Strengthening public health emergency preparedness and response in the South-East Asia Region

Strengthening health emergency preparedness and response is one of the most important health priorities in our Region. Emergency risk management is one of the Regional Flagship Priority Programmes of South-East Asia Region since their inception in 2014. The Delhi Declaration on Emergency Preparedness in the South-East Asia Region was endorsed by the honourable health ministers of the Region at the Seventy-second session of the WHO Regional Committee for South-East Asia in 2019. In the same session, the Five-year Regional Strategic Plan to strengthen public health preparedness and response 2019–2023 as well as Risk Communication Strategy for Public Health Emergencies in the WHO South-East Asia Region 2019–2023 were launched.

Member States in the Region have made considerable progress in advancing the International Health Regulations (IHR) (2005) for health emergency preparedness and response. Countries have fully utilized the existing core capacities to respond to the unprecedented ongoing pandemic to control transmission and save lives. However, the COVID-19 pandemic has revealed that the current level of preparedness is not sufficient to effectively manage severe health emergencies such as this pandemic.

This Working Paper reviews progress in advancing public health emergency preparedness and response in the Region and summarizes lessons learnt from the COVID-19 response. Combined with the recommendations from global review panels, strategic priorities are identified for consideration by Member States as regional priorities to further strengthen health security systems.

Building national health security systems linked to resilient health systems and a whole-of-society arrangement requires long-term vision, committed political leadership and sustainable financing. While the response to COVID-19 continues, Member States, WHO and other partners must work together to identify priority actions to further strengthen health emergency preparedness and response capacities to more effectively respond to the ongoing pandemic and prepare for future pandemics, emergencies and disasters.
This Working Paper was submitted to the High-Level Preparatory Meeting for its review and recommendations. The recommendations made by the HLP Meeting are as follows:

**Actions by Member States**

- Continue to advance implementation of the International Heath Regulations (IHR 2005), including through strengthening core capacities, embedded in health systems, and through implementing national action plans for health security; as well as ensuring early detection and notification of potential public health emergencies of international concern.

- Actively participate in the global “Working Group to strengthen WHO preparedness and response” in order to collectively take action to improve the global health security architecture.

- Contribute in developing a regional roadmap to strengthen health security in the South-East Asia Region, building on key lessons learnt and challenges identified from the COVID-19 pandemic response.

**Actions by WHO**

- Continue to provide relevant policy advice, technical assistance and logistic support to Member States towards achieving effective control of the COVID-19 pandemic and to further strengthen core capacities of Member States mandated by IHR (2005).

- Facilitate further synthesis of the lessons learnt from the COVID-19 response at a regional level along with the recommendations of the global panels and committees, and work with Member States to develop a regional roadmap to strengthen health security in the South-East Asia Region.

- Collaborate with Member States to strengthen the regional alert, preparedness and response systems, including mechanisms for rapid information sharing, and bolster the regional strategic stockpile of key health commodities.

This Working Paper and the HLP Meeting recommendations are submitted to the Seventy-fourth Session of the WHO Regional Committee for South-East Asia for its consideration and decision.
Introduction

1. Advancing implementation of the International Health Regulations (IHR) (2005) for health emergency preparedness and response has been one of the key priorities for WHO in the South-East Asia Region. Emergency risk management was identified as a Regional Flagship Priority Programme in 2014. The Delhi Declaration - Emergency Preparedness in the South-East Asia Region, the ministerial-level political commitment, was endorsed at the Seventy-second session of the WHO Regional Committee for South-East Asia in 2019. In the same session, the Five-year Regional Strategic Plan to strengthen public health preparedness and response 2019–2023 as well as the Risk Communication Strategy for public health emergencies in the WHO South-East Asia Region 2019–2023 were launched. In addition, the Region’s efforts to strengthen health security systems have also been guided by the bi-regional Strategic Framework, the Asia-Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED III): Advancing implementation of the IHR (2005), of which the original iteration was launched in 2005.

