a
larger scale would be a significant challenge.

It is hoped that this approach can be standardized in
health services. To ensure that the pilot project contrib-
utes to the control of the transmission of severe acute
respiratory syndrome coronavirus 2 (SARS-CoV-2) at
time when movement restrictions are being lifted,
efforts are being made to apply lessons learned within the National Strategy for Case Monitoring and Contact
Tracing established by MoPHSA. This integration and systematization of processes at the national level is neces-

sary to be able to follow up on COVID-19 cases, support them in their monitoring of symptoms and track their
contacts when cases eventually increase.

Laboratory diagnostics support

As of September 2020, PAHO/WHO has donated 620 896 tests for the laboratory diagnosis of SARS-CoV-2,
extraction reagents and enzyme kits necessary for the processing of the tests, and equipment for the pro-
cessing of molecular tests, to increase the diagnostic capacity of the National Health Laboratory. The country
has carried out 292 515 laboratory tests for the detection of SARS-CoV-2 using molecular methods and anti-
gen detection – of the total tests, 49% were polymerase chain reaction (PCR) and 51% were antigen tests.

Interprogrammatic visits to hospitals in Guatemala

Since April 2020, the Vice Ministry of Hospitals has coordinated a series of visits by interprogrammatic teams
(comprising the supervisor of the hospital and a delegate of MoPHSA Hospital Coordination) with PAHO/WHO
specialists from the technical units Health Service Systems, and Communicable and Non-communicable Diseases
Control. Visits have been made to 22 prioritized hospitals in 13 departments across the country, to assess the de-
gree of readiness of the service network with respect to infection prevention and control (IPC), water and sanita-
tion, and reorganization of health services for the response to the pandemic.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

To this end, PAHO/WHO has advised and supported the implementation of standards, guidelines, tools and protocols, and trained staff from the 22 hospitals to ensure adequate care for COVID-19 patients. This not only enables an improvement of local capacities, but also allows for the central level of MoPHSA to obtain comprehensive reports for their monitoring and improvement.

Reorganizing services for a better response

Among other actions, PAHO/WHO has provided support to hospital managers in assessing actions and functions using the Prehospital Emergency Medical System Readiness Checklist for COVID-19, enabling the 22 hospitals visited to expand their capacities by implementing triage and hospitalization in areas outside the hospital (e.g. outpatient clinic, laboratory or pharmacy). Others adapted tents or built temporary facilities. The intensive care units (ICUs) were also expanded with the acquisition of equipment (e.g. ventilators, monitors and oximeters), adaptation of operating rooms, and installation of air conditioning and appropriate electrical equipment.

The Government of Guatemala has also adapted five temporary hospitals that were able to calculate their human resource requirements (doctors, nurses and nursing assistants) according to the number of general beds or ICU beds using the tool Needs analysis for the pandemic. Thanks to this process, capacity was improved by more than 927 beds, of which 136 are for ICUs. Currently, the country has 2219 beds nationwide for the care of patients with COVID-19.

As a result, hospitals improved their enlistment capacity. Initially, the capacity was only 45%, but the enrolment level has now reached an average of more than 85% (noting that this is a dynamic figure).

PAHO/WHO has supported Guatemala with capacity-building and implementation of tools to plan and calculate the need for human resources, medicines, supplies and personal protective equipment (PPE) according to different scenarios of the pandemic and the capacity to expand services and to open new hospitals. The approach of productive management, efficiency and accountability is being implemented in 13 prioritized hospitals, to establish the costs of care in the different areas of the health service.
PAHO/WHO’s collaboration also includes training for health workers in the administrative area of hospitals on planning and reorganization, as well as the donation of PPE. During the pandemic, 33,759 disposable gowns, 3,819,726 surgical masks, 10,760 pairs of disposable gloves, 131,856 N95 respirators, 22,987 personal protective glasses and 129,400 plastic masks have been distributed in 45 hospitals and 29 health areas. The support has also included oxygen concentrators, the development of case management and sedation protocols, tents and portable sinks for the adaptation of triage and sampling areas, among others.

Water and sanitation to reduce health risks

The interprogrammatic team also carried out an assessment of the conditions of basic water, sanitation and hygiene services, to identify opportunities for improvement and to reduce health risks. Daily environmental cleaning and disinfection practices and the use of PPE were standardized, as was the use of PPE, water quality was improved and monitored, and residual chlorine meters were made available. Likewise, the preparation of disinfectant solutions in appropriate percentages according to the PAHO/WHO recommendations in the context of COVID-19 was improved in health facilities.

The evaluations made during these visits have supported MoPHSA to seek ways to assure the infrastructure necessary for the treatment of wastewater, a critical measure to reduce the health risks associated with infectious diseases. Through these evaluations, it is expected that the authorities will be able to estimate their investment, and prioritize their response to water and sanitation needs and facilitate the coverage of health services with quality, quantity, continuity and an acceptable cost.

Further, in response to the needs identified, PAHO/WHO has coordinated with MoPHSA 10 donations that include materials and equipment for transporting solid waste, residual chlorine and pH meters in water, and cleaning and disinfection materials.

Infection prevention and control

In the context of COVID-19, hospitals that do not implement IPC actions can become centres of contagion, endangering health personnel, and patients, and their families and communities. As part of the interprogrammatic team, two specialist nurses from PAHO/WHO assessed IPC indicators, trained 1000 health professionals on IPC in the context of COVID-19, and led practical exercises on the sequence for putting on and removing PPE.

As part of these visits, the work includes review of the pathway of a patient with respiratory symptoms, from their arrival at the hospital, passage through the triage area, detection, notification, sampling and hospitalization. The team also assessed the areas designated specifically for COVID-19 such as the triage, isolation and ICU areas. In coordination with the directors of the hospital, the team and the nurses identify possible risks such as exposure of patients in general wards.

MoPHSA, PAHO/WHO and staff from Guatemalan hospitals are working together to identify possible risks in the response to the COVID-19 emergency. Photo credit: WHO Guatemala
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Thanks to this collaborative work, a triage area was built (i.e. an area for sample collection with natural ventilation and a sink), and guides and flowcharts for IPC have been developed for the care of COVID-19 patients. Temporary areas for COVID-19 have also been readjusted following PAHO/WHO recommendations.

These hospital visits in Guatemala have also helped in the implementation of basic handwashing measures, given that the measures apply primarily to patient care, where human resources are the central axis that can expose patients to intrahospital infections. There is a similar situation with regard to the proper management of contaminated solid waste, in that hospitals need to improve their water, sanitation and hygiene equipment in the midst of this pandemic as an important part of IPC efforts. These actions are coupled with virtual training courses for health personnel; these courses were developed by PAHO/WHO in collaboration with MoPHSA, the Guatemalan Association of Infectious Diseases (AGEI) and the CDC at the beginning of the pandemic, and have been completed by 2000 people.

Preparing for the next few months

The response to the pandemic has revealed gaps in fundamental aspects of the development of public health, such as primary health care. The pandemic has also shown the need for an urgent response, to enable access to health care and universal health coverage leveraging on integrated health service networks as the cornerstone of quality primary health care.

The response also shows why sustained financing of the health sector until it reaches 6%, as recommended by PAHO/WHO, is a fundamental priority for the country. PAHO/WHO is providing technical support in these analyses. The PAHO/WHO Guatemala Office also began to implement a primary health care and nutrition project. Given the focus on comprehensive and integrated quality primary health care, the project will not only guarantee an adequate COVID-19 response in the communities but will also represent a positive response in other fundamental indicators, such as malnutrition and maternal mortality supported by the European Union.

Coordination of the response for the continuity of essential services

Since the first COVID-19 cases in the country, with the support of PAHO/WHO, MoPHSA has activated the Health Cluster within the framework of the Permanent Inter-Agency Standing Committee and the Humanitarian Country Team.

The Health Cluster – under the leadership of the Emergency Operations Center (EOC) of MoPHSA and with the co-leadership of PAHO/WHO – has organized six thematic subgroups in the areas of mental health, sexual and reproductive health (maternal and neonatal), communicable diseases (HIV, tuberculosis and malaria), gender and interculturality, risk communication and cadaver management, to create a forum for discussion and implement work plans to support the continuity of essential services. These efforts have achieved harmonization, synergy and mobilization of funds, and the integration of actions in an innovative and coordinated manner.

The implementation of this project, with its focus on a comprehensive and integrated quality primary health care, will guarantee not only an adequate response to COVID-19 in the communities but also a positive response in other fundamental indicators such as malnutrition and maternal mortality, supported by the European Union.
MONGOLIA

Key areas:  

Prompt action to protect the people

Although Mongolia shares over 4000 km of its borders with China, it has few COVID-19 cases, no local transmission and no deaths. Border closure and the resilience of Mongolians are the keys to the country's achievement in containing the disease.

Adopting global frameworks to accelerate preparedness

Close relations with neighbouring countries put Mongolia in a vulnerable position with regard to importation and transmission of COVID-19. Landlocked between China and the Russian Federation, Mongolia sends over 90% of its exports to China, resulting in extensive economic activity and mobility between the two countries. At the time of the emergence of COVID-19, approximately 10 000 Mongolians were pursuing higher education in various parts of China, and there were about 4000 Mongolian students in the Russian Federation,\(^1\) due to close relations.\(^2,3\) Mongolia also has a special relation with the Republic of Korea, which hosts the largest Mongolian diaspora in the world, with around 50 000 members.\(^4\) Some overseas Mongolians were eager to return home when the pandemic started, and some have done so. Despite the high risk from nearby countries,\(^5\) since the first case was detected in Mongolia on 10 March 2020, the country had only 315 confirmed cases of COVID-19 as of 8 October. There has been no fatality and no local transmission of COVID-19 in its 3.2 million population.

There are no short-cuts in planning preparedness. Building the system has required years of investment. Since 2007, the Government of Mongolia has demonstrated leadership and ownership in strengthening a resilient, sustainable health system, guided by the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED). Sustainable change is demonstrated in the capable public health workforce and in surveillance, laboratory, risk assessment and risk communication capacity. Domestic funding has been increased. A formal coordination mechanism for surveillance, risk assessment, risk communication and response to emerging infectious diseases and public health emergencies had a profound impact and now serves as the foundation of the Government response to COVID-19.

During the past 19 years, Mongolia’s health sector has evolved from one with only minimum capacity to a sustainable one with demonstrated system strengthening. Today, Mongolia has embraced the fact that health issues are the responsibility not only of the health sector but of the entire nation, involving all sectors. Health has changed from something to which people paid lip service to something to which the whole of society is wholly committed.

---

1. One-fourth of Mongolian students in Russia have returned to their home country. Montsame. 15 April 2020 (https://www.montsame.mn/en/read/222395).
COVID-19 has definitively proven to us that a whole-of-government, whole-of-society approach to health security is critical to protecting our people.

Mongolia has established a strong legal and regulatory framework to support implementation of the International Health Regulations (2005) (IHR). Building on the solid foundation of the past decade, the health sector has established a formal mechanism for coordinating health security threats. Mongolia’s preparedness to respond to different types of emergency in public health was evaluated in 2017 in a joint external evaluation, and Mongolia has been improving its capacity according to the recommendations and those from the APSED Technical Advisory Group. The IHR evaluation stimulated institutional policies, plans, procedures and linkages, which reduced duplication and facilitated better multisectoral communication, coordination and collaboration on preparedness and response to all types of public health emergency.

After issuance of the Sendai Framework for Disaster Risk Reduction 2015–2030,6 Mongolia amended its law on disaster protection and its budget allocation in February 2017 to ensure efficient multi-hazard, multisectoral disaster risk reduction. The disaster management system is responsive to humanitarian crises as well as health emergencies, with a formal coordination mechanism between the two platforms.

Quick early response

Mongolia took early action after receiving information on cases of pneumonia of unknown cause in China on 3 January 2020 through an IHR communication. The National Centre for Communicable Diseases started a risk assessment on 6 January, involving the Ministry of Health, the National Emergency Management Agency, the General Agency for State inspection and point-of-entry authorities. Surveillance, border control measures and screening of pneumonia patients were increased to detect COVID-19 cases as early as possible. Early detection, case finding and contact-tracing were intensified. The community was engaged and encouraged to practise health measures. Non-pharmaceutical interventions such as school closures and travel restrictions were implemented.

By 22 January, the Government had activated an inter-agency State Emergency Commission for an integrated Government response and to mobilize resources. The Parliament approved a law on action against the COVID-19 pandemic to reduce its impact on the economy and on society as a whole. Social distancing measures were instituted from 27 January.

Mongolia applied additional IHR measures, imposing travel restrictions on Chinese nationals and travellers from China from 2 February, and, on 26 February, the restriction was extended to four countries, with flights from Japan and the Republic of Korea cancelled. Flights through the Russian Federation were suspended from 2 March. All incoming travellers undergo 2–3 weeks of quarantine to prevent pre-symptomatic and asymptomatic transmission.

After 2 months of ramping up COVID-19 response capacity, the first person carrying the disease was detected on 10 March, a citizen returning to Mongolia on 2 March to work in southern Dornogovi Province who breached the 14-day self-quarantine. To prevent widespread transmission of COVID-19, the Government banned travel

---

6 The international guide for countries in developing capacity for disaster risk reduction
between cities until 16 March. Quarantine was strictly applied for all people entering Mongolia, and, by 2 weeks after detection of the first case, Mongolia had quarantined 2034 people.

Working closely with international partners to curb COVID-19 transmission

The Government is working with WHO, which is providing scientific information and technical advice, guiding the country in navigating the unprecedented situation. In the early phase of the response, in January, WHO activated a health cluster to ensure a coordinated response and mobilize additional resources. By mid-September 2020, the health cluster had mobilized more than US$ 400 million to build the preparedness and response capacity of the country.

UNICEF, the US Agency for International Development and the Mongolian Red Cross Society sent supplies such as soap, hand sanitizer and disinfectant to 67 quarantine centres across Mongolia.

WHO shared detailed information about COVID-19, and convened United Nations agencies and international partners to support Mongolia in reducing the risk of COVID-19. WHO leads the United Nations Country Team in planning the public health response, assisting the United Nations Resident Coordinator in coordinating the State Emergency Commission with the Prime Minister. The United Nations launched the COVID-19 Multi-Partner Trust Fund to further strengthen national capacity to suppress transmission and maintain essential services.

WHO provided advice for the health sector in Mongolia's proposal for support from the United Nations framework for the immediate socio-economic response to COVID-19. As the border control and travel bans are significantly affecting the country's economy, the United Nations Country Team is providing support to the Government according to the estimated economic impact on the GDP, which contracted by 9.7% in the first 6 months of 2020.7 Within the United Nations Country Team, the World Bank has allocated US$ 26.9 million to the Mongolia COVID-19 emergency response, and the Asian Development Bank redirected US$ 1.4 million from an existing loan to procure essential medical equipment in February and approved US$ 30 million in financing for the health sector in May to strengthen Mongolia's COVID-19 response.

Building on the existing system to contain a new disease efficiently

To ensure timely interventions to contain COVID-19, Mongolia made the necessary adjustments to the existing system. A risk assessment for the new coronavirus as early as January was conducted with the standardized tool used by multisectoral stakeholders for all types of public health event. The National Emergency Response Plan was revised, with reference to the WHO Western Pacific Regional Action Plan for the response to large-scale community outbreaks.

To strengthen local capacity for surveillance and case detection, Mongolia deployed 90 alumni of the Field Epidemiology Training Programme to train and mentor subnational and local personnel. Rapid response teams were extended from two teams per province to 20 multisectoral teams per province, with the incident management system structure.

Through a regional virology laboratory network, the National Centre for Communicable Diseases extended its laboratory capacity to eight provinces, including four regional diagnostic and treatment centres. The National

---

Centre for Maternal and Child Health and the National Centre for Zoonotic Diseases also developed COVID-19 laboratory testing capacity.

**Box: Multi-source surveillance**

COVID-19 is exposing the weaknesses of countries’ health systems. It is also creating opportunities for making improvements, as the dire situation has brought all sectors together to share data for Government decision-making. The Ministry of Health is using the demand to accelerate development of a multisource data system for public health measures.

During the SARS outbreak in 2003, data relevant to Mongolia’s public health was paper-based and collected monthly. Guided by APSED, Mongolia developed an early warning and response surveillance system and introduced an event-based surveillance system in 2010, which was extended beyond the health sector in 2017 to collect and analyse information from emergency management, inspection, points of entry and veterinary, food safety and environmental sectors. Multisource surveillance has improved during COVID-19, with the use of real-time digital technology and new sources of information. Data are collected from hospitals, hotlines, points of entry, the armed forces, the police and the intelligence agency. Data include human resources, medical supplies, movement of health supplies, health financing, school absenteeism, pharmaceutical sales and socio-economic issues.

Compilation, synthesis and analysis of multiple sources of data allows Mongolia to assess the situation nationally and in the provinces more precisely in order to make evidence-based decisions for controlling COVID-19, including implementation and relaxation of non-pharmaceutical interventions.

**Putting people at the centre of the COVID-19 response**

Mongolia increased risk communication as early as January. Government officials have consistently and transparently communicated with the public, building their trust and gaining their support. Businesses have remained open, except those in which physical distancing is difficult. The Government has taken a whole-of-society approach. Pro-active risk communication and active listening on dedicated hotlines, with regular feedback, started early in the outbreak. A critical aspect of the COVID-19 risk communication strategy was daily Government and WHO joint press briefings, which were initiated early. A total of 309 briefings have been organized with WHO and other sectors, and they have become a reliable single source of information. All activities are multisectoral, multisource information is analysed, and messages are adapted to the local context and culture and to communities and settings.

In Ulaanbaatar, where about half of Mongolia’s population resides, businesses must ensure that every employee wears a mask. A “Let’s wear masks” campaign was conducted in April, and those who do not do so must pay a fine of 150 000 MNT (US$ 54). A household telephone survey conducted by the World Bank and the Mongolian National Statistics Office in May indicated that people were aware of COVID-19 and applied the relevant preventive measures. While Mongolia has not imposed a stringent restriction on movement, 86% of respondents avoid public gatherings.

School closure in January shifted the education of over 900 000 students online. For school reopening on 1 September, WHO and UNICEF conducted a campaign involving children in order to familiarize them with COVID-19 prevention practices.
In doing its best to protect the population in the country, Mongolia has also arranged transport for citizens living abroad who request repatriation. Priority is given to those with serious health conditions, children, the elderly and pregnant women. Returnees undergo a mandatory 3-week quarantine in one of the 67 quarantine centres across the country, followed by a mandatory 2-week quarantine in their residences. By September, the Government had repatriated about 22 000 Mongolians.

So far, Mongolia’s health system has coped with COVID-19, with an average of 69.4 physicians and nurses per 10,000 people. Data on mortality, inpatient and outpatient visits, case management, emergency and hotline calls show no disruption to essential services in home care and health care facilities. Cardiovascular diseases, cancer, injuries and poisoning represent more than 70% of all deaths in Mongolia. WHO assisted the Ministry of Health in investing in a server to scale up data collection on noncommunicable diseases, enabling patients across the country to conduct automatic follow-ups, and to procure equipment, medical devices and disposable items for 16 health centres.

With the Ministry of Health and the National Gerontology Centre, WHO has mobilized 160 million MNT for a joint project to introduce community-based integrated care and to support vulnerable elderly persons in Ulaanbaatar. Facilitated by WHO, the Mongolian Association of Elderly People trained 121 community volunteers to conduct health check-ups and counseling at home and in nursing facilities, including with mobile technology.

The Ministry of Health, WHO and the Second State Hospital assessed and provided technical support to the COVID-19 response, antenatal care and prevention of mother-to-child transmission of HIV, hepatitis B virus and syphilis in Bulgan Province. The team also conducted training in infection prevention and control and maintenance of essential maternal and child health services during COVID-19 in the provincial hospital and soum health centres.

Mongolia is a vast country – as big as all of western Europe. While the urban settings are dense, small groups of people are spread out sparsely in rural areas. They are served by 331 health centres with 10–15 beds that providing basic surgery and delivery. The national insurance scheme supports access to high-quality health care for the rural population.

---

Future work

Mongolia continues to strengthen its defence against COVID-19. The country has used WHO tools to develop COVID-19 response capacity in the Ministry of Health and in its provincial and district networks. Hospitals are connected digitally to forecast and mobilize supplies in order to avoid shortages, including in regional and sub-regional facilities. Telemedicine facilities connect intensive care units across the country, forming a clinical management network of health care workers, accelerating knowledge transfer from major clinical centres to those in districts.

The Ministry of Health is strengthening its capacity for early detection of COVID-19 transmission in the community over the winter months. The Government is expanding the sentinel testing programme for influenza to COVID-19 and is establishing a targeted testing programme for workers in high-risk settings and professions. Testing for COVID-19 in the community is the cornerstone of the overall strategy for early detection of COVID-19 transmission in the community, which includes other elements as part of multi-source surveillance.

WHO works closely with the National Centre for Communicable Diseases in improving surveillance at points of entry and maintaining vigilance to keep the number of COVID-19 cases low, as Mongolia plans to reopen its borders soon.

The Government consistently involves Mongolians in protecting the country from COVID-19. With WHO’s support, a simulation exercise was conducted on 7 May in Chingeltei district in Ulaanbaatar, involving the Prime Minister, 150 000 residents, over 3500 doctors and Government and law enforcement officials. The exercise, conducted from 08:00 to 18:00, tested multi-sector coordination and response. Simulation exercises are planned to test local incident management systems in all 21 provinces.

On 9 July, the newly appointed Deputy Prime Minister and the Minister of Health held a briefing with the United Nations Resident Coordinator and the WHO Representative to discuss progress in the country’s measures to control COVID-19 and to plan future action on the basis of the socio-economic impact assessment conducted by the United Nations. On 7 August, the WHO Representative and Country Office team met with the Deputy Prime Minister and the Minister of Health to discuss the next steps in preparedness for COVID-19 and the upcoming influenza season.

To ensure that the health system can manage the influx of patients during the influenza season, the Ministry of Health and WHO are using WHO forecasting tools to model the national disease burden and to estimate the health care capacity and resources required and their costs. The Government has approved 112.6 billion MNT for health products and supplies (personal protective equipment, diagnostics, biomedical equipment, drugs and consumables), inpatient beds, health care workers and tests. To improve the financial capacity of the health sector to address COVID-19, the Mongolian Government has increased its health budget by 5% (110 billion MNT) and has mobilized 200 billion MNT from partners for the initial 8 months.
Future work

Mongolia continues to strengthen its defence against COVID-19. The country has used WHO tools to develop COVID-19 response capacity in the Ministry of Health and in its provincial and district networks. Hospitals are connected digitally to forecast and mobilize supplies in order to avoid shortages, including in regional and sub-regional facilities. Telemedicine facilities connect intensive care units across the country, forming a clinical management network of health care workers, accelerating knowledge transfer from major clinical centres to those in districts.

The Ministry of Health is strengthening its capacity for early detection of COVID-19 transmission in the community over the winter months. The Government is expanding the sentinel testing programme for influenza to COVID-19 and is establishing a targeted testing programme for workers in high-risk settings and professions. Testing for COVID-19 in the community is the cornerstone of the overall strategy for early detection of COVID-19 transmission in the community, which includes other elements as part of multi-source surveillance.

WHO works closely with the National Centre for Communicable Diseases in improving surveillance at points of entry and maintaining vigilance to keep the number of COVID-19 cases low, as Mongolia plans to reopen its borders soon.

The Government consistently involves Mongolians in protecting the country from COVID-19. With WHO’s support, a simulation exercise was conducted on 7 May in Chingeltei district in Ulaanbaatar, involving the Prime Minister, 150 000 residents, over 3500 doctors and Government and law enforcement officials. The exercise, conducted from 08:00 to 18:00, tested multi-sector coordination and response. Simulation exercises are planned to test local incident management systems in all 21 provinces.

On 9 July, the newly appointed Deputy Prime Minister and the Minister of Health held a briefing with the United Nations Resident Coordinator and the WHO Representative to discuss progress in the country’s measures to control COVID-19 and to plan future action on the basis of the socio-economic impact assessment conducted by the United Nations. On 7 August, the WHO Representative and Country Office team met with the Deputy Prime Minister and the Minister of Health to discuss the next steps in preparedness for COVID-19 and the upcoming influenza season.

To ensure that the health system can manage the influx of patients during the influenza season, the Ministry of Health and WHO are using WHO forecasting tools to model the national disease burden and to estimate the health care capacity and resources required and their costs. The Government has approved 112.6 billion MNT for health products and supplies (personal protective equipment, diagnostics, biomedical equipment, drugs and consumables), inpatient beds, health care workers and tests. To improve the financial capacity of the health sector to address COVID-19, the Mongolian Government has increased its health budget by 5% (110 billion MNT) and has mobilized 200 billion MNT from partners for the initial 8 months.

The country is also improving its capacity to protect the rural population, primarily those who live far from health care facilities. The Ministry of Health is working with WHO to improve access to and the quality of health services in remote areas and to maintain essential health services, particularly for vulnerable populations. The Government has set up a modified care pathway for COVID-19, using non-health institutional quarantine facilities to isolate suspected cases and contacts. By April, 21 890 isolation and observation rooms had been prepared. Over 18 700 front-line staff from inspection, emergency management, the military and the police have been involved in surveillance, contact-tracing and isolation. The Field Epidemiology Training Programme is playing a key role in building the capacity of local multisectoral incident management teams through training, long-term placement and continuous online coaching and mentoring.
ROMANIA

Key areas: 🚑 🌍 🗺️ 💼 🌍 🍀 🌍

A small office’s big impact in the fight against COVID-19

Since the establishment of its Country Office in 1991, WHO has developed and nurtured a close partnership with Romania’s Ministry of Health (MOH) and has supported the Government to reach the objectives of the Health 2020 framework: improving health and well-being of populations, reducing health inequalities, strengthening public health and ensuring people-centred health systems that are universal, equitable, sustainable and of high quality. The priorities for the Country Office are set out in the biennial collaborative agreement, in close cooperation with both national institutions and partner agencies, which include academia and other civil society organizations (CSOs).

A recently signed collaboration framework for 2020-2021 reaffirms the commitment, as outlined in the 13th General Programme of Work and the European Programme of Work, to “United Action for Better Health in Europe.” This strategic decision amid a pandemic with global repercussions shows the Government’s recognition of WHO’s role, its contribution to improving health and its vital role for the COVID-19 response in Romania.

Preparing for a pandemic

Recognizing the huge impact that COVID-19 may have on the resilience of the country’s health system and the delivery of quality care, the Government and the WHO Country Office started preparedness work before the first case of COVID-19 was registered in the country. It was clear that an effective and sustainable response to COVID-19 could only be achieved through effective collaboration between governmental institutions along with CSOs and the private sector.

“To meaningfully support the Government, we had no other choice but to look at national response policies across all sectors to find robust mechanisms that are both unique for each sector and simultaneously tackle common challenges,” said Dr Miljana Grbic, the WHO Representative in Romania. Building on its ‘health for all policies’ approach, the Country Office intensified its engagement with the Presidential Administration, the Ministry of Internal Affairs, the National Institute of Public Health, local public health authorities, civil society, academia, NGOs

Dr Miljana Grbic, WHO Representative discussing with EMT. Photo credit: WHO Romania
and churches to strengthen coordination at the national level. Bringing guidance, scientific advice and expertise, WHO supported the National Scientific Committee on COVID-19 clinical and epidemiological management since its establishment and advised the Committee on developing policies rooted in evidence and best international practices.

Through its Emergency Medical Team (EMT) initiative, WHO has been supporting Romania in developing the country’s national EMT, which can be deployed where most needed. While preparing for the upcoming WHO classification visit to become EMT, Type 1, Fixed Romania’s Emergency Medical Team has benefited from an extensive WHO mentorship and training curriculum, including strengthening expertise in case management, IPC, triage and referral management systems for patients with COVID-19. These simulation exercises and trainings further scaled up Romania’s EMT capacity and highlighted the country’s growing need for highly skilled professionals who can provide immediate support to health care professionals not only in Romania, but also in other countries of the European Region and beyond.

National hotline with WHO support

In order to respond to questions of citizens living both in Romania and abroad, the Green Line (Romania’s COVID-19 hotline) was established in February 2020 and has since answered over 500 000 calls as part of the country’s emergency risk communication plan developed with WHO input. The Green Line is a collaboration across different sectors: with both technical and financial support from WHO, it is operated by the National Institute of Public Health (NIPH) and the technical scientific arm of the Ministry of Health, while the Special Telecommunication Service (STS) provides telecommunication support. In addition, the Ministry of Defence staffs the lines during night shifts, ensuring continuous 24/7 service.

The hotline has been providing up-to-date public advice on a broad range of issues, such as mask use, testing facilities, home isolation, relevant medical leave certificates and other legal forms, special measures for chronic patients, and continuity of care, most notably for patients with oncological and cardiac conditions. The Green Line responders are personnel from the NIPH, the Ministry of Defence and other partner institutions, which all rely on WHO input to formulate answers to specific, and often technically complex, questions. Currently, the Green Line covers additional issues in the context of COVID-19, such as school reopening, violation of sanitary measures, etc.

But the Green Line has not only provided information for citizens. It has also helped the Government and WHO to understand and capture people’s concerns, attitudes and risk perceptions through their questions, contributing to the national COVID-19 response. “We were able to reach large audiences with our information materials and hopefully, by publishing our products, we were able to reduce the pressure on the Green Line,” said Dr Cassandra Butu, Public Health Officer in the WHO Country Office.

Responding as ‘One UN’

In Romania the UN agencies are WHO, UNICEF, UNHCR and IOM. Although small, the UN Country Team (UNCT) is active and works together not only on the COVID-19 response but also on a larger scale in support of Agenda 2030.

Regular updates are provided by WHO to UNCT, which serves as a valuable platform for the epidemiological situation in the country, the region and globally and for regular updates on the COVID-19 response. The UN agencies rely on WHO guidance in tailoring their work in relation to COVID-19. For instance, joint activities of IOM and UNHCR that address health-related issues for migrants and refugees incorporated WHO’s interim guidance note on preparedness, prevention and control of coronavirus disease (COVID-19) for refugees and migrants in non-camp settings. In addition, WHO has coordinated media relations and weekly briefings within UNCT to ensure that the UN speaks with one voice, maintaining both credibility and a “One UN” approach. Furthermore, the World Bank, International Finance Cooperation and the Council of Europe are a part of regular WHO-led exchanges on COVID-19.
Intercountry collaboration: teaching and learning for best outcomes

The economic repercussions of COVID-19 continue to reverberate globally, with impacts being felt across every aspect of daily life. As restrictions were eased, Romania’s private sector turned to WHO to seek advice on how to reopen businesses in a manner that would ensure safety at work for both staff and customers. Responding to this, WHO disseminated technical guidance on transmission prevention and management of suspected or confirmed cases at workplaces in the food industry, tourism, hospitality and freight businesses.

Before the pandemic there was little collaboration between the private sector and WHO. As businesses wanted to reopen safely and needed guidance on how to best proceed, the Country Office was increasingly contacted for advice, signalling that the private sector trusted WHO in this matter. WHO guidance became widespread, so that, for instance, Bucharest Airports National Company, the public railway company and many privately-owned fuel stations and shops now use WHO information leaflets to advise their customers on safety measures.

Neighbours supporting each other

Two neighbours, Romania and the Republic of Moldova, make a perfect example on how cooperation, which dates back to long before COVID-19, can be extended beyond national borders and how working together ensures the best possible protection and care for citizens in both countries. These countries share both historical and cultural bonds and their ties have been strengthened by the pandemic.

Their strong connection has proved vital for coordination of best practices, information exchange and a joint COVID-19 response, benefiting both countries. With continuous support from the WHO Country Offices in Romania and the Republic of Moldova, the MOHs of the two countries have established reliable channels for exchanging information and knowledge on clinical management of COVID-19 patients and on hospital care protocols. Moreover, Romania has supported the medical system of the Republic of Moldova by sending medical supplies and equipment.

Informing the people

Since WHO started releasing its global guidance on the COVID-19 response, the Country Office team in Romania has translated, adapted and disseminated more than 50 guides to national ministries on the topics of their mandate. In addition, more than 100 hospitals have received WHO materials on COVID-19, helping health facilities to provide clear, accurate and reliable information to patients.

In addition, WHO provided key information and recommended actions to the general public and target audiences via WHO’s social media platforms and other channels (Facebook, Instagram, HealthBuddy chatbot, email). As a result, there were more than 3 million Facebook users engaging with WHO’s Romania Facebook in March and April 2020; there are now about 90 000 visitors monthly. The number of fans doubled and is now 30 000 unique fans.
Overcoming obstacles

Some hospitals experienced disinfectant shortages at the early stages of the pandemic. The situation became critical when the number of imported disinfectants could not meet the country’s needs. Despite the challenges, hospitals were able to find a solution, relying on WHO’s production guides, and began local production of alcohol-based solutions in their own laboratories to meet the demand.

With many hospitals having to repurpose human resources and services during the COVID-19 pandemic, continuity of essential health services and routine immunization has been one of the priority areas of collaboration between WHO and Romania. To identify obstacles for the dual track approach in maintaining regular essential services, the Country Office made field trips to Iași, Miercurea Ciuc and Brașov hospitals and advised on how best to estimate possible exposure of health care workers to COVID-19, based on WHO guidance on risk assessment and management of exposure of these workers in the context of COVID-19.

In addition, using the WHO health workforce estimator, managers of health facilities could estimate the required number of each type of health worker, on the basis of the number of mild, moderate, severe and critical patients per day.

During COVID-19, many basic health services, such as routine immunization, have suffered. WHO teamed up with UNICEF to train local health workers in communication skills, assisting them in reaching remote areas with vulnerable families where there was low immunization coverage.

While the percentage of children receiving the diphtheria, tetanus and pertussis vaccine (DTP) has not reached the WHO-recommended coverage of 95%, the immunization campaigns have increased awareness of the importance of vaccines. As a result, an increasing number of families now complete all doses of DTP. However, as the influenza season approaches, the issue of vaccination is very likely to re-emerge. WHO and the government will continue collaborating on maintaining the population’s guard against influenza, measles and other long-known infectious diseases while keeping up measures against COVID-19. Moreover, despite active anti-vaccine groups that denounce mandatory vaccination and view it as a health hazard and an abuse of personal freedoms, WHO and its partners will continue working together to counter disinformation and reach out to the large majority still willing to listen.

Working with local communities

One example of WHO’s close collaboration with communities is its work in the region of Sadova. Supported by the Country Office, the community quickly initiated response mechanisms, with a coordination team composed of local leaders including family doctors, community health nurses, priests, teachers and the mayor leading the COVID-19 response. Local markets enjoy huge popularity and here the local population gets together while shopping for fresh local produce. After a period of closure due to COVID-19 restrictions, the Sadova community market reopened, providing an excellent opportunity for the Country Office to spread awareness about COVID-19.

While doing their shopping, people were handed information about personal protective measures, the importance of physical distancing and food hygiene recommendations developed by WHO. Sadova’s mayoralty also purchased face masks and produced leaflets, which were distributed in the market by support teams.

The Country Office in Romania has taken its engagement with communities a step beyond traditional information-sharing. The team has implemented a tool for Behavioural Insights (BI), developed at the WHO Regional Office for Europe, to monitor perceptions, behaviours and attitudes in populations during the pandemic. The WHO tool for behavioural insights on COVID-19 is today used by 27 countries in the WHO European Region to support and guide national response activities, in which public behaviour is one of the most critical elements of reducing virus transmission.
With the help of the Country Office, since April 2020 Romania has adopted, adapted and implemented the BI study. Social data are analysed and shared directly by WHO with the MOH and partner institutions on COVID-19 management and further interpretation.

WHO presented BI results to national key stakeholders in May and July, during key moments of the response to the pandemic. The Government used the results of the first two rounds of the studies for rapid, flexible and cost-effective monitoring of public knowledge, risk perceptions, behaviours and trust to design its COVID-19-related response, making it relevant and feasible. To respond to the rapidly changing situation, the third phase is currently being deployed. The BI survey questionnaire has been finalized and data are collected via online panels and through computer-assisted telephone interviews.

Looking ahead

The COVID-19 pandemic has reminded the world that no health system is perfect. With its fast implementation of response measures, Romania was able to avert a surge in the number of COVID-19 cases at the start of the pandemic. However, the rising number of new cases could negate previous success and challenge Romania’s health care system for a second time during the pandemic. With this, WHO’s work becomes increasingly vital in fostering solidarity among individuals, communities, leaders and neighbouring countries, strengthening health systems to enable a resilient response to the pandemic, and putting public health at the forefront as a driver of economic development, security and safety. Nationwide awareness yielded positive results in the spring of 2020. The work needs to continue to combat the recent increase in COVID-19 cases. WHO continues working with the Government on communicating to and with the population on how to protect themselves and how to follow the Government’s recommended measures on isolation and quarantine.
THAILAND

Key areas:

How a strong health system fights a pandemic

Outside China, Thailand was the first country to detect a case of COVID-19. After an initial spike in cases, Thailand went 102 days between May and September without any reported local transmission of COVID-19.1 Thailand’s four decades of investment in its health system has positioned the country to respond effectively to the current public health crisis.

COVID-19 in Thailand

On 3 January 2020, a few days after authorities reported a cluster of atypical pneumonia in Wuhan, Thailand started to screen passengers from China for symptoms of acute respiratory infection. On 10 January, anticipating what would happen later, the Royal Thai Government started a nationwide public communication campaign to provide accurate information about the disease that would come to be called COVID-19. All people living in Thailand were encouraged to protect themselves and their communities by applying basic health measures such as handwashing, mask-wearing and physical distancing.

On 13 January 2020, Thailand reported that a Wuhan resident who had travelled to Bangkok on 8 January had tested positive for the SARS-CoV-2 virus. This was the first COVID-19 case detected outside China. Over the next several weeks, 14 further cases were detected in travellers from China before Thailand’s first non-imported, locally transmitted COVID-19 case was reported on 31 January. Cases continued to increase through February and March, many related to superspreading events which included an indoor Thai boxing event and gatherings at downtown bars (see Fig. 1). By end March, 60 of Thailand’s 77 provinces had reported cases and the epidemic was widespread.

The Thai public health response was swift and comprehensive. Rapid response teams quickly managed confirmed cases by isolating and treating them and tracing and quarantining their contacts. Village health volunteers also made a major contribution. All cases were isolated in facilities rather than in their homes. A laboratory network for diagnosis, using reverse transcription polymerase chain reaction (RT-PCR), was established so that, by the end of July, 78% of Thailand’s 77 provinces had the capacity to diagnose COVID-19.

---

Fig. 1. Timeline of COVID-19 situation and response in Thailand

CCSA: Centre for COVID-19 Situation Administration.

After assessing health-care capacity, the Ministry of Public Health increased the number of hospital beds equipped to manage mild, severe and critical cases. Health authorities determined needs for medical supplies, including personal protective equipment for all hospitals. Gaps were partially filled using US$ 175 000 mobilized quickly from the South-East Asia Regional Health Emergency Fund.

As the epidemic peaked in late March, Government ministries, acting together as part of the newly created Centre for COVID-19 Situation Administration and under the direct leadership of the Prime Minister, implemented a series of public health and social measures. A state of emergency was declared, and an evening curfew was implemented. International and domestic flights were stopped, and people were advised not to travel across provinces. The Royal Thai Government closed schools, higher education institutions and non-essential businesses such as gymnasiums, barbershops, markets, bars, restaurants, public parks and boxing stadiums. People were asked to practise physical distancing and to stay home.

Locally transmitted cases began to decrease as a result of rapid case identification and isolation and effective contact tracing and quarantining. By the end of April, local transmission had been controlled across the country. Public health and social measures were strategically phased out, as facilities and businesses largely complied with recommendations on physical distancing, handwashing and wearing masks in public. Schools were reopened in July. Currently, there are few restrictions in activity or movement within Thailand, though borders remain closed to most travel. Anyone entering the country must quarantine in a State-monitored facility for 14 days. Currently all cases in Thailand have been identified among returnees in State quarantine, and therefore pose less risk to the community.

As of 29 September, Thailand has reported 3559 COVID-19 cases, with 31% imported cases, and 59 deaths (case fatality rate 1.66%).
How Thailand has so-far succeeded in preventing widespread transmission of the SARS-CoV-2 virus

For over 40 years, Thailand has invested in health infrastructure and achieving universal health coverage.2 Thus almost every citizen is protected by health insurance and has increased access to health care.3 Population surveys regularly indicate high levels of consumer satisfaction with the health system. Putting the public interest first is a commitment ingrained in Thai health professionals.4 During emergencies, the Thai people trust their health system’s capacity to respond in their best interests.

To support the primary health-care system, a national programme of over one million village health volunteers has, for many years, collected data, maintained health records and educated the community on how to prevent communicable and noncommunicable diseases. During the COVID-19 pandemic, they contributed to Thailand’s early-warning system and supported surveillance, detection, contact tracing and health monitoring.

Building on its strong health system, the Royal Thai Government also invested in building capacity to prepare and respond to communicable disease epidemics. The national Field Epidemiology Training Programme (FETP) was established in 1980 with the United States Centers for Disease Control and WHO5 – it is the oldest FETP outside the United States of America. The programme has trained thousands of experts in disease outbreak investigation and control, many of whom work at provincial and district level and have managed the COVID-19 epidemic. Over 1000 surveillance and rapid response teams have long been in place across the country; many of these were deployed to isolate cases rapidly and ensure they were effectively treated, and to trace and quarantine contacts actively. The Ministry of Public Health developed protocols to triage individuals with suspected COVID-19 and treat those with confirmed infection. Thailand’s strong academic and research networks contributed evidence and expert opinion.