2. Member States in the Region have made considerable progress in implementing IHR (2005) for health security. However, countries have faced unprecedented challenges posed by the COVID-19 pandemic. Despite the progress, countries are still not completely prepared to face pandemics and severe emergencies. It is critical that lessons from the ongoing pandemic response be used to inform further efforts to strengthen health security systems in the Region. Global review committees such as the Review Committee on the Functioning of IHR (2005) during the COVID-19 response and the Independent Panel on Pandemic Preparedness and Response have also issued their recommendations, which may have important implications for our Region. This Working Paper aims to summarize the lessons from responding to COVID-19 in the Region, progress in advancing IHR (2005) capacities and implementing regional strategic plans, and recommendations issued by the global committees. It also proposes strategic priorities for the way forward.

Current situation, response and challenges

Progress in core capacities mandated by IHR (2005)

3. The 2020 round of the State Parties Annual Reporting (SPAR) was submitted by all 11 Member States in early 2021, maintaining the 100% response rate observed in the Region since 2016. Many Member States reported using a consultative process of relevant stakeholders to complete the SPAR.

4. The distribution of overall SPAR scores by Member States shows that in 2020, 63% of SEA Region Member States scored in the range of 61–80, with one Member State scoring above 81 and one Member State scoring in the range of 21–40 (Table 1). Since the 2018 round of SPAR the proportion of Member States scoring at 61–80 has increased, and the Region compares favourably with the global results.
5. The regional averages for each of the 13 IHR core capacities as per the annual SPAR tool in 2018–2020 shows that progress has been made across most IHR core capacities (Fig. 1). Since 2018 considerable regional progress has been reported in the areas of legislation and financing, IHR coordination and National IHR Focal Points (IHR NFPs) functions, zoonotic events and the human-animal interface, food safety, laboratory, surveillance, human resources, national health emergency frameworks and health service provision. On the other hand, progress over points of entry, chemical events and radiation emergencies has been achieved to a lesser degree in comparison.

**Table 1: IHR capacity score distribution**

<table>
<thead>
<tr>
<th>Capacities score range (%)</th>
<th>Global</th>
<th>SEA Region</th>
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<tbody>
<tr>
<td></td>
<td>Percentage (%) of State Parties</td>
<td>Percentage (%) of State Parties</td>
</tr>
<tr>
<td>0</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>21 – 40</td>
<td>19%</td>
<td>16%</td>
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<tr>
<td>41 – 60</td>
<td>28%</td>
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<tr>
<td>61 – 80</td>
<td>28%</td>
<td>30%</td>
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<tr>
<td>81 – 100</td>
<td>21%</td>
<td>25%</td>
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</table>

Source: IHR State Party Self-Assessment Annual Report (SPAR)

**Figure 1: IHR capacity scores in 2018–2020 in the South-East Asia Region**

Source: IHR State Party Self-Assessment Annual Report (SPAR)
Learning from the COVID-19 response: Lessons learnt in the Region

6. Member States in the Region have faced major challenges in managing the COVID-19 pandemic. It has revealed gaps in our health security systems and arrangement, while critical lessons have also emerged. Some lessons are summarized below based on experiences shared by Member States and findings from global review committees.

7. Health emergency preparedness: Despite the major progress in strengthening public health emergency preparedness among Member States in the Region, the COVID-19 pandemic revealed that the current level of preparedness is not sufficient to effectively manage severe health emergencies. Reviews and reforms are needed in various aspects of preparedness, including but not limited to emergency governance structures and workforce, surveillance and alert mechanisms, laboratory, supply management systems, health-care system preparedness and risk communication and community engagement (RCCE).

8. Health emergency governance: The response to the COVID-19 pandemic demonstrated that the highest level of political leadership and involvement and functional multisectoral arrangements are crucial in preparing for and responding to pandemics and severe health emergencies. Such arrangements enable timely, decisive and largescale actions, such as the adoption of whole-of-government and whole-of-society responses and mobilization of necessary financial resources. These arrangements should be continuously reviewed and strengthened to achieve the best possible performance, guide translating lessons into policy and systems reforms, ensure sustainable investment, and provide oversight to advance core capacities for public health emergency preparedness.

9. Need for robust and agile surge capacities: Effective pandemic response requires an extraordinary scale of surge capacities across the gamut of response from surveillance and contact tracing to clinical management, laboratory testing, vaccination and risk communication. Member States and WHO mobilized surge capacities by repurposing existing staff, and engaging different sectors (e.g. military, security, education), communities and international partners. More robust planning, legal frameworks and continuous education is needed to prepare surge capacities for future emergencies. Partners such as Global Outbreak Alert and Response Network (GOARN) and emergency medical teams were also helpful with surge capacity, though more improvement is warranted.

10. Effective alert mechanisms: COVID-19 reiterated the importance of early notification and information sharing for global risk assessments and coordinated, timely and decisive responses. The value of sharing of timely information on an international scale can be overshadowed by the fear of negative economic consequences, such as restriction on travel and trade to be imposed by other countries. Member States and WHO need their collaborative efforts to further strengthen trust-based, transparent and timely notification and information-sharing mechanisms to enable effective alert functions, taking advantage of digital platforms and innovative technologies.
11. **Global mechanism to ensure equitable access to pandemic products:** COVID-19 vaccines were developed at unprecedented speed. Yet the current global distribution has been suboptimal and inequitable. As of 12 June 2021, only 0.8% of people in low-income countries received at least one dose of the COVID-19 vaccine. It is essential that robust global mechanisms should be established to facilitate equitable distribution of vaccines, therapeutics and diagnostics. Technology transfer should be promoted, and barriers related to intellectual property of pandemic products may need to be further negotiated, using procedures such as flexibilities under TRIPS (Trade-Related Aspects of Intellectual Property Rights) Agreement.

12. **Public health and social measures (PHSM):** The COVID-19 pandemic has highlighted both the effectiveness of non-pharmaceutical PHSM as well as their negative consequences. PHSMs can stop transmission, but can also have significant negative socioeconomic consequences that make them unsustainable in the long term. Epidemiological analysis and response capacity assessment should guide timely adjustment of measures, and stringent measures should be geographically limited to where they are needed and be time-bound. For PHSM, the legal framework used, especially the imposition of restrictions on the right to free movement of the population, should be reviewed to ensure clear and transparent legal foundation for such measures. Member States and WHO should review the evidence and lessons learnt on such measures to improve their evidence-informed and risk-based application in the future.

13. **International travel measures:** The COVID-19 pandemic has demonstrated the importance of using a risk-based approach for international travel measures. Member State experiences have shown that the international travel measures, such as travel restrictions, testing and quarantine, have resulted in preventing or delaying the importation of new viruses or variants of concern, and subsequent onward transmission. While excessive and unnecessary interference with international traffic has to be avoided, continuing uncertainties and lack of evidence posed major challenges for national authorities in making decisions on international travel measures while keeping their negative socioeconomic consequences to a minimum. Countries have used the precautionary approach in implementing and adjusting border measures. Further review of evidence is expected to inform future decision-making.

14. **Risk communication and community engagement (RCCE) has emerged as one of the most important needs during an emergency response. Addressing misinformation and communicating correct messages has been important during the COVID-19 response. The community has played important roles in the pandemic response, supporting surveillance and contact-tracing, supporting those in quarantine, and disseminating information. However, enabling policy and systems are essential for communities to effectively contribute in health emergency preparedness and response. For example, Thailand had established mechanisms in place that engaged more than 1 million village health-care workers who worked closely with the public health authorities during the pandemic response.
Progress in implementing regional five-year strategic plan on preparedness and response 2019–2023

15. The Five-Year Regional Strategy to Strengthen Public Health Preparedness and Response (2019–2023) for the South-East Asia Region was launched at the Seventy-second session of the WHO Regional Committee.