Laboratory and research capacity are also part of Thailand’s strong health system. The Thai Red Cross Emerging Infectious Disease Health Science Centre in Chulalongkorn University (a WHO collaborating centre) has researched diseases associated with bats for more than 20 years. The Centre was able to conduct genetic sequencing of the first viruses shared by China and develop a real-time RT-PCR assay within two weeks. Its efforts were complemented by the National Institute of Health reference laboratory of the Ministry of Public Health.

Both epidemiologists in the field and scientists in the laboratory gained important experience responding to severe acute respiratory syndrome (SARS) in 2003, avian influenza H1N1 in 2009 and Middle Eastern respiratory syndrome coronavirus in 2016 – Thai public health authorities at all levels recognized the need for comprehensive

---

5 See http://www.interfetpthailand.net/about_index.php.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

preparation and rapid action to manage emerging communicable diseases such as COVID-19. The population, also informed by experience with these pathogens, appreciated the need for measures such as handwashing, mask-wearing and physical distancing.

Effective community mobilization helped to manage COVID-19 in Thailand. Leaders in villages, subdistricts and districts monitor people’s mobility and self-quarantining in their areas. In the community, village health volunteers monitor the health of multiple families including their own, while tracing contacts, educating their community on preventing COVID-19, distributing masks and hand sanitizer and reporting suspected cases of COVID-19. Between 2 March and 11 April, village health volunteers visited a total of 11.3 million households across Thailand.

The private sector supported the Royal Thai Government during the COVID-19 response. A Thai company, Siam Bioscience, developed locally produced COVID-19 diagnostic kits. A web application called Thai Chana was developed to help trace contacts. Hotels were repurposed into ‘hospi-tels’ to isolate mild cases of COVID-19 and used for quarantine. When there was a shortage of masks and personal protective equipment in March, Thailand’s private manufacturers ramped up or repurposed operations to ensure adequate local supply. Local manufacturers innovated, using nanotechnology to produce reusable personal protective equipment. In May, WHO, together with the Ministry of Public Health, the Ministry of Social Development and Human Security and private partners, launched a 52-page comic book using humour to provide critical messages on COVID-19 to the population.

Throughout the COVID-19 crisis, essential health services for Thailand’s 70 million people continued without significant disruption. The use of telemedicine and the delivery of medicines by post were encouraged by the Ministry of Public Health. New models of health service delivery are being piloted using digital technology to protect patients and health care workers from COVID-19, and to improve efficiency.

COVID-19 response challenges

Recognizing the need to avoid complacency, Thailand was the first country in the world to assess critically its national COVID-19 response; this took place from 20 to 24 July 2020, drawing on the recently developed WHO intra-action review tool and methodology. As well as identifying best practices, the review generated recommendations to address some key COVID-19 findings and challenges. These are described below.

Epidemiological, laboratory, clinical and logistical information needed to inform decision-making were not always readily available. A new national data system would allow integration of data that could be easily accessed, analysed and communicated.

Although capacities for infection prevention and control (IPC) are generally strong at health-care facility level, the establishment of a national IPC programme with clear responsibilities, a predictable budget and dedicated staff could support transformative improvements, including setting national IPC policy, issuing uniform guidance, establishing IPC training and credentialling standards, overseeing national laboratory-based hospital-acquired infection surveillance and auditing IPC practices.

To further facilitate future detection of individual cases and small clusters, an enhanced COVID-19 surveillance system should be established and sustained. Routine testing of all patients meeting standardized case definitions in designated sentinel health-care facilities would provide an early-warning system for community transmission.

A national human resource mapping and planning effort would help to match human resources with assessed needs in every province. Close collaboration with academic institutions could then address human resource shortfalls and strengthen surge capacities.

The establishment of a national quarantine authority would ensure coordination between the Ministries of Public Health, Interior and Defence, maintain high standards and consistent implementation of policies, and facilitate an expansion of capacity.

The development of a “concept of operations” for public health emergency operations centres (EOC) with established and tested standard operating procedures will strengthen operational efficiency between EOCs at national and subnational levels, and further enhance collaboration with other ministries, including the Ministry of Interior Department of Disaster Prevention and Mitigation.

WHO support for Thailand and the global community in Thailand

A three-level rapid risk assessment was conducted in January 2020 with WHO headquarters, the regional offices for South-East Asia and the Western Pacific and the WHO Country Office in China. In alignment with the WHO Emergency Response Framework, an incident/event command system was established at the WHO Country Office in Thailand, the Office Business Continuity Plan was updated, and a COVID-19 response plan was developed. The Country Office also recruited and received secondments of extra staff, redeployed Country Office technical and administrative staff and, later, established work-from-home arrangements.

Government and partner communication channels were established, and support was provided for communication and information management, including dissemination and translation of technical guidance, production of 100 situation reports, translation, development and dissemination of infographics through social media, and development and publishing of seven photo essays on the Country Office website.

Provision of technical and financial support for the Ministry of Public Health focused on intersectoral coordination, laboratory capacity-strengthening, case investigation and response, migrant health, points of entry, health-care facility preparedness and maintenance of essential services, and vaccine development.
The Country Office also facilitated Ministry of Public Health support for intercountry, regional and global COVID-19 public health responses, including virus-sharing, laboratory diagnosis (including whole-genome sequencing) and webinars.

Bangkok is home to 25 United Nations regional offices, the United Nations Economic and Social Commission for Asia and the Pacific and the United Nations agencies working in Thailand. There are over 4000 Thailand-based United Nations staff and dependents. Decision-makers from across the system relied on WHO, through its Country Office in Thailand, to provide technical guidance, risk assessments, analysis, situation updates and responses to queries from staff. At the end of January, with direct support from WHO, the Designated Official created a dedicated crisis management group, the COVID-19 Contingency Management Team, to ensure the safety of staff and the business continuity of the whole United Nations system in Thailand. The Country Office has led contingency planning using scenarios, simulations and functional exercises and drills. In May, WHO supported United Nations agencies in planning the detailed phased return of staff to their offices.

In Thailand, the Country Office represented the WHO regional offices for South-East Asia and the Western Pacific in the United Nations and wider humanitarian regional forums and meetings in Bangkok. The Country Office regularly and actively consulted the two regional offices and coordinated biregional inputs and WHO perspectives on the pandemic with the Bangkok-based regional United Nations offices.

Moving ahead

In Thailand, the mood is optimistic but cautious. Thai public health authorities are actively preparing for further outbreaks of locally transmitted COVID-19 and are encouraging the population to continue to comply with basic public health measures, including mask-wearing and physical distancing.

The Royal Thai Government has extended the national state of emergency until 31 October 2020. The country is permitting limited tourism – a “Safe and Sealed” campaign has been launched to encourage tourism operators and tourists to practise stringent preventive measures. Visas are currently given only to tourists staying for a minimum of 90 days; all those wishing to visit Thailand must comply with specific requirements, including quarantine in a State-monitored facility for 14 days.

The intra-action review provided unique insights into how the Royal Thai Government might strengthen its response to COVID-19. Despite the low number of total cases in Thailand, the Government remains committed to this goal and to safeguarding the health of its population.

“For 40 years Thailand has committed to building a strong health system – investing in people, infrastructure, innovation, financial protection and getting ready for emergencies. A pandemic is where this kind of investment pays off”

Dr Daniel Kertesz, WHO Representative in Thailand
Togo

Key areas:

Supporting the Government, international aid partners and local communities in the response to COVID-19

An overview of the outbreak and response in Togo

Since the first COVID-19 case in Togo was identified in early March 2020, 1,743 confirmed cases and 46 deaths have been reported as of 27 September in this West African country of 8.3 million people – with 56% of cases occurring in the Greater Lomé region (the capital and its metropolitan area). While the actual case count is likely to be higher, it seems clear that the outbreak has been relatively well contained in the country (Fig. 1).

The Government’s response to the COVID-19 pandemic began with the activation of the country’s Public Health Emergency Operations Centre in late January 2020, following WHO’s global alert. The Minister of Health and Public Hygiene then conducted a risk assessment and drew up a three-month action plan and budget – both with technical support from WHO. The initial plan focused on strengthening screening and surveillance at points of entry to prevent COVID-19 cases from being imported into the country, renovating and equipping hospitals, setting up quarantine centres, establishing laboratory testing facilities and risk communication.

In January, WHO provided the Government with personal protective equipment, thermometers and other supplies, which were immediately deployed to where they would be needed. It also provided the National Institute of Hygiene – the country’s reference laboratory for diseases with epidemic potential – with the necessary reagents, test kits and other supplies, along with training, so that by mid-February the Institute’s laboratory was able to begin polymerase chain reaction (PCR) testing for the virus responsible for COVID-19.

Upon confirmation of the first case on 5 March 2020, a Sectoral Unit for Crisis Management was created within the Ministry of Health and Public Hygiene (on 23 March) to serve as the command centre for the response, with working groups corresponding to the...
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

various pillars of the response. A number of advisory and management committees were also established – all in March – including the National Crisis Committee chaired by the President of the Republic; an interministerial crisis management committee to ensure coordination of the response across the Government, together with parallel committees in each of the country’s 39 prefectures; a medical equipment and supply management committee; and the Scientific Council.

As in most other countries, the Government of Togo put in place a series of increasingly stringent measures to prevent imported and local transmission of the virus, starting on 16 March 2020 with the suspension of flights from high-risk countries. Within a few weeks, all international travel was banned; schools, universities, places of worship and some crowded markets and other public spaces were closed; a nightly curfew was imposed; and travel to and from cities and regions with clusters of cases was banned, among other restrictions. Given the relatively small scale of the COVID-19 outbreak in the country, restrictions on movement began to be relaxed on 9 June, international travel resumed by 1 August and the state of emergency that had been declared on 1 April was lifted on 16 August. On 17 September, the Minister of Health and Public Hygiene, Prof. Moustafa Mijiyawa, shared Togo’s experience of managing COVID-19 with the WHO Director-General and Member States from all world regions at a virtual Member State briefing on COVID-19.

Figure 1: Epidemic curve of COVID-19 in Togo in 2020

- Notification of the first case in Togo (5 Mar)
- Lockdown lifted in Ghana (21 Apr)
- Curfew lifted (8 Jun) and partial reopening of schools (15 June)
- Opening of international air borders (1 Aug)

x-axis: Weeks of 2020
y-axis: COVID-19 cases

Cases  Death
Among the successful features of Togo’s response to the COVID-19 outbreak one may single out the active engagement of local communities in the surveillance and monitoring of cases and in identifying people entering the country from abroad; the strict surveillance of and checks on international travellers, who are screened, tested multiple times and quarantined; and the establishment of seven designated facilities for COVID-19 treatment and nine quarantine centres throughout the country. However, this case study focuses on WHO’s role in helping the Government and the United Nations (UN) country team with the response, and highlights specific – and in some cases unique – interventions and strategies used by the country to combat the disease.

Supporting the Government with the coordination and technical aspects of the response

WHO has collaborated closely with the Ministry of Health and Public Hygiene not only on various technical aspects of the response, but also on its coordination and management. In particular, the daily (now three times weekly) coordination meetings of the Sectoral Unit for Crisis Management are co-chaired by the Minister and the WHO Representative. In addition, WHO has played a leading part in supporting the Government with the development of its COVID-19 response and operations plans. WHO has also made key technical contributions to many pillars of the response – notably laboratory diagnosis, case management, infection prevention and control (IPC), and communications – by sharing and helping to adapt global guidelines and protocols, assisting with training and arranging material support, such as the provision of medical supplies and equipment via the UN system.

Another essential aspect of WHO’s support has been the on-the-ground assistance provided to all six health regions of the country by multi-partner teams through month long missions. The teams – each made up of three to seven doctors, epidemiologists, communications specialists and other experts from the Ministry of Health and Public Hygiene, WHO, the United Nations Children’s Fund (UNICEF), the United Nations Development Programme (UNDP) and the Cuban Government – provide regional health workers with hands-on training and technical assistance in numerous areas, including: planning, needs assessments, data validation and reporting (for daily situation reports), communications, sample collection, case investigation, surveillance, contact tracing, case management and IPC. These missions have led to significant improvements in the daily reporting of COVID-19-related data from the districts and regions, the organization of treatment centres, tackling community resistance to COVID-19 safety measures, and the monitoring and follow up of contacts of cases and Togolese citizens returning from other countries.

Providing such wide-ranging support to the Government has required a temporary restructuring of the WHO Country Office and a surge in staff and consultants. Considerable help with that has come from the WHO Regional Office for Africa. A total of 15 experts have been brought in to the Country Office to assist with the response, including the incident manager and a risk communication and community engagement expert – both from the Regional Office – and three medical doctors from UNDP. WHO also recruited a total of eight national consultants to support the Ministry of Health and Public Hygiene, including epidemiologists, IPC specialists, a data manager, a coordination specialist and writers/editors. In addition, the Regional Office sent two international consultants to support the country’s response to the ongoing poliomyelitis (polio) outbreak (described further down).
Serving as the voice for the international community during the COVID-19 response

At the first weekly meeting of international partners to discuss the pandemic – convened by the UN Resident Coordinator and attended by representatives of all UN agencies operating in the country, the heads of diplomatic missions, bilateral aid agencies and international nongovernmental organizations – it was agreed that WHO would serve as the international community's voice on COVID-19, under the leadership of the Resident Coordinator (see also Box 1). During these meetings, the WHO Representative presents the latest developments in the COVID-19 epidemiological situation. WHO also prepares, jointly with the Ministry of Health and Public Hygiene, daily situation reports (together with a weekly update), which the WHO Representative personally sends out every day to the entire international community in Togo and also to the Regional Director and WHO Headquarters. Additionally, the WHO Country Office has supported the development of the UN framework for the immediate socio economic response to COVID-19 and contributed to a concept note for the UN COVID-19 Response and Recovery Multi Partner Trust Fund, which was established to improve the access of the most vulnerable to social protection benefits and basic social services during the pandemic.

In addition, the WHO Country Office has worked closely with technical and financial partners, including the private sector, to mobilize internal and external resources for the COVID-19 response in Togo. The funding secured includes US$ 170 000 from the Ecobank Foundation to pay for disinfection equipment and US$ 1 000 000 from the World Bank through its Pandemic Emergency Financing Facility (PEF) project. The PEF funding will be used to train health workers – notably through an e-learning programme prioritized by the Government to expand training across the country – and to strengthen IPC measures by supporting the production of bleach. WHO has also successfully advocated the reallocation of Health System Strengthening funds from the GAVI Alliance so that they can be used to increase laboratory testing capacity in the country.

Since the beginning of the outbreak, the WHO Country Office has been contributing to national research on the COVID-19 response by raising funds for the Scientific Council and by supporting documentation of the management of the pandemic. As of early October, US$ 72 000 had been raised to promote COVID-19 research in Togo.
Establishing and decentralizing laboratory testing capacity for COVID-19

The Ministry of Health and Public Hygiene’s protocols stipulate that all suspected COVID-19 cases should be tested twice, and all passengers arriving from other countries and contacts of confirmed cases three times. To enable local PCR testing to meet these requirements, WHO trained the staff of the National Institute of Hygiene (INH) and provided test kits, personal protective equipment and other supplies. The laboratory currently has the capacity to conduct around 1500 tests per day. WHO also assisted the Ministry with the strategic procurement of testing equipment – specifically advising on the use of PCR and GeneXpert technology – and it has been the main supplier of test kits and other articles to the country.

Box 1. Ensuring the safety of and appropriate medical care for United Nations staff and the international community in Togo during the COVID-19 crisis

In March 2020, the UN system in Togo established a COVID-19 crisis committee, consisting of the heads of all UN agencies, including the World Bank and the International Monetary Fund. The committee meets regularly to analyse the situation and make decisions that all UN partners in the country are expected to follow. A detailed contingency plan for the protection of UN personnel and their families was prepared with WHO support and published on 17 March. WHO was put in charge of assisting UN agencies with reducing the risk of COVID-19 transmission among their staff, and with coordinating and monitoring the medical and psychosocial care provided to UN personnel and their dependants stricken with COVID-19 or other illnesses during the outbreak. The Resident Coordinator officially designated a WHO programme officer and a physician from the UNDP country office to lead these efforts, with the support of four other medical doctors from WHO and UNICEF.

To prevent the transmission of COVID-19 among UN personnel and their family members, the WHO led team conducted information sessions for staff across the UN system about the disease and the preventive measures that should be taken, also when on field missions. Moreover, the team developed detailed protocols for the cleaning and disinfection of UN offices, and arranged for the installation of additional washing facilities in these. All UN personnel going out to the regions are required to contact the WHO Country Office to arrange for a COVID-19 test, and they and their dependants must receive approval for all travel, including personal travel. The team also conducts daily monitoring of UN personnel returning from travel overseas, who are required to self-isolate for 14 days.

Another critical contribution by the team has been the assistance it has been providing to people in the UN system and the broader international aid community suspected of having COVID-19 by coordinating and closely monitoring their care – a service that is greatly appreciated given the lack of a UN health clinic in the country. A toll-free phone number was established at WHO for UN staff and their dependants to call if in need of medical assistance. The WHO-led team investigates suspected COVID-19 cases to which it is alerted, coordinates their testing and arranges for their medical care, as required. Team members accompany patients to the hospital and follow up on them daily, both when they are being treated and while they are self-isolating after returning home. In addition, the team conducts contact tracing – notifying the close contacts of confirmed cases, arranging for them to be tested and following up on them daily during their 14-day quarantine period. WHO also coordinates and monitors the medical care of UN personnel suffering from other conditions, and organizes medical evacuations where necessary. Up to the end of September, the team has supported 172 staff and dependants in the UN and international community who required medical assistance, including seven cases of COVID-19.

Anticipating the psychological strain that the UN and international community would be under during this emergency, the UN Country Team requested WHO to recruit a psychologist to provide stress counselling to UN employees and their dependants. Since March, this counsellor has conducted training sessions for UN staff and their families on stress management and the psychosocial aspects of COVID-19, in addition to providing other forms of psychosocial support, including individual counselling.

In recognition of WHO’s role both in assisting with the coordination of technical and financial assistance among partners to Togo and in coordinating the medical care and follow-up of UN personnel and their families, the Government of France awarded the WHO Representative, Dr Fatoumata Binta Tidiane Diallo, the French Medal of Honour for Foreign Affairs in September. The letter accompanying the medal cites her “exceptional dedication during the COVID-19 crisis, also with regard to the French community”. WHO’s support was also acknowledged in a speech by the French Ambassador to Togo during the Bastille Day celebrations (see: https://www.facebook.com/ambafrance.togo/videos/692240958285179/).
The focus since May has been on decentralizing COVID-19 testing – first so that such testing could be conducted at the INH’s satellite laboratory in Kara, which serves the country’s three northern regions (thereby increasing national capacity to 1500 tests per day), and then expanding the network further to include four regional hospital laboratories with GeneXpert machines. This decentralization was made possible, on the one hand, by the online training of laboratory staff from these hospitals, coordinated by the WHO Regional Office for Africa, and on the other, by the considerable local expertise and experience in conducting influenza testing.

In preparation for the resumption of air travel to and from Togo in early August, the Ministry of Health and Public Hygiene set up a mobile COVID-19 PCR laboratory at the international airport in Lomé for departing and arriving passengers, with funding from the World Bank. All departing passengers must undergo a PCR test within 72 hours of their departure, while arriving passengers – who must present a recent negative test result before boarding their plane to Togo – are tested on arrival and once again 7 and 14 days afterwards.

As of the end of September 2020, seven laboratories were conducting COVID-19 testing – two in Lomé (at the INH and the airport) and five in the interior (at the INH satellite office in Kara and in four regional hospitals). Nearly 92 000 tests had been conducted by 29 September (Fig. 2). The stock of test kits and other consumables is sufficient at present, though there are concerns about future shortages as travel and economic activities pick up again.

A major challenge in laboratory testing in Togo in the past has been transporting samples from health facilities to the laboratories in good condition and in a timely manner. To tackle this problem, WHO concluded a contract with Togo’s postal service, paying them to deliver clinical samples for the testing of COVID-19 and other infectious diseases from anywhere in the country to a qualified laboratory. This arrangement has been observed to improve the efficiency and quality of sample transport in the country significantly.
Identifying and countering rumours and misinformation about COVID-19

A key focus of Togo’s risk communication and community engagement (RCCE) efforts during the COVID-19 outbreak has been to identify and tackle rumours, misinformation and fake news about the disease that have been circulating amongst the population. The Ministry of Health and Public Hygiene has requested a wide range of people working in local communities – including communication focal points, community surveillance workers, health facility managers and community influencers – to collect and report these rumours to the Ministry’s Communications Unit. With assistance from WHO staff working daily with this unit, the rumours are analysed and then sent to TogoCheck (http://togo-check.com), a popular private sector platform that was created in 2019 to counter misinformation on a variety of topics with factual and reliable information. TogoCheck contacts experts at the Sectoral Unit for Crisis Management to discuss how to tackle the rumours using correct information; it also conducts its own research. The platform’s staff subsequently produce a short video available in various local languages (audiogramme), which is an appropriate means of combating rumours in a country where nearly half of the adult population over the age of 15 years are illiterate. These videos are disseminated broadly via social media and, more traditionally, television and radio.

Other activities undertaken as part of the country’s comprehensive RCCE strategy include the participation of 43 experts from the Ministry of Health and Public Hygiene and the University of Lomé in special programmes on COVID-19 broadcast on 74 radio stations and five television stations; the deployment of more than 6000 community surveillance officers to raise awareness of COVID-19 in their communities; and the use of vehicles with sound systems and town criers to spread messages about COVID-19 while avoiding the formation of large crowds.

Involving traditional medicine practitioners in the COVID-19 response

Traditional medicine practitioners continue to be important providers of health services in Togo and enjoy considerable standing among the population. Accordingly, WHO discussed how to involve them in the COVID-19 response with the Division for Traditional Medicine at the Ministry of Health and Public Hygiene. These discussions led to a series of information sessions held in July and August for more than 270 traditional practitioners from seven districts in the Greater Lomé region, where the majority of COVID-19 cases have occurred. The goals of the sessions, conducted in the local languages by district focal points for traditional medicine, were to ensure that these providers apply IPC measures to reduce the risk of transmission between them and their patients, and to involve them in educating their patients about the disease and how to protect themselves and their families.
Over a series of meetings with the Traditional Medicine and Health Promotion divisions of the Ministry of Health and Public Hygiene, where UNICEF was also represented, WHO helped to plan these information sessions – supporting, for example, the decision to recruit participants through an association of traditional medicine practitioners – and to prepare the presentations and tools (such as job aids) for training the focal points.

Traditional practitioners in the Greater Lomé region have become more involved in educating the public through the media on barrier measures to protect themselves against COVID-19 since the information sessions. Moreover, whereas there had been some reported COVID-19 cases in April and May among such practitioners, no new cases have been reported within that group since their participation in the sessions in July and August.

Plans are now under way to expand the training to the country’s other five health regions, and to strengthen the monitoring and supervision of the traditional medicine practitioners’ activities.

**Box 2. Ensuring the safe reopening of schools in Togo**

Along with UNICEF and other partners, and under the leadership of the UN Resident Coordinator, WHO has been providing guidance and technical support to the Government of Togo in developing strategies, plans and protocols to ensure the safe reopening of schools, which were closed nationwide at the end of March 2020. The Government is following a phased approach: starting with classes preparing for the baccalaureate exam (these resumed on 15 June) and then proceeding with the resumption of all other classes on 26 October.

WHO’s support has included participating in the weekly meetings of a multisectoral committee established by the Government specifically to deal with this issue; developing directives on school safety procedures with the Ministry of Communications, based on the WHO guidance document on school-related public health measures in the context of COVID-19; taking part in the training of teachers and school inspectors on the new protocols; and monitoring schools’ compliance with the safety measures. WHO has also contributed to a national strategic document for the reopening of schools, which is currently pending approval by the Government.

In addition, WHO has advised the Government on the development of criteria for testing pupils for COVID-19. These include the systematic testing of all pupils in schools in areas near the country’s three borders (with Benin, Ghana and Burkina Faso), which are considered high-risk areas, and the isolation and follow-up of any pupils in these schools who test positive for COVID-19. All pupils returning to Togo from a foreign country are also automatically to be tested.

Maintaining critical preventive health activities

Following the stabilization of the outbreak and the consequent lifting of restrictions on movement in early June 2020, the Government announced, at a press conference on 23 June, the resumption of mass public health campaigns to eradicate epidemic-prone diseases – campaigns that had been interrupted or postponed owing to COVID-19. These include a vaccination campaign using the monovalent oral polio vaccine type 2 (mOPV2) in response to an ongoing outbreak of vaccine-derived polio virus that had begun in late 2019, and a campaign of mass administration of drugs against three neglected tropical diseases: onchocerciasis, schistosomiasis and soil-transmitted helminthiasis. The press conference provided an opportunity for journalists to ask questions regarding people’s fear of be-
coming infected with COVID-19 while taking part in these campaigns. Such fears were allayed by describing the safety measures that were to be implemented during the campaigns. The country representatives of WHO and UNICEF invited the media in attendance to support the Government in the eradication of these diseases by conveying accurate information to the public and countering rumours and misinformation. WHO, along with UNICEF, provided technical and financial support for the planning and implementation of both campaigns. The mass drug administration – the continuation of campaigns conducted every year since 2010 – took place over a two-week period in September in five of the country's six health regions (all but the Greater Lomé region). During this door-to-door campaign, which reached 37 out of 39 districts, community health workers distributed ivermectin (to treat onchocerciasis) and praziquantel (for schistosomiasis) to all people aged 5 years and older. Albendazole was administered to children up to the age of 14 years to treat helminthiasis, and children aged under 5 years were also given vitamin A. Additional safety precautions to prevent COVID-19 transmission were taken, including the wearing of masks and gloves, handwashing with soap and the use of hydroalcoholic gels.

The mass polio vaccination campaign – whose first round is due to take place in late September, followed by the second round about a month later – targets more than 715 000 children aged under 5 years in the 13 districts of two health regions (the Greater Lomé and Maritime regions), in which immunization campaigns had not yet taken place before the COVID-19 outbreak, and which consequently reported seven of the nine polio cases detected thus far in 2020. In addition to door to door vaccination using mOPV2, all childhood vaccinations are available during the campaign at fixed sites to ensure that children identified during household visits as having missed vaccine doses can be covered. The campaign has adapted vaccination practices to reduce the risk of COVID-19 transmission – a focus of the training provided to the vaccination teams – including the use of no contact vaccination, where the child’s caregiver and not the vaccinator opens the child’s mouth to receive the drops; more frequent changing of droppers; and handwashing whenever a vaccinator changes the dropper or inadvertently touches a child.

Looking forward

Togo, with the support of WHO, is learning from its experience of responding to the pandemic and, in so doing, it is preparing for further challenges that may arise in the coming months. As the COVID-19 situation evolves, the WHO Country Office will continue to work hand in hand with the Government in pursuing a coordinated and dynamic response, while at the same time strengthening the country's health system to meet current and future challenges. In addition to preparing for the safe reopening of schools at the end of October, WHO will support the Government in managing its land borders and monitoring travellers once these are reopened too. Efforts will continue to protect health workers from COVID-19 by enhancing IPC practices. WHO will assist the Government in its endeavour to maintain essential health services and achieve universal health coverage while also combating the COVID-19 pandemic. This includes strengthening community engagement in order to tackle risk communication challenges more effectively and to rebuild trust within communities, especially with regard to the uptake of immunization services. Finally, the Country Office will strengthen coordination mechanisms and resource mobilization with all partners, including the private sector, to achieve greater coherence, synergy and complementarity of actions.
Responding to the COVID-19 pandemic: Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

WHE/EURO HUBS

Key areas:

Connecting countries in peacetime and crisis

In the aftermath of the West Africa Ebola outbreak in 2014, the World Health Organization (WHO) started to reform its structure, enabling it to act promptly whenever emergencies strike. In 2016, the WHO Health Emergencies Programme (WHE) was established – as one programme, with one workforce, one budget, one line of accountability, one set of processes and systems, and one set of benchmarks.

WHE’s conceptual framework is built on health system strengthening in countries with high vulnerability; accelerating all-hazards preparedness through the International Health Regulations (IHR) (2005); strengthening assessments and core capacities; focusing on prevention and control strategies for high threats and infectious hazards; and coordinating and leading early warning systems, risk assessment and situation analyses for responding to emergencies.

With WHE in place, WHO has been providing leadership on matters critical to health in an emergency response, by convening and coordinating, leading the health sector and filling any gaps in the response.1

Setting the new working modality for WHE and the WHO Regional Office for Europe

WHE’s work in the WHO European Region covers cooperation with 53 Member States and more than 10 contested areas. The work is delivered through one of 32 WHO country offices,2 with technical support from the WHO Regional Office for Europe.

Focusing on preparedness activities and the accelerated implementation of the IHR (2005) core capacities, the WHO European Region has followed the WHE country business model and, in 2017, established three hubs that cover 15 priority countries; they are located in Georgia, Kyrgyzstan and Serbia (Fig. 1.1). Each hub covers a set of priority countries that are geographically close and are similar in terms of prevalent public health risks, levels of development of their health systems and systemic challenges, and socioeconomic development. The hub-and-spoke system is efficient thanks to the sharing of human resources and the reduction in travel costs. Moreover, the WHE teams in this system are familiar with the country-specific context, health system challenges, ministries of health, expert networks and civil society organizations, as well as the United Nations (UN) country teams. Being in place when emergencies hit is a major benefit of this structure; experts are at the forefront from the outset, and are ready to respond, building on their knowledge, and working with all stakeholders and partners and across programmes. Since the team is familiar with country-specific preparedness gaps, it can match support from WHO and partners to actual needs.

2 This includes 30 WHO Country Offices, one WHO Office in Pristina and one WHO Country Office in Israel that is being established.
The WHE/WHO Regional Office for Europe hub-and-spoke teams are a technical and operational extension of the WHE/WHO Regional Office for Europe. The coordinator of each hub delivers and facilitates WHE/WHO Regional Office for Europe activities, in collaboration with the respective WHO country offices. With country-specific knowledge and in-depth understanding of country contexts, the hubs allow WHO to provide tailored and relevant support to the priority Member States in the WHO European Region, prompt and effective responses in emergencies, and intensive and fit-for-purpose activities in peacetime.

In each hub, the coordinator acts as the technical health preparedness and response expert, and connects the hub with its spokes (i.e. with WHE/WHO Regional Office for Europe) and with other hubs. Through close collaboration with WHO country offices and staff from the WHO Regional Office for Europe, the coordinators ensure that countries are supported to monitor and objectively assess their emergency preparedness and response capacities and needs, and to take appropriate, context-specific technical actions to address the capacities and needs where necessary. In the context of the COVID-19 pandemic response, the hubs are the agile arms of the WHO Regional Office for Europe Incident Management System and the Incident Manager Support Team.

Propelling emergency preparedness in countries

Before COVID-19, the hubs mainly focused on emergency preparedness linked to IHR (2005) core capacities within broader health system strengthening activities.

The closeness of each hub team enabled swift actions and proved to be critical in engaging countries in the region’s COVID-19 response. The hubs augmented the existing connectivity with countries, partners, experts, stakeholders and the three levels of WHO to initiate the countries’ COVID-19 preparedness and response. Moreover, the hubs record vital information on who is doing what, when and where, and thus can indicate who should be called on to provide timely supports. The hubs’ forum (between countries within a hub, and between hubs) becomes a unique venue for the uninterrupted exchange of information, lessons learned and best practices, stimulating collaborations and, more importantly, ideas for solutions. Thus, Armenia learned from Georgia’s experience, Bosnia and Herzegovina received a technical expert from Serbia, and Kyrgyzstan’s ability to mobilize resources helped other countries to gain support from regional partners.

3 The map does not represent the exact scale of the countries’ sizes and positions.
Leveraging the circle of trust

When COVID-19 reached Central Asian countries, the Central Asian hub’s close relationship with national health authorities and its network of experts helped the countries within that hub to accelerate their COVID-19 preparedness before any case was detected in the subregion. “We are building bridges of trust that are not visible to eyes”, said Dr Tasnim Atatrah, coordinator of the Central Asian hub.

Harvesting the trust that had been built up when the COVID-19 pandemic started, the hub could promptly bring in the WHO Regional Office for Europe specialized mission to Tajikistan. That mission conducted a rapid assessment of the countries’ preparedness and capacity to respond to the new emerging disease. Immediately, an international expert with first-hand experience in emergencies arrived to work with all the countries of the hub, to further assess and strengthen the different aspects of the COVID-19 response. Given Central Asia’s constrained health systems, the assessments used by the expert were adapted to capture the situations on the ground. The ensuing technical advice also considered the context, to enable countries (as far as their capacity allowed) to withstand the effects of COVID-19, particularly as numbers of cases rose.

In Kyrgyzstan, the assessment led to the development of an evidence-based COVID-19 preparedness and response plan, which the country presented to international partners in a coordination and collaboration platform created by the hub. The technically sound plan increased the partners’ trust in the government, and thus helped to mobilize US$ 45 million of support to Kyrgyzstan, 200% more than the requested amount.

In Central Asia, support from partners has allowed countries to make improvements for the health workforce (e.g. obtaining surge capacity, and equipping the health workforce with sufficient tools and skills). Kazakhstan produced a tailored training module on infection prevention and control (IPC), including the correct use of personal protective equipment (PPE); also, the communication platform facilitated by the hub made it possible for focal points from other countries to join the training. In Uzbekistan, experts from the WHO Regional Office for Europe provided training on case management, adapting the training to the local context while giving participants high-quality and up-to-date scientific inputs.

The adapted tools and the evidence-based information from the mobilized experts allowed the hub to provide step-by-step guidance to the government, the ministry of health, national experts and staff, partners and other stakeholders. It also allowed the hub to communicate gaps and plan actions to fill those gaps. WHO has engaged the European Commission in meeting the countries’ short- and medium-term needs. Central Asia received €3 million to strengthen health system resilience and €2.2 million to advance the response and deliver PPE, during the COVID-19 pandemic.

Providing solutions

In the Southern Caucasus, the WHE hub also took early action by deploying international experts with hands-on experience to support countries’ laboratory capacity. An expert rapidly assessed the laboratories in the three countries of the hub in terms of available expertise, equipment and practices, biosafety level, resources and needs. A list of needs was created, and served as the reference for procuring the necessary equipment and
labatory supplies such as test kits, swabs, transport media and polymerase chain reaction (PCR) machines. The list also served as an evidence-based reference for partners and WHO to support the countries’ laboratory capacity. To date, several batches of laboratory supplies have been dispatched to the Southern Caucasus with financial support from the European Union (EU).

The assessment result was also discussed with national laboratory experts to determine how WHO guidelines on COVID-19 detection should be applied to the national reference laboratory and its network. Based on this discussion, a country-specific programme was used to train laboratory staff on COVID-19 testing using PCR, including the biosafety protocol. The expert also provided onsite support to national reference laboratories and COVID-19-designated laboratories in various parts of the Southern Caucasus. The speed of the COVID-19 preparedness and response meant that staff had to continue working while learning the new practices.

The scaling up of the COVID-19 testing capacity includes animal health and food safety laboratories, and both public and privately owned laboratories. The expert helped to standardize the procedures in these different types of laboratories with different levels of capacity, so that every laboratory could contribute valid data to the surveillance system. This calibration and the increasing level of testing has given the government more accurate epidemiological data to guide decision-making about implementing, increasing or decreasing movement restrictions in certain geographical locations or population groups. “Our overall work actually informs governments’ decisions and policy-making on [the] COVID-19 response”, said Dr Vasily Esenamanov, coordinator of the Southern Caucasus hub.

Learning from Georgia’s experience, the hub helped Armenia to develop a system in which the epidemiological data and transmission potential are combined with information on socioeconomic activities; such information is useful to the authority as it implements different phases of movement restrictions. The hub coordinated with the World Bank and collected relevant data sets to categorize COVID-19 transmission risks in different socioeconomic settings. The Government of Armenia was able to use this information when deciding on the opening or closing of public and business premises, based on the risk category of the areas and the associated economic impact.

Catalysing actions

In the Balkans, a weekly online meeting enables the hub to recognize challenges and needs at the early stage, and provide suitable support in a timely manner. The hub and the deployed experts helped countries to formulate timely action points for strengthening their preparedness and responses.

The hub arranged remote technical support for Albania, with an international expert reviewing the country’s contact tracing tools and protocols, and providing key recommendations for improving those tools and protocols. The hub promoted the use of Go.Data – the WHO tool for field data collection during public health emergencies – to advance contact tracing. Currently, the hub has collaborated with the WHO Regional Office for Europe and WHO headquarters to install and implement Go.Data in the countries within the Balkan hub. Taking a proactive step to close the capacity gap, the hub conducted two rounds of training on case management and IPC in each country, resulting in improved skills for caring for COVID-19 patients and passing on the training to other frontline health care workers at the subnational level.
In Bosnia and Herzegovina, in the light of expected fatigue in the public health workforce, the hub provided advice on how to maintain and even scale up contact tracing capacity. The Ministry of Public Health recruited 25 personnel with different educational and professional backgrounds; the hub then trained those personnel in contact tracing and monitoring of the relevant surveillance indicators. Seeing the increasing trend in COVID-19 cases, the hub arranged for a senior clinical expert from a Serbian clinical centre for infectious diseases to share his hands-on experience with his counterparts in Bosnia and Herzegovina. “I think intercountry solidarity and support are very important than ever during such crises and it is very crucial for the pandemic containment efforts”, said Dr Abebayehu Assefa Mengistu, coordinator of the Balkan hub.

When the epidemic peaked in Kosovo in August 2020, an expert for case management from Sweden was recruited and deployed to Kosovo, to support local clinicians. The hub collaborated with the WHO Regional Office for Europe and the Global Outbreak Alert and Response Network (GOARN) secretariat to deploy an emergency medical team (EMT) from Germany. The EMT comprised intensivists, anaesthesiologists, IPC specialists and paramedics, and was intended to support case management in hospitals. In September, the EMT worked with local clinicians for 2 weeks to treat COVID-19, and exchange experiences and best practices with their local counterparts.

Subsequent works

All hubs continue to be alert and ready to step up their activities. The use of online modalities (e.g. chat applications and videoconferencing) simplified and sped up the communication process, in line with the cost-effective approach of the hub. Hubs have also used online technology to provide remote support, particularly in light of the travel restrictions imposed by countries to reduce the risk of COVID-19 importation.

The preparedness and response activities involving national, regional and international experts, along with multisectoral stakeholders, have developed knowledge that will enrich emergency preparedness and response now and in the future. As the WHO Regional Office for Europe moves towards reform, it can use that knowledge to help countries to develop their health systems, and to engage multisectoral stakeholders in the interface between health and socioeconomic efforts.

The hubs’ understanding of contexts and realities in countries will help to ensure that the multitude of guidance and tools provided by WHO can be used to optimize preparedness and response activities within a country’s limitations and needs. The hubs’ on-the-ground scientific assessment of strategic preparedness and response plan pillars will inform further support from WHO and partners; it will also improve public health emergency preparedness and response, from engaging laboratories working outside of human health to cascading education for health workforce. The WHO Regional Office for Europe could support the hubs as they work to reorient the existing health workforce in the post COVID-19 context, helping them to use innovative systems and technologies to provide team-based, people-centred care.

4 All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).
Reflecting on the role of the WHO Country Office in responding to the COVID-19 pandemic

The COVID-19 pandemic has become an unprecedented challenge that all nations have been facing in today’s fast-changing world. It has hit all countries, not only as a health crisis but as a severe social and economic crisis that has tested the resilience of countries in all sectors and areas of development. “The COVID-19 pandemic has been a stress test for the world, and has exposed our past mistakes and failures”, Kassym-Jomart Tokayev, the President of Kazakhstan, told world leaders in his address during the General Debate of the United Nations General Assembly in September 2020. In a prerecorded address at the Assembly’s virtual gathering of leaders, the Kazakh President put forward a series of recommendations for dealing with the pandemic at an international level. These include increasing the World Health Organization’s capacity and building a strong global health system. The call for a stronger WHO and robust health systems highlights the President’s recognition of the potential of WHO to support the Government of Kazakhstan in fighting the COVID-19 pandemic. Let us take a closer look at the work of the WHO Country Office in Kazakhstan as it responds to COVID-19.

In Kazakhstan, the scale-up of preparedness for the COVID-19 outbreak coincided with the first official visit of Dr Hans Kluge, in his capacity as WHO Regional Director for Europe, on 12–14 February 2020. The visit reaffirmed the importance of optimal cooperation between WHO and Kazakhstan and helped to catalyse the country’s COVID-19 preparedness and response plan. Within days, the Country Office set up an incident management system and took the lead in initiating and convening a forum for United Nations agencies and international partners to agree on joint efforts to support the future COVID-19 response in Kazakhstan to ensure efficiency and avoid overlaps. WHO coordinated and streamlined all supplies across agencies in line with the requests submitted by the Ministry of Health and the Ministry of Foreign Affairs. The Country Office increased its logistics capacity to lead this important area of work.

The country preparedness and response plan was developed early in the response in collaboration with the Ministry of Health. The key pillars of the response were detailed, and an appropriate response plan was developed and operationalized.

On 13 March 2020, Kazakhstan’s Government announced the first cases of COVID-19 in the country, and two days later the President declared a nationwide state of emergency. With the growing need to increase the capacity of health-care professionals to respond to COVID-19, WHO rapidly organized and facilitated training on infection prevention and control and case management. As WHO obtained more accurate information about the epidemiological situation, the Country Office held additional webinars that covered different aspects of COVID-19 responses, including sample collection, laboratories, Geographic Information Systems (GIS) mapping for contact-tracing, and field data collection using the WHO online platform Go.Data.

The Country Office team, which consisted of five staff at the start of the pandemic, expanded its technical expertise to 22 persons in the light of the greater demand for WHO’s support at the country level. They advise the Government of Kazakhstan on epidemiology, laboratories, risk communication, logistics, research, processes, reporting, health operations and health systems.
The establishment of the WHO logistics and procurement platform played one of the most important roles in enabling efficient supply chain management that integrates various distribution plans, demands and supplies from national counterparts and international partners. This platform put WHO at the centre in leading the response activities, particularly among United Nations agencies, to mobilize medical supplies in a way that prevents any duplication of resources. This is critical in a situation when medical supplies and equipment are limited.

The Country Office was also confronted with global limitations; mobilizing and arranging delivery of the urgently needed supplies required continuous perseverance from the team. “Procuring medical supplies is complicated and requires specific technical knowledge”, said Dr Caroline Clarinval, WHO Representative in Kazakhstan. “There is the sheer number of line items, their specifications, then the process of quality control, and safe packaging. WHO’s technical know-how has been pivotal to carry out quality control for the items and processes to make sure that the products are appropriate, safe, and will benefit the health system and ultimately the people of the country.” The Country Office team undertook the colossal task of meticulously examining each of the requests and their specifications while ensuring the timely submission of logistics requests to the WHO supply chain portal and the delivery of the supplies to the appropriate facilities.

Additionally, WHO organized two simulation exercises on preparedness at border crossings between Kazakhstan and Kyrgyzstan and provided technical guidance on the implementation of real-time reverse transcription polymerase chain reaction (RT-PCR) testing and on the development of the national testing algorithm to ensure testing quality.

Besides driving the medical interventions, the Country Office led nonmedical work for the COVID-19 response, including risk communication. WHO has been working with the United Nations Children’s Fund (UNICEF) and the United Nations Resident Coordinator’s office to support the dissemination of information and knowledge about COVID-19 to the public, in order to generate greater awareness, fight infodemics and encourage preventive measures and risk reduction in the community. The multiagency communications group launched the #SafeHands challenge, an online initiative engaging the Ministry of Health, local bloggers and influencers. From January to June 2020, WHO increased its social media outreach to more than 500 000 viewers. The WHO visuals and videos were also shared with the United Nations Population Fund (UNFPA) and UNICEF for further dissemination. A Government call centre and chatbot, supported by WHO, are available 24 hours a day, seven days a week, to communicate with people in the community.
Responding to the COVID-19 pandemic: 
WHO’s action in countries, territories and areas, 2020

Moreover, to gather information to help prioritize health interventions, Kazakhstan rolled out the WHO tool for behavioural insights on COVID-19. The study made it possible to collect data on the population’s risk perception, knowledge, trusted sources of information, attitudes towards pandemic response initiatives and other variables to inform COVID-19 outbreak response measures, including policies, interventions and communication. Gaining a better understanding of people’s behaviours during disease outbreaks is fundamental for tailoring the response appropriately. The aim is to ensure that WHO’s key messages and recommendations meet the target audience. This requires in-depth study to avoid undue reliance on anecdotal evidence. WHO can carry out high-quality research projects with the support of partners.

Another example of the use of reliable data for policy decisions is the first national conference on health promotion in schools organized by WHO, UNICEF and national partners in June 2020, once the decision was made to reopen schools. The virtual conference brought together over 50 representatives from the educational and health sectors, as well as regional project coordinators from all 17 regions of the country and over 1500 YouTube viewers. The sessions demonstrated best practices of regional authorities and school teams and shared evidence-based information on safe reopening of schools.

Analysing its work on the COVID-19 response, the Country Office in Kazakhstan derived important lessons and recommendations, as an emergency can strike at any time in any country. The first recommendation from Kazakhstan’s experience is to equip each Country Office with a minimum essential set of technical capacity and to attribute clear roles and responsibilities for each function. At times there are political subtleties that managers should be aware of and navigate at both the country and international level, especially during emergencies.

Second, promoting the neutrality and the impartiality of the Organization is fundamental to allow WHO to maintain access and to deliver life-saving health interventions. Third, creating a value-centred work environment that matters. The values ought to be shared, upheld, reinforced and in line with WHO’s mandate as a knowledge-based organization providing technical expertise on norms and standards. Senior managers and staff would benefit from training in ethics during a public health emergency, when they are at risk of having ethical dilemmas while leading responses in high uncertainty and having to make quick decisions. Deciding what is right or wrong during an outbreak is difficult and a platform for debate helps a Country Office team decide collectively on how to approach and manage challenging situations.
Moreover, to gather information to help prioritize health interventions, Kazakhstan rolled out the WHO tool for behaviour insights on COVID-19. The study made it possible to collect data on the population's risk perception, knowledge, trusted sources of information, attitudes towards pandemic response initiatives and other variables to inform COVID-19 outbreak response measures, including policies, interventions and communication. Gaining a better understanding of people's behaviours during disease outbreaks is fundamental for tailoring the response appropriately. The aim is to ensure that WHO's key messages and recommendations meet the target audience. This requires in-depth study to avoid undue reliance on anecdotal evidence. WHO can carry out high-quality research projects with the support of partners.

Another example of the use of reliable data for policy decisions is the first national conference on health promotion in schools organized by WHO, UNICEF and national partners in June 2020, once the decision was made to reopen schools. The virtual conference brought together over 50 representatives from the educational and health sectors, as well as regional project coordinators from all 17 regions of the country and over 1500 YouTube viewers. The sessions demonstrated best practices of regional authorities and school teams and shared evidence-based information on safe reopening of schools.

Analysing its work on the COVID-19 response, the Country Office in Kazakhstan derived important lessons and recommendations, as an emergency can strike at any time in any country. The first recommendation from Kazakhstan’s experience is to equip each Country Office with a minimum essential set of technical capacity and to attribute clear roles and responsibilities for each function. At times there are political subtleties that managers should be aware of and navigate at both the country and international level, especially during emergencies.

Second, promoting the neutrality and the impartiality of the Organization is fundamental to allow WHO to maintain access and to deliver life-saving health interventions. Third, creating a value-centred work environment that matters. The values ought to be shared, upheld, reinforced and in line with WHO's mandate as a knowledge-based organization providing technical expertise on norms and standards. Senior managers and staff would benefit from training in ethics during a public health emergency, when they are at risk of having ethical dilemmas while leading responses in high uncertainty and having to make quick decisions. Deciding what is right or wrong during an outbreak is difficult and a platform for debate helps a Country Office team decide collectively on how to approach and manage challenging situations.

By far the most critical part of WHO’s role in providing technical advice to Member States lies in the ability of its experts to remain up to date with the technical specificities and know-how of each field. More importantly, it also lies in the skill sets that the experts bring to the situation, rapidly assessing and understanding the country’s structure, resources, practices and differing situations to find ways of ensuring the application of global guidelines and standards in the country and identifying the required results that will contribute significantly to containing COVID-19. WHO team members are expected to have the capacity to see what countries should and could do, help ministries to contextualize the new guidelines and tools, guide national counterparts through the implementation of these guidelines and tools, and promote an environment that allows for two-way communication and collaborative work in implementing the standard practices and protocols within the country context.

Managing an outbreak of a new disease and considering the unprecedented situation it has created also means that WHO and entire national health systems have to adjust their way of operating. This requires a new level of flexibility and dynamic ways of working. None of this can be achieved without committed governments, health-care workers and WHO teams promoting evidence-based health interventions that are tailored to the needs of patients.
Lao People’s Democratic Republic

Key areas:

Harnessing the existing health system and partnerships to respond to COVID-19

The Lao People’s Democratic Republic has been rapidly developing its health system over the past decade, in line with the WHO strategic focus on emergency preparedness and response. Thanks to having the necessary capacities in place and to its strong collaboration with WHO and other partners, the country has been able to respond effectively to the COVID-19 emergency. As of 5 November 2020, the Lao People’s Democratic Republic has had only 24 cases, with no sustained community transmission occurring, and zero deaths.

The Government’s early response to COVID-19

As soon as the early cases of unknown pneumonia were reported from neighbouring China on 31 December 2019, the Lao People’s Democratic Republic immediately took measures to prevent the potential transmission of the disease within its territory. A National Prevention, Control and Response Task-Force Committee on COVID-19 was established by the Government. WHO helped the Ministry of Health to explore various scenarios so that it could plan for the country’s expected needs with regard to medical and laboratory equipment (including personal protective equipment) and consumables.

A COVID-19 orientation meeting in Vientiane for Buddhist monks in charge of temples. The event was organized by the Ministry of Health, the Lao Front for National Development and the Central Buddhist Fellowship Organization, funded by the United States Agency for International Development (USAID) and technically facilitated by WHO. Photo credit: S. Khounpaseuth.
The issuing of visas on arrival at points of entry on the border with China was suspended, and the Government shortly thereafter closed some of the entry points into the country from China, Myanmar, Thailand, Cambodia and Viet Nam. While the remaining points of entry were kept open for returning citizens, enhanced surveillance measures were put in place. The Government proactively started holding daily press conferences, complemented by other nationwide risk communication activities, to ensure that the public could readily access trustworthy information and to combat any misinformation. A ban on large public gatherings was also quickly issued to reduce the risk of the disease spreading rapidly if a case were to occur in the country. Early in March 2020, the Government suspended national events such as the 11th National Games and the festivities to celebrate the recent listing of the Plain of Jars as a World Heritage Site.

One week before the first cases of COVID-19 in the Lao People’s Democratic Republic were announced (namely, on 24 March 2020), the Prime Minister had already ordered a temporary closure of schools, universities, shops and entertainment venues. All people, except for those working in essential services, were asked to work from home. Stricter surveillance and border control measures were introduced, and the issuance of tourist visas was suspended. Visitors and Lao citizens returning from other countries have since then been subject to mandatory testing on arrival and required to undergo 14 days of quarantine. Determined to curb the potential spread of COVID-19, the Government introduced a nationwide lockdown and banned interprovincial travel from 1 April to 3 May 2020.

Harnessing the existing systems and partnerships to respond to COVID-19

In conjunction with strengthening its health system, which is essential to emergency preparedness, the Lao People’s Democratic Republic has over the past decade been building its capacities to be able to respond effectively to public health emergencies, in line with WHO’s Asia Pacific Strategy for Emerging Diseases (APSED).

The country’s health system has been dealing with various public health emergencies in recent years – from outbreaks of diseases, such as measles and dengue fever, to emergencies caused by natural disasters, such as flash floods. The lessons learned have been used to strengthen national emergency response mechanisms. WHO has been supporting the Lao People’s Democratic Republic throughout in the development of its health system.

In support of global influenza surveillance efforts, the Lao People’s Democratic Republic established a central virology laboratory at the National Centre for Laboratory and Epidemiology (NCLE), with the capacity to perform reverse transcription polymerase chain reaction (RT-PCR) tests. In order to scale up the NCLE’s capacity to meet the demand for COVID-19 testing, WHO and the United States Agency for International Development (USAID) partnered with the Luxembourg Agency for Development Cooperation, the United States Defense Threat Reduction Agency and the United Kingdom’s Department for International Development to provide laboratory equipment (including reagents and swabs) and training. The Global Fund to Fight AIDS, Tuberculosis and Malaria (hereafter “the Global Fund”) later joined in this initiative by contributing laboratory reagents and supplies through the United Nations Office for Project Services. Lao laboratories are currently able to perform up to 1500 tests per day. Sentinel sites for the surveillance of influenza-like illnesses (ILIIs) and severe acute respiratory infections (SARIs) were already in operation in the country’s 18 provinces, and COVID-19 testing was duly added to the existing surveillance protocols.

The public health emergency operations centres (PHEOCs) constitute a further mechanism that is in place at both the central and provincial level. In line with a key APSED recommendation, such centres were established across the country, with the support of the Bill and Melinda Gates Foundation, in order to strengthen overall capacity for dealing with public health hazards, including outbreaks of emerging and re emerging diseases. WHO already had a long history of working together with PHEOCs in the country responding to health emergencies, including the one caused by the floods in Attapeu Province in 2018. In action already during the
Responding to the COVID-19 pandemic: Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

preparatory phase of the COVID-19 response, the clearly structured emergency operations mechanisms in PHEOCs have expedited the coordination of response measures within the provinces and between provincial authorities and the central Government.

On the ground, rapid response teams (RRTs) have reinforced the surveillance system and the PHEOCs. WHO has been assisting the RRTs with capacity-building by supporting the Field Epidemiology Training Programme ever since it was launched in the Lao People’s Democratic Republic in 2009. The 86 graduates of the programme have been at the heart of RRTs at the central and provincial levels. These teams also feed information to the sentinel ILI and SARI surveillance systems. In view of their important role in the early detection of COVID-19 cases, RRTs have been familiarized with the new case definitions, along with the supplementary investigation tools for COVID-19. WHO provided the RRTs with the necessary equipment and training through joint resource mobilization with various partners, notably Switzerland.

Upgrading health information systems to support evidence-based actions and decisions

Rapid response teams were recently introduced to an expanded version of the existing multisource surveillance system (MSS), which was built on the basis of the national health information system by the Ministry of Health with the support of WHO, the GAVI Alliance and the Global Fund. During the COVID-19 pandemic, the MSS has been further enhanced by NCLE – with technical support provided by WHO for reviewing the standard operating procedures and the system’s implementation – to enable swift and easy reporting of potential COVID-19 cases.

The key information in the MSS is collected from hospitals, local health departments and sources at the community level through close collaboration among all the departments and centres of the Ministry of Health. The MSS has also been gathering information through social listening, which involves following the discussions on social media platforms.

At the community level, village health volunteers (VHVs) are reporting health events and monitoring people who may have been exposed to COVID-19, including close contacts of confirmed cases or people returning from affected countries. The volunteers lay the groundwork for the RRTs by identifying events that may require further investigation, and they also provide surge capacity to support public health officials. To date, WHO has supported the training of VHVs in five provinces. Training activities will be conducted in the remaining 13 provinces in the coming weeks. The assistance provided by WHO with community engagement for event detection and contact monitoring has been supported by China.

A technical working group was established within the Ministry of Health to regularly analyse the information collected through the MSS with a view to detecting early signs of possible transmission, conducting situation assessments and issuing recommendations on response measures. The outcomes of the assessments are reported at the meetings of the central PHEOC and used by senior officials when making decisions on travel restrictions and other measures. WHO is providing technical assistance for the training workshops organized by the Ministry of Health to strengthen capacity for using the MSS in decision-making at the provincial level.

The national health information system itself, which is based on a District Health Information Software 2 (DHIS2) platform, was readily modified to support real-time information collection and analysis as a key strand of the COVID-19 response. WHO has been supporting the development and implementation of the DHIS2 platform in the Lao People’s Democratic Republic since 2013. One unexpected benefit of having such a system in place is that it has served to demonstrate the indirect success of community-wide efforts to reduce COVID-19 transmission through measures such as physical distancing, wearing masks and hand hygiene. Thus, DHIS2 data indicate that hospital admissions due to a range of conditions such as pharyngitis, tonsillitis, respiratory infections and diarrhoea decreased significantly from January to August 2020. The box below gives an overview of how the DHIS2 platform was modified, together with further examples of its contribution to the COVID-19 response.
Modifying the existing DHIS2 platform to support the COVID-19 response and maintain essential health services

Since 2013 the Lao People’s Democratic Republic has been developing a national health information system based on a DHIS2 platform to identify public health risks. When the COVID-19 pandemic broke out, a simple modification of the platform enabled the country to design, develop and implement a new COVID-19 tracker within three weeks of activation of the emergency response mechanism in early March 2020. This system collects and processes data on suspected cases, positive cases, contacts and returning migrant workers; it features several dashboards to facilitate data visualization for active monitoring, surveillance and quality control.

WHO has supported the Ministry of Health with the rapid development and roll-out of a tablet-based application connected to the DHIS2 system. This app collects key data such as the numbers of COVID-19 and intensive care beds, ventilators and human resources for health in designated COVID-19 treatment hospitals. The real-time data obtained from each hospital on bed and ventilator occupancy, in particular, help the Ministry of Health and WHO to make informed decisions on the management of critical resources.

The availability of real-time data allows the Lao People’s Democratic Republic to be agile in its COVID-19 response. The Ministry of Health and WHO can easily interrogate the system to analyse trends in outpatient and inpatient attendance across all hospitals and thus assess the health system situation in the country. WHO has been providing support with information management to monitor key indicators on the provision of essential health services, such as the number of admissions per month and the types of disease being treated.

The data for the second quarter of 2020 show an increase in outpatient attendance, indicating that people’s health seeking behaviour was not significantly influenced by COVID-19. Another important trend was a pronounced decrease in inpatient admissions owing to fewer cases of diarrhoea, pharyngitis, bronchitis and other respiratory diseases. This decrease may be regarded as a proxy indicator of the effectiveness of the handwashing, mask wearing and physical distancing measures adopted in the Lao People’s Democratic Republic as part of its COVID-19 response.

Comprehensive WHO support in building the capacity of the Lao People’s Democratic Republic to respond to COVID-19

Recognizing that good infection prevention and control (IPC) is central to the quality and safety of health services, the Lao People’s Democratic Republic has invested great effort in developing IPC standards and guidelines for health care facilities. A network of IPC teams implements the guidelines at the central and subnational levels. The Ministry of Health’s work on IPC has been funded by various development partners and technically assisted by WHO. Although such work was already under way before the pandemic, it has expanded and accelerated in the course of 2020.

In April and May 2020, the Ministry of Health and WHO conducted field visits to all health facilities in the country designated for COVID-19 care so as to verify that they were applying essential IPC measures, including: setting up screening and triage areas and isolation rooms with IPC precautions in place; training staff on the proper use of personal protective equipment; and disinfection and cleaning. The Ministry and WHO are currently drawing up a plan for follow-up visits to all provinces in order to continuously monitor the implementation of these measures while providing further technical support. A further key aspect was the introduction of IPC measures for public places: WHO supported the Ministry in developing simple guidelines and posters for various settings to ensure that the measures were communicated effectively to the public.
Supplementing WHO’s support for IPC enhancement at health facilities, the World Bank recently announced a grant of US$ 200 000 to improve hygiene in 50 hospitals, in 40 districts. Meanwhile, USAID funded activities relating to hygiene improvement, cleaning and disinfection in both health and non-health settings, particularly to reduce the risk of COVID-19 transmission during the reopening of schools in June 2020.

The Ministry of Health and WHO have devoted considerable attention to communicating with the public during the COVID-19 pandemic. Thus, WHO has been assisting the Ministry with a wide range of tasks, from the development of its communications strategy to the posting of regular webcasts. Seeking to encourage and collect insights at the local level, WHO and the Ministry invited 32 senior health promotion staff from all of the country’s provinces to in-depth meetings for the purpose of developing information, education and communication (IEC) materials. In total, WHO has helped the Ministry to print over 70 000 posters and other IEC materials on COVID-19. WHO is also supporting the Ministry in the monitoring of media and social media, and in gathering information about the public’s concerns and, more generally, knowledge that can be used in the development of effective messages on COVID-19.

Moreover, WHO has been assisting the Ministry of Health in holding monthly technical briefings on COVID-19 for the national media. Seeking to engage the media even further in support of the COVID-19 response, WHO helped the Ministry to conduct a one-day tabletop exercise on how to report an outbreak; the exercise was attended by 40 news editors and journalists.

As for human resources, WHO has been using various methods to promote capacity development among health workers across the Lao People’s Democratic Republic. One of the main tasks is to improve their understanding of COVID-19 and the relevant guidelines, tools and protocols. A series of eight training videos have been produced by WHO to reach out to front line workers.

In case management, WHO assisted the Ministry of Health in developing the national clinical management guidelines for COVID-19, and supported the training of 618 doctors and nurses from designated hospitals in all provinces on applying the national guidelines. Drawing on their professional networks, these doctors and nurses went on to train colleagues in provincial hospitals across the country. A training event attended by 115 intensive care unit (ICU) doctors and nurses from all central and provincial hospitals featured simulation of the critical care that COVID-19 patients admitted to ICUs need to receive. The Ministry of Health and WHO worked together with local authorities to ensure that every province has at least one hospital with staff trained in how to treat and safely isolate patients with COVID-19.

Coordination of partnerships to support emergency preparedness and response

Partnerships between the Government and various development partners in the health sector have been fostered by the Health Sector Working Group, an official coordination platform jointly led by the Ministry of Health, the Embassy of Japan and WHO. These robust partnerships, developed over many years, have allowed the Lao People’s Democratic Republic to build health systems that are now well equipped to deal with COVID-19.

All United Nations (UN) agencies actively participate in the joint efforts to mitigate the impacts of the pandemic in the Lao People’s Democratic Republic. WHO plays a critical role in providing technical guidance to the agencies and in coordinating support for the health sector. In particular, WHO is actively involved in the UN Crisis Management Team established to coordinate the UN system-wide scaling up of assistance to Member States for the COVID-19 response, and it chairs the Team’s subgroup on health.

WHO also worked with other UN agencies through the multi-partner trust fund mechanism to improve coordination with local authorities on the COVID-19 response; to enhance the management of quarantine facilities and points of entry; and to ensure the continued provision of reproductive, maternal, neonatal, child and adolescent health services during the outbreak.

The Lao people’s engagement – a key factor in the successful containment of the disease

As of 5 November 2020, only 24 people have tested positive for COVID-19 in the Lao People’s Democratic Republic. Additionally, the country managed to have 102 days without any confirmed COVID-19 cases between April and July. The national strategy based on monitoring, consistent testing, multisource surveillance and transparency inspires confidence that there is currently no sustained community transmission of COVID-19 in the country.

The WHO Representative also credited the Lao people’s contribution to minimizing the risk of community transmission of COVID-19 by observing the recommended preventive measures. The national context and culture have played a fundamental role in the response to COVID-19 in the Lao People’s Democratic Republic. In particular, the country is not densely populated, even in its largest cities. Out of a total population of 7 million there are fewer than 1 million people living in the capital Vientiane.

The value placed on personal space and the traditional way of greeting, which does not involve shaking hands, have made physical distancing there easier. People complied with the Government’s policy restricting free movement. During the lockdown, people’s mobility at bus stations dropped by 70%, while visits to retail and recreation facilities went down by 50% and 60% respectively, compared with the levels at the start of the year (Fig. 1).

Figure 1. Changes in mobility over time in the Lao People’s Democratic Republic

The active participation of members of the community has also contributed to the high level of compliance with public health measures. Village health volunteers enable risk communication messages to reach the entire village community. Prominent and influential figures, such as the monks from the Lao Buddhist Fellowship Organization, help the Government to communicate with the public, particularly when announcing the cancellation of religious events.
WHO’s continued support to address remaining challenges and ensure future improvements

The reopening of public places and businesses means that sustained community commitment to preventive measures remains crucial. WHO will continue supporting the Government to maintain active engagement and communication with local communities so that the disease remains under control.

Despite a decade of strong investment and support, the Lao health system still faces constraints in terms of human resources, medical supplies and financing that may make it challenging to deal with a future epidemic of COVID-19 while also maintaining other essential health services. This underlines the crucial importance of WHO’s ongoing support to the country, not only for strengthening further the health system and its capacity to manage potential future COVID-19 cases, but also for maintaining a focus on the prevention and rapid detection of, and response to, emerging diseases in general.

Seeking to address the aforementioned constraints, WHO has supported the Lao People’s Democratic Republic with the development of a National COVID-19 Preparedness and Response Strategic Plan covering the years 2020–2025. The Strategic Plan includes short- and long-term measures aimed at simultaneously preparing the health system for other public health emergencies and protecting the entire population as well as vulnerable groups, with the involvement of all relevant sectors in the country and external partners.
Key areas:

Leveraging polio structures to address SARS-CoV-2 and strengthen primary health care during a period of unprecedented global socio-economic turmoil

The COVID-19 pandemic has demonstrated a lack of preparedness in most countries. With the first reports of SARS-CoV-2 outside China in January 2020, WHO on 30 January declared COVID-19 a grade-3 public health emergency of international concern (indicating that substantial internal coordination and response is required). On 31 January, it listed Nigeria as one of 13 countries in Africa at high risk of COVID-19. The WHO Country Office in Nigeria immediately activated its incident management system, reassigned central staff to the relevant pillars and solicited additional surge capacity. Zonal coordinators were invited to Abuja for a pre-deployment briefing on the COVID-19 outbreak response. Some had been working in the Polio Eradication Initiative for many years and had also assisted in the response to the Ebola virus disease outbreak in 2014; the similarities between SARS-CoV-2 and previous disease outbreaks were immediately apparent. The polio programme was one of the first structures to be approached by the Federal Government, as its expertise, extensive network and infrastructure provided an opportunity to deliver front-line support for preparedness and to scale up the response.

Some concern about Nigeria’s preparedness was based on the findings of a WHO joint external evaluation of core capacities for implementing the International Health Regulations (2005), a collaborative, multisectoral exercise conducted in 2017.1 The purpose of the evaluation is to determine the extent of compliance with the Regulations expressed as a score, the maximum score of 5 indicating sustainable capacity and the minimum score of 1 no capacity at all. Nigeria showed capacity in the “detect” category, with an average score of 2.6 for the 13 indicators, but was graded 1.9 and 1.5, respectively, for the categories “prevent” (15 indicators) and “respond” (20 indicators). The latter score in particular suggested that, at the time of the evaluation, the country’s capacity to react in a timely manner to a rapidly emerging large-scale health problem was limited. A country-led mid-term reappraisal of core capacities in November 2019 showed improvement in the three scores, with upgraded laboratory capacity and biological specimen transfer but continuing poor coordination and communication among ministries, departments and agencies.2

---

Nigeria has a predominantly young population of 214 million (only 3.3% aged > 65) and a high population growth rate, making it the most populous nation on the African continent. The country has a long experience of dealing with outbreaks of infectious diseases. Weekly situation updates provided by Government services include epidemiological data on Lassa fever, yellow fever, measles, rubella, cholera and monkeypox, as well as on COVID-19. At the time of reporting, on 2 November, 62,691 cases of infection with SARS-CoV-2 had been reported and 1146 COVID-related deaths.

Long before the pandemic, however, Nigeria's Federal Government had been faced with major constraints on the economy and the welfare of the country, such as the impact on its earnings of the steep decrease in the barrel price of oil – its major source of foreign exchange – and a fall in global demand for commodities, which have increased fiscal deficits. To counter the sharp fall in GDP growth (second-quarter growth in 2020 was –6.1%, while the National Bureau of Statistics reported an unemployment rate of 27.1%), the Government has had to borrow from international and domestic markets to float its budget and repay it debt. In April, the Executive Board of the International Monetary Fund approved US$ 3.4 billion of emergency support to Nigeria to address the economic impact of the pandemic. Once the impact of the COVID-19 passes, Nigeria will have to ensure medium-term economic stability to support its recovery and allow debt levels to remain sustainable.

On 31 January, the Government set up a coronavirus preparedness group to study the probable effects of spread of the virus in the population. As in many other countries in the region, the first cases in Nigeria were observed in people returning to the country on international flights, and increasing numbers of people, especially in the urban centres of Lagos, Rivers State and the Federal Capital Territory, tested positive in March and April. When the first case was reported (27 February), the Nigeria Centre for Disease Control (NCDC, the national public health institute and a Government agency under the Ministry of Health established by Act of Parliament in 2018) established a multisectoral emergency operations centre (EOC) to coordinate the outbreak response in collaboration with the country's 36 states. The response relied on an incident management system, the main themes of which were surveillance and epidemiology, laboratory services, control at points of entry, infection prevention and control, case management, risk communication, logistics, coordination, liaison and research, with the overarching goal of reducing the spread of COVID-19 in the country.

In the early months of the crisis, capacity for testing was limited, as in many other African countries, which is the main reason for the late detection and low numbers in many countries in Africa, including Nigeria. A measure of testing capacity is the number of tests per million population at risk. In Nigeria, relatively few laboratories could test for SARS-CoV-2. The only African country in the top 30 countries worldwide for testing per million population is South Africa (population 58 million), with a rate of 81,738 tests performed by 31 October. Even this rate is much lower than those in countries in the European Union and North America. Nigeria has performed a total of 673,183 tests. When the pandemic emerged, only 350 intensive care beds were available in the country, with

\[ \text{3 Disease situation reports. Abuja: Nigeria Centre for Disease Control (https://www.ncdc.gov.ng/diseases/sitreps).} \]
\[ \text{4 National Bureau of Statistics website (https://www.nigerianstat.gov.ng/).} \]
\[ \text{7 COVID-19 Nigeria. Nigeria Centre for Disease Control website (https://covid19.ncdc.gov.ng/).} \]
a similar number of ventilators. On 28 April, the Government announced a target of testing at least two million citizens in the following 3 months; it fell short of this target by two thirds but has developed several strategic responses to counter the economic and social implications of the crisis.

How expertise built during the Global Polio Eradication Initiative and other infectious disease campaigns helped in the COVID-19 response

The Global Polio Eradication Initiative was launched in Nigeria in 1988. Since then, the capacities for case detection, surveillance and response and for coordination of outbreak response have been significantly strengthened. A network of EOCs was established in the 36 states to coordinate the response to polio and other outbreak-prone infectious diseases. A Presidential task force on polio was established under the leadership of the Vice-President, and this experience was duplicated in the early phase of the COVID-19 outbreak, with the establishment of a specific task force for COVID-19. Strengthened public health functions (case detection, surveillance, response and multisectoral coordination) and other achievements have contributed to mounting an effective response.

On 25 August, WHO and UNICEF congratulated Nigeria on having achieved a significant milestone: eradication of wild poliovirus. The country had met the stringent criteria for certification by the independent Africa Regional Certification Committee, which include 3 years during which no strain is detected in the country. This public health triumph in Nigeria leaves Afghanistan and Pakistan as the only countries in the world with endemic wild poliovirus. WHO and UNICEF have provided tireless support for this objective, which was due not only to global funding but also to the efforts of Nigerian traditional and religious leaders and volunteer community mobilizers. Both WHO and UNICEF continue to support Nigeria in strengthening its primary health care system under the “Primary health care under one roof” policy promoted by the Government with the aim of reducing fragmentation of service delivery, a key determinant of user rates and health indices. The goal is for every ward in the country to have at least one functional, integrated primary health care centre; there are now 10–15 wards in each of Nigeria’s 774 local government areas. This is crucial if children under 5 are to continue to receive routine vaccination, including against polio.

Key elements of the “Primary health care under one roof” policy

- integration of primary health care service, with decentralized authority, responsibility and accountability;
- legislation and regulations to promote primary health care;
- a single management body that controls services and resources, especially human and financial resources;
- an integrated, supportive supervisory system;
- effective, appropriate referrals to the various levels of care; and
- acceptance of the three “ones” principle: one management, one plan and one monitoring and evaluation system.

For factsheets, see the Partnership for Reviving Routine Immunization in Northern Nigeria, Mother, Newborn and Child Health programme.

---


9 Partnership for Reviving Routine Immunization in Northern Nigeria; Maternal Newborn and Child Health Initiative website (http://www.prrinn-mnch.org/resources_factsheets.html).
More than vaccinations

The WHO Country Representative, Dr Walter Mulombo Kazadi, observed that polio workers have always been involved in disease entities beyond polio and that their presence would be essential as Nigeria entered the community transmission phase.

[They] perform critical functions to contain outbreaks. With the COVID-19 response, the polio staff are assisting with coordination, contact tracing, investigation of cases, risk communication, community engagement and disease surveillance at the state level.10

In April, polio personnel were monitoring 6655 contacts and conducting follow-up visits. Staff were also giving talks in local communities to provide clear, accurate information about the virus and how to limit its transmission. Technical officers informed more than 11 700 community and religious leaders in all 36 States and the Federal Capital Territory about the outbreak and the Government strategy. With this innovative technique, questions about surveillance of COVID-19 were added to a mobile application originally devised for monitoring Ebola virus disease and acute flaccid paralysis by health workers and community volunteers in remote areas. Surveillance, Outbreak Response Management and Analysis System software, an initiative of the Helmholtz Centre for Infection Research in cooperation with the NCDC, is one of a few programmes that provides comprehensive disease surveillance and outbreak management functionalities on a single digital platform. 11

A total of 774 disease notification and surveillance officers are tracing COVID-19 contacts across the country, and 50 689 community informants relay information to communities and report on cases. The strategy of active searches for signs of acute flaccid paralysis was pioneered by the Polio Eradication Initiative.

Adopting the EOC model

Early in the outbreak, Nigeria’s Ministry of Health through the NCDC and state ministries of health activated the EOCs in the affected states to coordinate response activities. The EOC is a disease containment model introduced into Nigeria with the polio programme. It is organized into six functional units: management and coordination, epidemiology and surveillance, case management, laboratory services, risk communication and points of entry. One of its priorities is to build capacity rapidly by training local doctors, health officials at ports and other points of entry, ship crews and military personnel in the principles of infection prevention and control, decontamination and contact tracing. WHO supported the Government in training key personnel in states. Polio EOCs were repurposed to support the COVID-19 response.

Now that the goals of polio eradication have been achieved and polio workers have proved their worth, first in containing the Ebola virus disease outbreak in 2014 and then in responding rapidly to the challenge of COVID-19, the Polio Eradication Initiative is undergoing a transformation, absorbing new functions such as providing basic health services and becoming part of the wider health system. As Dr Walter Kazadi observed,

*The polio infrastructure on the ground… [was] crucial for mounting the response to the outbreak and continues to be WHO’s frontline technical support to the Nigeria Centre for Disease Control and States’ respective incident management teams.*

**Operational challenges in the north-east**

The polio structure is based on a network of community informants and workers in inaccessible areas and in nomadic communities, and the strategy has been used in the past to detect and respond to both cholera and measles outbreaks in insecure border areas, including among the communities living on the Lake Chad islands in Borno State. These workers commonly use pictorial leaflets (e.g. on acute flaccid paralysis) and tally sheets to report the number of cases of epidemic diseases observed, to administer vaccinations and in some cases to evacuate people for observation and treatment in safe areas. After Borno State’s index case was reported on 20 April, WHO supported local health care workers in tracing contacts, managing confirmed cases in isolation units and screening travellers at the 28 entry points to the state. The Country Office has helped to train more than 1000 doctors, nurses, pharmacists, epidemiologists, health educators and community outreach workers. At the end of May, with donor partners, WHO launched a campaign “COVID-19 Heroes campaign” to give popular recognition to survivors as heroes and heroines. Support was also provided to the State to develop risk communication and surveillance activities, strengthen logistics, provide mental health care services and set up rapid response teams. Borno State is the target of a decade-old insurgency, which has claimed many lives and displaced millions of people internally; the State also has refugees from neighbouring countries. It is undergoing an outbreak of malaria, which is the reason for half of all consultations at health facilities and with community health workers in north-eastern Nigeria. WHO estimates that malaria, which kills more than 100 000 people every year in the country, is responsible for more morbidity and mortality than all other causes, including measles, cholera and hepatitis E. ¹²

Malaria control programmes, which are supported in Adamawa, Yobe and Borno by the Global Fund to Fight Tuberculosis, Malaria and AIDS, were not suspended during the COVID-19 crisis, although there were records of stock-outs of malaria drugs and commodities at health facilities. The Borno State government, through the “Saving one million lives” programme, procured 100 000 bed nets at the beginning of the year, far fewer than the number required for all the pregnant women and children under 5 who have been immunized. Adamawa State is conducting a mass campaign to distribute nets to the entire population. The planned seasonal malaria chemoprevention campaign in Borno and Yobe states was held as planned, although there were shortages of drugs in both states. Yobe State completed its four cycles, as the implementing partner redistributed drugs from other locations; however, some settlements and children were missed in the campaign. Borno State did not have enough drugs for three implementation cycles and is still awaiting their arrival.

Funding the multilateral donor response

Through the various health crises that it has seen over the years, including curtailing the menace of Ebola virus disease at its frontiers in 2014, Nigeria has a long experience of mobilizing funding from donors and third parties. At the outset of the COVID-19 crisis, the Federal Government in Abuja estimated that it would require US$ 330 million to procure medical apparatus, personal protective equipment, tests and pharmaceuticals to control COVID-19.13 The Government pledged various sums for the NCDC and Lagos State, the most heavily affected state, and financial commitments were made by private, bilateral and multilateral institutions. The Nigerian National Petroleum Company, for instance, earmarked US$ 30 million to assist the Government in meeting its target. This basket fund was supplemented by a contribution of € 50 million from the European Union. After encouragement from the Governor of the Central Bank of Nigeria, the private sector set up the “Coalition against COVID-19” in March and raised over US$ 72 million, which will be used to purchase medical facilities and equipment for different parts of the country.

The strategic objectives of the country's joint support framework are directly aligned with those of the COVID-19 Global Humanitarian Response Plan to contain the spread of the virus. Given the multidimensional nature of the crisis, the United Nations organizations in Nigeria have developed a triple cooperative response by amalgamating their expertise: WHO and UNICEF assist in the health response (epidemiology, strategy, response), the World Food Programme and the International Organization for Migration in humanitarian aspects and the United Nations Development Programme and the Food and Agriculture Organization of the United Nations in social and economic elements. WHO’s main activity in the response plan has been to encourage funding from donors, including the European Union and the Bill & Melinda Gates Foundation. The WHO Country Representative represents the United Nations and all other international partners on the Presidential task force for COVID-19 and participates in discussions with the Development Partners’ Group, the Federal Ministry of Health and other national ministries, departments and agencies, in which it offers guidance and leadership.

Microeconomic effects of the Government response

After travel bans in March, closure of schools, successive lockdowns in several states in April (Bauchi, Federal Capital Territory, Lagos, Ogun) and a nationwide curfew (20:00–06:00) in May, the Government promised various palliative measures to offset the economic difficulties experienced by its citizens. It has since relaxed the lockdown measures, recognizing that they will not stop virus transmission on their own, although they have raised public awareness and acted as a temporary stopgap. It is widely accepted, however, that, in the absence of an adequate social safety net for the most vulnerable or a strategy to foster economic revitalization, drastic measures will have detrimental medium- and long-term consequences.14 The measures that have been taken are listed below.

- **Economic Stimulus Bill 2020.** The aim of the Emergency Economic Stimulus Bill 2020, passed on 24 March, is to support businesses and citizens by providing 50% tax rebates to registered businesses to avoid redundancies. While providing relief to the formal sector, this ignores the fact that 65% of Nigeria’s total GDP derives from the informal sector, in which > 90% of the workforce is engaged. By definition, businesses in the informal sector, which often rely on microfinancing or community funding arrangements, are unregistered and unlikely to be eligible for this stimulus.

---

• **Cash transfers.** In early April, the Government announced that it would provide a cash transfer of 20 000 Naira (US$ 52) to poor and vulnerable households registered in the National Social Register. Only 2.6 million households (about 11 million people) are registered, however, and most people are likely to miss out on this stop-gap solution, as only a few have access to electronic payments and only 40% of the population has a bank account. It has been calculated that 87 million Nigerians live on less than US$ 2 a day. 15

• **Central Bank of Nigeria stimulus package.** This stimulus package offers a credit of 3 million Naira (US$ 7800) to poor families impacted by COVID-19. It requires collateral, however, and is unlikely to be accessed by the informal sector.

• **Food assistance.** After President Buhari imposed the lockdown in Lagos, the Federal Capital Territory and Ogun states at the beginning of April, the Ministry of Humanitarian Affairs Disaster Management and Social Development announced that it would disburse food rations to vulnerable households in those states. In Lagos, about 14 000 motorcycle and 50 000 tricycle operators lost their jobs overnight, and the cost of public transport soared as companies took advantage of the collapse in competition and raised prices. Police have often been heavy-handed in enforcing curfews and lockdowns, and it has been speculated that the combined actions of the police and military to enforce the lockdown caused more deaths than the infection itself. In October, newspaper reports in the Nigerian press suggest that the lockdown and associated measures have led to people facing hunger in many regions of the country. Armed robberies and domestic violence have increased, especially in Lagos. Nevertheless, the private sector, churches and nongovernmental organizations have provided considerable support to communities across the country, facilitating distribution of food to some of the country’s most deprived areas. According to an article in The Lancet, “despite the socioeconomic differences seen across Nigerian communities, there has been a sense of togetherness during this time”. 16

**Conclusion**

Preparedness is the key to dealing with emerging and re-emerging epidemic-prone diseases. In 2017, Nigeria’s preparedness for dealing with infectious diseases with epidemic or pandemic potential was assessed as low in a WHO joint external evaluation. The first reported case of COVID-19 in Nigeria occurred when its preparedness was not optimal. This, with ongoing socio-economic disruption and an unpredictable commodity market, made it difficult to address the pandemic properly. Despite these limitations, Nigeria was able to mount an effective response to COVID-19 that averted the major crisis predicted by various models. The country’s decades-long experience with the Global Polio Eradication Initiative provided a basis for detection and containment. The established emergency operation centres network, the surge capacity within the polio programme, establishment of a Presidential task force and strong coordination by the NCDC have contributed to the response so far. The pandemic is still unfolding, and WHO has urged countries to remain vigilant in controlling transmission and strengthening public and social measures until vaccines become available. Until then, Nigeria must continue to use its experience with polio in addressing the pandemic, which is now in its second wave in many countries.