Strategic Pillar 1: Build, strengthen and maintain State Parties’ core capacities required under IHR (2005)

16. Objectives under this pillar are to strengthen IHR capacities through developing and implementing the national action plans for health security, linked with health systems strengthening efforts. This section summarizes progress in selected IHR capacities.

17. National policies, plans and legislation: National Action Plan for Health Security (NAPHSs) are a country-owned, multi-year planning process to capture national priorities for health security including key actions for addressing capacity gaps, and resources required to accelerate the development of IHR core capacities. Six Member States – Bhutan, Indonesia, Maldives, Myanmar, Sri Lanka, and Thailand – have developed and implemented their NAPHS. Timor-Leste’s NAPHS has been endorsed and published while Bangladesh’s is awaiting endorsement. Most Member States have also developed and implemented national action plans for disaster risk management in line with the Sendai Framework for Disaster Risk Reduction 2015–2030.

18. Zoonotic events and the human-animal interface: Member States have strengthened coordinated action at the human-animal interface.

- Indonesia and Thailand have also initiated joint risk assessment engaging relevant stakeholders on this issue. Nepal has reviewed and updated the priority zoonosis lists engaging multi-sectoral stakeholders.
- The Asia-Pacific One Health Coordination Group was established by the Food and Agriculture Organization of the United Nations (FAO), OIE and WHO, to foster coordinated support to countries to more effectively address health risks at the human-animal environment interface.

19. Food safety: The Framework for Action on Food Safety in the WHO South-East Asia Region 2020–2025 was endorsed in 2020. Eight of the 11 Member States have developed action plans for strengthening their foodborne disease surveillance and response systems. Four experts from Bhutan, India, Indonesia and Thailand are representing the SEA Region on the Foodborne Diseases Epidemiology Reference Group (FERG) to advise WHO on the method to estimate burden of foodborne diseases and indicators for food safety. Timor-Leste has become the 188th Member of the Codex Alimentarius Commission. Workshops on Codex advocacy and INFOSAN were run in Bhutan, DPR Korea, Maldives, Myanmar, Nepal and Timor-Leste.
20. **National laboratory systems:** With the emergence of SARS-CoV-2, Member States have established testing capacities for SARS-CoV-2 and strengthened genome sequencing capacities.

- All 11 Member States have established laboratory testing capacity for SARS-CoV-2, largely by augmenting existing influenza laboratory capacities. All countries have expanded their COVID-19 testing capacity to subnational levels and added testing by antigen rapid diagnostic tests. Ten national laboratories participated in the WHO External Quality Assurance Programme, with all 10 achieving 100% concordance for their COVID-19 testing results.

- Rapid identification of genomic changes to the COVID-19 virus has become essential to track and monitor the circulation of variants. Currently four national public health laboratories can perform genome sequencing, with an additional three Member States having access to genome sequencing through non-government laboratories.

- Various challenges have emerged. The laboratory information management system and its effective operations seems to be a critical challenge. The massive and rapid expansions of subnational laboratory chains, which in turn affected the overall turnaround time from testing to reporting. Besides, funding constraints, sporadic supply of essential laboratory consumables, scarcity of competent human resources, impaired specimen transport systems due to lockdowns, and lack of effective national networking (in some countries) has largely affected countries in their efforts to maintain optimal laboratory capacity to meet the testing demands.

21. **Surveillance:** Member States have strengthened indicator-based and event-based surveillance systems that inform risk assessment and timely decision-making. For example:

- India has launched the Integrated Health Information Platform (IHIP) for the Integrated Disease Surveillance Programme, aiming towards real-time data monitoring and enhanced analytics to enable evidence-based policy and response decisions.

- Event-based surveillance has been strengthened in all the countries, with Nepal introducing “epidemic intelligence through open source (EIOS)”, which helped enhance ability to screen a greater number of formal and informal information sources.