Senegal, a robust West African country

Located in West Africa, Senegal is home to some 15.13 million people, of whom 3.14 million live in the capital Dakar, by far the country’s most populous city. The urban population accounts for 48.1% of the total population. With more than half of Senegalese aged under 25 years and only 3.1% aged 65 years or over, the median age is very low (male: 18.5 years; female: 20.3 years). One of the most stable countries in Africa, Senegal’s presidential election in 2019 saw the incumbent, Macky Sall, who had been in office since 2012, win a second term through to 2024. Since 2014, Senegal has enjoyed one of the highest economic growth rates in Africa, at around 6% annually. However, this has been significantly slowed down by the COVID-19 pandemic to an estimated 1.3% for 2020, with the service industries (transport and tourism) – the main contributors to Senegal’s gross domestic product (GDP) – being the hardest hit. In the context of the pandemic, the Government has rolled out containment measures and a comprehensive economic stimulus plan, known as the Economic and Social Resilience Programme, to protect lives and livelihoods. Economic recovery is likely to be gradual, despite the expected brisk return of higher levels of private consumption and investment in agriculture and the developing oil and gas industry. Challenges will continue to be posed by the country’s large informal sector, vulnerable health care system (with health expenditure accounting for just 4.1% of GDP) and limited fiscal space.

The benefits of an early response

As soon as the first COVID-19 cases were reported outside China, WHO advised the Ministry of Health and Social Action to initiate preparedness measures. The process was expedited by the National Epidemic Management Committee (CNGE), which has been in existence since a cholera outbreak in the 1980s and was restructured more recently following the Ebola virus crisis. Following an extraordinary CNGE meeting held on 22 January 2020, it was decided to intensify preparatory operations. An initial assessment of the country’s readiness level, based on a checklist provided by the WHO Regional Office for Africa, put that level at 65%. Subsequently, a preparedness and response plan was developed specifically to meet the challenge of COVID-19, making it possible to provide rapid response teams and hygiene officers in health districts across the country with training on infection prevention and control.

Senegal recorded its index COVID-19 case on 2 March 2020 at the Institut Pasteur de Dakar. While most of the country’s first cases were among foreigners, by the end of that month there were 175 confirmed cases, the majority being Senegalese nationals. On 23 March, the Government declared a state of emergency and imposed various containment measures: schools were closed for three weeks, cruise ships banned from docking at Dakar and all public gatherings prohibited, including religious events.
After confirmation of the first case, the Government activated the country’s Health Emergency Operations Centre\(^1\) and set up an incident management system (IMS) to coordinate response interventions. These efforts were supported technically and financially by partners under the leadership of WHO, the total budget allocated being 1.4 billion CFA francs (US$ 2 530 000). Ongoing contributions are being mapped by WHO and the World Bank. The WHO Country Office also set up an IMS of its own, appointing an incident manager and reassigning other members of the team to work on that system. The WHO Representative is supported by 14 WHO country office staff, experts from the WHO Emergency Hub in Dakar, 10 consultants, four United Nations (UN) volunteers and a STOP team supervised by the incident manager. Case numbers peaked in mid-August, prompting the Government to announce new restrictions, including the mandatory wearing of masks in confined spaces and a ban on gatherings in parks, beaches, sports grounds and theatres and on demonstrations in the capital.

Case numbers followed a downward trend throughout September and October. As of 31 October 2020, Senegal has registered 15 616 positive cases, with 324 deaths and 14 853 recovered. The country’s decentralized preparedness and response plan has helped to strengthen capacities nationwide and enabled smaller cities to contain the spread of COVID-19 (see Box 1).

**Box 1. Dialogue with religious authorities to prevent COVID-19 infection at a pilgrimage site**

The most important religious festival in Senegal is the Grand Magal of Touba, the pilgrimage of the Mouride brotherhood, one of the country’s four tariqa (Sufi schools), to the holy city of Touba. It takes place in early October and is usually attended by as many as 3 million people from all over the world.

Early on in the pandemic, Touba had emerged as a virus hotspot, with several clerics falling ill and dying. The city is almost a State within a State, and dialogue between the central Government and the religious figures there, who include many marabouts (Muslim holy men), has often been strained. The prestige of the religious leaders is such that through their words alone they can often influence the behaviour of many a pious family. However, after the first cases appeared in the Touba health district, an incident management system was set up and within four weeks its team had succeeded in quelling the local outbreak. WHO sent international consultants together with World Customs Organization colleagues to assist with epidemiological monitoring.

As part of its efforts to support a safe pilgrimage in 2020, WHO conducted a mission to the Touba health district from 30 September to 9 October in order to provide technical back-up, including coordination of interventions, epidemiological surveillance, training of health officers deployed from other regions and districts, and infection prevention and control. To prepare appropriate risk communications, data on pilgrims’ attitudes and behaviour were collected before the pilgrimage. Furthermore, risk communication and community engagement (RCCE) plans were drawn up to document good practices and list recommendations for future events. Funding was provided by the United Nations Children’s Fund (UNICEF) and other partners.

The mission was particularly challenging in terms of coordination and retaining the trust and support of the local population. An evaluation meeting with all the partners involved was held immediately afterwards to share lessons learned and discuss recommendations for the next Grand Magal and other mass gatherings in the country. Some of the recommendations that emerged were:

- mapping and involving all RCCE stakeholders to ensure better coordination and implementation;
- initiating RCCE activities a week before the start of the Grand Magal festivities;
- developing community engagement strategies that have been adapted to local settings in order to ensure buy-in from everyone;
- overhauling the entire RCCE system;
- disseminating more information to reassure local populations; and
- focusing communication efforts on specific entry points.

The importance of effective planning when response to an pandemic is decentralized

WHO provided technical support to the Ministry of Health and Social Action in the development of a multisectoral contingency plan for March–September 2020, and participated in the daily coordination meetings of the Health Emergency Operations Centre and the weekly meetings of the CNGE’s emergency operations centre.

\(^1\) Centre des Opérations d’Urgence Sanitaire (COUS).
WHO staff also took part in CNGE meetings at various administrative levels and in the meetings of the national IMS. Thanks to their attendance of these meetings, WHO staff succeeded in adapting generic guidance issued at higher levels of the Organization to the national context and in gaining acceptance for their recommendations more readily. To strengthen staff capacity, a webinar was organized featuring former WHO staff with emergency expertise. Suggestions on how best to support the COVID-19 response were raised at this webinar, taking into consideration all the different aspects of Senegal’s society and physical geography.

In parallel, by supporting the establishment of an IMS in each of the 14 medical regions of Senegal, including some districts, WHO staff helped to decentralize the country’s COVID-19 preparedness and response efforts. Highest priority was given to regions that were already responding to the pandemic, followed by those still readying themselves to face it. IMS induction missions were conducted to assess the level of preparedness, develop a preparedness or contingency plan in line with the national plan, train IMS members and share COVID-19 tools and response measures with front line staff (regional and district management teams).

In July 2020, the WHO Country Office in Senegal issued recommendations to modify activities already under way, based on a review of the lessons learned from key aspects of the COVID-19 response. In September, six months after the start of the response, the Ministry of Health and Social Action, with the technical and financial support of WHO and other partners, conducted an intra-action review which evaluated the successes achieved and the constraints encountered, resulting in a set of 15 priority actions for the ongoing response.

**Stepping up countrywide monitoring activities**

During the preparation phase, WHO provided technical and financial support for an early warning unit (*cellule d’alerte*), which included setting up a database and ensuring that personnel could be paid for their work. Moreover, a WHO staff member was assigned to the Ministry of Health and Social Action in order to establish an effective line of communication and safeguard data transfer.

Activities in the first two months of the response were devoted to sharing WHO-produced guidelines and tools for COVID-19 monitoring, leading to the development of standard operating procedures that were used to train health workers at all levels (central, regional and district) and set up surveillance mechanisms. WHO support was crucial to the fostering of management skills for early warning and investigation, active searches for suspected cases, collecting and processing surveillance data, and identifying and following up contacts. Overall surveillance was strengthened at the regional level, coming on top of measures to restrict movement between cities that were taken to prevent the disease from being spread to different regions by pedlars and street traders, among others.  

With its small but energetic workforce, the WHO Country Office in Senegal has played a unique role in the pandemic response. WHO’s direct engagement on the ground proved to be an invaluable source of information for both the Organization’s work and that of its partners, and serves as an excellent example of how to optimize the use of limited resources in a critical situation. Throughout the pandemic, WHO has worked closely with different agencies and organizations in all areas of the country.

---

2 The restrictions on movement were lifted on 3 June 2020.
Working with partners to manage points of entry and strengthen capacities across the country

In order to further rein in the pandemic, Senegal closed its air borders on 16 March 2020, along with its land and river borders with Mauritania, the Gambia (except for authorized goods), Guinea, Mali and Guinea Bissau. As of 31 October, only the airports were open, with other borders remaining closed. In line with the International Health Regulations (2005), monitoring has been conducted at 75 points of entry in 10 of Senegal’s 14 administrative regions to prevent the global spread of COVID-19. Like many countries in Africa, however, Senegal’s land borders are porous, and there exist numerous clandestine routes into and out of the country.

Along with the International Organization for Migration (IOM) and the Office of the United Nations High Commissioner for Refugees (UNHCR), WHO provided support to medical regions, districts and health posts for the strengthening of health control measures – specifically by assessing health capacities and needs at different points of entry. As a result, training activities have been extended to cover 857 staff from Senegal’s defence and security forces. Community outreach workers, especially from border villages, also received training on infection prevention, risk communication, and case detection and notification. Assistance was provided to administrative and health authorities with setting up or refurbishing isolation spaces for suspected cases and strengthening cross-border collaboration and coordination to ensure that Senegal’s monitoring efforts were in line with those of neighbouring countries. The joint IOM–UNHCR–WHO team also helped to develop communication and health monitoring activities provided by local committees and community outreach workers – particularly in refugee settlements – and supplied surveillance tools and protective equipment for officers working at border posts.

Rolling out infection prevention and control procedures

In the early months of the pandemic, WHO supported hospitals, health centres, health posts and other out-of-hospital facilities involved in disease prevention and control. In collaboration with UNICEF and the non-governmental organizations (NGOs) Médecins Sans Frontières and the Alliance for International Medical Action (ALIMA), technical support was provided to develop standard operating procedures for infection prevention and control (IPC), which were used to train 51 trainers at the national level, who themselves then instructed doctors, laboratory technicians and nurses. The training syllabus focused on hand hygiene, the use of personal protective equipment, how to prepare chlorine solutions for decontamination, waste management, environmental protection and taking a person’s temperature with an infrared thermometer.
In tandem with the Ministry of Health and Social Action – specifically with its Directorate for Infrastructure, Equipment and Maintenance – WHO helped to evaluate the IPC level of health facilities and to identify those that could serve as COVID-19 treatment centres. These facilities were categorized in terms of their patient circuits, the availability of changing facilities for medical staff, procedures for discharging recovered patients, waste storage and laundry facilities.

At the health district level, WHO staff took part in biocleaning procedures at health facilities and in public spaces, decontaminating the homes of confirmed COVID-19 cases as well as the equipment used by investigation teams (including ambulances and hospital linen and waste), and repairing incinerators. This extended to providing support for the dignified but safe burial of those who had died of COVID-19. In order to protect health facility staff and users, individual protection kits, hand cleansing devices and disinfectant products were also offered.

In order to promote collective hygiene at the community and household level, WHO participated – alongside members of the regional hygiene brigades and local health and hygiene officers – in showing how to disinfect homes and markets. Red Cross hygienists were trained in IPC measures for public spaces, which enabled them to support local communities. Practical measures included donating alcohol based hand gel to the community of Thiénaba (see Box 2).

Given the prospect of schools reopening in the autumn, WHO participated in school disinfection measures and in the development of IPC guidelines for schools: these were used to train teachers in Dakar and Red Cross volunteers working at the regional level.

**Box 2. Medical equipment and supplies donated by WHO in Senegal**

In addition to the technical and financial support that it provided to Senegal, WHO also coordinated the donation of medical equipment and supplies to strengthen the response to COVID-19. In particular, WHO donated:

- laboratory test kits and reagents to the Institut Pasteur de Dakar;
- 700 kg of alcohol-based hand gel to the community of Thiénaba in the Khombole district, Thiès Region;
- a batch of protective equipment to the city of Saint-Louis;
- sets of oxygen concentrators to the following towns and cities: Kédougou (four concentrators), Kolda (three), Tambacounda (eight), Kaffrine (four); and
- 15 000 test kits and 22 000 laboratory sampling kits to the National Public Health Laboratory in the city of Thiès and oxygen concentrators to the regional hospital.

**Managing COVID-19 cases when resources are limited**

Even before the first case of COVID-19 emerged in Senegal, WHO was directly involved in the clinical management strategy. Thus, together with the Ministry of Health and Social Action and the NGO ALIMA, it helped to identify a suitable treatment centre, namely the Fann University Teaching Hospital in Dakar. Established during the Ebola virus epidemic in 2014, this facility is now fully equipped and meets international standards for infectious disease control.

After the rise in the number of imported cases and contacts during the initial phase of the pandemic, followed by that of local transmission, WHO helped to identify and upgrade other centres and treatment sites in Dakar and affected regions, and also to organize the routine work of health providers. These initiatives have gradually made it possible to decentralize patient care to the regions and reduce the number of patient evacuations to Dakar. From having only 24 beds available for the care of COVID-19 patients in March 2020, Senegal had 1127 beds by September.
Following a WHO recommendation, the Government adopted and implemented guidelines for the out of hospital management of asymptomatic and mild cases in May 2020. Several such care sites were set up in Dakar and the regions with WHO’s technical support. In August, a home care strategy for asymptomatic and uncomplicated cases was adopted and implemented, which has helped to relieve congestion in treatment centres struggling with high patient numbers in general.

Furthermore, as an integral part of COVID-19 management, WHO has assisted the Ministry of Health and Social Action in developing a psychosocial support system for COVID-19 patients who are receiving clinical treatment, self-isolating contacts, cured patients and health personnel. This includes, for example, group therapy for residents of community care centres. Given the lack of specialists in this field, WHO also organized a training programme for 44 psychologists, psychiatrists and social workers to enable them to provide relevant support to affected individuals in all of Senegal’s regions. The capacities of the 152 Red Cross volunteers and community actors and of the 60 members of the Association of Women Physicians of Senegal have been strengthened. Additionally, WHO, together with the Ministry of Health and Social Action, has established a national pool of trainers on dealing with gender based violence during health crises.

Encouraging communities to promote protective behaviour

Risk communication and community engagement (RCCE) activities are carried out at the national level by the National Education and Information Service for the Promotion of Health, the Health Emergency Operations Centre and the communications unit of the Ministry of Health and Social Action. These services are decentralized regionally and locally. At the community level, RCCE activities are driven by community actors. WHO provided support to the different levels of the health system and supplied the community with five communication experts, which allowed working groups to be established for the drafting of national, regional and departmental RCCE plans. WHO guidelines were used in the design and distribution of communication tools.

RCCE capacity-building efforts were undertaken by the Ministry of Health and Social Action and collaborating organizations in the form of training and supervisory sessions for chief district physicians and their teams. The training was also directed at those working at the community level, including Red Cross volunteers, religious leaders, bajenu gox (a Wolof term meaning “local godmothers”) and community outreach workers. Awareness-raising activities have been carried out in districts and markets. They have involved, for example, encouraging local leaders to assist in campaigns promoting the display of materials with prevention messages. COVID-19 safe home visits and individual interviews were conducted in households across the country by community actors, especially the widely trusted bajenu gox.

Information caravans with loudspeakers have been set up in heavily frequented places to promote protective measures; these have also provided an opportunity to distribute free masks to people in situations of vulnerability. Various nationally renowned artists and actors have received a COVID-19 briefing from WHO to enable them to produce songs, plays, sketches, murals and paintings containing original messages on the topics of community engagement and behaviour change. In addition, to deal with the so-called infodemic of misleading information about COVID-19, WHO helped to set up a unit tasked with monitoring and combating rumours and misinformation; it has also trained media professionals from the written press and radio working in Dakar and six of the country’s health regions.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

A joint endeavour with socio-anthropologists has made it possible to develop a strategy for working together with communities in order to strengthen their commitment to the adoption of protective measures. This strategy has been implemented in the urban region of Dakar, which alone accounts for more than 75% of COVID-19 cases in Senegal.

Continuity of essential services

As the pandemic unfolds further, WHO has supported the Ministry of Health and Social Action in ensuring the continuity of essential care, especially through the Ministry’s Directorate for Maternal and Child Health. Similarly, it has worked with partner organizations to assess whether reproductive health, maternal and child health services, including nutrition, are fully up and running. The WHO Country Office contributed to the drafting, in April 2020, of standard operating procedures for the appropriate management of pregnant and breastfeeding women, adolescent girls and children with COVID-19. A technical guide for health providers on maintaining essential services was developed at the same time.

Integrated supervision missions conducted in June 2020 at the regional and health district levels showed that health activities had picked up again after a downturn in March and April. Strategies for adapting the delivery of diagnostic and care services for patients with tuberculosis and HIV have been developed and are being implemented. Community outreach workers are currently being trained so as to boost capacity for malnutrition screening. A chemoprevention campaign for seasonal malaria has been conducted and home-based malaria care has been strengthened.

The COVID-19 pandemic has also had an impact on immunization services. Vaccination coverage fell by 10% nationwide between January and May 2020. In order to help bring immunization activities back to their pre-2020 levels, the Ministry of Health and Social Action has forwarded guidelines to the country’s 14 medical regions while WHO has been analysing how health districts are performing in terms of vaccination coverage. WHO has recruited several consultants to support immunization activities in poorly performing districts.

Looking ahead

A steady fall in the number of detected COVID-19 cases has been observed in Senegal over the past ten weeks: epidemiological week 33 (10–16 August) saw 926 new cases, compared with 72 in epidemiological week 44 (26 October–1 November). While this is a positive development, it has led on the other hand to reduced alertness, and even to complacency, among the population regarding the need to observe physical distancing, wear a mask in confined spaces and regularly wash hands. The risk that the disease could bounce back cannot be ruled out, especially as borders open, restrictive measures are lifted and economic, cultural and religious activities resume. Accordingly, WHO will continue to assist Senegal with (a) adapting its response strategies in the light of the evolving epidemiological situation; (b) bolstering epidemiological surveillance through active case finding at health facilities and in the community; and (c) introducing rapid diagnostic tests. It will also continue to step up RCCE activities directed at religious leaders, key figures in local communities and young people in general. Finally, WHO stands ready to offer technical support, in collaboration with UN and non UN partners, once a vaccine against COVID-19 can start to be introduced in the course of 2021.
SUDAN

Key areas:

Sustaining essential health services in time of outbreaks

Sudan strives to provide essential health services for the people in the midst of disease outbreaks and the COVID-19 pandemic

COVID-19 in Sudan

At the beginning of January 2020, after fighting the outbreaks of dengue and chikungunya that had started in August 2019, the Sudanese Federal Ministry of Health declared that Sudan was finally free of the two diseases. However, other health threats were still present. The diphtheria outbreak that started in late 2019 was persisting and poliomyelitis (polio) outbreaks were occurring in the surrounding countries. Sudan was in the middle of a nationwide polio campaign to shield the country from poliovirus when it received an early warning of an outbreak of a novel influenza in China.

Sudan immediately engaged WHO in strengthening its guard against COVID-19 importation by strengthening surveillance at its international airport, seaports and border crossings, and equipped these points of entry with heat detection, quarantine rooms, medical supplies, and training for medical staff. Soon, Sudanese residents were advised to cancel travel to countries with widespread COVID-19 and flights from Sudan to those countries were suspended. All border posts with Egypt were closed. Two quarantine stations were prepared, in Khartoum airport and Khartoum Teaching Hospital. By the end of January, the Ministry of Health had formed a technical committee and started to plan for emergency measures. WHO assisted Sudan in facilitating discussions with international communities and mobilization of support for the planned measures. Among the needed immediate supports was to establish laboratories to improve Sudan's testing capacity for COVID-19.2

On 29 January, the Ministry of Health announced Sudan's first suspected cases of COVID-19, two people who had come from China. The Government established a Higher Health Emergencies Committee chaired by a Sovereignty Council consisting of representatives of all ministries and stakeholders. The Ministry of Health quickly developed a national plan focusing on capacity-strengthening of health facilities and cadres to be prepared for and respond to COVID-19. WHO convened different key technical partners to adjust the WHO guidelines, and started to facilitate training for health-care workers in case management, triage in different health facilities, isolation and infection prevention and control (IPC). Cadres were also trained to help detect COVID-19 in communities. A public campaign to increase people’s awareness of COVID-19 was already ongoing when, on 13 March, the Ministry of Health announced the first confirmed locally acquired COVID-19 case in Sudan. The Government of Sudan declared a national health emergency for COVID-19. In April, the Minister of Health called on international partners to support Sudan’s COVID-19 response financially, admitting that the health system would not be able to cope with a large outbreak.3

WHO had been enhancing coordination mechanisms with the health partners and cluster, bringing in the development partners and humanitarian cluster to attract and mobilize resources to support the national COVID-19 response plan. A country preparedness and response plan was developed by the Health Cluster and later adopted by the humanitarian country team and United Nations country team as the country plan to support the national response to COVID-19. Some partners could immediately allocate financial support for Sudan (see Table 1). In addition, WHO coordinated the listing of required supplies and equipment to be submitted to the WHO Partner Platform and Supply Portal.

**Table 1. Partner support for COVID-19 response in Sudan**

<table>
<thead>
<tr>
<th>Partner and financial support</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Commission € 9 850 000</td>
<td>Humanitarian-Development Nexus: Strengthening preparedness and response of the health system addressing the COVID-19 pandemic in Sudan</td>
</tr>
<tr>
<td>WHO € 400 000</td>
<td></td>
</tr>
<tr>
<td>GAVI US$ 1 200 000</td>
<td>Enhancing National Capacities to respond to COVID-19 pandemic</td>
</tr>
<tr>
<td>Global Fund US$ 1 600 000</td>
<td></td>
</tr>
<tr>
<td>United Nations–African Union Mission in Darfur (UNAMID) US$ 1 900 000</td>
<td>UNAMID/UNCT Response Plan to COVID-19</td>
</tr>
</tbody>
</table>

GAVI: GAVI, the Vaccine Alliance; UNCT: United Nations country team.

WHO is working with an additional € 10.2 million from the European Union to fund a three-year project intended to maintain the provision of essential health services. The project will rehabilitate emergency units, with additional basic and essential equipment in hospitals. Furthermore, the fund will allow the procurement of ambulances and improvements at points of entry. While the Ministry of Health and WHO worked rapidly to develop Sudan’s capacity to respond to COVID-19, the Government implemented social distancing and other public health measures. In Khartoum, the capital city where around one fifth of Sudan’s population lives, public venues were closed and mass gatherings, even religious ones, were banned. Interstate public transportation was halted, and gradually curfews were implemented nationwide. However, the transmission routes of COVID-19 cases indicated that people were reluctant to follow the movement restriction and public health measures. In order to curb the spread of COVID-19, the Government adopted a stronger measure and imposed a nationwide lockdown.

---

Maintenance of essential health services

Along with the lockdown came the devastating impact of COVID-19 on a health system that was already wrestling with a lack of resources and capacity, afflicted by political, security, social and economic crises. At the beginning of the COVID-19 crisis, many health facilities were not fully operational because they were not designed with an advance triage system that would enable the provision of appropriate health care for patients and protect health workers from COVID-19 infection. The absence of health-care workers due to lack of transportation and, in many facilities, inadequate medical supplies and personal protective equipment (PPE) created gaps in health services, including primary care. The situation was exacerbated by misinformation and stigma that caused people to hesitate to seek health care. The lockdown, which was prolonged for three months, aggravated the economic downturn that was manifested by shortages of fuel and medical supplies. Having anticipated and observed the decline in the utilization of essential health services, the Ministry of Health and WHO collaborated with partners to reverse the situation.

Assessing the real situation

Sudan needed to have a scientific basis to study the impact of the COVID-19 pandemic on access to essential health services before taking action to revive the services. WHO developed the tools to assess outpatient services at primary health care facilities and rural hospitals. It investigated service utilization and barriers, together with determining and influencing factors such as human resources and logistics to provide services for integrated management of childhood illness, maternal health, childbirth, postnatal care, immunization, tuberculosis (TB) and HIV services, family planning and essential medicines. The tool also assesses health facilities’ capacity to provide essential services while simultaneously caring for COVID-19 suspected or confirmed cases. It looks at the health facility’s catchment area, then examines the infrastructure (including laboratory infrastructure), human resource capacity and level of IPC implementation.

Subsequently, the Ministry of Health assessed the routine monitoring and reporting mechanism at the locality level and evaluated the supply system for medical items and logistical support, including operational costs, water supply, electricity and fuel. In every locality, a team has been trained to conduct this assessment.

The first phase of assessment was conducted in Khartoum State by visiting all health facilities during May/June 2020. The current results have identified gaps and challenges, including practical ones such as lack of transportation support for health-care workers. WHO has contributed to providing transportation for 105 health facilities in Khartoum. WHO supported the Ministry of Health in establishing a mechanism to continuously monitor access to and utilization of health services, particularly at primary health care level.
Reproductive, maternal, neonatal, child, adolescent and ageing health

WHO support for reproductive, maternal, neonatal, child, adolescent and ageing health (RMNCAAH) services in Sudan began with issuance of the technical guidelines for continuing these services during the COVID-19 response, followed by a training course for 300 health-care providers on IPC when delivering the services. Supportive supervision took place at all levels of service provider to give technical assistance, and PPE was distributed to enable the implementation of IPC protocols in the facilities.

The next step in WHO support for maintaining RMNCAAH services was to provide the tools for health facilities and health-care workers to operate during movement restriction and lockdown. The WHO RMNCAAH team and the Ministry of Health’s maternal and child health unit have jointly led an initiative to support the development of a business continuity plan in light of the WHO operational guidance for maintaining essential health services during an outbreak and developed a national maternal and child health technical note incorporating national COVID-19 management protocols for pregnant women, newborn babies and children.

The COVID-19 outbreak and the subsequent movement restrictions were deemed to be the cause of an estimated 15% drop in the use of measles-containing-vaccines during the first quarter of 2020, as compared with the same period in 2019. Moreover, there was a 65% decrease in measles vaccination coverage among children under five years of age. Working with the RMNCAAH programme, the expanded programme on immunization (EPI) also trained EPI focal points in IPC and distributed PPE for vaccinations in health facilities and mobile services. A national guideline for immunization services and supplementary immunization activity was developed and disseminated. The Ministry of Health has run two rounds of a campaign to reach missed children and accelerate the routine immunization programme, reaching more than 600 000 children.

Nevertheless, the low immunization coverage has had profound repercussions. Diphtheria outbreaks continued to be reported from different states. Despite the national polio campaign and surveillance and the training complementing them since January, the Ministry of Health detected cases of circulating vaccine-derived poliovirus type 2 (cVDPV2) in August 2020, 5 years after Sudan last confirmed a wild poliovirus case, in 2008, and was announced polio-free by WHO, in 2015. As of September 2020, cVDPV2, which had been circulating in Chad and South Sudan, was detected in 13 of 18 states in Sudan. The Federal Ministry of Health with support of WHO, the United Nations Children’s Fund and other health partners is planning for two rounds with monovalent oral polio vaccine type 2 in November and December 2020.

---


Nutrition essential services

Malnutrition is prevalent in Sudan, with families enduring droughts, floods and the hardships inflicted by armed conflict. However, the COVID-19 pandemic directly and indirectly impacts, and in many cases worsens, people’s livelihood and access to food. Financial hurdles, on the one hand, and hikes in food prices, on the other, have left many families struggling to put food on the table. Around 3.3 million people needed assistance with nutrition.

WHO supports the Ministry of Health in making lifesaving inpatient care for severe acute malnutrition accessible from 65 stabilization centres. Nutrition services and inpatient malnutrition care for malnourished children are being maintained, with providers implementing the national guidelines for the delivery of nutrition services in the context of the COVID-19 pandemic at the community and facility levels. The Ministry of Health is now supervising the implementation of the guidelines.

WHO and the Ministry of Health nutrition team, together with other United Nations agencies, support the country’s business continuity plan for nutrition to ensure the sustained provision of essential and lifesaving nutrition services for malnourished children. WHO contributed to the training of 320 health and nutrition staff working in community management of acute malnutrition, as well as the staff of the stabilization centres in Khartoum, to build their capacity to deliver lifesaving nutrition services safely during the pandemic. The WHO nutrition programme prepositioned 140 kits to treat severe acute malnutrition with medical complications (SAM/MC) that could be used for 7000 children under 5 years with medical complications in 17 states, to help the nutrition services during the lockdown and the rainy season, which normally obstructs transportation.

Noncommunicable diseases

Before the COVID-19 crisis, noncommunicable diseases accounted for 52% of deaths in Sudan, an estimated half of which were premature deaths. There is a substantial percentage of the population that needs to continuously accesses health care for noncommunicable-disease-related health conditions. Hence, WHO and the Ministry of Health initiated the Be Healthy Be Mobile programme, a hotline service to serve noncommunicable-disease patients with telemedicine consultations during COVID-19 and beyond. The primary objective of the virtual consultation initiative was to ensure the continuity of noncommunicable disease health services and to bridge the gap in disrupted services. The secondary goal was to strengthen the role, effectiveness and reach of primary health care as the gatekeeper to the health system. The service is feasible, considering that over 70% of Sudan’s population uses a mobile phone.

---

9 Source: Sudan Telecommunication and Post Regulatory Authority. April 2020.
People living with noncommunicable diseases can call from all states, and family doctors can respond even from their homes in different states. The WhatsApp Business API application complemented the hotline to facilitate the delivery and exchange of prescriptions and laboratory investigations. This initiative is expected to change the face of health service delivery in Sudan, particularly during the ongoing COVID-19 emergency. The application includes an automated interactive voice recorder to identify the patient’s geographical location and chronic diseases, thereby adding to the data collected about the noncommunicable disease situation. Depending on the level of care and services required, the patient is either provided with advice virtually, referred to the nearest primary health facility or, for those needing urgent care, referred to the emergency unit or hospital. When a complicated case requires a second opinion, the attending doctor will consult on the case virtually with specialists.

The project is currently in the preparatory phase for its implementation in November. Training was undertaken to familiarize the family doctors with the application, and to guide them in providing information, health education, treatment consultation and, when necessary, refer patients to health facilities. This initiative was made possible with the support of the Sudanese Telecommunication and Postal Regulatory Authority, National Information Center, telecommunication operators, Family Medicine Society, Sudanese Medical Specialization Board, Internal Medicine Society, Sudanese Diabetes Association, Sudanese Childhood Diabetes Association, Sudanese Cardiovascular Society, Sudanese Chest Society and Sudanese Oncology Board. Financially, the project was supported by the Danish Fund.

Another project that involves mobile technology is mDiabetes. The application was designed to raise awareness of how people with diabetes can take care of their health and protect themselves from COVID-19. mDiabetes has attracted more than 71 000 people to subscribe. To support care for people with diabetes, the Ministry of Health and WHO arranged the distribution of insulin in the five states that have the highest diabetes prevalence and shortages of insulin. Novo Nordisk has donated insulin to support this activity.

Capacity development

Among WHO’s many capacity development activities and projects covering the nine pillars of COVID-19 response in Sudan, improving the health information system is one of the critical priorities for the transformation of policies for the health system and public health emergencies. Sudan is adapting and using the WHO DHIS2/COVID-19 module for surveillance of communicable diseases, kicking off the project by assessing the existing health information system and remotely interviewing the rapid response team, as well as staff at points of entry and laboratories, to derive information that reflects the real-time situation on the ground. Scaling up and rolling out the full DHIS2/COVID-19 module will help WHO and the Ministry of Health in contact-tracing at points of entry and in providing vital information for the rapid response team and public health laboratory. The upgraded information system will also improve data quality; enhance data integration; enable more efficient unification of data presentation and analysis; and support DHIS2 implementation and expansion for routine data.
Challenges and further work

Countries are engaged in a colossal and strenuous effort to curb COVID-19. In Sudan, the fight to protect over 40 million people from contracting the disease was aggravated by multiple challenges. Between January and October 2020, Sudan has encountered outbreaks of diphtheria, malaria, chikungunya and polio. The humanitarian crisis at the periphery of the country creates an unfavourable situation in which to implement the necessary public health measures at points of entry. The flood disaster in September affected 800 000 people, and drought disrupted the food supply.10

COVID-19 measures are being conducted in the middle of a dramatical political change that has been ongoing for two years. There were protests, followed by a change of regime and establishment of a transitional Government. As of 29 October 2020, Sudan has reported 13 765 confirmed cases of COVID-19, with 837 deaths.11 The combination of different crises put more pressure on the Government, the health system and the people. The economic downturn has translated into devaluation of the local currency, increasing inflation, rising cost of living and shortage of fuel. This situation has affected basic livelihoods and health services, people’s movements and the risk of public health threats and health security hazards, particularly for vulnerable and disadvantaged populations. The market exchange rate, which can be five times higher than the official rate, poses budgeting and planning issues, stalling the supports to COVID-19 response. The existing initiatives suffer from a lack of infrastructure, such as the internet connection that is essential for running the health information system and telemedicine for noncommunicable diseases. The changes in government imperil the continuity of health programmes.

WHO and the United Nations country team have proposed the required activities and funding through the United Nations framework for the immediate socioeconomic response to COVID-19, placing some emphasis on the maintenance of essential health services, while pursuing the country’s previous commitment to progress towards universal health coverage. WHO is staying flexible and working collectively with authorities, the community and partners to support Sudan.

“Building a resilient health system in Sudan is the way forward to address the COVID-19 pandemic and multiple concomitant public health emergencies”

Dr Nima Saeed Abid, WHO Representative in Sudan
The COVID-19 pandemic from the perspective of small island States in the Caribbean

Endowed with a diversified industrial base and large reserves of oil and natural gas, the southernmost Caribbean island archipelago of Trinidad and Tobago is a middle- to high-income country, whose gross domestic product per capita of US$ 17 277 is twice the regional average.\(^1\) As of 31 October 2020, among a total population of 1 364 000, it has recorded 5692 positive cases of COVID-19 (with 33 083 people having been tested) and there have been 108 deaths.\(^2\) When it became apparent in January that the novel coronavirus, SARS-CoV-2, had spread beyond the borders of China, the Government of Trinidad and Tobago, like those of other small island States in the Caribbean, was obliged to review its state of preparedness for a pandemic. The country’s preparedness and response plan has focused first and foremost on preventing serious illness and related deaths, and secondly on mitigating the social disruption caused by the virus containment strategies that have been adopted.

Following WHO’s official declaration of a global health emergency on 30 January 2020, the expected influx of thousands of visitors to the twin islands for the annual Trinidad and Tobago Carnival on 24 and 25 February became a cause of particular alarm to the Government. However, initial public health concerns proved to be unfounded and the Carnival proceeded without being adversely affected by COVID-19. (On 28 September, the Prime Minister, Dr Keith Rowley, announced that the Carnival would not be taking place in February 2021 – a measure that could potentially result in lost earnings of several millions of dollars.)

Trinidad and Tobago recorded its index case on 12 March 2020, a resident returning from Switzerland who self isolated as soon as symptoms began. Other early cases were typically people returning from business trips, overseas educational programmes or holidays abroad. In spite of the Government’s advice in March that people should restrict their travel, the majority of the 118 cases in the first wave of COVID-19 were returning nationals, including 40 people from a single cruise ship. All returning nationals were placed in State quarantine and monitored for at least 14 days.

The Government’s response to COVID-19 consisted of measures that, as elsewhere in the world, escalated in severity from countrywide restrictions aimed at limiting the movement of people to the total closure of borders. All external borders, including airports and seaports, were closed by the Minister of National Security on 22 March, bringing the cruise ship season to an abrupt halt. The containment measures also escalated from physical distancing to a full national lockdown, except for essential services, such as groceries and pharmacies, which were permitted to open for limited hours. Schools and tertiary education facilities were closed, as were restaurants, bars and other recreational places and services. All except essential workers were mandated to stay at home from 30 March to 15 May.

---


The hospitals at Couva, in the west-central area of the country, and Caura, in the north-central area, were the two facilities initially designated for high-dependency hospitalization of severely or critically ill patients who required close clinical management, including oxygen therapy and assisted ventilation. Although at first there were only 707 isolation beds in the whole country, the Ministry of Health has succeeded in increasing the availability of such beds at any given time by enlisting additional public and private hospitals and clinics so that the overall bed occupancy rate for COVID-19 cases remains below the critical level of 75%. The Technical Director of the Ministry of Health’s Epidemiology Division pointed out in an interview that Trinidad and Tobago’s ability to channel resources into a “parallel health care system” for COVID-19 patients was remarkable: it had allowed the country to develop a “surge capacity” to deal with any epidemic pathogen (not just SARS-CoV-2) that might emerge as a public health threat in the future.  

At the end of April, testing was ramped up through the introduction of community testing at health centres, made possible by the delivery of 14 000 test kits from China and another 10 000 from PAHO/WHO. In mid-May, as no new COVID-19 cases had been reported for several weeks, the Prime Minister announced that a phased reopening would begin. In June, domestic, service and public transport workers were able to return to work. Sports and other social activities were also permitted as long as physical distancing, handwashing and mask-wearing rules were observed. Despite the measures taken to curb the spread of the virus, a flare-up of new COVID-19 cases was detected in July–August. In mid-August, given the all too real threat of community transmission of the virus, the Prime Minister announced new restrictions to limit its spread and to prevent the health system from becoming overwhelmed. An online dashboard on the Government’s website provides information on the situation and is updated daily by the Ministry of Health’s Communications Division.

Oxygen concentrators being handed over by the PAHO/WHO Country Office to the Ministry of Health on 16 September 2020. In the picture (from left to right): Dr Roshan Parasram, Chief Medical Officer; Hon. Terrence Deyalsingh, Minister of Health; Dr Erica Wheeler, PAHO/WHO Country Representative; and Dr Paul Edwards, PAHO/WHO Adviser on Health Systems and Services. Photo: PAHO/WHO Country Office in Trinidad and Tobago.

The COVID-19 crisis is a reminder that Trinidad and Tobago – like its fellow members of the Caribbean Community (CARICOM), a regional organization that promotes economic integration and cooperation – is a small State affected by the situation in other parts of the world. Even before 2020, the country had been experiencing an economic downturn due to the collapse in commodity prices for oil, its main source of revenue, caused by political manoeuvring between the Russian Federation and Saudi Arabia over the barrel price of oil. This downturn has now been exacerbated by the steep decline in energy demand in the airline industry and other sectors: a revenue loss of 4.5 billion Trinidad and Tobago dollars (US$ 662 million) is projected. Although the country has not been severely impacted by the loss of earnings in the tourist sector (in contrast to the neighbouring islands that make up the Caribbean part of the Netherlands – see further down), the general reduction in global energy demand is

---


4 It was speculated that transmission had risen owing to illegal border crossings and increased social encounters during the pre-election campaigns which were held in the run-up to the general election on 10 September 2020. These speculations, however, are unconfirmed.

Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

having knock on effects on other sectors of the economy, such as manufacturing and construction. It was estimated early in the year by the Economic Commission for Latin America and the Caribbean (ECLAC) that a travel ban lasting several months would lead to a contraction of the economy in the Caribbean as a whole by between 8% and 25%, accompanied by massive unemployment and increased numbers of people living in extreme poverty.\(^6\)

At a media conference on the pandemic held on 10 October, the Prime Minister was cautiously optimistic, pointing out that the fall in positive test results for COVID-19 and the plateauing of infections in October (with numbers hovering between 30 and 40 cases a day) were no reason for the country to drop its guard. If the public continued to cooperate in terms of compliance with public health measures, he added, the Government would be able to ensure that the number of cases stayed low over the coming months.

Reaching out to the rural population using a combination of media

In parallel with the efforts of the Ministry of Health to inform the general population about ways of protecting oneself against COVID-19, the PAHO/WHO Country Office launched an unusual and enterprising national communications campaign to investigate the impact of the crisis on people’s lives. The campaign focused on mental health issues, domestic violence and discrimination against the growing migrant population in Trinidad and Tobago. A mixed media approach was adopted, using television, radio, social media, celebrity support and digital billboards. One specific campaign to promote community engagement in rural areas was modelled on the town criers of old: it involved driving through remote neighbourhoods in a car fitted with a loudspeaker announcing relevant messages, putting up information posters at corner shops and conducting video interviews with local residents.

This communication effort was a first for the PAHO/WHO Country Office, which had never undertaken a mission on COVID-19 to the rural districts and hamlets in the southern part of the island of Trinidad, areas of the country that rarely see international organizations of any kind.

The PAHO/WHO team were surprised by the wealth of responses they received during the video interviews. In particular, they were impressed by the level of knowledge, preventive behaviour and coping activities regarding COVID-19 that were described by interviewees of all ages. There appeared to be a clear need for further exercises of this kind – for example, to assess how parents manage with children staying at home during the virtual school term, or how itinerant workers deal with reduced mobility or loss of revenue. Some information on the first topic was gleaned from a few preliminary interviews with mothers and their children in which they were asked to describe how they had been adapting to the situation.

Misinformation is countered through regular press conferences held by the Ministry of Health on television and via the Internet, and through the publication of a COVID-19 update every day at 16:00 on the Ministry’s website, which serves as the primary source of accurate, real-time information on the evolving COVID-19 situation. Early on in the crisis, the PAHO/WHO Country Office seconded four staff members to the Ministry of Health’s Com-

---

Communications Division to assist with its work on informing the public about COVID-19 issues. This has helped to ensure clear and concise reporting of government information in an easily understandable format.

Capacity-building for surveillance and outbreak response in the COVID-19 pandemic

In a sense, the COVID-19 pandemic represents an opportunity for the Government – namely, to strengthen the country’s disease surveillance system, including its capacity for early disease detection, laboratory diagnostics and outbreak response, and to extend to other areas of health the whole of government, multidisciplinary approach it has adopted in the COVID-19 crisis. Trinidad and Tobago has five regional health authorities (North-West, North Central, South-West, Eastern and Tobago), which are quasi autonomous. One effect of the pandemic has been to reveal the need for improved coordination and collaboration between national and regional health sector levels, and for the standardization of surveillance and response activities throughout the country. This would help to enhance its surveillance and outbreak response capacity, not only with regard to COVID-19 but also other communicable diseases that the country may have to deal with in the future. Improved coordination would also benefit the country in terms of preparing for and – once a vaccine becomes available – implementing a COVID-19 vaccination programme, because the success of such a programme will depend on effective logistics for cold-chain storage, the prioritization of cases and vaccine distribution, and the surveillance of adverse effects.

The strengthening of laboratory capacity to detect SARS-CoV-2 in Trinidad and Tobago deserves special mention. Early in the year, the PAHO/WHO Country Office, the Ministry of Health, the Caribbean Public Health Agency and the University of the West Indies collaborated on the development and organization of a virtual training course on laboratory diagnosis, molecular biology and polymerase chain reaction (PCR) testing in support of the COVID-19 response. The course was delivered to 50 laboratory professionals from the country’s five regional health authorities and the national public health laboratory. It was the first time that a bench-based laboratory diagnostics training programme had been implemented in virtual format through a multi agency collaboration. The broader initiative of which the training in Trinidad and Tobago was part sought to ensure that the 29 national public health laboratories in the Caribbean were able to detect SARS-CoV-2 by the end of February and could participate in the PAHO/WHO network of laboratories in the Americas working on respiratory virus surveillance.

Since the onset of the pandemic, PAHO/WHO has worked through field visits and teleconferencing with countries in the Caribbean, including Trinidad and Tobago, to develop national COVID-19 plans on the basis of existing influenza pandemic preparedness plans. In Trinidad and Tobago, PAHO/WHO, in collaboration with other partners, has continued to provide training and donate laboratory reagents and supplies to strengthen capacities for the detection of SARS-CoV-2. A diagnostic testing facility was first set up at the University of the West Indies laboratory at St. Augustine on account of the laboratory’s existing capability to perform molecular detection by PCR methods, the diagnostic gold standard. Subsequently, laboratories in two of the regional health authorities (North Central and South-West) were added to the national PCR testing network for COVID-19. GeneXpert machines (which, like PCR machines, rely on a nucleic acid amplification technique) have been set up for

COVID-19 testing in Sangre Grande, in the north-west of Trinidad, and in the sister island of Tobago, but it has proved difficult to ensure continued access to the cartridges required for this automated testing method.

Despite these efforts to enhance diagnostic capacity in Trinidad and Tobago, the sheer number of people to be tested, which has been ever growing, is a challenge for the country’s centralized laboratory system and has resulted in a backlog of samples to be processed and longer turnaround times. Accurate and timely reporting of results is crucial for the implementation of evidence-based public health measures, not least in the detection and isolation of cases and the subsequent tracing and quarantining of contacts, as displayed on the Ministry of Health’s mapping tool, which is based on a geographical information system. Moreover, for people living in rural areas far away from the main urban centres it has proved challenging to access diagnostic facilities. These obstacles to timely and universal diagnosis have had an adverse effect on the control of community transmission and on access to care for people affected by COVID-19.

Most recently, the PAHO/WHO Country Office has been instrumental in assisting Trinidad and Tobago to procure 190 000 antigen-detecting rapid diagnostic tests, which arrived at the end of October 2020. These tests will expand the capacity of the country’s laboratory network to carry out diagnostic testing for SARS CoV-2. The Country Office is also collaborating with the Caribbean Med Labs Foundation, a nongovernmental organization (NGO), to support Trinidad and Tobago in introducing and rolling out rapid testing across the laboratory network. A tiered decentralization process is being recommended, with the provision of alternative platforms to expand access to diagnostic testing. These innovative nationwide approaches to capacity-building for laboratory diagnostics are likely to stand the country in good stead even after the pandemic is over.

Trinidad and Tobago is a signatory to the COVID-19 Vaccine Global Access (COVAX) Facility, a global risk sharing mechanism for pooled procurement and equitable distribution of a portfolio of potential candidate vaccines. This means that once a vaccine has been proved to be safe and effective, the country is guaranteed to receive 560 000 doses in the first instance (covering 280 000 people, since any such vaccine will almost certainly require two doses). As in other countries in the world, the intention is to use this first batch to vaccinate the most vulnerable members of the population: health and social care workers, older people and those with underlying health conditions that make them more susceptible to COVID-19. PAHO/WHO will provide technical assistance with the rolling out of a potential COVID-19 vaccine.
Trinidad and Tobago’s PAHO/WHO Country Office and the six constituent entities of the Netherlands in the Caribbean

In addition to the technical assistance it provides to the Government of Trinidad and Tobago, the PAHO/WHO office in Port of Spain is a multi-country office that also serves the six constituent entities of the Netherlands in the Caribbean: Aruba, Curaçao, Sint Maarten, Bonaire, Sint Eustatius and Saba. On the dissolution of the Netherlands Antilles in 2010, the islands of Curaçao (population: 163 000) and Sint Maarten (41 000) joined Aruba (116 000) as self-governing countries within the Kingdom of the Netherlands. The Netherlands retains responsibility for the islands’ foreign policy and oversees their finances under a mutually agreed debt-relief arrangement. Bonaire, Saba and Sint Eustatius, on the other hand, are special municipalities of the Netherlands.

Before the COVID-19 pandemic, patients from any of the six islands requiring intensive care were airlifted to Colombia under a formal agreement between that country and the Netherlands. Since then, owing to the closure of borders and travel restrictions, severe cases have had to be managed on site, except for Sint Eustatius and Saba, where patients have been referred to treatment centres in Sint Maarten or Curaçao. While all three self-governing islands have intensive care unit (ICU) beds, the number of such beds is limited in Aruba and Sint Maarten. Capacity was boosted in Sint Maarten by the arrival in April of a team of 30 ICU health staff together with a mobile unit from AMI Expeditionary Healthcare, an American NGO. The ICU capacity in Curaçao had also increased significantly in 2019 with the opening of a new hospital in the capital, Willemstad.

Since the first weeks of the pandemic, the three self-governing islands (Aruba, Curaçao and Sint Maarten) have seen a drastic loss of revenue from tourism, resulting in job losses and severe financial hardship. PAHO/WHO has shared COVID-19 guidelines with all the constituent entities of the Netherlands in the Caribbean, and efforts have been made to ensure that technical assistance complements what is being provided by the national public health agency and health ministry of the Netherlands (for example, personal protective equipment, test kits and ventilators). The PAHO/WHO situation report for 5–17 October indicates that the islands are going through a financial crisis following an estimated 20% drop in revenue. Aruba’s borders were reopened in August to help alleviate the economic situation. Later in the same month, however, it started to experience a second wave of COVID-19.

In view of the fact that the mental health and well-being of many people had been, and indeed continues to be, affected by the pandemic, PAHO/WHO and Aruba’s Department of Public Health jointly delivered a two-day virtual course in September on substance use and the management of related disorders. This was the first time that the PAHO/WHO office in Trinidad and Tobago piloted a course bringing together all the service providers working on substance use and mental health in Aruba, these providers being mainly NGOs. The course tied in with the Aruban health ministry’s own efforts to streamline mental health care and addiction treatments in its work as part of an integrated approach to the provision of services under the banner of universal health coverage. Rising rates of substance use and relapse during recovery had been observed since COVID-19 was first reported in Aruba. There are many reasons for this: loss of income, illness or death among family members, loneliness and the loss of social support due to isolation, curfews or other physical distancing measures. Furthermore, many substances – some previously
unknown – were being used to cope with personal insecurities and financial hardship brought about by the pandemic. During discussions among providers, it emerged that some drug users were exhibiting unusual types of behaviour owing to a lack of access to their regular illicit drugs after border closures and had been experimenting with new or locally produced synthetic drugs. These were often of unknown origin and poor quality. Moreover, relapse rates among patients in recovery have also been on the rise owing to their inability to access prescribed medications and attend treatment sessions. This has indirectly led to service providers setting up a mechanism for affected individuals to discuss and share information on how best to address these issues. The lessons learned from the course in Aruba will make it easier to tailor the training programme before similar courses are delivered in Curaçao and Sint Maarten later in the year.

As part of the technical assistance extended by the PAHO/WHO Country Office in Trinidad and Tobago to the six constituent entities of the Netherlands in the Caribbean, the Office’s current biennial work plan covers ongoing support to the authorities of those islands in tackling emerging mental health issues and, more generally, in formulating national health strategies.

Conclusion

Despite the challenges posed by the COVID-19 pandemic, the technical assistance provided by the PAHO/WHO Country Office complements the comprehensive response by the health ministries in Trinidad and Tobago and the six constituent entities of the Netherlands in the Caribbean. The innovative countrywide approaches to capacity-building for laboratory diagnostics, dealing with mental health and substance use issues, communications, surveillance and outbreak response that have been adopted are likely to be a permanent, positive legacy of the pandemic, helping to strengthen the health systems in these small island States.
COX’S BAZAR

Key areas:

Ensuring the continuity of essential health services during the COVID-19 pandemic: a snapshot from the world’s largest refugee camp

When communicable disease outbreaks, conflicts or natural hazards threaten lives, WHO stands ready to respond. Particularly in humanitarian contexts, the prevention and control of infectious disease outbreaks requires constant, timely monitoring and maintenance of essential health services.

Three years into the Rohingya emergency response in Cox’s Bazar, with the COVID-19 pandemic unfolding around the world, the WHO Emergency Sub-office based in Cox’s Bazar started implementing its preparedness plan for yet another health emergency in the district. The aim of the plan is to support the Government of Bangladesh and health partners by reducing the health burden and threats associated with the pandemic in terms of mortality, morbidity, hospitalizations and demand for health care goods and services, to protect vulnerable groups, minimize economic and social disturbance for health care and enable a quick return to normal conditions.

The “new normal”: the burden of a health emergency within a humanitarian crisis

Coordinated by WHO, the health sector in Cox’s Bazar is providing health care to 860,000 Rohingya refugees and 472,000 Bangladeshis living in the areas surrounding the refugee camps. The facilities run by health sector partners to provide services to the population comprise 38 primary health care centres, 97 health posts, 23 special facilities and three field hospitals. As of April 2020, 3,500 health care workers, including 360 doctors, 357 nurses, 219 paramedics, 341 midwives and 1,400 community health workers, were continuing to provide
services in health facilities in the refugee camps. Their role as front-line responders illustrates the contributions of the health sector to ensuring the well-being of the Rohingya people. During the COVID-19 pandemic, effective provision of essential health services remains a high priority in Cox’s Bazar.

Health services have continued, despite restrictions on movement and closure of other services. The facilities have made adjustments and taken preventive measures in the context of COVID-19, comprising establishment of screening, triage and waiting areas for screening, isolation and referral of patients with suspected COVID-19 to isolation and treatment centres for severe acute respiratory infection (SARI). Preventing infection of patients, health workers and visitors to health care facilities is fundamental to ensuring the quality care, patient safety and security.

WHO has provided leadership, coordination, supportive supervision and collaborative support to all health partners and sectors to ensure that:

- Health facilities can provide clinical care for suspected and confirmed cases of COVID-19, as well as the necessary coordination for referral, treatment and discharge.
- Protocols are in place for the management of suspected cases, isolation and referral, and health care workers are trained in home care for suspected cases of COVID-19.
- Infection prevention and control measures are adopted to ensure that routine health services remain available to Rohingya refugees and host communities inside the health facility area.
- Patients accessing routine services are separated from suspected and confirmed COVID-19 cases at all times.

Despite all these efforts and, as in most places in the world, the number of medical consultations has significantly dropped in Cox’s Bazar since the beginning of the COVID-19 pandemic, as many people avoid health facilities to reduce the risk of being infected.

**Enhancing disease surveillance to fight a common enemy**

The past 7 months were used to improve public health and to use, adapt and strengthen the surveillance system to detect and contain the COVID-19 outbreak in the vulnerable populations in Cox’s Bazar. WHO is using all available tools to detect, isolate, test and manage suspected cases. Surveillance is conducted at various levels of the health care system, and community members participate in contact tracing and case investigation and helping to dispel rumours. The tools used by WHO include sentinel testing, COVID-19 case investigation and contact identification, interview and follow-up of contacts, a dispatch and referral unit, reporting on use of facilities for isolation and quarantine, enhanced community-based surveillance for COVID-19 (supported by the Community and Health Working Group), community surveillance of mortality and investigation of deaths due to suspected SARI or COVID-19.

The health sector continues to monitor and respond to alerts of risks for communicable disease, including diseases with outbreak potential, by weekly reporting to the WHO early warning and response system. In addition, a tool for collecting data in the field during outbreaks, GoData, is being used to ensure daily data exchange by 12 contact-tracing organizations and 14 functional SARI partners on COVID-19 cases among Rohingya and host communities. Led by WHO, the Epidemiology Working Group continues to verify alerts raised by partners of suspected cases of outbreak-prone diseases such as diarrhoea, acute respiratory infection, measles and diphtheria.

“Misinformation can spread faster than the virus itself”, said Dr Mushfique Rahman. “We received a community-based alert indicating an increase of deaths for unknown reasons in Camp E1. This information is based on community rumours collected by different volunteers. Today we are set to visit about 500 households to make a rapid assessment. This will allow us to take appropriate action.”
Sexual and reproductive health: women’s and girls’ rights can’t be put on hold

One of the challenges posed by the COVID-19 pandemic is balancing the demands of COVID-19 with strategic planning and coordinated action to maintain essential health services. Women’s choices and rights to sexual and reproductive health care must remain a priority regardless of their COVID-19 status. As of September 2020, facilities in Cox’s Bazar reached 59.8% of women, an increase over the 53.2% registered in June, with a total of 96,461 women of reproductive age in Ukhiya and Teknaf Upazilas using methods of contraception, including long-acting reversible contraceptives and subcutaneous injectable contraception.

To meet the immediate sexual and reproductive health needs of extremely vulnerable women, adolescents and girls in Cox’s Bazar, WHO is delivering emergency reproductive health kits and other medical supplies to partner health facilities and ensuring that nurses, midwives and medical officers participate in WHO capacity-building sessions.

Achievements and challenges of the routine immunization programme in Cox’s Bazar

Immunization is an essential health service, which has been significantly affected by the COVID-19 pandemic. Even brief disruption of immunization services will result in increased numbers of susceptible individuals and raise the likelihood of outbreak-prone vaccine-preventable diseases, such as measles. Vaccines are especially important in the densely populated Rohingya refugee camps; however, there are misconceptions about vaccination, and the Rohingya people arrived in Cox’s Bazar in August 2017 with very low protection against vaccine-preventable diseases. In September 2018, with support from WHO, UNICEF and other partners, the Government of Bangladesh organized the first measles–rubella vaccination campaign for Rohingya children.

“As a child I never had a vaccine, but throughout my pregnancy I followed all the vaccine recommendations”, says 18-year-old Hasina, a Rohingya refugee, less than 24 h after delivering at a health facility in Ukhiya. “At first, we were all sceptical about vaccines but many people in my community are saying that children and pregnant women can’t miss one single vaccine”, she adds.

The Government of Bangladesh, supported by WHO and UNICEF and other health partners, launched the routine expanded programme on immunization in the Rohingya refugee camps in July 2018. The programme provides six vaccines against 10 life-threatening diseases (diphtheria, whooping cough, influenza, tetanus, polio, tuberculosis, measles, rubella, hepatitis B and pneumonia) for children under 2 years and pregnant women. Since mid-April, however, immunization services in the refugee camps have been halted due to restrictions on people’s movement.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

after the first COVID-19 cases in the host community, compromising the progress achieved in the past 2 years. In response, the Government, WHO and health sector partners have developed a transitional strategy to resume routine immunization services at fixed sites that are open for 6 days a week and at sessions in health facilities (outreach sessions) 4 days a week. At the time of reporting, 55 fixed sites at health facilities and 60 outreach sites were ensuring routine immunization in the Rohingya refugee camps.

WHO field monitors have been monitoring immunization sessions. Data collected in 1058 sessions, which have been shared with the Government and partners, showed that engagement with community health workers is increasing, so that more families are receiving information about immunization. The field monitors also interviewed 1374 caregivers, of whom 63% said that community health workers had asked them to attend vaccination sessions. During sessions, 97% of vaccinators wore face masks and 89% of caregivers maintained physical distancing to reduce the risk of COVID-19 infection.

Addressing gender-based violence during the pandemic

The COVID-19 pandemic has underscored society’s reliance on women, both on the front line and at home. In times of crisis, when resources are strained and institutional capacity is limited, women and girls are disproportionately affected. In this context, it is essential to strengthen and integrate action against gender-based violence in health facilities to ensure the availability of services. The health sector, in collaboration with technical working groups on gender, gender-based violence, child protection and protection from sexual exploitation and abuse developed an orientation package on these cross-cutting themes to be included in health sector training on COVID-19. A series of training workshops on SARI for child carers was jointly organized by the health sector, WHO and the child protection sub-sector for a total of 106 participants between June and September 2020. Online awareness training began in June 2020, and, in July, the health sector coordinated 1–2-h online awareness sessions on themes including gender (34 health care workers trained to date), protection from sexual exploitation and abuse (46), gender-based violence (36), protection (37) and child protection (16).

Noncommunicable diseases and COVID-19

People with noncommunicable diseases (NCDs) are reported to be at greater risk of severe illness or death from COVID-19, as is the case of the poorest, most vulnerable people in Cox’s Bazar. Continuing to treat people with NCDs and preventing exposure to risk factors are part of WHO’s work to limit the impact of the COVID-19 pandemic. WHO is supporting the Civil Surgeon’s office in coordinating NCD care by engaging Government partners and national and international stakeholders and promoting national protocols on treating high blood pressure and diabetes. This approach is based on the WHO package of essential NCD interventions, which includes building the capacity of primary health care staff and community outreach workers, health promotion to reduce NCD risk factors, supplying essential NCD commodities to fill gaps, supportive supervision and strengthening NCD surveillance and monitoring in the Cox’s Bazar district. As a result, 94% of the primary health care centres in Cox’s Bazar, including in the refugee camps, manage diabetes, cardiovascular diseases and chronic respiratory diseases.
No health without mental health

Mental health and psychosocial support are a priority in the humanitarian crisis in Cox's Bazar, currently and before the emergency response. Such support is necessary not only in the district but also nationwide, as the most recent national mental health survey in Bangladesh (2018–2019) showed that almost 17% of the adult population had some form of mental health condition, and the Mental Health Atlas 2017 revealed that there were few human resources for mental health, with 0.13 psychiatrists per 100,000 people. The Rohingya refugees, who were exposed to traumatizing events, thus presented an added challenge to health care professionals to close the treatment gap and improve health-seeking behaviour. WHO is thus addressing mental health in Bangladesh to assist the populations affected by the Rohingya refugee crisis.

Training in the Mental Health Gap Action Programme helps health care workers to address mental health needs in emergency and other complex settings where specialized medical care is scarce or nonexistent. WHO's aim is to increase the confidence of front-line workers in talking about mental health, providing primary support and referring patients who require psychosocial support. The Hope Field Hospital in Camp 4 in Ukhiya provides a friendly space for women and health care to the host community and Rohingya refugees. The mental health unit at this facility is composed of one doctor, five nurses, two midwives and two counsellors, all of whom participated in WHO training in 2019, where they learnt the power of empathy and providing first-line support by recognizing and treating the symptoms of mental health conditions. During the past few months, however, these workers faced many challenges, including fear of being infected and bringing COVID-19 to their patients and families and the lockdown, which reduced mental health care. “For three months, we were unable to see our patients regularly. These people with mental health conditions experienced even greater social isolation, and that explains the many calls we received through our hotline. Since August, mental health services are back to normal except for the masks that we are all wearing. In the first month we had 82 patients”, says Dr Rumana Rafiq, mental health coordinator at Hope Field Hospital.

WHO’s technical support to partners to ensure essential health services

The provision of essential health services in the world’s largest refugee camps has minimized the impact of COVID-19 pandemic on the well-being of the populations and will enable a quick return to normal conditions when the time comes. In Cox’s Bazar, WHO monitors health facilities every 4 months to provide supportive supervision and guidance and to monitor compliance with the essential minimum service package. Inter-agency visits for supportive supervision are made weekly.

The WHO Cox’s Bazar team is strengthening laboratories in the camps and improving biosafety. An assessment of infection prevention and control was conducted in 45 health facilities in the camps and Government facilities, followed by training and supportive supervision to address the identified gaps. Training has been provided to 3600 humanitarian health care workers and Government staff in SARI isolation and treatment centres. The culture of patient safety is reducing the risks of transmission among health care workers and patients and also helping to build trust in the health care system. WHO has also been building the capacity of the health workforce in management of COVID-19 and in mental health and psychosocial support, which is critical for mitigating stress in health care workers, COVID-19 patients and family members.

WHO is coordinating the international response to humanitarian health emergencies and, in the case of essential health services during the COVID-19 pandemic, is providing operational guidance on practical actions at national, sub-regional and local levels to reorganize and safely maintain access to high-quality, essential health services during the pandemic. In doing so, the Organization contributes to alleviating human suffering and protecting and respecting the life, health and dignity of each individual.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020
November 2020
REPUBLIC OF KOREA

Key areas:

Preparedness, agile adaptation and universal health coverage with whole-of-government governance

The Republic of Korea has responded swiftly to the COVID-19 pandemic and managed to flatten the epidemiological curve, avoiding overburdening the health system. The first case was confirmed at the end of January 2020, and there was a huge outbreak at the end of February, reaching a peak of about 800 new confirmed cases per day at the beginning of March. Because of effective preparedness, a rapid response and a strong health system based on universal health coverage (UHC), the country did not introduce severe restrictive measures such as lockdowns. Active compliance with social distancing and wearing face masks by citizens, instead of lockdowns and enforcements, contributed to lower socioeconomic costs associated with the response to COVID-19. (See Fig. 1 for trends in the numbers of daily confirmed cases and major Government policies.)

Preparedness and learning from the past

The painful experience of the Middle East respiratory syndrome coronavirus (MERS-CoV) outbreak in 2015, with 186 cases and 38 deaths, provided valuable lessons for both the Government and the people of the Republic of Korea.\(^1\) This incident alerted the Government to the importance of responding promptly to infectious diseases and reporting key developments transparently to the public. In 2015, there was no effective system of contact-tracing, and lack of coordination between central and local governments contributed to delays in a timely, swift response. From the MERS-CoV experience, the Government and the public learnt the importance of transparent communication and trust, effective surveillance and alerts, early diagnosis and clear roles and responsibilities for stakeholders. As a result, the country substantially enhanced its preparedness for major outbreaks.

After the MERS-CoV outbreak, the Government revised the Infectious Disease Control and Prevention Act and empowered the Korea Center for Disease Control and Prevention by increasing the agency's personnel and funding for infectious disease control to strengthen pandemic preparedness. The Center was recently renamed the Korea Disease Control and Prevention Agency (KDCA), with increases in its budget and personnel, independent of the Ministry of Health and Welfare (MoHW). After MERS-CoV, the revised law allowed the Center to hire more epidemiologists, who are vital to increasing capacity for infectious disease control and pandemic preparedness.

The revised Infectious Disease Control and Prevention Act also allowed the MoHW to collect information and to request the National Police Agency and telecommunications companies to share information on the location of patients and potential patients, with the provision that the collected information is destroyed when tasks relevant for the outbreak are accomplished.\(^2\) This amendment made it possible to conduct extensive contact-tracing for COVID-19. The law also obliges the Government to disclose information to the public about the paths of

---


each confirmed case to ensure the public’s right to know. The revised law therefore permitted the KDCA and the MoHW to access private information, particularly at the outbreak of an infectious disease, under a special provision of the privacy law.

Employers and the Government were mandated to provide compensation to employees and self-employed people under treatment or in quarantine due to an outbreak. In addition, the Government was obliged to provide compensation to hospitals that incur losses due to treatment of patients with confirmed or suspected infectious diseases. These financial arrangements have contributed to the participation and compliance of citizens and health providers during COVID-19 pandemic. The high-level “control tower” for the emergency response is established under the Prime Minister at the response headquarters.

Coordination has been strengthened among central and local governments in infectious disease management since the MERS-CoV outbreak. Contact-tracing is the responsibility of local governments, while the KDCA is responsible for epidemiological investigation in collaboration with local governments in outbreaks of serious infectious diseases such as COVID-19, Ebola virus disease, severe acute respiratory syndrome and MERS. Although local governments have the authority to implement their own emergency response measures, including the closure of schools, kindergartens, day-care centres and public welfare centres, most follow the instructions of the MoHW and the KDCA in emergency-related measures.

Hospital-acquired infection was a serious concern during the MERS outbreak. In the response to COVID-19, the Government designated 343 “COVID-19 safe” hospitals to minimize infection (28 tertiary hospitals, 215 general hospitals, 99 hospitals, 2 traditional Korean medicine hospitals), which provide separate diagnosis and treatment pathways for patients with respiratory symptoms throughout treatment to ensure that they do not encounter other patients in a health care facility. The Government also designated 67 hospitals in the public sector with about 7500 beds exclusively for the treatment of COVID-19 patients.

Effective response

Testing, tracing and isolation, and treatment (3Ts)

Instead of restrictive measures such as lockdowns, massive testing and extensive contact-tracing were the key strategy of the COVID-19 response. When the first cases of COVID-19 were reported at the end of January, the Government was already preparing mass production of test kits and meeting with producers. Early action by the Government and mass testing have led to early detection, isolation of cases and prevention of further infections, which have been crucial, as there are many asymptomatic cases of COVID-19. About 6 weeks after approval of the test kits, more than 300,000 people had been tested.

When a test is positive, all paths are traced to check where and when the patient went. This includes checking all footage of visits to or use of restaurants, shops or public transport. The law allowed the Government to use additional information, such as credit card payments, mobile phone location and closed channel cameras in public places. Text messages with information on patients’ movements are sent by local and district governments to all residents, which encouraged those who had been in contact with patients to be tested. Although exposure of this information was widely supported by the pub-
lic, some businesses such as local restaurants and retail shops, experienced negative impacts. The details of the information that is disclosed to the public are determined by local governments. The extensive contact-tracing practised during the COVID-19 pandemic was possible only because of social consensus, which is difficult to achieve in many other countries.

In the early stages, some patients visited health facilities and laboratories for testing and infected health workers, resulting in closure of the facilities. Later, drive-through testing units were introduced nationwide for quick testing without the risk of infection. Additional innovations, such as outdoor walk-through testing stations, have been introduced. PCR tests are free for people who have travelled abroad, been exposed to the contacts of patients or on a physician’s recommendation and for people who test positive even if they are ineligible for free testing. Many local governments also provide free testing to their residents. Anyone entering the country must self-quarantine for 14 days in a Government-funded facility or at home, and those with symptoms at entry screening are tested for COVID-19, regardless of nationality.

Flexible response and agile adaptation

Mass testing resulted in many positive cases in March. Initially, all those who tested positive for COVID-19 were hospitalized; however, it soon became clear that hospitalization of all positive cases would overload the health system, resulting in a shortage of hospital beds, especially critical care units for severe COVID-19 cases, and would impact other severely ill (non-COVID-19) patients. In order to avoid such a crisis, cases were prioritized according to severity. Accumulated clinical evidence also showed that the majority of positive cases would have only mild symptoms or would even be asymptomatic and would not require hospital treatment. To fill the gap, the Government introduced the concept of “residential treatment centres”, for which large (mostly suburban) residential buildings, primarily used for education, training and short-term residence by public enterprises or large private firms, were transformed into quarantine centres to accommodate mild cases. People who are quarantined in this type of facility evaluate themselves by checking and reporting their temperature and respiratory symptoms twice a day. The centres were associated with general or university hospitals in the district or region. The patient triage system has been revised continually on the basis of the latest scientific evidence and experience.

There has been increased use of innovative and alternative technologies to continue the provision of health services, such as telemedicine. Telemedicine has not previously been allowed because of strong opposition by the Korean Medical Association (KMA), the main stakeholder group of primary physicians in the private sector, because of concern about the increasing market share of large hospitals at the expense of clinic-based physicians in the community. Under the national health system, people can choose their physicians and health care facilities, and the KMA has argued that many patients are already by-passing primary physician clinics to go directly to the outpatient centres of large general hospitals. They consider that primary care could be further weakened, as large hospitals can attract more patients if telemedicine is allowed. In the face of COVID-19, however, telemedicine
was allowed temporarily with a limited scope, i.e. physician’s prescription of medicines by telephone, to protect patients with existing conditions and also to minimize potential infection of health providers.

Universal health coverage

Although the 3Ts strategy has been highlighted as the core of the effective response to COVID-19, it is the capacity of the national health system that has been the foundation of the response. One of the unique, strong features of the health system in the Republic of Korea is national health insurance (NHI), which provides all citizens with access to health care, for prevention, treatment, rehabilitation and (elderly) long-term care, in a single pool. The single pool provides the NHI with high bargaining power relative to health providers, with no difference in terms of benefits, contributions or provider payment to the insured. As the NHI covers the entire population and all health care providers (both public and private), it has information on the insured, providers and health care utilization and provision. The data systems of the KDCA and the NHI are effectively linked, seamlessly sharing information on health care utilization and foreign travel of patients with confirmed and suspected COVID-19. Although more than 90% of health care facilities are private, they are all mandated to participate in the NHI system, with the same contractual conditions for public and private providers set by law. When masks were rationed in March because of a temporary shortage, they were distributed by pharmacies according to the NHI database. The COVID-19 experience re-emphasizes the importance of UHC for coping with epidemics and health security crises.

As the NHI is a single purchaser, it responded rapidly to COVID-19 by listing and pricing COVID-19 diagnostic test reagents and test methods after rapid approval by the Ministry of Food and Drug Safety. The NHI swiftly revised the benefits coverage for COVID-19 medicines through shorter review and rapid approval for listing and introduced compensation for infection prevention to COVID-19 patients in hospitals. COVID-19 patients have no financial burden of treatment because most medical costs are covered by the NHI, and patients are exempt from co-payment in the case of communicable diseases (i.e. funded by the Government).

As a relief measure, the mandatory NHI premium (contribution) is discounted for people heavily affected by COVID-19. For 3 months (March–May), 50% of the contribution was discounted for people in the bottom 20% of the income quintile and 30% was discounted for those in the low 20–40%. People in the lower 50% of income percentile in Daegu and North Gyeongsang provinces, which were heavily affected by the outbreak, received a 50% discount on their NHI contribution. Many health providers saw a shortage of cash flow as a result of the decrease in (non-COVID-19) health care utilization, and the National Health Insurance Service has provided advance payment equivalent to 90–100% of reimbursements in the previous year.

Governance and international cooperation

Governance and transparency

Every day, the Government (MoHW and KDCA) provides a detailed briefing on new cases, mortality, numbers of the treated and discharged cases, regional distribution and current capacity to treat COVID-19 patients (e.g. availability of beds). Mayors and governors of local governments also provide frequent briefings on the pandemic in their districts or regions. Transparent communication is essential, as it increases the trust of the public in the Government and their compliance with Government recommendations. Most people voluntarily follow Government recommendations on social distancing, wearing masks and hand-washing, without major restrictive measures.

Whole-of-government governance has been effective in preparing for and responding to the pandemic. The MoHW and KDCA played key roles in technical leadership, mobilization of resources for health care and testing, tracing and treatment. The Ministry of Economy and Finance provided rescue funds to entire households to boost consumption as well as emergency funding to small businesses. The Ministry of Interior and Safety mobilized public-sector resources and managed quarantine and residential treatment centres. Local governments are responsible for local contact-tracing, disclosure of contact information and management of health centres and public hospitals in their locality.

**International collaboration**

Global collaboration is crucial, as no country is safe until all the countries in the world are safe. During the MERS-CoV outbreak in 2015, the WHO–Republic of Korea Joint Mission made some important recommendations, including early identification and monitoring of all contacts, regular provision of information to the public and strengthening the capacity of medical facilities and laboratories. WHO recommendations were fully incorporated into the country’s strategy for pandemic preparedness and response.

The Republic of Korea is committed to leaving no one behind in the pandemic, and the Government has participated actively in the global response to COVID-19, including through close collaboration with WHO at the highest levels and with other countries.

The country promptly notified the first imported confirmed case of COVID-19 in January 2020 to WHO, and, since then, information has been shared daily by the national focal point according to the International Health Regulations (2005).

The President of the Republic of Korea, Mr Moon Jae-in, and the WHO Director-General, Dr Tedros Adhanom Ghebreyesus, discussed the country’s success and potential opportunities for supporting other countries in a phone call in April. President Moon was invited by WHO to deliver the keynote address at the Seventy-third World Health Assembly in May 2020.

Throughout the year, the Republic of Korea has been lauded for its open, transparent response and its willingness to share experiences in international fora. For example, in March, the country was one of the first to present its response to WHO and Member States during the weekly COVID-19 information session. National experts have been working hand-in-hand with WHO at both headquarters and regional level.

In addition to technical collaboration, the country has also demonstrated leadership and solidarity in support to other countries. It provided a flexible contribution of US$ 3 million to WHO for its strategic preparedness and response plan and an in-kind contribution of PCR tests and extraction kits to 24 countries in the African Region, which increased testing capacity where it was needed most. Under the auspices of the Foreign Minister, Ms Kang Kyung-wha, the Permanent Mission of the Republic of Korea in Geneva established a global support group for infectious disease response, which is an action-oriented coalition for fostering global health readiness and a better-equipped response to possible pandemics. The Korea International Cooperation Agency, a Government agency for official development assistance, mobilized a global disease eradication fund and collaborated with WHO on infectious disease control and pandemic preparedness in many low-income countries.
The Republic of Korea has also been playing a key role in vaccines for COVID-19. The country joined the COVAX facility on 9 October to secure a supply of vaccines for up to 20% of the population (10 million doses). It signed a purchase agreement with GAVI, the Vaccine Alliance, and made a prepayment. SK Bioscience in the Republic of Korea signed a letter of intent with AstraZeneca on 21 July and with Novavax on 13 August to manufacture vaccines for a global supply. The Government donated US$ 10 million to the COVAX Advance Market Commitment to fund COVID-19 vaccine distribution to low- and middle-income countries on 28 October. The country also joined the Access to COVID-19 Tools Accelerator facilitation council as a member of the market leader group to provide continued political leadership to promote international support for the Accelerator and help secure the financial resources necessary to maximize the impact.

The way forward

The experience of the Republic of Korea shows a huge pay-off from sustained investment in preparedness and response for pandemics, including the legal framework, human resources in epidemiology and public health, systematic, agile adaptation to changes and multisectoral collaboration. Countries should ensure that pandemic preparedness is ingrained in resilient health systems, rooted in UHC values, to cope with pandemics and provide access to the essential continuum of care, including key public health functions and testing, without financial barriers. Effective targeting and protection of the elderly, poor and vulnerable, including workers in small enterprises, is key to success in addressing a pandemic. Countries should learn from the crisis and take this opportunity to “build back better” through pandemic preparedness, investment in public health services and pro-poor policies, including resilient health systems for UHC and health security. In this effort, global collaboration and multisectoral cooperation among the public and private sectors, central and local governments and different ministries and sectors is critical.

Fig. 1. Government policies and daily confirmed cases per million people
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Note: The government response stringency index from Our World in Data is a composite index based on 11 measures: school closures, workplace closures, cancellation of public events, restrictions on gatherings, closing public transport, staying at home, restrictions on internal movement, international travel controls, public information campaigns, a testing policy and contract-tracing.

Acknowledgements

As WHO does not have a country office in the Republic of Korea, the case study was led by Professor Soonman Kwon (Seoul National University Graduate School of Public Health, Seoul, Republic of Korea).

The Department of Country Strategy and Support at WHO headquarters (Geneva, Switzerland), in collaboration with the Country Support Unit at the WHO Regional Office for the Western Pacific (Manila, Philippines), the Division of International Cooperation at the Ministry of Health and Welfare, the Director for International Affairs at the Korea Disease Control and Prevention Agency and the Permanent Mission of the Republic of Korea in Geneva supported development of this case study.
A timely response to protect and promote the health and well-being of a population during the pandemic while leaving no one behind (March to November 2020)

The Dominican Republic has a population of more than 10 million people, of which more than 3 million are concentrated in the provinces of Santo Domingo and the National District. Despite sustained economic growth over the past few years—estimated at 5% per year—wealth inequities persist, as well as social inequities and disparities in access to, and coverage of, health services. The country registers endemic communicable diseases, such as dengue and malaria, and has experienced a rise in chronic illnesses, such as hypertension (23.8% among men; 19.1% among women) and diabetes mellitus (8.6% among men; 11.4% among women). The Ministry of Health (MoH) reported the first imported case of novel coronavirus disease 2019 (COVID-19) on 1 March 2020, becoming the fourth Latin American country to confirm a case. As of 30 November 2020, the country had counted 143,988 cases and 2,331 deaths related to COVID-19.

Preparedness, mitigation and containment actions taken to confront the pandemic

Fig. 1. Chronology of the COVID-19 response in the Dominican Republic.

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>First imported COVID-19 case</td>
<td>1 March</td>
</tr>
<tr>
<td>Declared a state of emergency</td>
<td>15 March</td>
</tr>
<tr>
<td>First national lockdown and quarantine</td>
<td>19 March</td>
</tr>
<tr>
<td>End of the second extended phase of the reopening plan</td>
<td>20 May</td>
</tr>
<tr>
<td>Resumption of the national economy</td>
<td>15 July</td>
</tr>
<tr>
<td>Second state of emergency</td>
<td>1 October</td>
</tr>
<tr>
<td>Second national lockdown and quarantine</td>
<td>15 August</td>
</tr>
<tr>
<td>Inauguration of the new presidential and health authorities</td>
<td>1 September</td>
</tr>
<tr>
<td>Extension of the state of emergency for 45 more days (to December 1)</td>
<td>17 November</td>
</tr>
</tbody>
</table>

Source: PAHO/WHO based on unofficial data for the Dominican Republic from the Ministry of Health and the Government.

1 According to the National Statistics Office (Oficina Nacional de Estadística), in 2016, the country’s Gini index was 45.7 and there was a 30.9% general poverty rate, with an extreme poverty rate of 6.9%, mainly in the border regions and rural areas.

The Pan American Health Organization/World Health Organization (PAHO/WHO) Country Office worked in coordination with national authorities starting as early as January, collaborating on actions to prepare for, mitigate and contain the pandemic. These efforts resulted in the development of a COVID-19 contingency plan based on the nine pillars of the COVID-19 Strategic Preparedness and Response Plan, which included creating inter- and multi-sectoral committees to address COVID-19, strengthening the technical capacities of national laboratory personnel, enhancing capacities to process samples using polymerase chain reaction (PCR) to detect SARS-CoV-2 and other respiratory viruses, and increasing the preparedness of health centres to care for patients with COVID-19.

### Fig. 2. Trends in COVID-19 cases, by month, Dominican Republic.

Source: Ministry of Public Health.

### Fig. 3. Trends in COVID-19 deaths, by month, Dominican Republic.

Source: Ministry of Public Health.

### Fig. 4. Number of samples processed by polymerase chain reaction and percent positive, by month, Dominican Republic.

Source: Ministry of Public Health.

---

On 19 March, the government declared a nationwide state of emergency (Fig. 1), closing many institutions and restricting movement throughout the country, including closing schools and universities, suspending public transportation within and between cities, suspending travel by air and sea, and restricting border crossings to and from Haiti, with which the Dominican Republic shares the island of Hispaniola in the Caribbean Sea. Businesses were also closed; teleworking was promoted where possible; and only essential workers continued working, with agreed-upon schedules. These measures had significant impacts on the lives of thousands of Dominicans, so encouraging the adoption of them required great efforts on the part of the authorities and the general population, especially in view of the country's socioeconomic factors.