- Member States have swiftly responded to surveillance needs for COVID-19 to inform decisions to adjust response measures, building on multiple existing systems. For example, Timor-Leste, faced with challenges to rapidly scale up case-based surveillance, used multiple sources of information from community-based surveillance, sentinel surveillance at health-care facilities, enhanced syndromic surveillance, and testing as part of exit screening for people departing the country, all of which in combination helped inform decisions on response measures.

- Member States have also strengthened contact tracing in the context of COVID-19. While community transmission challenged the performance in most countries, countries such as Sri Lanka and Thailand engaged non-health sector partners to cope with the large demands of tracing and supporting contacts to be quarantined.
22. **Human resources:** According to the Mid-Term Review of the Decade of Strengthening Human Resources for Health (HRH) in the SEA Region (2015–2024), the regional availability of doctors, nurses and midwives per 10 000 population has increased from 21.5 in 2014 to 26.0 in 2018. However, this is less than the new SDG threshold of 44.5 per 10 000. Bangladesh, India, Indonesia, Myanmar and Thailand have dedicated field epidemiology training programmes (FETP) to continue strengthening the field epidemiologist workforce. The FETP graduates have demonstrated vital capacities during the COVID-19 pandemic, contributing to surveillance, field investigation, contact tracing and risk assessment in the respective countries. COVID-19 has also demonstrated that critical roles can be played by the non-traditional workforce from non-health sectors and communities\(^1\) in implementing IHR core capacities.

23. **National health emergency frameworks:** Member States in the Region have developed and updated national preparedness and response plans to guide national responses to COVID-19. Countries have also established high-level multisectoral task forces to command and coordinate the unprecedented scale of whole-of-government and whole-of-society national responses to COVID-19. Functional national health emergency operations centres (HEOC) were established in all the countries, as well as subnational HEOCs in some. An incident management structure has been developed, strengthened and actively used in coordinating day-to-day emergency operations.

24. **Points of entry:** Countries in the Region have registered 97 designated points of entry in total. Among them, 65 have contingency plans at the point of entry as mandated by IHR (2005). Member States have strengthened capacities at their points of entry. One significant fallout of this effort is that Thailand successfully detected the first case of COVID-19 outside of the People’s Republic of China. Countries have conducted risk assessment to adjust and implement international travel measures to prevent and delay the importation of the SARS-CoV-2 and the later emerging variants of concern. At the same time, countries have faced major challenges in controlling the importation risks across ground crossing points, especially around porous borders.

**Strategic Pillar 2: Strengthen event notifications and management in compliance with the requirements of IHR (2005)**

25. Strategic Pillar 2 aims to strengthen an enabling environment and network on IHR NFPs and regional mechanisms for alert, preparedness and response.

26. **Notification and information sharing:** Member States have established surveillance for early warning systems. When potential public health events of international concern are detected and assessed, respective countries notified the event to the Regional Office via the IHR NFPs. Delays were sometimes observed in States Parties’ notifications to the Secretariat as well as in their response to requests for event verification under Articles 6 and 10 of the Regulations.

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27. **Regional event-based surveillance:** To enhance regional alert function, the Regional Office (SEARO) carried out regional event-based surveillance to monitor potential public health alerts and signals. In particular, SEARO introduced the WHO Epidemic Intelligence Using Open Sources (EIOS) tool, in which over 1500 articles are scanned daily, with signals reviewed. When needed, the Regional Office requested verification of information on such events under Article 10 of the IHR. In 2019 there were 252 signals referred to WHO country offices for verification with Member States. Of these, 97 were confirmed as events of public health importance and recorded in the WHO Event Management System (EMS). In 2020, 82 signals were sent for verification, with 57 confirmed as events and registered in EMS. As of 15 June 2021, 26 events have been registered in EMS. These events are mostly either related to infectious disease outbreaks or natural or man-made disasters.