Despite holding presidential and congressional elections and experiencing two tropical storms in July and August, the country has had only a moderate outbreak, thanks to the early action taken by local authorities working with PAHO/WHO and other partners. Initially, the reopening of the country was planned to be accomplished in four phases, each lasting 2 weeks to provide time to assess the epidemiological situation before moving to the next phase, but at the end of the second phase, a significant rise in cases delayed the transition to the third phase. Nevertheless, by 1 July, the country managed to reopen a large part of its economy, although the national curfews remained (from night to early morning).

The highest increase in cases and deaths (Figs. 2 and 3) occurred from July to September, with the highest positivity rate (33.6%) occurring in July. With respect to hospital capacity, 48% of beds for COVID-19 patients were in use on 15 June, and this rose to 81% by 31 July, a percentage that had decreased to 35% by 25 October.

Strengthening epidemiological surveillance for the timely detection of cases

PAHO/WHO has worked with the MoH and the National Epidemiology Directorate (Dirección Nacional de Epidemiología, or DIGEPI) to strengthen epidemiological surveillance, including establishing a situation room and a Centre for Public Health Intelligence (Centro de Inteligencia en Salud Pública, or CISP). The establishment of CISP and its functionality represent a milestone in the country's capacities for surveillance and data analysis for public health decision-making. While the MoH had previously had a situation room, it lacked the capacities now offered by CISP, such as the ability to connect in real time with situation rooms in Provincial Health Directorates and Health Area Directorates across the country, which enables the central health authorities to be in contact with local authorities and thus have knowledge about the epidemiological situation everywhere in the country. The value of this situation room will transcend its use during the current health emergency because in addition to being instrumental in COVID-19 surveillance, it is already being used for surveillance of other public health events, such as outbreaks of dengue and cases of tuberculosis. PAHO/WHO's collaboration has included the formation of rapid response teams that are able to react to the emergency in the provinces; more than 140 professionals have been hired for these teams, including epidemiologists, laboratory specialists, data entry clerks and interviewers, with the financial support of the United States Agency for International Development (USAID).

PAHO/WHO is also supporting the realization of prediction models with the COVID-19 Simulator (https://www.covid19sim.org/tool by considering scenarios with an effective reproduction number (known as an Rt) of 1.5 versus 0.8 to estimate the short- and medium-term numbers of infections, recoveries, hospitalizations and deaths, including the need for intensive care unit (ICU) beds. Further, PAHO/WHO has prepared comparative epide-
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Epidemiological analyses for predictions reflecting the phased reopening of the economy to share with partners. In 2020 PAHO/WHO in the Dominican Republic also had a dashboard that was updated daily, with data provided by national authorities. Some dashboards used by other countries in the Region of the Americas have served as examples for the Dominican Republic’s dashboard, with specific functions added to more accurately reflect the national epidemiological situation.

Supporting laboratory capacity building

The need to strengthen human resources capacities and enhance supplies at the National Laboratory of Public Health Dr Defilló (Laboratorio Nacional de Salud Pública Dr Defilló, or LNSPDD) represent some of the challenges posed by the pandemic to the health system in the Dominican Republic. The LNSPDD, the reference laboratory for processing PCR tests to detect SARS-CoV-2, is making efforts to increase its capabilities, including automating its processes (Fig. 4). Among other actions, PAHO/WHO has supported the training of LNSPDD personnel by facilitating their participation in a workshop on laboratory diagnosis and detection of SARS-CoV-2, held in Mexico in February 2020 by PAHO/WHO and the Mexican Ministry of Health’s Institute of Epidemiological Diagnosis and Reference. PAHO/WHO also donated equipment and supplies to increase the capacity for PCR testing on open and closed platforms as well as viral transport media and extraction kits. On 6 November, PAHO/WHO donated 15 000 rapid antigen tests to LNSPDD to help expand the diagnostic network to remote areas and make it easier for first-level personnel to diagnose and isolate people who test positive. As of 30 November, 10 laboratories – five public and five private – are authorized to carry out PCR tests.

Donations being delivered to the National Laboratory of Public Health Dr Defilló during the emergency. Photo credit: PAHO/WHO

Fig. 5. The plan for reorganizing and expanding health services in the Dominican Republic.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CEAS: 68</td>
<td>CEAS: 150</td>
<td>CEAS: 151</td>
<td>CEAS: 152</td>
</tr>
<tr>
<td>HICU beds: 577</td>
<td>HICU beds: 2,617</td>
<td>ICU beds: 1,932</td>
<td>ICU beds: 1,415</td>
</tr>
<tr>
<td>Ventilators: 82</td>
<td></td>
<td>Ventilators: 293</td>
<td>Ventilators: 427</td>
</tr>
</tbody>
</table>

Source: PAHO/WHO in the Dominican Republic (unofficial).
Expanding the health system and services to save lives

One of the main achievements of the country’s response to this health emergency was the result of the linkage among the network of public, private and military health facilities that contributed to avoiding overwhelming the capacity for hospital beds and ICUs in much of the country, with the exception of certain provinces in which 90% of beds were occupied in July and August. At the beginning of the pandemic, only four public health facilities and one military health facility were involved in the case management response. As the epidemic unfolded, private health centres were integrated into the network. By 30 November, the Dominican Republic had expanded its capacity to include 154 public health centres, 2 military health facilities and 56 private health care clinics; thus, more than 3 500 hospital beds and 568 ICU beds were available.

Care and case management

To build this network, PAHO/WHO provided technical and financial support to prepare health care centres for COVID-19 patients and to develop care and case management protocols. This work included developing tools known as dynamic matrices to strengthen reporting of the number of hospital beds and occupancy rates of ICU beds, the use of ventilators and the discharge of patients, as well as collaborating with the National Health Service (Servicio Nacional de Salud, or SNS) to analyse the needs of health facilities to enable the increase of hospital and ICU beds. PAHO/WHO also provided technical cooperation to the SNS for data collection related to existing resources (beds, supplies, equipment and HHR) and to identify gaps in health centres in complex settings.

PAHO/WHO also helped the SNS to develop organizational and expansion plans, resulting in the evaluation, designation and preparation of specialized health care centres (Centros Especializados de Atención de Salud, or CEAS) equipped with hospital and ICU beds specifically for COVID-19 patients needing critical care, which requires hospital isolation and specialized life support (Fig. 5). The expansion plan for the Directorate of Hospitals in the SNS has prioritized identifying and recruiting CEAS in nine regions to ensure timely access to health services, depending on local infrastructure and human resources capacities.

A pregnant patient receiving medical attention at a health centre in the National District. Photo credit: National Health Service, Dominican Republic.

A PAHO/WHO technical team accompanies members of the Ministry of Health during supervisory visits to health centres in the southern part of the country. Photo credit: PAHO/WHO
Table 1. Supporting the maintenance of essential health services and adapting technical cooperation: fundamental pillars of the PAHO/WHO response to the COVID-19 emergency

<table>
<thead>
<tr>
<th>Type of health service</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicable diseases</td>
<td>Thanks to the support of PAHO/WHO, the Dominican Republic is the second country in the Region of the Americas to implement the virtual course on the clinical management of dengue in the context of the pandemic, through which 20 national facilitators were trained. In addition, since July 2020 the country has had a malaria response plan for the context of COVID-19, as well as a national plan for the response to dengue outbreaks and other arboviruses for the 2020 season, for which it had development support from PAHO/WHO and other partners.</td>
</tr>
<tr>
<td>Maternal and child health</td>
<td>Reducing maternal morbidity and mortality is one of the country’s priorities. Through the support of PAHO/WHO, more than 700 health professionals have been trained to provide maternal, child and adolescent health care within the framework of the COVID-19 pandemic. Also, PAHO/WHO has supported the development of guidelines and protocols and has provided technical cooperation for implementing surveillance for the multisystem inflammatory syndrome seen in newborns, children and adolescents with COVID-19.</td>
</tr>
<tr>
<td>Noncommunicable diseases and mental health</td>
<td>PAHO/WHO has assisted the Ministry of Health and the National Health Service (Servicio Nacional de Salud) in a series of activities, such as expanding the HEARTS programme throughout the country, with a view to positioning it as a crucial tool for preventing COVID-19 in patients with cardiovascular and other noncommunicable diseases. PAHO/WHO has also supported the organization and training of a network of more than 700 volunteer psychologists and psychiatrists to provide psychological care to people affected by COVID-19 and their families, as well as frontline personnel, including doctors, nurses and police among others.</td>
</tr>
</tbody>
</table>

As part of the project to organize and expand health services, health professionals working in primary care have been appointed to manage COVID-19 patients and help maintain the delivery of essential health services. PAHO/WHO has donated medical devices not only to be used in hospitals but also in first-level care for patients with chronic illnesses (for example, glucometers, sphygmomanometers and pulse oximeters); additionally, PAHO/WHO has donated personal protective equipment for first-level health workers working in medium- and high-complexity health facilities and provincial directorates (more than 5 million pieces of equipment, including masks, protective goggles and gowns).

PAHO/WHO has also engaged in a technical collaboration with the MoH to prepare a proposal outlining how to return to normality in public and private health services within the framework of the COVID-19 pandemic. This proposal also involved collaboration with USAID, the US Centers for Disease Control and Prevention, and other partners. Similarly, PAHO/WHO supported the preparation of a document on recommendations for CEAS during the transition from the emergency phase.
Reaching everyone everywhere through collaborations between institutions

PAHO/WHO has optimized its relationships with other agencies of the United Nations system and members of civil society to reach various population groups to strengthen their skills and increase their knowledge to counter the impact of the COVID-19 pandemic.

Capacity building in communities and in health care services

More than 1,000 people have been trained on COVID-19 prevention and mitigation measures through a series of 16 webinars managed by PAHO/WHO, the Office of the United Nations High Commissioner for Refugees (UNHCR), the MoH and the National School for Migration. These sessions – aimed both at health personnel and the general community – addressed topics such as the correct use of personal protective equipment, disinfection of public spaces, management of COVID-19 in pregnant women and newborns, and basic prevention guidelines for home and in the community.

Another important interagency initiative undertaken between PAHO/WHO and the International Organization for Migration (IOM) is the development of an intervention plan for the response to COVID-19 in the provinces bordering Haiti. Both agencies have coordinated with local authorities and actors at the border to promote joint activities that address the impact of the pandemic on vulnerable migrant populations. PAHO/WHO is also working on a project with the Pontificia Universidad Católica Madre y Maestra to strengthen the capacities of health professionals providing primary and secondary care in the context of COVID-19 in the border provinces of Dajabón and Independencia. This project will help maintain essential health services in these areas and help people receive high-quality and timely medical care.

Radio spots to reach vulnerable groups

Thanks to collaborations among PAHO/WHO, UNHCR and IOM, inhabitants of rural and border areas have learned about COVID-19 prevention measures through radio spots in both Spanish and Creole, a language mostly spoken by the Haitian population. These messages have been broadcast through the community radio network – thanks to the Office for the Coordination of Social Policies of the Vice Presidency of the Republic – which is part of the Community Technology Centres. In areas with large populations of Haitian migrants, IOM has disseminated these messages in Creole through loudspeakers. Similarly, in order to reach vulnerable populations, PAHO/WHO produced nine radio spots about COVID-19 prevention aimed at older adults, people living with HIV and people who engage in the harmful use of alcohol, and these are also broadcast through the community radio network.
Donations to protect vulnerable groups

PAHO/WHO also donated 2,000 hygiene kits that included infection prevention supplies and information about COVID-19 that were distributed by two civil society foundations to 1,500 people living with HIV and 500 sex workers.

Within the framework of an interagency project that includes PAHO/WHO, UNDP, and UNICEF, and that aims to foster the full inclusion of people with disabilities in the Dominican Republic, PAHO/WHO donated 10,000 masks to 8 organizations that serve people with disabilities. On 30 November and 1 December, the project made an additional donation of 100,000 masks for people with disabilities and 520,000 for people deprived of their liberty. In addition, PAHO/WHO has advocated for people with disabilities to be included in the response planning for the COVID-19 emergency, both in the Dominican Republic and in the United Nations system.

Looking to the future

Because the country will continue facing challenges, it will be important to maintain efforts to detect and treat cases of COVID-19, and in the event that cases start increasing, to consider and evaluate whether it is necessary to expand the capacity of hospitals and ICUs. Other challenges lie in strengthening the supply chain commensurate with the needs at different levels of care; ensuring effective management of personal protective equipment for infection prevention and control; improving surveillance through mass testing, the identification and isolation of cases and contact tracing; and ensuring that information from public, private and military health establishments is collated and analysed promptly to ensure timely decision-making.

PAHO/WHO will continue working with the Dominican Republic, joining efforts by other United Nations agencies and humanitarian organizations, intensifying technical cooperation, strengthening the capacities for human resources in health and facilitating the acquisition of supplies through the Strategic Fund of the Pan American Health Organization, which will also serve to ensure that the country receives medicines and future vaccines through the Revolving Fund of the Pan American Health Organization.

In addition, PAHO/WHO will support the country in participating in the Solidarity clinical trial for COVID-19 treatments, for which seven public and private health providers have been selected for the medicine arm of the trial. The Solidarity clinical trial has already obtained the approval of the National Bioethics Committee. As such, the necessary inputs for the implementation of the study in the country are expected to arrive, contributing to the generation of rigorous and generalizable evidence about effective COVID-19 treatment in critically ill patients.
Gambia

Learning from its first major public health crisis

The economic backdrop

The West African Republic of the Gambia (population 2,174,000) is considered to be among the world’s least developed countries by the United Nations (UN), and prior to the coronavirus disease 2019 (COVID-19) crisis, was on the point of exiting from years of chronic debt distress, with a robust growth rate of 6.3%, a sharply reduced fiscal deficit and the promise of debt relief from multilateral creditors. The advent of the COVID-19 pandemic has hobbled gains made since the democratic election of President Adama Barrow in 2017. In 2020, however, the accent has been on forestalling crisis. In April 2020, the International Monetary Fund approved a US$ 21.3 million disbursement to the country to address the COVID-19 pandemic. The European Union has also disbursed a budget support grant of US$ 9.7 million, while the World Bank has frontloaded its support through two projects: the Social Safety Net (US$ 6 million) and COVID-19 Emergency Response (US$ 10 million).

Given Gambia’s dependence on the tourism and hospitality sectors, the sudden and massive loss of tourists from key European markets (before the pandemic, projected arrivals for the 2020 season were 101,930 persons) means that the socioeconomic impact of the pandemic is already being felt: Gambia – like other least developed countries, including neighbouring Senegal, which entirely surrounds it, except along the Atlantic coast – has limited room for manoeuvre. The per capita gross domestic product (GDP) in the country is US$ 809, with almost half of the population considered to be living below the poverty line.¹ Health care facilities remains modest (at 3.3% of GDP in 2017), and there is a low ratio of health professionals to population (at 1.1/1,000 persons); primary health care facilities are few, and equipment is limited, especially in the North Bank, Central River and Upper River regions. Gambia has four tertiary-level referral hospitals, including the Medical Research Council (MRC) Unit The Gambia and the Edward Francis Small Teaching Hospital in Banjul. This riverine country’s leading causes of mortality are infectious diseases, notably tuberculosis (TB), malaria and diarrhoeal infections, and although malnutrition is prevalent in some of its remoter areas, the country also has a high burden of obesity (10%).²,³ The maternal mortality rate is high at 433 deaths/100,000 live births, and accounts for 36% of all deaths among women aged 15–49 years.⁴

The World Bank estimated in July 2020 that the economy’s growth rate would decline to between 2.5% (assuming a third-quarter recovery) and -2.4% in 2020.⁵ In a detailed policy brief published in August on the socioeconomic impacts of the pandemic, the United Nations Development Programme was even more specific: the estimated

---

Responding to the COVID-19 pandemic: 
WHO’s action in countries, territories and areas, 2020

impact on the tourism sector would be a loss of US$ 108.5 million, representing 7% of GDP. Trade disruption and the worldwide reduction in commodity prices have also had negative effects on the economy: exports such as peanuts, fish and cotton are important sources of revenue for Gambia. And last but not least, there has been a significant drop in incoming remittances from the substantial diaspora community.

Strengthening governance and coordination early in the outbreak

WHO declared the COVID-19 outbreak to be a global pandemic on 11 March 2020, and Gambia confirmed its first positive case of the disease on 17 March in an airline passenger returning from the United Kingdom who subsequently went into quarantine. Since achieving its independence in 1965, the country has never faced a major public health emergency, except for isolated cholera outbreaks in regional pockets following flooding during the rainy season: the closest major threat was the 2013–2016 Ebola virus disease outbreak in the country’s subregion, which spared Gambia. At that time, the WHO Country Office initiated emergency preparedness plans by coordinating partnerships at the national level, a task that was made more straightforward by the relatively small number of bilateral and multilateral partners in Gambia specifically concerned with the health sector. However, this resulted in the development of a National Ebola Virus Disease Plan.

Thus, when the COVID-19 outbreak in Wuhan began to spread globally in early 2020, Gambia’s Ministry of Health (MoH) was able to repurpose the emergency response structure that had been put in place in 2015 when there was widespread transmission of Ebola virus disease in Guinea, Liberia and Sierra Leone, southern neighbours of Senegal.

Developed with WHO’s support, Gambia’s COVID-19 plan was published on 5 March 2020. An incident management system based on WHO’s emergency response framework was set up, and WHO Country Office staff were reassigned to provide strategic guidance and support to Gambia’s COVID-19 preparedness and response sub-committee (initially chaired by the Minister of Health and currently by the Vice President) as well as three health sector coordination structures in which WHO was represented: the National Health Emergency Committee, the Strategic Coordination Group and the Daily Coordination Platform. Some of the actions taken are highlighted here.

- On 3 February 2020, the MoH activated the National Health Emergency Committee to coordinate the preparedness and response strategy to combat the outbreak of COVID-19.
- The MoH instituted point-of-entry screening at Banjul International Airport, and WHO helped design the screening tool.
- An independent advisory group was convened by the Minister of Health and composed of the WHO Country Representative, the director of the MRC Unit in Gambia, the director of the Gambia Red Cross Society, senior medical specialists, retired senior WHO staff and other stakeholders.

---

Six subcommittees were set up in alignment with some of WHO’s recommended pillars for strategic preparedness and response: coordination, risk communication and community engagement, surveillance and laboratory capacity, case management and infection prevention and control, logistics and safety, and psychosocial support and research.

A UN Coordination Committee at strategic and operational levels was launched to harmonize the response to COVID-19, guided and supported by WHO.

Regular updates were solicited from WHO and other UN partners of global COVID-19 data as well as relevant tools and guidelines.

The Development Partners Group, comprising UN agencies and development partners, was engaged to coordinate and promote harmonization and collaboration: this included assisting the UN Country Team to develops standard operating procedures and guidelines.

Curbing the spread of SARS-CoV-2

As mandated in the National Health Strategic Plan 2014–2020, the Epidemiology and Disease Control unit within the MoH became the focal point for the country’s integrated disease surveillance and response (IDSR) activities. Since February 2020, the Epidemiology and Disease Control unit has been providing regular situational reports: its 30 November bulletin indicated that there had been 3 742 cases and 123 deaths related to COVID-19 in Gambia, corresponding to a crude case fatality rate of 3.3%.

---

Circulars issued by President Barrow led to the closure of schools, universities and madrasas; a ban on public gatherings; mandatory quarantine; and the suspension of flights. A State of Public Emergency was declared on 26 March 2020 (see Fig. 1). The Gambia–Senegal border and the national air space were closed, except to allow in crucial foods and medicines, and non-essential workers were urged to work from home. Markets continued to be open for 12 hours daily (the first 6 hours for food vendors, the second for non-food vendors), while the Government, in its attempt to mitigate the adverse social effects of its restrictive measures and prevent hoarding and price gouging, slashed fuel prices, announced a student relief programme and food relief for 84% of households. On 8 June, the first humanitarian flight landed at Banjul International Airport, opening a corridor for logistical support, including the transport of personnel and supplies.

In order to halt the spread of COVID-19 across the country, on 10 June the Government extended the national state of emergency for an additional 21 days, until 1 July 2020; and the State of Public Emergency continued to be enforced until 17 September. Mask wearing was made compulsory on 30 July. All non-essential public spaces were closed on 9 August, although places of worship, including mosques, were reopened on 28 August, but with strict rules: punitive measures, including fines ranging from 100 to 1 000 dalasi (US$ 2–20), were introduced for those caught “not wearing facemasks in public, spreading false information on COVID-19, obstructing health officials on COVID-19 duties and absconding”. Gambia’s Ministry of Basic and Secondary Education disinfected 190 schools in line with plans for implementing a staggered reopening.

The Public Health (Dangerous Infectious Diseases Protection) Regulations 2020 are still in force, although it remains a challenge to encourage broad public compliance. In November, the government under the initiative of the Minister of Health, Dr Ahmadou Lamin Samateh, moved to introduce a bill in parliament setting up a prepayment-based national health insurance scheme to improve health care coverage for the population, reduce the burden of out-of-pocket expenditures and provide more equitable medical services under the banner of universal health care.

Rolling out SARS-CoV-2 testing

Initially, the only facility for SARS-CoV-2 antigen testing in the country was the MRC Unit, which works in partnership with the London School of Hygiene and Tropical Medicine: it is one of the leading research institutes in sub-Saharan Africa and conducts research into how to control of diseases of public health importance.

Testing was offered by appointment only and arranged through a dedicated phone number provided by the MoH, enabling citizens to access immediate, 24-hour support and guidance on reporting and handling possible cases of COVID-19. About 80% of cases were reported through the call centre during the first months of the outbreak. Since 4 June 2020, testing has been transferred to the National Public Health Laboratory in Banjul, with technical and material support from the MRC Unit and WHO: on 13 October the laboratory was provided with a stand-alone generator by the European Union and the International Organization for Migration to allow for polymerase chain reaction (PCR) testing.

---

9 Termination of daily COVID-19 diagnostics reports from MRCG at LSHTM. Banjul: MRC Unit The Gambia, London School of Hygiene and Tropical Medicine, 2020 (https://www.mrc.gm/termination-of-daily-covid-19-diagnostics-reports-from-mrcg-at-lshtm/)
The WHO Country Office was instrumental in fostering partnerships with the private sector to boost testing capacity by building and stationing testing booths at strategic locations and advocating for the installation of a PCR machine at the National Public Health Laboratory. The Country Office also supported the training of laboratory staff to conduct testing. With this support, 100 health workers from private sector clinics, nongovernmental organizations and faith-based health facilities, and 50 lab personnel from public health facilities were trained to collect and transport samples, as well as on safety protocols for handling samples after a limited outbreak was observed among health workers. The training programme was completed in August 2020. Testing booths across the country collect samples, and each of the seven health regions has at least four and as many as eight booths, based on population needs.

Box 1. WHO’s critical support and specific achievements in Gambia

WHO has aided Gambia in developing preparedness and response activities for the COVID-19 pandemic in a number of ways, by:

- helping to establish functioning coordination structures for effective harmonization of COVID-19 response operations;
- supporting the development and revision of a US$ 40 million national preparedness and response plan for COVID-19 to mobilize resources;
- reassigning WHO staff to assist the Government’s efforts and deploying experts to support the national response – three national experts to strengthen surveillance, continuity of essential health services and the incident management system; and one international expert, one critical care physician and two international staff to support infection prevention and control measures;
- mobilizing about US$ 700 000 from the private sector (that is, Standard Chartered Bank) and the UN Multi-Partner Trust Fund to roll out COVID-19 testing and build three treatment centres in underserved communities;
- providing engineering and design advice on the construction of high-quality treatment centres (one in Banjul and three at the regional level);
- advocating for expansion of the national capacity for COVID-19 testing to the National Public Health Laboratory; WHO provided the necessary PCR machine, test kits and laboratory supplies, while the MRC Unit provided expertise in training staff and quality control;
- training health workers in various aspects of the COVID-19 response, including:
  - more than 100 health workers trained in COVID-19 surveillance techniques (rapid response and contact tracing teams) and case management;
  - 12 trainers and 40 other health workers trained in COVID-19 infection prevention and control measures, along with the development of policies and guidelines;
  - more than 150 laboratory and clinical staff trained in specimen collection;
  - 20 PHEOC staff trained in data analysis, modelling and mapping and given mapping software and computers;
  - more than 300 Gambian health workers trained in IDsR, based on the third edition of the manual, on the WHO-sponsored ECHO training platform;
  - more than 100 security and law enforcement agents trained in COVID-19 prevention, risk communication and related human rights; and
  - more than 200 frontline health workers trained in risk communication, stress management and psychosocial support in collaboration with the International Organization for Migration;
- providing critical medical supplies and equipment worth more than US$ 600 000 to the MoH;
- boosting capacity at the national call centre and all points of entry for early detection and rapid response by providing resources to facilitate reporting through District Health Information Software, version 2, to compile electronic records;
- working in partnership with UN stakeholders to help develop a multipronged risk communication plan with coordinating structures and rolling it out across the country’s seven health regions using social mobilization and community engagement interventions.
Impact of COVID-19 on essential services

There is increasing evidence that the uptake of essential health services by the general population has been negatively affected by the COVID-19 pandemic: there was a fall in immunization coverage during March–May and August–September 2020. This two-step decline coincided with the declaration of the state of emergency and an increase in the numbers of reported cases and deaths. The overall number of recorded admissions to health centres and hospitals has also fallen off, although the number of deliveries by skilled birth attendants remains unaffected.

A recent study by MRC Unit researchers looking at the diagnosis of pulmonary TB confirms that there is considerable delay. A delay in TB diagnosis is a surrogate measure for the quality of TB care, which requires prompt initiation of treatment; it suggests that the COVID-19 pandemic is likely to have grave consequences for TB patients and make it difficult to achieve the targets of WHO’s End TB Strategy: a 90% reduction by 2035 in TB incidence compared with 2015.11

This study confirms a preliminary WHO analysis of five key essential health service indicators (outpatient consultation, inpatient admission, skilled birth attendance, treatment of confirmed malaria and provision of the childhood pentavalent vaccine) in 14 African countries that found an abrupt decline in these services between January and September 2020, which was especially pronounced in May, June and July, compared with the two previous years. On average, service use decreased by more than 50% compared with the same period in 2019.12

The WHO Country Office has been instrumental in recruiting a short-term consultant for 1 year to support the Government’s efforts to ensure that essential health services are maintained. This medical doctor is posted at the MoH and chairs the committee for the continuity of essential services. There are plans to extend the services of this short-term consultant beyond 2021. The team has also gained two new consultants whose tasks are to strengthen case management and laboratory services.

The way forward

Gambia, with WHO’s support, has learned and continues to learn from its first major public health crisis. Given that very few new cases were reported in November 2020, and with the prospect of several vaccines soon becoming available, the WHO Country Office will continue to work with the Government to meet the challenges ahead, such as the need for mass testing and barrier methods, isolation of suspected cases and coordination of prevention efforts while continuing to provide medical services to those most in need of them.

Work remains to be done in improving risk communication and rebuilding trust in remote communities, especially regarding immunization, and ensuring prompt diagnosis of TB. The Government’s move to introduce a national health insurance scheme may well mark a step for the country in advancing towards universal health coverage, which, in the end, is about more than health: it is about a crucial move towards equity, national well-being and social inclusion and cohesion.

The Philippines polio outbreak response in the time of COVID-19

Importance of national leadership

When COVID-19 was first detected in the Philippines in January 2020, the country was still responding to the complex outbreak of circulating vaccine-derived polioviruses types 1 and 2 that was first detected in July 2019. Furthermore, following a large outbreak of measles in 2018–2019, another large outbreak was expected because of the number of children who missed measles vaccination.

By mid-March, with increasing numbers of COVID-19 infections, the Philippines Government declared an “enhanced community quarantine” on Luzon island, including Metro Manila. The quarantine posed many challenges to the outbreak response. Because of travel restrictions, families had limited access to health facilities, and health workers, overburdened with responding to COVID-19, had difficulty in reaching communities for vaccination and surveillance. Transport services, critical to a country consisting of more than 7000 islands, were nearly all suspended, and the transport of environmental and human samples to laboratories to detect polioviruses and the travel of health workers to investigate cases as part of the response were also affected.

The outbreak of COVID-19 came at a time when mass vaccination campaigns were essential to mitigate the threats posed by polio and to prevent a potential large-scale measles outbreak. The rising number of COVID-19 cases and the quarantine restrictions meant that the polio campaign rounds initially scheduled for March and April 2020 had to be postponed. Meanwhile, the number of COVID-19 cases in the Philippines continued to rise. At the time of reporting, the Philippines had more cases than any other country in the Western Pacific Region.

Amid the challenges of the COVID-19 pandemic, the threats of polio and measles had to be addressed urgently. Communities, and especially children, must be protected from these diseases. Furthermore, stopping further spread of these diseases was considered essential to ease the burden on the health system.

Committing to end polio during the COVID-19 pandemic

As the vaccination campaigns were stalled due to COVID-19, the risk of continuing spread of polio remained. The Department of Health decided to proceed with an immense, unprecedented task – to cautiously resume polio mass vaccination campaigns, beginning in July, even while the country was at the height of battling a pandemic.

“Continuous implementation of polio response amid the present health crisis we are facing is important, as this will prevent not only the debilitating effects of the disease but also interrupt the transmission during a pandemic,” said Health Secretary Francisco T. Duque III in a media statement.1

---

This decision reflected the determination of the Government to end the polio outbreak. It required cautious, detailed planning to protect both health workers and the community from COVID-19 while achieving high coverage to stop poliovirus circulation. The campaign also meant adopting a new door-to-door strategy to lessen the risk of spreading COVID-19 during the campaign, while ensuring that no eligible children were missed. Guidelines were developed that included infection prevention and control measures such as physical distancing, use of personal protective equipment and frequent hand hygiene. Vaccination teams had to be trained, which itself posed a challenge when face-to-face meetings could no longer take place. The new practices required large supplies of personal protective equipment and hand sanitizers for the vaccination teams, social mobilizers and front-line workers.

A more significant challenge faced by the programme was community acceptance of vaccination during COVID-19. Parents and caregivers raised a number of concerns: Is vaccination safe during COVID-19? Will vaccination make COVID-19 worse? My doctor does not agree that my child should receive the vaccine now. How do I know the health worker is not bringing COVID-19 to my child and family? Health workers also had concerns: Will I be safe? Will the community open their doors for us to vaccinate their children? Preparation of responses to these concerns was crucial in building the acceptance of vaccination by the community and health workers.

A whole-of-government, whole-of-community response

In response to these challenges, the Department of Health, with technical assistance from WHO and UNICEF, updated the guidelines, adopted the new strategies and procured all the necessary equipment for the campaign. New communication messages and materials were produced to address both COVID-19 and polio. Local chief executives and community members were also engaged in the campaign and informed about the necessity of continuing surveillance.

Mass vaccination required close coordination with the national, regional and local interagency task force responding to COVID-19. The campaign was highlighted as an essential health service to be continued despite the pandemic.

Reaching every child with polio vaccines amid COVID-19

With much anticipation, the campaign began in July 2020. It was successful in the six regions of Mindanao, which had already conducted several campaigns and had few COVID-19 cases, reaching 3.4 million eligible children (98.1%). The strategies for limiting the spread of COVID-19 proved effective, as there was no significant increase in the number of cases during or after the campaign. The campaign proved more challenging in regions III and IVA, where campaigns were being arranged for the first time, after confirmation of cases. These regions have more densely populated urban areas.

A child receives polio drops in Zamboanga City. The last round of the polio vaccination campaign continued in Mindanao during the COVID-19 pandemic.

Photo credit: WHO/G Jennings

Health workers in Dilasag, Aurora Province, going house-to-house to identify children under 5 years of age during the polio campaign, while observing physical distancing and infection prevention and control measures.

Photo credit: WHO/J Orbina
areas, high COVID-19 community transmission and less recent experience in mass vaccination. The campaign soon became a street-to-street battle to vaccinate children because of lockdowns, community fear and not enough vaccinators because of mandatory quarantine after exposure to close contacts of COVID-19 cases.

Furthermore, it was difficult to implement the new door-to-door strategy uniformly in some areas, as vaccination teams were also given other public health tasks, including responding to COVID-19 transmission. The campaign did not start simultaneously in some areas in which local chief executives were reluctant to conduct the campaign because of concern about high COVID-19 transmission and lockdowns. Additionally, some areas were flooded during the campaign, slowing vaccination teams in reaching children in every house.

Through the hard work of the Department of Health, local government officials, WHO and UNICEF, the following achievements were made, despite the barriers.

- The vaccination teams generally practised correct infection prevention and control measures for COVID-19 that included wearing personal protective equipment, sanitizing their hands before and after each vaccination and enforcing physical distancing.
- Community acceptance was higher than expected. Refusal by some families was more often due to previous anti-vaccination perceptions than the COVID-19 situation.
- Despite the high incidence of COVID-19 in regions III and IVA, vaccination teams reached more than 2 million eligible children aged 0–59 months (> 80%) in two rounds of mass vaccination with monovalent oral poliovirus vaccine 2.

**Learning from the polio campaigns**

On 26 October 2020, the Department of Health launched another nationwide campaign, against measles–rubella and polio with bivalent oral vaccine. The first phase of the campaign was conducted in several regions of Luzon and the entire Mindanao region. This was another daunting task but was essential to prevent another large-scale measles outbreak and to build further community protection against polio.

Lessons learnt in coordinating and conducting the mass immunization campaign amid a pandemic proved helpful in preparing for the current campaign. These campaigns have already resulted in over 92% coverage for measles–rubella in Luzon and Mindanao and over 88% coverage with bivalent oral poliovirus vaccine in target populations in Luzon.
Surveillance teams faced the same challenges as immunization teams because of COVID-19. The community was reluctant to allow health workers to visit their homes to investigate cases, and travel restrictions sometimes did not allow health teams to collect environmental or laboratory samples. Disruption of transport, especially in regions outside the capital, meant that samples could not be sent to the national laboratory for analysis. In some areas, this challenge was overcome by use of military and other transport systems. Now, most surveillance work has returned to normal, which is critical for documenting progress towards ending poliovirus and measles outbreaks.

The WHO Director-General acknowledged and commended the ownership and leadership of the Government of the Philippines in the polio outbreak response while responding to the COVID-19 pandemic, providing in-kind and funding support for up to 85% of the response. WHO remains committed to supporting the Government in multiple health threats and the challenges of mounting a public health response during the COVID-19 pandemic. With other partners, we are confident of ending polio and mitigating the threats of other vaccine-preventable diseases in the country.
December 2020
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

ALBANIA

Key areas:

Coping with COVID-19 against the backdrop of a recent earthquake and economic vulnerabilities

In the space of thirty years, Albania (current population 2 845 955, of whom almost a quarter live in the capital Tirana) has gone from being one of the most isolated and poorest countries in the WHO European Region to a maturing upper-middle income economy with an overall life expectancy of 79 years. Since 2013, the government of Albania has been engaged on broad-based reforms such as decentralization and increasing justice. On 25 March 2020 the EU decided to open accession negotiations for Albania. Albania supports multilateralism and plays an active role in international bodies (Chair of the Organization for Security and Co-operation in Europe until the end of 2020 and candidate for a non-permanent seat on the UN Security Council in 2022–23).

Albania: a disaster-prone country

Immediately prior to the pandemic, the north-west of the country including the country’s main port of Durrës was hit by a severe earthquake on 26 November 2019. It was the most severe earth tremor experienced in the country for decades and involved extensive search-and-rescue missions. A total of 202 291 people were affected; 51 persons died, 943 were injured and approximately 13 000 were displaced. A total of 36 health facilities were damaged and four health facilities destroyed. Based on the Albanian Post-Disaster Needs Assessment (PDNA), total losses for the health sector, including infrastructure and services, were estimated to be €1 912 668. Owing to the impact of the earthquake, Albania’s economy was already expected to contract severely in 2020 with a possible rebound in 2021 (+ 5% growth) 1, and a rise in the poverty rate from 4% to 8%. In these pressing circumstances the country requested financial assistance at the donors’conference (February 2020) where a sum of €1.15 billion was pledged.

Based on the strategic risk assessment conducted in 2019, Albania’s risk profile—quite aside from the earthquake and pandemic—for flash floods, snow blockages, avalanches, antibiotic resistance and air pollution was classified as high to very high risk.

1 World Bank forecast, Western Balkans Regular Economic Report No. 18, autumn 2020

Official BCA signing ceremony between Dr Hans Kluge, Regional Director, WHO Regional Office for Europe, and Ogerta Manastirliu, Minister of Health and Social Protection of Albania. Photo credit: WHO Albania.
Structural vulnerabilities

The health, economic and social impact of COVID-19 is worsened by the country’s structural vulnerabilities, which include:

- tourism’s preponderant place in the economy (26.3% of GDP and 23% of jobs in 2018);
- Albania’s dependence on diaspora remittances (12% of GDP in 2019) from the more than a million Albanians who have settled abroad, an ongoing phenomenon; and
- trade dependence on Italy (47.9% of Albanian exports in 2019).

Some aspects of the health care system

Albania’s healthcare system has also evolved in those same thirty years from chronic underfunding into one with mandatory and voluntary contributions to the National Compulsory Health Insurance Fund (NCHIF) supplemented by state funding. Public expenditure on health is limited to 3.03% of GDP (2019) compared to 4.6% on average in the six countries of the western Balkans. World Bank data shows that out-of-pocket payments (OOP) declined from 52.1% in 2014 to an estimated 44.6% in 2018, which is still significantly higher than the EU average of 15.6%. Out-of-pocket expenditure for medicines can still be a significant financial burden for families. The effects of the COVID-19 epidemic on the financial protection of the Albanian people are still to be assessed.

As part of the recent health system transformation, changes in system organisation and services have been initiated. These include merging social governance and services, demarcating policy-making and management more clearly, regionalizing specialized services, strengthening screening and early detection programmes, and using e-tools to assist the throughput of persons and improve the information flow. This is an ongoing, unfinished process. The emergency situation has delayed the initiated reforms, although opportunities may arise at a later date for a clearer focus on reform triggers.

The final review of the country’s National Health Strategy 2016–2020 showed that it had accomplished most of its targets, while its strategic priority on providing UHC, despite the hindering effects of the emergency situations continues to be pursued as a priority. Work is currently ongoing to develop the new National Health Strategy 2021–2030, and the Ministry of Health and Social Protection (MHSP) has asked WHO for guidance and support in this process (see Box 1). A primary health care (PHC) development strategy was endorsed by the government in May 2020.

With a low birth rate and 13% of the population aged over 65 years (median age 34.3), the population pattern is one typical of a medium-income country. Noncommunicable diseases are a growing cause for concern: approximately 29.4% of the adult population smokes, and alcohol consumption is also common. More than half of the population is overweight, and 21.7% obese, according to 2018 data. A significant aspect of the medical system is

Box 1. Visit of the WHO Regional Director for Europe to Albania in November 2020

In November 2020, Dr Hans Kluge, WHO Regional Director for Europe, signed the Biennial Collaborative Agreement (BCA) with Albania’s health minister Ms Ogerta Manastirliu to tackle areas in which Albania’s health services could be strengthened in line with the European programme “United Action for Better Health” and WHO’s triple billion goals. These include the new emphasis on UHC, primary health care, health financing and strengthening the COVID-19 response.

The BCA was signed after a meeting between Ms Manastirliu and Dr Kluge where they discussed the ongoing COVID-19 pandemic response, the country’s National Health Strategy and health financing. During the country visit, Dr Kluge visited a hospital caring for COVID-19 patients, expressing his admiration for the courage and determination of health care workers. “I would like to thank you for the great job that you are doing, but I would also like to thank your families because they suffer as well when you are working day and night,” said Dr Kluge. “We have to fight the pandemic in the hospitals, but also at home, in the communities and at the primary health centres”.

Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

The “brain drain” (see Box 2) and the chronic deficit it faces in terms of human resources: Albania has one of the lowest per capita ratio of doctors in Europe (115 per 100,000), with the country losing graduates to Germany, UK and Italy.

The first cases of COVID-19

The first cases testing positive to SARS-CoV-2 in Albania were reported in a father and son who had returned from Italy on 8 March. Four days later the Prime Minister Edi Rama declared a “war” on COVID-19. Based on the COVID-19 strategy, a slew of restrictive measures was introduced including police and army checkpoints at the country’s terrestrial borders with its neighbours Montenegro, Kosovo, North Macedonia and Greece; a short-lived general curfew and closures of garment factories and call centres; and indefinite suspension of public transport and closure of bars, cafes and other services. By May lower risk activities were permitted, based on the COVID-19 opening-up strategy, with a gradual resumption of economic activities and transport of goods. On 1 June, the lockdown was definitively lifted, with opening of the borders to neighbouring countries and unhindered transport across the country: this was a fact of some importance given that Albania normally welcomes 1.5 million tourists every year. Mask wearing was made mandatory in closed environments on 15 July, and measures—including online learning and limited gatherings—were progressively tightened as the country moved into the autumn and incidence rates rose: the schedule was based on the government’s main COVID-19 autumn and winter strategy 2020–213. The Expert Committee on COVID-19 has advised the government to extend these restrictive measures into the new year, with a curfew from 22:00 to 06:00, and continuing closure of all bars and restaurants.

The country has 44 public hospitals. Three facilities were designated COVID-treatment centres, two of them within the University Hospital Centre “Madre Teresa” and a fourth was opened on 1 December (known as COVID 1, 2, 3 and 4 with respectively 120, 206, 154 and 108 beds) corresponding to 20 beds per 100,000 population. Four regional hospitals were also prepared in December 2020 to receive patients in the event of a surge.

Box 2. The Albanian “brain drain”: a chronic health workforce dilemma

The free movement of individuals within the European Union is one of the community’s fundamental pillars. When this extends outside the EU to the migration of physicians and other healthcare staff, often trained at great expense to the public purse of their home nations, it become not just a socio-economic and political problem, but an ethical one too.

Physicians in south-east Europe migrating to more affluent countries in the west, have to balance complex personal and professional aspirations and allegiances and the knowledge that the society that accorded them their professional status is being depleted of staff. Private enterprises even exist to export skilled staff. Furthermore, this “brain drain” undermines effective long-term health policies and planning across Europe. Institutional “memory” is squandered for a generation. Nevertheless, health care staff in Albania and the Balkans are confronted by difficult conditions: these include job stagnation, low salaries, patronage and nepotism, and sometimes poorly equipped facilities. In response, the Albanian government has announced a salary increase of 40% for those working in the health care system, effective as of 2021.3

Box 3. Specific key WHO country office actions

Coordination between health partners and donors in collaboration with UN Resident Coordinator’s Office

- Continuous strategic, technical support to MHSP
- Daily, weekly and biweekly situation reports on COVID-19
- Technical cooperation with development partners willing to provide Albania with COVID-related commodities
- Coordination of the UN Procurement Task Force
- Public Health Emergency Operation Centre set up in the MHSP

Risk communication

- COVID-19 phone call green line
- MHSP supported on the preparation of the COVID-19 Risk Communication Strategy
- UN/MHSP risk communication and community engagement group
- Monthly training of 22 journalists
- Increased daily posting on WCO Facebook and Instagram (from 3200 to circa 4600 visitors)

Case management

- Support to solidarity trial
- Training of 7054 health staff from university, regional and municipality hospitals

Surveillance

- National level training of epidemiologists and rapid response teams on COVID-19
- Development of cases and contact investigation protocol and Go.Data tool for investigating and following up cases and contacts
- Support for performance improvement of COVID-19 contact tracing via transportation facilities

Infection Prevention and Control (IPC)

- Assessment of IPC training needs at the University Hospital Mother Tereza
- Training of 8000 health workers and volunteers in various aspects of IPC

Lab testing

- Assessment to upscale country’s COVID-19 lab procedures during the emergency response in 3 accredited laboratories
- Support to IPH and Madre Theresa hospital to scale up PCR testing capacity
- Laboratory workshops
- IPH Laboratory Information Management System set up

Points of entry (PoE)

- Prioritization of technical assistance needed for Albania’s PoE
- Preparedness for PoE training

Public health and essential health services (EHS)

- Rapid assessment of the availability and access to EHS during the epidemic
- Analysis of health system response to COVID-19 in Albania (HSRM)4
- Mental health training of 220 mental health workers
- Operationalization of policy options for safe schooling
- Support to the continuity of NCD (diabetes) screening and follow-up services

Vaccination

- COVAX Facility
- Vaccine coordination team with UNRC, UNICEF, WB and EU
- Contribution with UNICEF to national COVID-19 vaccine plan development

Procurement of COVID-related commodities

- COVID-19 testing kits, testing machines
- Tons of personal protective equipment
- Medicaments and diagnostic material

4  https://www.covid19healthsystem.org/mainpage.aspx
As the curve rose

In fact, with its low numbers of affected cases in the spring Albania managed to “buy” time, keeping down the curve until the end of the summer: cases only started to rise steadily after September. Already in January, the MHSP had set up a technical advisory committee and documented its strategy to respond to the coronavirus challenge. The National Centre of Emergency Medicine (NCME) was set up to receive calls, perform triage and inform local levels. Health care operators triggered the rapid response teams (RRT) which worked with family doctors to collect samples, interview contacts, ensure quarantine and register data. The entire system of case management and monitoring was placed under the technical lead of the Institute of Public Health (IPH). WHO is currently supporting the MHSP (see Box 3) in its attempts to improve coordination within the emergency response. Lack of infection prevention and control procedures in health facilities has been a persistent weak spot, along with the lack of logistics for contact tracing and transport of samples; family doctors received updated treatment protocols in November 2020.

WCO was also involved in boosting testing capacity starting in May 2020: thereafter it increased fivefold. Initial PCR testing was performed by the IPH and subsequently extended to three other public laboratories; four private labs were licenced to perform PCR tests for administrative purposes (travel, third-party documentation, etc). Rapid testing was introduced on 06 November, and a further 200 000 tests are arriving through WHO supply. The current testing rate is 94 655 per million. The incidence of new cases in the last 14 days (22 December–04 January) has decreased from 342 to 218 compared to the previous 14 days (08–21 December). At the time of writing (11 January), there has been a total of 63 971 confirmed cases and 1247 COVID-19-related deaths. The case fatality rate remains around 2.0%.
The Solidarity Trial

For the first time, Albania has been involved in a large international trial: with 65 participating patients it is one of the score of countries involved in WHO’s international Solidarity Trial—pooling 12 000 patients in more than 500 hospitals worldwide—to determine whether various drug combinations have any effect on mortality, initiation of ventilation and length of hospital stay in COVID-19 patients. Albania is also an active member of the International Steering Group which is tasked with discussing and appraising intermediate outcomes and recommending whether various treatment arms should be pursued.

Maintaining essential health services

All essential health services in the country were suspended during the lockdown phase except for emergency cases and specific forms of ongoing treatment or follow-up; outpatient cases were minimized. Several secondary and tertiary inpatients services were directly affected because of repurposing of staff and facilities, and NCD screening, including cancer, has yet to be reactivated. Limitations still exist in terms of access to the full range of health services (see Box 4). Although the doctors were extremely overburdened with the treatment of the increasing numbers of patients with COVID-19, some services like TB and HIV outpatient consultations were not suspended. The majority were offered in person, in other cases by phone as required by the patients.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Box 4. Several COVID-19 patients without known mental health problems commit suicide

In November, Albanian news outlets reported a series of five people jumping to their death from the upper floors of the Shefqet Ndroqi hospital in Tirana; these were patients being treated for COVID-19 infections in the isolation ward of the infectious diseases unit. Albania has a mental health strategy, but its implementation requires further strengthening: there is a penury of psychologists and other mental health personnel. WHO and UNICEF sit on its advisory committee, and since February 2020 have provided advice, with multilateral support, on capacity development. In this particular case, WCO suggestedremedying the isolation of such patients, who until then had no contact with their immediate family or the outside world. Internet connections and tablets were made available for the use of hospitalized patients.

There are concerns in many countries that rates of suicide may increase, or have already increased, not least in children and young people, although no robust epidemiological studies are yet available. Tackling known risk factors such as depression, feelings of hopelessness, loneliness and entrapment, substance misuse and unemployment should not be neglected. The effect of economic damage resulting from lockdown measures applied during the pandemic, and the provision of appropriate safety nets for those in difficulty are of great concern. An International COVID-19 Suicide Prevention Research Collaboration now exists to collate evidence and guide future policy.

Improving health reporting

The MHSP has been issuing a daily bulletin on the number of cases and new regulations. Since there is no national system for detecting and correcting rumours and expectations, or indeed the circulation of fake news and misinformation related to COVID-19, representatives from WCO and the MHSP have been briefing journalists on COVID-19 impacts, ongoing government policy, and the probable rolling out of vaccination in 2021. An ongoing interactive training programme aims to improve health literacy and reporting across the media: as the WHO representative, Dr Bettina Menne explained in an interview: “Our goal is to help journalists build an insightful understanding of key health topics. We aim to create an Albanian Network of Health Reporters.”

Joining COVAX

On 31 August, Albania submitted its “confirmation of intent to participate” in COVAX, the global collaboration led by GAVI, the Coalition for Epidemic Preparedness Innovations (CEPI) and WHO which aims to accelerate the development and manufacture of vaccines, and to guarantee their fair and equitable access across the globe. The country has chosen Option 2 (optional purchase) once the domestic legal procedures have been completed for pre-payment and contractual commitment. Through COVAX it plans to vaccinate 20% of the population in a first round, which will require a total of 1 140 000 doses and a budget of almost $US 4 million. Albania, which already benefits from topped-up EU funding as a neighbouring country, hopes to benefit through EU mechanisms to ensure quicker access to further doses of vaccine. The country has also negotiated some first doses of Pfizer vaccine arriving to the country in January 2021 and prepared the “air Albania” stadium for the first mass vaccination in Tirana.

---

7 http://dx.doi.org/10.1136/bmj.m4352
8 https://coronavirus.al/statistika/
A tireless effort by WHO staff

Although Albania’s WCO has limited staff numbers, it has a very close relationship with the MHSP and multilateral partners and has taken on an indispensable role in daily reporting and analysing public health trends, in contributing to strategic discussions, increasing procurement and chairing both the procurement platform and the vaccine platform with the UNRC office. Albania has 18 UN agencies working in the country, 12 of them being present in the field: more than 20% of the 250 staff working in the country have tested positive for SARS-CoV-2. WHO has weekly meetings with colleagues in the RC, EU, WB and UNICEF, and recently took on two extra staff to fill critical gaps: there are now a communication officer, additional secretarial support, and a range of long-term consultants to provide additional medical and epidemiological expertise. All WCO staff members have adapted their skill sets to deal with the COVID-19 pandemic, while continuing to implement biennial collaborative agreement activities (such as the National Health Strategy, health services and HIV/TB) and benefitting from technical support by the WHO/Europe Incident Management Support Team and the Balkan hub.

Evolution of COVID-19. Drawing on COVID-19 numbers, during daily WCO team meetings, by @Dr Ardian Xinxo, NPO WHE.

March 2020: “Fighting COVID-19 – only if we prepare in advance, we can beat the disease” (quote: NPO Dr Gazmend Bejta)

July 2020: “Let’s double our ordering of masks. Let’s be prepared”. (Quote: Gladiola Kashiari, WCO assistant)

October, 2020: “Three priorities: testing, contact tracing, quarantine; case management; and vaccination” (Quote: Dr Bettina Menne, WR a.i.)
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

EGYPT

Key areas:  

A Whole-of-Government Approach to COVID-19 Response

This article details how a whole-of-government approach in Egypt, pooling resources and capacity for an effective COVID-19 response, enabled the country to maintain the balance between protecting people’s health and mitigating the potential economic risks of the pandemic.

Egypt is home to 101 million Egyptians and 7 million non-Egyptians. In 2018, the government adopted a Universal Health Insurance (UHI) law to provide universal access to health service and increase health equity among its citizens, and rolled up its implementation using a whole-of-government approach, involving the Ministry of Health and Population (MOHP) together with the Ministries of Communications, Military Production, Finance and the governorates, and the medical entities from the public and private sectors, as well as university hospitals.

In October 2018, Egypt took a pioneering presidential initiative of “100 Million Healthy Lives”, which is considered one of a kind, to perform mass screening for Egyptians and non-Egyptians for hepatitis C and noncommunicable diseases (NCDs). The two initiatives differently shaped the health care system in Egypt.

COVID-19 Preparedness and Early Response

On 14 February 2020, Egypt announced the first confirmed case of COVID-19, which was also the first COVID-19 case in the African continent. Within a month, the case counting reached 100. By the end of March, the government had to undertake difficult measures to contain COVID-19 transmission, started by implementing a policy that restricted people’s physical interactions and mobility, which was expanded within the next few months with a partial curfew of the commercial facilities, and cutting down employees’ attendance in government offices down to 50 %.

The MOHP had drawn up an integrated plan based on the eight WHO recommended pillars of COVID-19 Strategic Preparedness and Response Plan (SPRP), then adding the ninth pillar (maintaining essential health services and systems). A national crisis operations room was set up inside the MOHP to monitor the global, regional, and national situations, as well

10 https://www.capmas.gov.eg/ accessed 1 December 2020
11 As of 31 December 2020, Egypt recorded 136 644 cases of COVID-19, including 7466 deaths.
as people’s mobility at Egypt’s Points of Entry (POEs). Laboratories were stocked up, quarantine facilities were set up, hospitals were prepared, and communication channels were developed and enhanced. The MOHP deployed ten new self-disinfectant ambulances with intensive care equipment to airports and ports in Cairo, Alexandria, South Sinai, Luxor, and Aswan, accompanied by the medical teams trained to operate the equipment.

Figure 2. The COVID-19 situation in Egypt in 2020.


Country specific response to a global public health emergency

In February 2020, H.E the Egyptian President, Abdel Fattah Al-Sisi, set up a Higher Committee for the Management of the Coronavirus Crisis, chaired by the Prime Minister Mostafa Madbouly, and decided to manage the pandemic crisis through multisector coordination and collaboration, involving all government’s hands.

Besides testing and quarantining returnees with the newly specified guidelines, Egypt’s testing targeted people showing COVID-19 symptoms or in contact with people tested positive for the disease, all free of charge. On 21 March, laboratories across the country were already able to conduct COVID-19 tests. WHO added primers probes and positive controls for 25 000 tests and the MOHP distributed 400 000 more test kits. Fifty testing centres were established, and then expanded to 13 more laboratories, ensuring that each of Egypt’s 27 governorates had the laboratory capacities to test for COVID-19.

In order to map Egypt’s capacity, required changes, and priority to respond to COVID-19, the MOHP invited WHO to conduct an assessment. A team of WHO experts visited facilities and met focal points and staff to understand Egypt’s situation, review the ongoing activities, and identify good practices to build on and gaps to fill. Technical supports were also given by the experts during the mission that took place on 22-25 March. Since then, the MOHP has been bringing WHO in to check off the to-do list recommended in the assessment report.
A Scientific Steering Committee was set up in the MOHP to gather and analyse scientific references, including WHO’s guidelines, tools, and references, that could serve as the scientific basis for the government’s decisions and measures in response to COVID-19. This Scientific Steering Committee has become the focal points for the MOHP in following the latest information, looking into scientific researches and scientific backgrounds for medical and public health measures, conducting necessary clinical trials, and listening to medical professionals and public insights. It engages WHO and partners to discuss and find solutions and measures that are feasible in the country’s context, considering the country’s resources and capacities.

In tandem with WHO, the United Nations Country Team (UNCT) developed a unified United Nations’ Country Preparedness and Response Plan (UN-CPRP), in line with Egypt’s National COVID-19 Preparedness and Response Plan. The first version of UN-CPRP was completed in February to cover the response plan from April to June and the forming of a Task Force for Essential Services.

The sustainability of essential health services during the pandemic was a crucial consideration in shifting the national resources to activities related to direct COVID-19 response. Thus, in May, WHO included essential health services sustainability as the ninth pillar of UN-CPRP, and added a special task force for the pillar. Soon after, the second version of UN-CPRP was developed to cover the period from July to December.

Figure 3. WHO financial support to the government of Egypt by Pillars in US$ since the beginning of COVID-19 Pandemic until December 2020

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Support (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1. Leadership, coordination, planning, monitoring</td>
<td>50,000</td>
</tr>
<tr>
<td>P2. Risk communication, community engagement</td>
<td>300,000</td>
</tr>
<tr>
<td>P3. Surveillance, contact tracing, case investigation</td>
<td>350,000</td>
</tr>
<tr>
<td>P4. Point of entry, travel, trade</td>
<td>100,000</td>
</tr>
<tr>
<td>P5. Diagnostic, testing</td>
<td>750,000</td>
</tr>
<tr>
<td>P6. Infection prevention &amp; control</td>
<td>2,000,000</td>
</tr>
<tr>
<td>P7. Case management, therapeutics</td>
<td>500,000</td>
</tr>
<tr>
<td>P8. Operational supports, logistics</td>
<td>300,000</td>
</tr>
<tr>
<td>P9. Essential health system &amp; services</td>
<td>1,000,000</td>
</tr>
<tr>
<td>P10. Vaccination</td>
<td>50,000</td>
</tr>
<tr>
<td>P11. Research, innovation, evidence</td>
<td>100,000</td>
</tr>
</tbody>
</table>
As part of UNCT’s first response, WHO led the tender process under UN-CPRP to procure Personal Protective Equipment (PPEs) worth of US$ 1 million, for the MOHP. Prior to the procurement, the needs were estimated using the WHO COVID-19 Essential Supplies Forecasting Tool. In addition, WHO provided a training package on Infection Prevention and Control (IPC) preparedness and response for COVID-19.

Four months after Egypt’s index case was reported, health care workers were struggling to cope with the rapidly increasing number of COVID-19 patients. According to 2017 data, Egypt had around seven doctors and 14.3 hospital beds per 10,000 population.12,13 Analysing the situation, the MOHP found that 85% of COVID-19 cases showed mild symptoms and did not need full medical support. Starting in June, returnees, as well as COVID-19 positive patients with mild to moderate symptoms, were isolated at home, under the close medical supervisions of the staff of the MOHP.

Aiming to decrease pressure on the referral and isolation health facilities, the MOHP announced the utilization of home isolation strategy in its national protocol for COVID-19 confirmed cases with mild and moderate symptoms, which were determined according to a set of preset inclusion criteria as well as per WHO COVID-19 home isolation guidelines. Based on the database provided by relevant stakeholders at the MOHP, WHO, the MOHP and stakeholders jointly developed a plan for a phone-call COVID-19 follow up for cases in home isolation. This way, the MOHP could closely monitor the home-isolated cases and ensure their compliance with the national protocol. Experts have carried out the plan under the complete supervision of WHO. Supporting this mechanism, WHO and the MOHP released Information, Education, and Communication (IEC) materials on performing home isolation. A video on this mechanism was broadcasted through social media platforms and gained 35 million reaches and 9.5 million views.

12 https://apps.who.int/iris/bitstream/handle/10665/324835/9789241565707-eng.pdf accessed 1 December 2020
13 https://apps.who.int/gho/data/view.main.HS07v accessed 1 December 2020
For those requiring treatment, on 5 January, the Prime Minister announced that about 500 hospitals had been allocated to treat COVID-19 patients. Among them, 363 hospitals were affiliated with the MOHP and the remaining hospitals were affiliated with the Ministry of Higher Education (MOHE) and other governmental institutions. A total of 35,000 beds, 4,500 ICU beds, and 2,500 ventilators were provided in the MOHP-affiliated hospitals.

To ensure the safety of patients and health workers, the MOHP teamed up with WHO in scaling up IPC practices in health facilities. In hospitals, the MOHP and WHO established a project conducting supervisory visits and trainings for IPC best practice, covering 26 governorates, involving private hospitals and the MOHE. Staff from different departments in hospitals take parts in monitoring the implementation of IPC in their facilities.

Supporting IPC in hospitals, a need assessment was arranged to identify the areas requiring supports and interventions, and a field training was conducted to evaluate and update the health workers’ knowledge and skills on IPC procedures for managing COVID-19 cases. Subsequently, the MOHP developed an adapted IPC guideline and IEC materials specifically for COVID-19 response. More than 300,000 copies were printed and disseminated to ensure sufficient supply for central and local IPC departments. An online IPC training course was also developed by WHO to provide health workers with more access to IPC materials.

The MOHP also maximized the use of online platforms for Risk Communication and Community Engagement (RCCE). An official Facebook page was created by the MOHP on 28 January to increase the communication reach to the Egyptian population, in addition to the deployment of television and radio stations, community health workers, chatbot, and two hotlines: 105 and 15335. Coincidently, WHO regional and country offices had planned an RCCE workshop early in March to prepare the first draft of a national action plan for emergency RCCE.
within a multisectoral and all-hazards approach. This workshop supported the MOHP to strengthen the communication approaches and tactics during the pandemic.

Social media is one of Egypt’s main communication channels, particularly with over 42 million Facebook subscribers in Egypt as of January 2020. Eleven months since the MOHP launched its Facebook campaign, the Facebook account of the MOHP successfully gained 7.8 million followers, an extremely high number of social media followers given the MOHP’s minimal use of social media before and the small number of ads Facebook provided for the MOHP. By the end of 2020, the campaign about using masks and fighting stigma gained around 20 million reaches and 12 million views.

**Lockdown measures, impacts, and actions**

Considering the potentially devastating impact of a lockdown on the country’s economy and people’s livelihoods, the government took actions to limit social gatherings and physical interaction. Starting in March, schools and universities, religious and public venues, as well as restaurants, were closed. Exceptions were given to bakeries, supermarkets, and pharmacies. Public transportation operated following the government-imposed curfew between 8 p.m. and 6 a.m. local time. All public gatherings and touristic activities were cancelled, and all flights were suspended. In June, the government announced and started implementing a phase-out plan, gradually easing out restrictions and shortening the curfew through three phases decided based on epidemiological data.

The government of Egypt has allocated LE 100 billion (US$ 6.4 billion equivalent to 2% of GDP) to fund an immediate plan to soften the economic blow of COVID-19 on the households. Half of the budget is allocated to the tourism sector while the rest supports low-income families, and the stock market through a stock purchase programme. As a part of this allocation, the government started to offer LE 500 cash handouts to non-regular workers, and paid wages for those laid off due to restrictions on businesses and movement. Moreover, in its efforts to widen the social safety net, the government added 60 000 households to the conditional cash transfer programme “Takaful and Karama” while 100 000 more households are to be included into the programme.

The MOHP also worked to minimize the impact of the COVID-19 on the sustainability of essential health services. Assisted by WHO, the MOHP conducted a workshop for health care professionals (HCPs) on the continuity of essential health services. Besides HCPs, health managers from all governorates were invited to join an on-the-job training to guide them in ensuring effective patient flow inside primary health care facilities (PHCs), and another training on digital management and monitoring system. Other trainings were also carried out to develop HCPs and service seekers’ capacity, covering different areas from family planning during COVID-19 to supporting the National AIDS Programme (NAP) and the procurement of antiretrovirals. HCPs and health managers were involved in a training on tracking the continuity of maternal and child health (MCH) services in primary health care facilities. Online trainings for around 2000 officials of the MOHP from various sectors was conducted to sustain non-COVID-19 health services, with topics such as MCH; Integrated Management of Childhood Illness (IMCI); provision of health service for Egyptians and refugees to protect mothers and children from COVID-19 transmission; and health service for low-income families.

---

Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

A Water, Sanitation and Hygiene (WASH) training, of which curriculum based on WHO guidelines, was given to health care providers in multiple health facilities, with the support of UNICEF, UNHABITAT and other partners. Moreover, WASH rehabilitation activities in four chosen governorates were successfully conducted with the support of pillar nine task force. Online training on school health was also made available, adding capacity building and guidance on report production, for qualifying schools for re-opening and conducting examinations.

Public health measures for school re-opening in the context of the current COVID-19 pandemic

In preparation for schools re-opening, and fears of increasing number of COVID-19 cases, the MOHP requested WHO, UNICEF, the Ministry of Education (MOE) and the MOHE to develop a back-to-school guidelines for COVID-19 prevention and control in educational facilities.

The guidelines were developed and reviewed by all partners, then revised and finalized by WHO. Sixty thousand copies of the guidelines were printed and disseminated to all school health workers and school administrators, accompanied by a training on using the guidance. These guidelines will act as a reference document to guide the decision makers at educational premises to take preparatory steps to ensure the safety of students and academic staff, in the context of COVID-19. The guidelines harnessed WHO-recommended preventive measures and drafted ten golden rules, including handwashing, keeping a safe physical distance between students in classes and outside the classes, avoiding crowding as much as possible, eating healthy nutritious meals to boost the immunity, maintaining physical exercise, and ensuring the good aeration of classes. “Back to school” awareness campaign communicated messages for parents and students, posters were distributed to schools, videos were also broadcasted through social media, and mass media supported the campaign by sharing and disseminating the guidance and the golden rules.

School Guide developed by WHO, UNICEF, the MOHP, MOE, and MOHE.
Noncommunicable diseases: A priority on the national health agenda of Egypt

NCDS are accounted for approximately 84% of total deaths in Egypt. The government has been taking this health issue to its priority and launched a series of presidential public health initiatives. It started with the “100 million Healthy Lives initiative” for hepatitis C screening and NCDs early detection for students and the community members, followed by the Women Health Initiative for early detection of breast cancer and other NCDs, almost two years ago.

The COVID-19 pandemic disrupted the national NCDs programme plans and services in an unprecedented way. Nevertheless, the MOHP initiatives before the pandemic prepared the health system to maintain access to essential health service delivery with some alterations and innovations. The MOHP used the existing data on people with NCDs to develop a contingency plan to redirect them to the closest primary health care (PHC) centres to receive needed clinical care and their medications for three months, instead of one month. A large number of health care workers were shifted and reassigned from public hospitals to PHC centres along with all necessary medications for NCDs management.

This contingency plan reduced the burden on public hospitals and the risk of COVID-19 exposure to patients with NCDs. Furthermore, the triage made for the elective interventions related to NCDs programme, according to the case situation, could postpone non-emergency cases to later dates. To ensure that people with NCDs and their families know how to care for themselves and manage their chronic conditions at home, the MOHP designed a plan to make phone calls or home visits, on top of disseminating the home isolation guiding booklet.

Next steps

The Prime Minister and the Minister of Health have been reminding people about the potential second wave and encouraging them to take all the preventive measures such as wearing masks, in public places and gatherings, keep their physical distance from others and wash their hands regularly. Like elsewhere globally, with COVID-19 fatigue settling in, risk communication and community engagement will remain a challenge.

Fortunately, vaccination is on the horizon. Egypt has signed an agreement with the Global Alliance for Vaccines and Immunization (GAVI) to secure the provision of vaccines and agreed with AstraZeneca to provide COVID-19 vaccine for Egypt. WHO is working with the national health authorities to strengthen all means of cooperation to ensure the success of COVID-19 vaccine manufacturing process in Egypt with the best technology transfer available and the fastest time possible to ensure the availability of COVID-19 vaccine for all Egyptians.
Upon the request of the Egyptian MOHP, on 27-30 September, WHO Country Office for Egypt assessed the preparedness and readiness of VACSERA, the Egyptian state-owned vaccine, sera, and drugs company, to produce COVID-19 vaccine in Egypt. In the briefing to VASCERA and the Egyptian Drug Authority (EDA), the experts expressed that the Egyptian authorities will not compromise between safety, efficacy, and quality of any produced vaccine. They advised VACSERA to follow the best practices in the production process to ensure the best quality of the vaccine and comply with good transportation conditions and practices, complete with clear documentation of all processes.

Following the signing of Egypt’s agreement with Sinopharm on vaccine supply, by the time this report was written, Egypt has received two shipments of Sinopharm vaccine and awaiting the EDA’s emergency approval to start the vaccination process.
WHO’s response brings emergency relief and long-term solutions in a challenging refugee camp

A double challenge

Situated on the south-eastern border of the European Union, Greece found itself in autumn 2020 between a rock and a hard place. On the one side, it was threatened like the whole of Europe by the worldwide spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the first case of which was detected in Thessaloniki on 26 February; by late autumn, case numbers had started to rise alarmingly enough to stretch the country’s capacities (138 850 positive cases and 4 838 deaths by 31 December). On the other, it had to cope—and has done so for several years now—with housing and processing thousands of stranded displaced persons on its territory. The massive fire that razed the Moria Reception and Identification Centre (RIC) on the island of Lesvos on 8 September left over 12 000 refugees and migrants without shelter. Overnight, people including vulnerable groups such as persons with disabilities, children, pregnant women and the elderly were forced to sleep in the streets, fields and beaches. The disaster became one of the top items on news channels across the world. A humanitarian crisis seemed in the making, and “No more Moria” became a rallying cry for politicians and activists all over Europe.

The third largest Greek island, Lesvos is situated in the north-eastern Aegean, separated from Turkey by the narrow Mytilene Strait which at its narrowest point measures only 5.5 kilometres. The terms of the 2016 EU-Turkey Statement to end irregular migration essentially led to thousands of refugees being placed under geographical restriction on the island in several camps, of which Moria RIC was the largest. According to the UNHCR estimates, by November 2020, as many as 120 000 displaced persons were thought to be living at different locations in Greece, in their hope of a better future in European countries.

The situation was no less delicate and complex for the WHO Country Office (WCO) in Athens which had newly opened in 2018 and, in human resources terms, was a very small fish (three staff members, since increased with two consultants) in a big UN sea (more than 2000 UN staff, with the IOM alone accounting for over 1500 and UNHCR about 400 persons). Nonetheless, WCO responded promptly to the dire situation, liaising with the Hellenic Ministry of Health (MoH), mobilizing other partners and taking the lead in addressing the health needs of the refugees and migrants while curbing the spread of COVID-19. The latter became an even more urgent priority: prior to the Moria fire, 35 individuals in the camp had tested positive for SARS-CoV-2. Not neglecting legitimate local needs and concerns was at the centre of WCO’s efforts to balance the pressing needs of the wider community and resolve the immediate crisis.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

An immediate response to the crisis

Just hours after the incident, the WHO Country Representative, Dr Marianna Trias and the Migration and Health Officer arrived on the island and started working at the forefront of the response, joining efforts with the Greek government and other health actors. WHO staff immediately visited the site of the fire at Moria, conducted a rapid assessment of the damage and immediate health needs and helped to generate the initial urgent public health response. The old camp was a total write-off, with possibly toxic substances polluting the area. There could be no question of erecting a new camp at the same site.

Without delay, a new health working group of several international and local health partners was set up to address the health emergency under the umbrella of the National Public Health Organization (EODY), the operational health authority supervised by the MoH and working in close collaboration with WCO. The immediate priority was to map existing resources and use them optimally, with the long-term goal of streamlining health service provision and recouping access to health care for the refugee and migrant population, both to primary care services inside the RIC and secondary health care at the local hospital when needed.

It also seemed important in this context to make a rapid assessment of the status of referral level care for the whole island (population: 114,000), including its ability to respond to the immediate health needs of refugees and migrants. This included a visit to the general hospital in the capital, Mytilene, where the WHO team met its chief executive, the medical director and other health professionals: the aim of this visit was to establish capacities and identify needs, including for COVID-19 diagnostics, so that the hospital could play its part in the overall emergency response. By the end of September, over 150 SARS-CoV-2 infections and 12 deaths had been registered among the local population in Lesvos since the onset of the pandemic.

The government of Greece responded rapidly to the pressing needs of the refugee population for food and shelter by erecting a new temporary RIC at Kara Tepe, an old army firing range about 3 km from the former RIC in Moria.

Construction of this new RIC started by preparing the ground and erecting an encampment of 1000 tents and 10 Rubb halls, capable of housing up to 15,000 inhabitants. This was quickly followed by the setting up of a planned area for joint public health and emergency medical services, the health response being led by the MoH via EODY in close coordination with WHO. Organizational and logistic aspects of the camp were handled by the Ministry of Migration and Asylum (MoMA) and the Hellenic army with back-up from UNHCR, while food, water and sanitary facilities were provided by the army and partners.

Given the numerous stakeholders involved at Kara Tepe RIC, coordination was crucial if the process was to be successful. From the beginning, the WHO team met regularly with the relevant Greek authorities, including EODY and the competent ministries, as well as with other UN bodies and non-governmental organizations (NGOs), notably Médecins sans Frontières (which provided various clinical services outside the camp). The WHO team provided these stakeholders with timely updates on the evolving epidemiological situation, which also helped to identify challenges and potential areas of cooperation.

WHO conducting rapid assessment of the damages and health needs  Photo credit: WHO Greece
Emergency Medical Teams

The day after the fire (9 September), the Greek government requested assistance through the WHO Emergency Medical Team (EMT) Initiative. In coordination with the MoH through EODY and the MoMA, WHO initiated the EMT deployment procedure: these teams would be required to provide health care to refugees and migrants in the new RIC for an interim period of three months. Norway and Germany responded to WHO’s call, and preparations were made for the arrival of their teams. An EMT Coordination Cell was established, with its first coordinator from the WHO Regional Office for Europe (EURO). A WCO risk communications officer also joined WHO forces on the ground, as well as a logistician from WHO headquarters.

On 14 September, a Norwegian government-funded team (EMT/NOR) arrived on Lesvos and was welcomed by the WHO team and EODY. After epidemiological and security briefings by WHO, EODY and UNHCR, as well as coordination meetings with local authorities and other stakeholders, the EMT set up a primary health care clinic and started work. This would continue for the next six weeks. A total of 25 team members, including medical doctors, nurses and paramedics with diverse specializations and prior COVID-19 experience ran the WHO/EMT clinic in a large tent, while ambulances and mobile clinics were also deployed to extend EMT services. A COVID-19 rapid-testing station and isolation area were also set up by EODY.

The team organized triage, delivered initial emergency care for injuries, managed acute medical conditions and emergencies, and provided public health and primary health care—initially for more than 100 patients a day—at the joint clinical site. Additionally, 45 ambulance trips were provided by EMT/NOR, and 26 patients referred to the general hospital in Mytilene for childbirth, major surgical interventions, treatment of strokes and management of complex health problems. After their six-week deployment, EMT/NOR made a very generous donation of consumables and drugs for use by the next EMT and partners.

To ensure a seamless provision of essential health services, WHO then facilitated the deployment of a joint EMT funded by the German Foreign Affairs Office. EMT/GER was composed of two NGOs: CADUS which worked from 26 October to 21 November, and ASB from 22 November to 19 December, thus guaranteeing the continuity of services in Kara Tepe RIC to the end of the year.

Aside from responding to the emergency needs resulting from the fire and the COVID-19 pandemic, the EMTs made a crucial contribution to primary health care provision for the refugees and migrants in Kara Tepe RIC. Major public health and medical issues identified by the EMTs included scabies and other skin diseases, communicable diseases such as watery and bloody diarrhoea, respiratory infections and tuberculosis. They also highlighted issues related to mental health and psychosocial well-being, including post-traumatic stress disorder. Noncommunicable diseases and dental health problems signalled at the beginning of the EMT mission were subsequently addressed by EODY and the Crisis Management Association (CMA). All in all, the EMTs managed 7274 patient consultations.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

During the EMT deployments, WCO served as a focal point for coordinating and streamlining health services in close contact with the Greek government. WCO was also vital in overcoming various logistic and administrative challenges. One involved facilitating customs clearance for health professionals and medicines from countries outside the Schengen area (Norway and Switzerland), a challenge complicated by the COVID-19 pandemic restrictions and stricter regulations for refugee and migrant accommodation sites. Another involved securing containers to serve as safe warehouses for medical equipment and pharmaceuticals within the new temporary RIC after the Greek authorities had imposed restrictions on permanent structures in what was planned to be a temporary camp.

Besides coordinating with the authorities to overcome logistic hurdles, WCO was also instrumental in providing Dari and Arabic interpreters to aid the EMTs in providing seamless and relevant health services.

GRAPH: Weekly number of patient consultations in Kara Tepe RIC

Rapid-response mobile laboratory

From the start of WHO’s operation in Lesvos, scaling up laboratory services had been identified as a critical need in order to control the spread of COVID-19 and support primary health care services in Kara Tepe RIC. The need had also been signalled by the Greek authorities and local bodies.

During the first week of operation of the new RIC, EODY performed more than 7000 antigen rapid-diagnostic tests (RDTs) on individuals entering the camp. Subsequently, EODY monitored the COVID-19 situation by performing 30–40 RDTs daily (with PCR confirmation of positive cases) to determine appropriate clinical management strategies and epidemiological trends. Providing a comprehensive testing strategy in the RIC remained a high priority.

This need was also relayed to WHO by the local general hospital in Mytilene which had a limited laboratory capacity (only one PCR machine capable of performing four tests per hour) to cover the needs of the permanent island population in addition to those of Kara Tepe RIC, not least in view of the decade-long economic crisis that had afflicted Greece and put local hospitals under additional strain. Since it was a hospital policy to perform a PCR test on any refugee or migrant requiring admission due to an emergency, the hospital director observed that laboratory services on Lesvos in general needed to be scaled up.

On 4 October, a rapid-response mobile laboratory (RRML) sent by the Bernhard Nocht Institute of Tropical Medicine (BNITM) in Germany was deployed to assist the health services in Kara Tepe RIC with PCR diagnostics and analytics for COVID-19 and other diseases; it became fully operational only on 19 October due to ongoing reconstruction work at the camp. This undertaking—initially for three months—was assisted by seven BNITM laboratory specialists and an expert from the Robert Koch Institute. It was mobilized through the Global Outbreak Alert and Response Network (GOARN) and funded and coordinated by WHO EURO with operational assistance from WCO Greece.
Once the lab was in place, WHO and EODY mounted a collaborative effort to finalize a testing strategy for the RIC in Kara Tepe that could profit from the amalgamation of EODY’s own capacities and RRML. The strategy was designed not only to scale up capacities in the COVID-19 response but also to test health care professionals by periodically monitoring for SARS-CoV-2, as well as any persons being relocated. The laboratory also supported primary health care services by offering blood biochemistry, haematology and urinalysis, thereby developing a holistic approach to meeting the needs of the refugees and migrants in Kara Tepe RIC.

**TABLE: Total number and classification of RRML samples in RIC Kara Tepe**

<table>
<thead>
<tr>
<th>Project</th>
<th>Total RRML samples (20 October–25 December 2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 RT-PCRs for refugees and migrants</td>
<td>1546</td>
</tr>
<tr>
<td>SARS-CoV-2 RT-PCRs from internal swabs (service providers)</td>
<td>436</td>
</tr>
<tr>
<td>Blood or Urine tests</td>
<td>683</td>
</tr>
<tr>
<td>HIV tests</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total samples processed</strong></td>
<td><strong>2671</strong></td>
</tr>
</tbody>
</table>

Setting up the lab constituted a milestone for WHO since it marked the first co-deployment of EMTs and RRMLs anywhere in the world. Both teams worked harmoniously under WHO’s umbrella coordination, lending support to existing health provider efforts and maximizing outcomes for the camp population.

### Coordination: an interplay of partners

The emergency response in Lesvos involved an impressive number of authorities and interested parties with a stake in health service provision, all led by the MoH through EODY and guided and supported by WHO. Setting up a communication and coordination network between key partners to streamline and optimize activities was therefore crucial to the success of the process.

During the entire emergency response, all three levels of WHO worked hand in hand and in close with the Greek government. They have held regular meetings and exchanged updates, while WCO has remained in continued contact with high-level officials from the MoH, MoMA, Ministry of Citizen Protection and the leadership and key staff at EODY.

At Kara Tepe RIC, WHO gave firm support to EODY to streamline communication and coordinate action through the Health Coordination Cell. This resulted in regular meetings in which members of the UN family (IOM, UNHCR and UNICEF) and governmental and nongovernmental actors met to establish a common basis for understanding, shared responsibilities and joint actions.

To observe at first hand the successful joint response to what initially threatened to be a disaster in the making, WCO invited some key stakeholders and partners to make a joint trip to Lesvos. On 1 October, WCO accompanied Ms Zoe Rapti, Deputy Minister of Health responsible for Mental Health, and His Excellency Mr Frode Overland Andersen, Ambassador of Norway, to Kara Tepe RIC where they were both able to inspect the site and talk to stakeholders and health care professionals working on the ground.
Securing the cooperation of local health authorities and stakeholders on Lesvos was an integral part of the collaborative effort. This included a joint MoH-WHO visit to the mayor of Mytilene to learn the views of the local administration and lay the ground for a common understanding and joint efforts to provide health services for everybody on the island; this was relayed through shared statements to the media. From the first week of the response, WHO initiated and maintained a close exchange between the mobile laboratory, EMTs and Mytilene’s general hospital and facilitated site visits that led to a heartening exchange of knowledge and response in which no party felt excluded.

From emergency response to longer-term solutions

The WHO emergency response in Lesvos fulfilled its purpose: restoring access to health care for refugees and migrants in Lesvos after the destruction of Moria RIC. It operated in a coordinated manner, by capitalizing on existing complementary capacities among a whole range of partners and supporting government policies, with EODY in the driver’s seat. Importantly, the impact of COVID-19 was kept in check. After the three-month EMT period, during which 404 cases of SARS-CoV-2 infection were confirmed and cared for in specific isolation areas in the RIC, not a single person with COVID-19 remained in the camp.

Ensuring a smooth transition and exit

After addressing the immediate needs of refugees and migrants in the new RIC, authorities resumed the gradual process of relocating the population. Initially estimated at about 9500 persons, by 20 December, 7371 refugees and migrants were still residing in Kara Tepe RIC; another 1500 inhabitants are expected to benefit from international protection through the German government and be relocated in early 2021.

Although the emergency response operation was dwindling in December, WHO cooperation in Lesvos remains strong and on target. All direct health services have been gradually shifted to local actors in the absence of COVID-19 in Kara Tepe RIC without neglecting the need for vigilance and further strengthening of the public health response as the pandemic progresses worldwide. The success of the response and its smooth transition—enabling sustained health care for the refugees and migrants in Kara Tepe RIC—was firmly rooted in recognizing the importance of close cooperation with national and local authorities. WHO’s exit strategy involved complete transfer of service provision from the EMTs to EODY by mid-December while arranging with the Greek authorities for use of the RRML to be extended for an additional two months to allow local staff to build capacity and acquire expertise. Attention was also given to identifying and prioritizing long-term solutions for the benefit of refugees and migrants as well as health professionals working in Greek RICs after finalization of the WHO emergency response.
Harnessing the power of data

The emergency response operations in Kara Tepe RIC managed to keep COVID-19 infections in check by applying and adhering to testing, isolation and quarantine procedures. Nevertheless, there was a lack of systematic contact tracing in the camp. In late October, WHO initiated discussions with the Greek authorities about the potential use of the organization’s Go.Data tool in Kara Tepe RIC. The aim was to use this tool as a patient database with special modules linking to the minimum data sets provided by the EMTs and RRML, allowing clear data visualization and its potential application in multiple outbreak investigations.