28. **Risk assessment coordinated by the Regional Office:** For major acute public health events of public health concern, rapid risk assessments (RRA) are conducted to characterize the risk of the event for the national, regional and global level. In 2019, eight RRAs were conducted for Nipah in Bangladesh and India, measles and cholera in Cox’s Bazar, Bangladesh, dengue in Bangladesh and Thailand, circulating vaccine-derived poliovirus (cVDPV) in Indonesia and Myanmar. In 2020, 11 RRAs were conducted (10 RRAs for countries that reported COVID-19 and one for an event of unknown cause of morbidity and mortality in India). In 2021, as of 20 June, one RRA for a surge in COVID-19 cases in India was conducted.

29. **Regional supply management mechanism:** SEARO has identified three international warehousing locations for strategic regional stockpiling to diversify the risk of delays in supply in current and future emergencies. These were used for India’s second wave of the COVID-19 pandemic and flash floods in Timor-Leste in 2021.

30. **Regional platform to connect IHR NFPs:** This was strengthened using various approaches. In particular, SEARO has organized several virtual meetings with IHR NFPs in the context of COVID-19, to facilitate exchange of information, experiences and lessons among IHR NFPs, and between Member States and the WHO Secretariat. The first virtual meeting of IHR NFPs in the Region was organized in February 2020 to discuss the country readiness for COVID-19 response. In July 2020, a biregional meeting of the APSED TAG was organized virtually to exchange lessons learnt.

2 Since November 2020, virtual meetings were organized every two months to further exchange country experiences and to provide key technical updates on priority subjects. Through the discussion at the virtual meetings, regional standard procedures on international contact tracing was developed.

31. **The Regional Knowledge Network of NFPs:** This platform for interaction between IHR NFPs, WHO and subject experts was also used to provide online learning resources (e.g. online self-paced rapid response team [RRT] training) and a “regional knowledge repository” among its 196 users. Webinars and seminars of IHR NFPs were also conducted through the platform.

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3 Considerations for sharing information for international contact tracing in the context of COVID-19. June 2021. [https://apps.who.int/iris/handle/10665/341809](https://apps.who.int/iris/handle/10665/341809)
Strategic Pillar 3: Measure progress and promote accountability

32. Strategic Pillar 3 aims to measure progress, enhance accountability and foster continuous learning and improvement through enabling countries to implement IHR monitoring and evaluation frameworks to monitor the progress in implementing NAPHS, and to report annually the progress in strengthening IHR capacities.

33. Monitoring and evaluation: All 11 Member States have reported their annual SPARs since 2016. Eight Member States have conducted the voluntary joint external evaluation (JEE) since 2016, while JEEs planned in 2020 and 2021 were postponed due to the COVID-19 pandemic. Simulation exercises have been conducted in Bhutan, Myanmar and Thailand in 2020. The “Paro Airport exercise” in Bhutan was conducted prior to the pandemic to test the readiness of airport health authorities on handling sick passengers on incoming flights, with the outcomes contributing to the national COVID-19 preparedness and response. Several Member States used the WHO simulation exercises for vaccine roll-out prior to implementing their COVID-19 vaccine programmes. India has conducted after-action review of an event of Nipah outbreak in the state of Kerala in May 2018 and Sri Lanka conducted after-action review of the health sector response following the Easter Sunday attack in April 2019.


In the South-Asia Region, Member States were also guided by the Asia-Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED) to strengthen health emergency preparedness and response capacities. APSED, currently in its third iteration (APSED III), was launched in 2006 as a guiding strategic framework to strengthen core public health capacities required to implement the IHR (2005); enhance national and regional capacities to manage emerging diseases and public health emergencies; and improve pandemic preparedness and response.

The three iterations of APSED have been used by many countries in the Asia-Pacific as a guide to develop, update and implement national action plans for health security to strengthen core capacities mandated by IHR (2005). These capacities were fully utilized by countries in responding to COVID-19, while countries have also gained important lessons through the unprecedented experiences that can inform further improvement in their health security systems – in line with one of the guiding principles of APSED ‘Continuous learning for improvement’.