In early November, a WHO Go.Data expert was sent to Greece to spearhead the pilot implementation of the tool in Kara Tepe RIC and build capacity among the local staff. Templates were created for recording suspect cases, locations and questionnaires were configured, and the tool’s interface was transformed for Greek language users. With the implementation of Go.Data, WHO assisted in converting records collected by EODY in Kara Tepe RIC from paper to an interactive digital interface. The tool has proven extremely helpful for EODY in COVID-19 testing, contact tracing, surveillance and follow-up in the camp.

The usefulness of WHO’s Go.Data tool was immediately grasped by the Greek authorities involved in Kara Tepe RIC’s emergency response. After its successful pilot in Lesvos, discussions started so that use of the tool could be extended to all the country’s six RICs on the islands of Lesvos, Samos, Kos, Leros and Chios as well as in the mainland RIC in Evros—and potentially among the 30 refugee and migrant accommodation centres spread across the country in 2021.

To further highlight the tool’s potential, WCO and the Go.Data expert made a presentation to officials of the MoH and the General Secretariat of Civil Protection, opening an exchange of views on best practices with the key stakeholders responsible for contact tracing among the Greek population nationwide. It was agreed that streamlined data collection and analysis, including integration across data sources, could have a great impact on the timeliness of local contact-tracing activities and lead to greater efficiency and improved operability in the long run.

Underlining the importance of mental health

From the start of the Kara Tepe emergency response, mental health and psychosocial well-being were identified as key health issues by the on-site EMTs. To ensure that problems could be addressed beyond the emergency operation in Lesvos, WCO began linking mental health issues to its ongoing technical cooperation in Greece. WCO, in conjunction with Medical School of Athens—a WHO collaborating centre candidate—and other partners, promptly organized in December the first of a planned series of training activities tailored to existing needs.

As requested by EODY and its partners this “Mental Health Week” training programme was specifically dedicated to mental health issues for front-line health professionals working with refugees and migrants during the COVID-19 pandemic. The first training exercise attracted over 170 participants and international academics; due to increased demand, a recording of the week’s proceeding will be made available on WHO and partners’ websites, while the event itself will be repeated early in 2021.
Conclusions and looking forward

Undeniably, any complex disaster of a humanitarian nature poses major challenges even without a global pandemic in the background. In the event, the COVID-19 pandemic triggered an urgent sense of the need for solidarity and joint action in which WHO’s country presence, technical assistance and cooperation of all three levels perfectly complemented the comprehensive response by the Greek authorities.

Through a collaborative, all-embracing approach which included emergency health care provision, laboratory diagnostics, infection surveillance and risk communication, WHO was not only able to address the immediate health emergency created by the fire at Moria and the COVID-19 pandemic, but also strengthened the provision of on-site health care for refugees and migrants. Throughout the crisis, WHO worked hand in hand with the Hellenic government and alerted the applicable Greek authorities to long-term solutions, ensuring that a collaborative approach will continue to benefit those in need long after the emergency.

WHO’s involvement in ensuring the provision of a high standard of direct health care in Kara Tepe RIC, commensurate to the circumstances, was an undeniable success. Testimony derives from the fact that the MoH, MoMA, the central government, EODY and other stakeholders all asked not only for an extension of WHO’s response in Lesvos but for it to be expanded to similar settings elsewhere on the Greek islands. Various concrete long-term solutions advocated by WHO have already been adopted by the authorities, including the strengthening of surveillance, testing strategies and contact tracing, as well as training and knowledge transfer initiatives to improve mental health. WCO has also been invited to participate in the steering committee meetings on migration management organized by the European Commission Task Force and the Ministry of Migration and Asylum.

While WHO’s action in individual countries is not an on-eff exercise, times of difficulty can harness resources and encourage initiative and make the added value of its country offices plain to all partners.
PANAMA

Comprehensive, intersectoral coordination to address the pandemic and protect health equitably

Panama, located in Central America, is a country through which thousands of people from different countries transit daily and a hub of the Americas, with an economy based mainly on air traffic and trade. The Government quickly recognized the country’s particular vulnerability to the arrival of SARS-CoV-2 and, with the technical cooperation of Pan American Health Organization, PAHO, prepared and responded rapidly to the COVID-19 pandemic through intersectoral actions, health intelligence and community-level contact tracing.

Preparation and early response to COVID-19

As early as January 2020, months before confirmation of Panama’s first COVID-19 case on 9 March 2020, Panama recognized its unique vulnerability to the threat of the novel coronavirus. National authorities read and interpreted the international situation and seized the window of opportunity to prepare early, quickly and proactively. WHO, in close coordination with the health authorities, redirected its technical cooperation resources, prioritizing preparation and response for what would imminently be a new public health emergency of international concern. The early actions of the Ministry of Health and the Presidency resulted in establishment of a health emergencies operations centre, of which WHO is a part and the members of which assess the national and international situation, plan actions, make decisions by appraising different scenarios and use unified criteria to develop and implement the national strategic and operational plan to prevent and control the COVID-19 outbreak published by the Ministry of Health in January 2020.

In the preparatory phase, a national advisory committee was formed by executive decree, comprising WHO, representatives of medical and public health groups, researchers and recognized experts. The committee analyzes the situation and provides evidence to support the decisions of the Minister of Health and the Government. Before a change of Minister of Health, the committee was reorganized into thematic groups for vaccination, health intelligence, treatment protocols, laboratory, provision of health services and strategic communications.

3 On 4 February, WHO published the strategic preparedness and response plan for the international community to help States with fragile health systems. Panama published its own a week before.
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

From the beginning, WHO has supported initiatives, plans and technical protocols to strengthen surveillance, strengthen contact tracing and ensure appropriate care, protecting the most vulnerable. The situation reports produced by the WHO Country Office were quickly in high demand for analysing epidemiological indicators for decision-making as the epidemic evolves, in addition to providing technical recommendations and highlighting relevant public health issues, keeping the population well informed.

Panama’s early preparation resulted in early national capacity for laboratory testing and facilitated complex decisions to mitigate the effects and control the spread of COVID-19, combining intersectoral action to balance the effects on the economy with initiatives to subsidize the poorest, most vulnerable people. The early decision to suspend in-person classes, border and airport regulations and controls, mobility restrictions, teleworking and a prolonged quarantine, helped to slow and stabilize the spread of the virus during 3 valuable months. This avoided the collapse of services and gave time to health personnel and the general population to learn about treatment and control of the virus and to adopt protective measures.

During this period, the health authorities hired more than 1700 new health workers to ensure health care for patients, including general practitioners, specialists, nurses, nursing technicians, technologists, nutritionists, pharmacists, health promoters and administrative officers. With technical support from WHO, the laboratory staff of the Gorgas Memorial Institute for Health Studies received training in Brazil and Mexico on use of the new RT-PCR test and, through the PAHO Strategic Fund, the purchase and donation of equipment, supplies and rapid test kits for detection of COVID-19. As a result, the Institute has strengthened its diagnostic capacity to 33 laboratories located at strategic points across the country, in four hospitals of the Social Security Fund, in 10 Ministry of Health hospitals and in 17 private laboratories and clinics. Numerous tests have been carried out, making Panama one of the countries in the Region and in the world that is conducting the most tests per 100 000 inhabitants, surpassed only by Canada, Chile and the USA in the Region of the Americas.

Like several other countries in the Region, Panama was at the most critical period of the epidemic by the end of December 2020. As of 27 December, there were 231 357 accumulated confirmed cases, of which 2633 were confirmed in the most recent 24 h. The country has nevertheless managed to maintain a low overall fatality rate (1.7%) and acceptable hospital capacity: 43% of beds, 58% of ventilators and 29% of intensive care and semi-intensive care beds were available on that date.

Intersectoral coordination to protect the Panamanian population comprehensively during the pandemic

Intersectoral activities among government institutions, organized communities and the private sector have been core to decision-making and to timely actions to keep citizens informed and protected, including distributing materials and subsidies to the poorest populations of the country. The leadership of the Ministry of Health from the beginning of 2020 has been instrumental in development of an inter-ministerial and inter-sectoral work dynamic, which has ensured efficient joint use of resources and Government decision-making based on the best available evidence.

This work dynamic continues, providing a structure for coordinated action, which was particularly useful in the initial stages and continues to support decision-making. The WHO Representative participates in this structure weekly as a permanent advisor to the Government – a privileged position that reflects trust in the Organization and recognizes its legitimacy and its human capital.

Inter-ministerial action: synergies for the protection of health and well-being

Inter-ministerial experiences include the following. The Ministry of Health has coordinated with the Ministry of Social Development in the creation and implementation of social protection mechanisms and humanitarian assistance for the most disadvantaged. The latter Ministry meets the needs of the most vulnerable by facilitating the provision of food and access to health care, among other necessities. Likewise, the two ministries have prepared guidelines and protocols for safe reopening of public and private early childhood care centres, with technical assistance from WHO.

At the beginning of the pandemic, the Ministry of Health collaborated with the Ministry of Education in an early decision to suspend in-person classes on 10 March 2020 until the end of the school year. The two ministries, with technical support from WHO, are developing biosecurity measures to reduce the risk of COVID-19 infection for students returning to schools in the country.

The Ministry of Health also works with the Ministry of Labour and Labour Development to protect health in the workplace. The ministries have developed a protocol to ensure hygiene and health at the workplace, which outlines measures and guidelines for workers and employers in gradually re-opening economic sectors. They have designated specific functions to occupational health, hygiene and safety committees to prevent infection and to provide an immediate response to COVID-19 cases in the work setting.
To address the effects of the pandemic on mental health, the Ministry of Health and WHO are leading the intersectoral mental health network against COVID-19, an inter-institutional initiative with the Social Security Fund, State agencies working in mental health and nongovernmental organizations that provide psychosocial support. The network optimizes resources, establishes alliances and a referral system and conducts joint analyses of needs and responses. Mapping of specialized mental health human resources has made it possible to redistribute resources. A working group has been formed to reinforce rapid response teams in mental health and another group to answer the psychosocial support telephone lines available to the population during the pandemic. This intersectoral effort for mental health has resulted in sharing of resources, ensuring interventions in response to the pandemic and planning future actions to promote the well-being of the population.

The Ministry of Health, with technical support from WHO and with the Ministry of Security, the Public Ministry, the Joint Task Force and the National Civil Protection System also coordinates monitoring and surveillance of compliance with the measures prescribed for the community by the health authorities (isolation, quarantine, health fence and control points). They also coordinate the distribution of humanitarian aid and subsidies and have ensured timely coordination with authorities and port operators, airports and land borders to ensure screening and daily monitoring of travellers from affected countries at points of entry. They also ensure implementation of the protocols for opening airports and of mechanisms for identifying cases, isolating them and quarantining their contacts. Given the importance of Panama as an international hub, WHO has provided strong support in this area, as well as recommendations for safe opening of airports.

Building the capacity of stakeholders in many sectors

PAHO’s Virtual Campus for Public Health has developed many virtual training courses for the Ministry of Health, the Social Security Fund, the Gorgas Memorial Institute for Health Studies, the United Nations system and other entities. In 2020, 224 courses and virtual training sessions were held, reaching 23,983 participants in the health system, citizens, public and private hospitals, ports, airports, laboratories, pharmacies and universities. The topics for the health sector covered a wide range, from proper use of personal protective equipment, triage, application of clinical guidelines and care protocols, human resource management, bed reconversion, laboratory tests and management of supplies and vaccines.

Training for other sectors includes risk communication (to sensitize journalists about the importance of their role as communicators in times of crisis and to avoid spreading false news), timely detection of suspected cases at airports and maritime and land borders, social participation, caring for mental health, management of work stress for public servants, community-level contact tracing and prevention of violence and gender-based violence.

Coordination with nongovernmental actors

In addition to collaboration among public institutions, coordination with the scientific society has been instrumental in advising and identifying public health actions, building the capacity of health personnel, updating protocols according to new evidence and strengthening health intelligence. WHO supports the development of guidelines, in collaboration with Panamanian scientific societies, based on the best evidence and in accordance with evolution of the pandemic.

In recognition of the importance of health equity and of ensuring the welfare of vulnerable populations, WHO has also collaborated with the Ministry of Health, universities and other United Nations agencies to meet the needs of vulnerable population groups by strengthening the capacity of health promoters and health workers in the indigenous regions of Guna Yala and Ngäbe Bugle and in the provinces of Darien and Bocas del Toro, among others.

Regional distribution centre for humanitarian aid in health, Panama City. Photo credit: WHO/Gerardo Cárdenas

\[7\] National police, border and naval police and components of the security force
Panama is the regional headquarters of several United Nations agencies, and about 1500 international officials live in the country. The Country Office, coordinated by the Resident Coordinator’s Office, has leveraged this situation to conduct joint, complementary actions with other United Nations agencies for the benefit of vulnerable populations in areas such as risk communication, the acquisition and distribution of personal protective equipment, biomedical equipment and other supplies, capacity-building, technical updates and generation of clinical and preparatory guides and protocols for reopening economic activity. As a member of the United Nations Inter-agency Mobility Group, WHO has contributed to protecting the health of informal migrant populations by providing technical support, installing devices for analysis of strategies and in the care and prevention of COVID-19. The support includes raising awareness, reducing the risk of COVID-19 infection and training in public human rights.

The WHO Representative works with community leaders of groups in vulnerable situations to prepare communication strategies and health education materials, with messages on prevention and protection measures. The materials have been translated into indigenous languages and widely disseminated.

The private sector also plays an important role in the context of the pandemic. At the beginning of the epidemic, hotels were transformed into health care centres, with supervised housing for COVID-19 patients with moderate or mild disease who have difficulty in isolating. As the incidence has increased, other establishments have been transformed, including municipal and university gyms, educational establishments and a convention centre, for the isolation and care of simple COVID-19 cases. Each of these facilities has an interdisciplinary health team appropriate for the level of complexity of cases. WHO has supported the development of protocols for hotel facilities, including guidelines for the care of COVID-19 patients and protocols for solidarity in these establishments. Currently, all health regions have one or more facilities of this type to provide care for COVID-19 patients.

#todopanama is an apolitical citizen movement consisting of an organized, civic, union group that is well financed and that acts in a coordinated, disinterested, supportive way to facilitate and implement a comprehensive multi-sectoral, multidimensional plan in response to the COVID-19 pandemic, which is overwhelming people and the country’s economy, mobilizing the community to stop infection.

Health intelligence

Panama has based its decisions on epidemiological surveillance. With support from WHO, weekly reports are produced on various indicators, facilitating analyses of the pandemic’s trends and effects on the population, on health services and on the country as a whole. These analyses provide support for decision-making by the Presidential Cabinet Council.

The data required to guide and support decisions are derived by both routine surveillance of events and monitoring of the virus and its mutations through genomic analysis in research led by the Gorgas Memorial Institute for Health Studies, which is currently carrying out the first seroprevalence study in the country. Every week, representatives of the health intelligence group present the situation to the President and the Cabinet, with the Ministry of Health’s technical team. This information is used to make decisions on interventions in health, the economy and social development. Every Tuesday, new measures are announced at press conferences and on social networks to all citizens.

---

Enablers and challenges of health intelligence for surveillance

The Government of Panama was one of the first to set up a virtual platform for surveillance that functions as a digital advisor through WhatsApp or a telephone line. The Automatic Health Operational Response platform has been used for early surveillance and as an agile mechanism for communication with citizens, allowing patient monitoring and facilitating compliance with isolation measures.

The epidemiological surveillance system in Panama still strives to overcome barriers to accessing data due to fragmented information flows and multiple, disjointed information in the network of public and private laboratories and public and private health service networks. This reflects challenges posed by a highly segmented, fragmented national health system. For WHO, active participation in these working groups provides new opportunities to influence the national agenda and renew cooperation strategies that were paused because of the pandemic but that must be central to the post-COVID-19 national agenda.

Community-level contact-tracing strategy

In June, the Operations Centre for the Control of Community-level Contact Tracing was created to contain the spread of COVID-19, following the Government’s strategy for interinstitutional work under the leadership of the Ministry of Health and with the participation of the Ministry of Social Development, the Social Security Fund, the Ministry of Security and other Government agencies, in collaboration with local governments and community leaders and with the support of WHO. The Centre has made it possible to strengthen surveillance, detection and early isolation and to activate quarantine measures, sanitary zoning, mixed patrols and control points. Based on the national model, regional contact-tracing control centres have been created in some provinces, enabling community-level contact tracing at both national and regional levels.

Fig. 1. WHO technical support for training rapid response teams and unified contact-tracing teams

- **267** Rapid response teams trained by WHO in 15 regions of the country
- **321** Unified contact-tracing teams trained by WHO in 15 regions of the country
- **800** People enrolled in WHO training courses, of whom 600 (75%) completed training in 2020
- **3** Course levels, including training of trainers in provinces
The Centre establishes the guidelines and strategic action for contact-tracing teams in the field, which are described in the “Operational plan to strengthen the control and contact tracing of COVID-19 at the community level”, and provides follow-up, accompaniment and guidance to regional and provincial centres at weekly meetings where the results are presented and evaluated. Decisions on contact-tracing are made according to the situation of each region.

The regional and provincial centres are responsible for operation of the contact-tracing strategy and work with the rapid response teams and the unified contact tracing teams, who visit COVID-19 patients, enquire about their direct contacts, verify their health status and identify and inform families or people who require humanitarian aid about food supplies, cleaning kits and medicines, which can be delivered.

The rapid response teams perform antigen tests continuously, house by house, for people with respiratory symptoms and their direct contacts. The results are obtained within 30 min, so that contacts can be traced immediately and isolation and quarantine measures can be applied, making the response to cases faster and more efficient. WHO has been a key partner in training rapid response teams and unified contact-tracing teams (Fig. 1).

The Department of Epidemiology of the Ministry of Health is responsible for the contact-tracing strategy, which not only helps to break the chain of transmission but is an example of intersectoral action and participation among various levels of government that operates quickly and effectively. It allows people to engage in public health activities in the fight against COVID-19 and facilitates contact between the Government and the public, as well as with civic associations for mental health when support is needed. Contact-tracing teams have relieved the pressure on the health system, especially on hospital capacity, as they helped to identify early cases and prevent hospitalizations. The contact-tracing teams, health educators and health promoters, as well as community leaders, are an integral part of the response to the pandemic, promoting the physical, mental and social well-being of individuals and families in isolation and quarantine.

Facing the pandemic in 2021

WHO began 2021 by working with the Ministry of Social Development, the Ministry of Health and UNICEF in preparing the conditions for re-opening early childhood care centres in the first weeks of the year. WHO is also supporting the Ministry of Health in preparing the national COVID-19 vaccination plan, including the logistics and organization of groups and phases, and the corresponding actions in the COVAX mechanism. In parallel, the WHO technical cooperation agenda is maintaining support for regular programmes, adjusting the cooperation modalities to current circumstances.

The pandemic has brought to light the strengths and weaknesses of Panama’s health system, the effects of social inequality and the need to reactivate the universal health strategy. The benefits of integrated work to address the determinants of health through intersectoral work have been demonstrated. These experiences should be leveraged and documented so that they are not forgotten and can serve as a catalyst for the new national agenda. WHO is committed decisively to continue supporting the construction of a healthier, more equitable Panama that can ensure family and community health within its new integrated health system.

---

9 Operational plan to strengthen the control and contact tracing of COVID-19 at the community level. Panama City: Ministry of Health; 2020.
RWANDA

Key areas:

The positive effects of decisive leadership, whole-of-society coordination and high-tech innovations in a country with limited resources

Robot health assistants in Rwanda

In October 2020, an American pastor, Rev Dr Jonathan Weaver, made a two-week trip to visit members of his congregation, the African Methodist Episcopal (AME) church, in Rwanda. Flying into the capital Kigali from a layover in Ethiopia, he had already had a PCR test and negative result in order to board the flight from the United States. On entering the terminal building in Kigali, he had a temperature check and while awaiting his baggage, heard a voice welcoming him to Rwanda, which also delivered instructions on basic hygiene, social distancing and mask-wearing. But the speaker was no human: it was a humanoid robot, one of five that Rwanda received on 19 May 2020 from the United Nations Development Programme (UNDP) to support patient care at the Kanyinya treatment centre for COVID-19 patients in the capital and received by the Minister of Health Dr Daniel Ngamije. Dr Weaver had another PCR test before leaving the airport and was sent to a transit hotel room until his negative result arrived the following morning. During his visit to Rwanda he visited three major cities and parts of the countryside where he observed that everybody, from the youngest to the eldest—“with virtually no exception”—was wearing a mask. Temperature checks were regularly performed in stores and offices, and social distancing was observed in churches.

So impressed was he by his experiences in the country—and by the fact that by October 2020, this country of 12 million people had recorded 35 coronavirus-related deaths since key preventive measures had been implemented after its first case on 13 March 2020—and the contrary experience of returning to the United States at Dulles International Airport at the end of October where no safeguards of any kind were in operation, he published an op-ed article reflecting on the pandemic, which was by then raging across parts of the US. Provocatively titled “Could America Learn a COVID-19 Lesson from Rwanda?”, his article was syndicated in many American newspapers, and caused a stir on national media. Rwanda’s effective response to the coronavirus crisis had also been noted by the eminent Harvard epidemiologist and activist Dr Paul Farmer, who observed, in contradistinction to the “clinical nihilism” in respect of the previous Ebola virus crisis, that Rwanda had been able to hire and train as many as 60,000 contact tracers in what was a relatively small and poor country. His observations were also echoed by congresswomen Donna Shalala.

The robot which had addressed Dr Weaver at the airport is known as “Urumuri”; its siblings are “Akazuba”, “Ikizere”, “Mwiza” and “Ngabo”. They were manufactured by the Belgium-based company Zorabots, and are designed to perform repetitive work and free up medical staff for more personal tasks. They had been acquired through a partnership between Rwanda’s Ministry of ICT and Innovation and the UNDP Rwanda Accelerator Lab (AccLab). These robots—each of which costs about US$33,000—are equipped to perform mass temperature screening, detect dry cough, monitor patient status and identify those not wearing masks correctly; they can also retain the medical records of COVID-19 patients. The screening capacity of Urumuri is 50 to 150 people per minute, and it can report abnormalities to officers on duty. The major benefit of the robots deployed at the Gatenga and Kanyinya health centres is to minimize contact time with suspected or confirmed cases and thereby reduce the contamination risk for health professionals working in COVID-19 treatment centres4.

A pioneering courier service to improve health services delivery

The use of robots is not the only innovative and newsworthy tool that has been put to good use in Rwanda. Since December 2016, from a strategic launch-and-land site (since 2017 two sites) staffed by local professionals, drones have been used to transport urgently needed medical blood supplies—packed cells, platelets and fresh frozen plasma—to twelve hospitals across a snarled road network which would otherwise have made speedy delivery impossible. This is of obvious benefit in a part of the world with frequent stockouts and hospitals that sometimes have too many power outages to maintain their own refrigerated blood stores or run an effective cold chain. A surge in demand can be met almost instantly and targeted precisely. Other expensive items like oxytocin, antivenin or antibiotics have also been flown out on an as-needed basis, saving both time, money and—most importantly—human lives. From order to launch takes a mere 7 minutes, and once airborne the drone sends an automated text message to the hospital, informing it of the exact time at which its payload will be dropped with parachute, before it circles back to base.

Rwanda has also explored using drones for highly targeted (and environmentally-friendly) larvicide spraying and topographic mapping in agriculture, as well as to promote tourism. Their main use during the pandemic has been to complement the public health message “#GumaMuRugo” to stay home, wash hands and respect the physical distancing messages regularly broadcast on national radio and TV. Rwanda’s National Police have fitted drones to bring prevention reminders such as “#NtabeAriNjye” (“Let it not be me”) directly to residents by air, especially in areas of low accessibility for community awareness teams. Drones were also used by the police, at least during the first phase of the lockdown starting on March 21, to prepare evacuations or interventions in densely populated neighbourhoods and high-risk areas that did not appear to be following preventive measures. During lockdowns, drones were used to deliver cancer medicines. Each drone, which costs about US$6000, is able to record high-definition images and broadcast sound.

The hardware flying the length and breadth of the country are products of the California-based start-up company Zipline, which now profiles itself as a “healthcare logistics company”5. The two Zipline distribution centres in the country can make hundreds of deliveries anywhere across the 26 000 square kilometres of the country, and distribute more than two tons of critical health products every day: each drone carries a payload of 1.75 kg, and travels at around 100 kph.

---

Use of High-technology as part of Rwanda’s “Vision 2050”

These high-profile, attention-seizing developments in Rwanda are part and parcel of the country’s ambitious programme to attain middle-income country status by 2035 and high-income status by 2050 (“Vision 2050”). Politically stable since the 1994 genocide, Rwanda is one of the select number of African countries often referred to as “Africa rising”—countries making a concerted, long-term effort to escape the poverty trap, and its attendant high birth rates and limited life expectancy. President Paul Kagame was re-elected to a third seven-year term in 2018 following an amendment to the constitution three years before which allowed him to serve a third term. Rwanda’s aspirations are framed within a series of seven-year National Strategies for Transformation, which follow the robust economic and social improvements seen in the country in the ten years between 2008 and 2018 when growth averaged 7.5% and per capita GDP grew 5% annually. Rwanda’s strong economic growth has been accompanied by substantial improvements in living standards and development indices, with near-universal primary school enrolment and increased life expectancy. Total expenditure on health as a percentage of GDP is now 7.5% (versus 1.9% in 1996).6

Key indicators published in the Rwanda Demographic and Health Survey (RDHS) show that the country has made progress in terms of service delivery and maternal and child health. Currently, 96% of children under two years are fully vaccinated, 99% of pregnant women receive at least one antenatal visit and 93% of deliveries are performed at a health facility. The maternal mortality rate has fallen from 1017 per 100 000 women in 1992 to 203 in 2020 (with the target of 70 set by the 2030 Agenda for sustainable development). Other key indicators such as under-five and neonatal mortality have also fallen in the same period by as much as two-thirds. Speaking at the official unveiling of the sixth RDHS indicators, the Minister of Health drew attention to the fact that these results should guide political intervention and commitments. One indicator however fell short of its target: although 83% of families in 2015 possessed an insecticide-treated net (ITN) as part of the government effort to combat malaria this figure had fallen to 66% in 2020. Dr Sabin Nsanzimana, Director General of the Rwanda Biomedical Centre, noted that net distribution had been hindered by the COVID-19 lockdown. Other indicators that need special attention include chronic malnutrition in children under five with stunting in these children being above the public health threshold of severity at 33% (RDHS 2019–20) and anaemia in children aged 6 to 59 months which has been stable from 2010 to 2019–20 (respectively 38% and 37%, RDHS).

Leveraging Ebola Virus Disease preparedness for COVID-19 response

When initially faced with the coronavirus crisis, the Prime Minister convened a national crisis committee of key ministries (Health, Defence, Finance, Internal Security and Local Government). The committee set up a COVID-19 Joint Task Force (JTF) on 9 March 2020 to coordinate the implementation of a preparedness and response plan just a week before the first case was reported. Rwanda had already been in a state of high alert after cases of Ebola virus diseases (EVD) were reported in its western neighbour, the Democratic Republic of Congo, in 2018: WHO had played a major role in drawing up and implementing the EVD plan, and this provided an optimal starting point for stealing a march on COVID-19. Prevention plans were repurposed, with infrastructure set up for EVD now being used to broadcast messages about COVID, e.g. light-emitting diode panels at border crossings, and add-ons to existing structures such as the ambulance network and referral system. Other EVD infrastructure co-opted for COVID-19 include the thermo-cameras for temperature screening at borders as well as the hygienic infrastructure for regular hand washing.

The emergency response focused on harnessing digital solutions and analytical tools to enhance containment of COVID-19, building on the country’s track record with innovative approaches, e.g. use of digital maps to visualize disease spread in real time; mobile apps for sending health messages, and telemedicine options to enable suspected cases to be assessed without patients having to leave their homes. This approach allowed a local out-
break in Rusizi District in the country’s Western Province to be contained in June. Two-week lockdowns in various locations such as Gisenga in Nyarugenge District and Nyenyeri in Kicukiro District, as well as in Kigali City, also enabled virus spread to be forestalled.

Initially, in February 2020, WHO Rwanda had three public health officers working on training material, standard operating procedures, case definition and epidemiological notification. By April, their number had risen to 16, with requests coming in from government for strategic advice in various pillars of the pandemic response. An emphasis was put on attracting experts in laboratory medicine and test validation.

WHO Rwanda also prepared a tool to capture the different components of the response plan, including resource needs; weekly meetings were held with UN partners to review commitments, track investments, avoid duplication of efforts and determine which aspects of the plan they felt able to support. WHO Rwanda was able to update this information by dint of its comparative advantage: it knew what was going on at different levels and was able to communicate directly with government counterparts. This tool was ultimately adopted by other development partners, since it captured all the crucial information on the ground; the investment section of the tool was used to identify gaps in funding.

A personal story: WHO Rwanda Communications Officer Alice Rutaremara explains how she was recruited and primed by the earlier EVD preparedness and response to work on the COVID-19 pandemic

“I was nominated from the Office of the Government’s Spokesperson to join NETCC’S working group on risk communication and community engagement. Staff members were also nominated from Immigration, Local Governance, the then Ministry of Disaster Management and other strategic government institutions to join the different working groups (surveillance, case management, laboratory, logistics, etc.) that made up NETCC. These nominated staff members—with their different backgrounds, different career paths, and different skill sets and levels of education—were given the task of planning for the EVD pandemic. In return, NETCC members were able to increase hands-on knowledge and maximize best practices by tapping into Rwanda’s pre-existing relationships with WHO and other UN partners: staff were paired with those who had direct experience of the 2014–16 Ebola outbreak in West Africa.

Rwanda invested significantly in EVD preparedness by providing a series of training exercises on case definition, contact tracing and community engagement initially at national level and then in the 15 districts at highest risk. EVD response simulation exercises were conducted in Kanombe Military Hospital, Gihundwe District Hospital, Kamembe International Airport, and Rugerero Ebola Treatment Centre to test Rwanda’s preparedness to respond to a potential case. By September 2018 we were the first certified Rapid Response Team trained by WHO in Rwanda. In a jiffy the same team reformed to become the COVID-19 Joint Task Force: it has been leading the fight against the pandemic since early 2020. All it took was the threat of a new virus.

So far Rwanda seems to have dodged the Ebola bullet, but the skills and expertise developed to tackle a crisis that didn’t happen in 2018 have come in very handy to combat the one that did in 2020.”
**Emphasis on COVID-19 testing**

Initially centralized in Kigali City where the first positive SARS-CoV-2 cases were identified, it rapidly became clear after fresh cases came to light in the provinces that a more decentralized strategy would be needed.

A multisectoral approach was adopted in all 30 districts under the leadership of local mayors. Rapid Response Teams (RRTs) were activated at district levels with activities and outcomes being reported to the central level every day. WHO Rwanda contributed eight out of a total of 25 staff who were seconded to Rwanda’s five provinces, with a provincial command post consisting of experts in laboratory services, case management, infection prevention and control (IPC), data management and epidemiology. To support the work of the JTF almost 2000 officials from various sectors were assigned to contact tracing, lab testing and case management including psychological support. Attention was also given to risk communication and community engagement, with IPC cascade training of small groups of health centre personnel at district hospitals. Preventive measures included mandatory quarantine for all travellers coming into the country, bracelet-enabled trackers, compulsory wearing of face masks, hand washing and physical distancing (at least 1.5 metres). Coordination structures have been present at all levels of society including villages: this is one of the main reasons for Rwanda’s ability to contain the spread of the virus.

The Government of Rwanda set up several isolation sites and two treatment centres during the preparedness phase. During the first peak of the pandemic, 26 treatment centres including hotels and repurposed buildings—the most the country has ever had—existed to offer treatment to confirmed COVID-19 cases. However, with the implementation of homebased care the number of treatment centres significantly reduced to five (5) by December 2020. The WHO Rwanda team has played a major role in the development of guidelines and implementation of home-based care for asymptomatic patients. On-site staff are multidisciplinary and include a physician specialized in emergency medicine and critical care, general practitioners, nurses, psychologists, nutritionists and infection prevention and control staff as well as cleaners. WHO Rwanda has also helped to boost the ICU bed capacity for acute COVID-19 treatment from 0 in March to 36 in October 2020. In July 2020, no more than three patients out of a thousand were requiring oxygen therapy support. Mental health has emerged as more of a significant problem than was expected: one WHO-funded analysis showed that 80% of asymptomatic quarantined patients were displaying symptoms of acute stress.

As preventive measures were rolled out across the country, by the end of December 2020, over 730,000 samples had been tested for COVID-19. With the country initially able to process only a few hundred at the Rwanda Biomedical Centre (RBC) in Kigali, four months later the national testing capacity had increased 15-fold with a shift from manual extraction of RNA to an automated antigen pooling system providing results in the shortest possible time. Rwanda’s testing system was efficient enough to allow it to rank as a “very low COVID-19 risk” country and the only sub-Saharan country able to retain its air links with the European Union (1 July 2020).

Although all SARS-CoV-2 testing was initially performed at the National Reference Laboratory (NRL) at the RBC, a new testing strategy was introduced to decentralize capacity to several peripheral district laboratories (now 12 in all). Tests were conducted on all suspected cases, contacts of confirmed cases and other identified high-risk groups and clusters (such as in prisons). Testing guidelines were revised for six laboratories (in Rusizi, Kirehe, Nyagatare, Rubavu, Rwamagana and Huye Districts) to facilitate prioritization for COVID-19 testing in view of the generally minimal sources available for microbiological testing. Currently around 3–4000 tests are being performed daily (609 per 10,000 in December 2020) with sample pooling. In December 2020, an additional molecular laboratory was set up at the Kigali International Airport to test passengers on arrival. Meanwhile, civic life continues: markets and shops remain open, with mainly cashless transactions, and washing stations and hand sanitizers compulsory in all public spaces.

---

Registered cases were classified in three categories according to whether they were imported, locally transmitted and unknown sources of transmission. The most affected age group has been those aged 30–39 years, with men accounting for close to 80% of all positive cases⁸.

The Government of Rwanda continues to hold bi-weekly cabinet meetings to assess the country's response and adopt ad hoc solutions in line with available evidence, such as online schooling programmes to balance the May–September gap in the academic calendar and amended road regulations to modify traffic flows. Nine months later, on 12 January 2021, Rwanda has reported 9950 cases of SARS-CoV-2, with 125 COVID-19-related deaths⁹.

**Intra-Action Review of the COVID-19 Response in Rwanda**

The pandemic has caused an unprecedented disruption in social conditions worldwide and affected the international flow of goods and services into Rwanda. Exports and tourism have also been badly hit by the disruption in international trade and travel, and the country—like many of its neighbours—is experiencing a mounting balance of payment and fiscal pressures. Continuous capacity building of health care providers has also been affected by the COVID-19 preventive measures. This may have a negative public health impact with respect to the delivery of essential health services (as suggested by the drop in the distribution of insecticide-impregnated nets to combat malaria), owing to the scale of the fiscal resources and numbers of workers reassigned to the emergency response.

Prompted by the Fourth COVID-19 IHR Emergency Committee virtual meeting on 31 July, the WHO secretariat encouraged countries to conduct an Intra-Action Review (IAR) of the outbreak response in order to share best practices, pinpoint challenges and offer recommendations for further action. Rwanda conducted its IAR between 27 October and 9 November with financial support from WHO, examining all the pillars of the Rwanda preparedness and response plan at both national and provincial levels. A total of 311 persons from the MoH, Rwanda BMC, the Prime Minister’s Office and other ministries, UN bodies and other stakeholders took part, consolidating their findings in a comprehensive report. The mainstay of Rwanda’s response was prompt and decisive leadership, with involvement of actors at all levels.

**Key achievements noted in the Inter-Action Review (IAR), October-November 2020**

- Robust coordination structures at national and district levels from the beginning of the outbreak;
- Provincial level command posts established in July 2020 to accelerate decentralization of the response efforts in Rwanda;
- An increased number of SARS-CoV-2 testing laboratories from one in March 2020 to 12 by October 2020;
- Amplified population testing rates from 0.25 per 10 000 population in March 2020 to 465 per 10 000 population by October 2020 with a focus on high-risk groups which led to early identification of clusters (this has further increased to 609 per 10,000 population as of December 2020);
- A rapidly increased number of treatment centres from one in March 2020 to 26 by August 2020 through repurposing infrastructure and keeping bed occupancy rates well below 100%;
- Greater acute COVID-19 Intensive Care Unit (ICU) facilities 0 in March 2020 to 36 in October 2020 with a low case fatality rate of 0.7%; and
- Low health worker infection rate of 3.6% with no reported deaths in this group.

---

⁹ [https://covid19.who.int/region/afro/country/rw](https://covid19.who.int/region/afro/country/rw)
Responding to the COVID-19 pandemic: WHO’s action in countries, territories and areas, 2020

Entering 2021 – Key priorities and strategies for COVID-19 response

Rwanda’s 2021 COVID-19 response plan was developed based on the findings of the IAR. Its goal is to contain the pandemic, mitigate its impact on the population and enhance the resilience of the existing health system. It focuses on scaling up the best practices, addressing identified challenges and managing anticipated resurgence.

Key Strategies

Surveillance at the community level
• **Hotline centres**: To detect and assess community transmission, provincial hotlines will be established in addition to the national call centre. These centres will collect and analyse data indicating trends in severe acute respiratory or influenza-like illnesses (SARI/ILI). The population will be encouraged by platforms to call specific COVID-19 helplines. Every quarter, a sample proportion of cases fitting the ARI/ILI case definition will be checked in order to provide an indication of COVID-19 community transmission in specific areas.

• **Community event-based surveillance (eCEBS)**: Village “lookouts” will be trained to notice community events including ILI, SARI and unusual deaths. Reported events will be investigated and verified by the local health centre and should there be a suspicion of community transmission, a sample portion will be tested to determine COVID-19 baseline occurrence and trends in the community.

• **Monthly drive-through testing and testing of high-risk groups**: This will be critical for early identification of clusters/hotspots and implementing control measures at the local levels to minimize spread. High-risk groups include HCWs at all levels, essential occupations, correctional facilities, refugee camps, schools. Viral testing and serology prevalence survey will be provided for high-risk groups.

Surveillance at facility level
• To monitor possible COVID-19-related trends in outpatient visits, two surveillance systems will be used: syndrome-based integrated disease surveillance and response (IDSR) and a sentinel ILI surveillance system.

Surveillance at district and provincial health facilities
• COVID-19-associated hospitalizations/SARI cases will be monitored through the SARI sentinel surveillance network at 10 sites and hospital-based IDSR surveillance system (eIDSR) at 51 tertiary hospitals across Rwanda’s districts. IDSR surveillance will be based on all-age, population-based surveillance for SARI hospitalizations: all cases admitted to hospital or ICU/HDU will be tested in order to monitor the proportion of confirmed COVID-19 cases among such patients. Data gathered from these systems will be used to estimate age-specific hospitalization rates and describe the underlying medical conditions of those hospitalized with COVID-19/SARI illnesses.

Expanding the capacity for COVID-19 testing
• The number of laboratories conducting COVID-19 testing will be ramped up. The use of rapid antigen tests for testing symptomatic patients will be rolled out to all health facilities. Increasing Rwanda’s sequencing capacity has also been prioritized.

Home-based care
• Home-based care is being promoted to relieve the substantial burden the pandemic has placed on the health care system, and thereby maximize available resources for caring for people with more severe illness while ensuring continuity of essential health services. Home-based care is being strengthened by boosting the capacities of community health workers, health posts, health centres and district home-based care teams, while ensuring that critical cases can be rapidly transferred via the referral system. A virtual home-based care system has also been developed to facilitate patient follow-up while minimizing contact. WHO Rwanda supported the procurement of 21 ICU beds, 80 hospital beds and 69 pulse oximeters.
Continuity of essential health services
• An effort has been made to re-organize and optimize existing service delivery platforms to ensure that there is an uninterrupted provision of essential health services in the context of COVID-19, and to strengthen the monitoring of essential health services interventions.

COVID-19 vaccine Introduction
• With the help of partners including Gavi the Vaccine Alliance, UNICEF and WHO, the immunization system has been strengthened in recent years: Rwanda has been able to achieve high immunization coverage rates with 96% of children fully immunized. COVID-19 vaccination will leverage on these established systems.

Rwanda joined the COVAX Facility to have access to the first licenced COVID-19 vaccines and protect its high-risk groups. It is anticipated that 23.6% of the population will be vaccinated by the end of 2021. This proportion includes health and social workers (3% of the population), people living with chronic conditions (17% of the population) and other frontline workers considered to be at high risk depending on the evolving epidemiological situation. The target is to cover 60% of the total population by the end of 2024.

With support from WHO and partners, the coordination structures for introducing and deploying COVID-19 vaccines were established and the National Deployment and Vaccination Plan (NDVP) was drafted in the final weeks of 2020. Rwanda’s vaccines storage capacity has been upgraded with additional cold-chain equipment at district and central level, including ultracold-chain (UCC) equipment (-60°C to -80°C) for vaccines requiring extreme storage conditions at the central vaccine depot. By December 2020, the country’s readiness for COVID-19 vaccine introduction was estimated to be almost 69%, and vaccination is expected to start by April 2021.