The Technical Advisory Group (TAG) on APSED was established in 2006 to provide technical advice on the implementation of APSED to the Regional Directors of the WHO South-East Asia and Western Pacific Regions and Member States. The TAG convenes annually to monitor overall implementation of APSED and IHR (2005) and to provide technical advice on priority actions for implementation. Every other year, a bi-regional APSED TAG meeting is convened for both WHO regions.
This year, the APSED TAG meeting was organized on 27–29 July 2021. The meeting synthesized lessons from COVID-19 and focused on two outputs: First, the meeting participants reviewed the progress, lessons and challenges in responding to the COVID-19 pandemic, including having a detailed discussion on the findings and recommendations of various IHR and WHO review committees and boards, and identified priority actions to further optimize COVID-19 response for the next six to 12 months. Second, the participants also discussed key strategic and technical elements that will contribute to the development of a new action framework for health security in the Asia-Pacific.

34. **Intra-action review (IAR):** Bangladesh, Bhutan, India (Gujarat), Indonesia, Sri Lanka and Thailand conducted IAR of their COVID-19 response, engaging stakeholders from all relevant sectors, to identify strengths, challenges, lessons learnt and priority actions to inform further improvement of the ongoing pandemic response. The findings and recommendations also had important implications for health security system strengthening. Indonesia also conducted follow-up meetings every three months to monitor the implementation of the recommendations that emerged from the IAR.

**Progress in implementing the Risk Communication Strategy for Public Health Emergencies in the WHO South-East Asia Region 2019–2023**

35. The Risk Communication Strategy for Public Health Emergencies in the WHO South-East Asia Region 2019–2023 has the goal that in five years, sustainable and dynamic risk communication systems are established at the national level in all countries for public health emergencies, with dedicated professionals, tools and budgets, as endorsed by the Delhi Declaration of the Regional Committee session of 2019. The risk communication systems will include the five pillars of risk communication, that is, risk communication structure; coordination system for communication; capacity for dynamic, proactive public communication; community engagement and listening; and misinformation management mechanism (“five by five”).

36. Progress has been achieved towards the five objectives, as summarized in the following:

- **Risk communication structure and plans:** Bhutan, Indonesia, Nepal and Timor-Leste have drafted risk communication plans for all-hazard public health emergencies, while Thailand has been implementing the plan. All countries have developed risk communication plans for COVID-19.

- **Mechanisms for coordinated risk communication:** During the COVID-19 response, all Member States established national risk communication and community engagement (RCCE) working groups, led by their government, and engaging international and national partners.

- **Proactive public communication:** All the countries have strong media communication strategies and have a nominated focal point for media and public communications. Most countries have a senior appointee as the official spokesperson. Bangladesh, India, Indonesia, Maldives and Nepal have conducted trainings for spokespersons during the COVID-19 pandemic.
• **Strengthening community engagement:** During the COVID-19 pandemic, community engagement has been strengthened in all countries, with engagement of civil society organizations (CSOs) in decision-making promoted. Six CSOs have partnered with WHO in four countries.

• **Combating fake news, rumours and misinformation:** SEARO launched a rumour and misinformation surveillance and response system using artificial intelligence in February 2020. All the countries have established similar systems, using media and digital media scanning and analysis, and feedback from hotlines and health workers. Once analyzed, these were responded to through multiple channels. Communities also contributed to clarifying public perceptions and in refuting misinformation.

37. Challenges in risk communication include the lack of adequate risk communication experts, changes in how information is distributed and the rise of social media platforms. Harmonizing social media with traditional face-to-face communication and community engagement and sensitizing decision-makers on the need for these linkages is very important and also poses a challenge in most countries.

**Resilient health systems**

38. The ongoing pandemic has reiterated the critical importance of resilient health systems as the foundation for health emergency preparedness and response. Successive waves of the COVID-19 pandemic have placed tremendous strain on health systems. Existing gaps in national and subnational health systems and inequities have been exacerbated. The need for sustained investments in resilient health systems that are primary health care-oriented and that fully engage communities was highlighted. Accelerated implementation of the Regional Flagship Priority of Universal Health Coverage is essential in strengthening public health emergency preparedness and response.

39. **Essential health services.** Two rounds of the pulse survey revealed that substantial disruptions had been caused to essential health services due to the COVID-19 pandemic. Public reluctance to utilize health services and the recurrent lockdowns that impeded access were among the major causes for disruption, while factors on the supply side, such as cancellation of elective care, health workforce shortages and repurposing, and disruption in supplies of essential health products were also critical reasons. Since the first quarter of 2021, there has been some recovery in service provision, resulting from policies that focused on maintaining essential services, reorganization and integration of services, community engagement, optimization of the available health workforce, and support for innovations such as telemedicine.

40. **Health financing.** COVID-19 imposed unprecedented financing requirements on countries to rapidly implement effective response measures in the context of a severe economic contraction. A secondary data review revealed that, in the first six months of the pandemic, Member States adopted policies to reduce financial barriers to care, mitigate the immediate economic impacts of movement restrictions and streamline public financial management systems that will enable the rapid procurement of essential resource commodities. Common policy responses included extending free service coverage for COVID-19 testing in the public sector, engagement of the private sector, and the adoption of price ceilings for testing and medicines intended to regulate the private sector. Funding commitments to health systems at this time may also have been constrained by a lack of absorptive capacity.
41. **Medical product and technologies.** Ensuring access to safe, effective, affordable and quality medicines remains a challenge in the Region. Medicines constitute the single largest component of out-of-pocket expenditure for the population in the Region. The already challenging situation was exacerbated by COVID-19, which resulted in shortages and disrupted supply chains of emergency medical supplies and essential medicines.

42. **Health workforce.** COVID-19 brought renewed attention to the health workforce and to the importance of having appropriate numbers of health workers with the right skills and distribution, and to their support and protection. Many Member States faced serious shortages of PPE kits that made frontline health workers vulnerable to occupational infection. Moreover, many health workers were asked to work longer hours, which affected their physical and mental well-being. Seven online “COVID-19-safe hospital webinar series” that covered health workforce surge capacity, protection of health workers, psychosocial support, and training modalities in the context of closed health education institutions were organized by WHO from January to April 2021.

43. **Infection prevention and control (IPC) and water, sanitation and hygiene (WASH).** have assumed special significance and urgency due to COVID-19. Most Member States updated their IPC guidelines and conducted extensive capacity-building for IPC and WASH during the pandemic. Several trainings were conducted to strengthen IPC at the national level and at health-care facilities.

### Recommendations on COVID-19 issued by global review mechanisms

#### IHR Review Committee

44. The Review Committee on the Functioning of IHR (2005) during the COVID-19 response was convened by the Director-General of WHO on 8 September 2020 at the request of Member States vide resolution WHA73.1 of 2020, and in line with Article 50 of IHR (2005). The Committee formulated 40 recommendations in 10 key areas. Key messages of the IHR Review Committee were as follows:

**Compliance and empowerment**

- Lack of compliance of States Parties with certain obligations under IHR (2005), particularly on preparedness, contributed to the COVID-19 pandemic becoming a protracted global health emergency.
- Responsibility for implementing IHR (2005) needs to be elevated to the highest level of government.
- A robust accountability mechanism for evaluating and improving compliance with IHR (2005) obligations would strengthen preparedness, international cooperation and timely notifications of public health events.

**Early alert, notification and response**

- Early alert is important for triggering timely action, notably to enable the WHO Secretariat to use the powers conferred to it by IHR (2005).
- Early response requires better collaboration, coordination and trust.
- Applying the precautionary principle in implementing travel-related measures could enable early action to be taken against an emerging pathogen with pandemic potential.
Financing and political commitment

- Effective IHR (2005) implementation requires predictable and sustainable financing at both the national and international levels.
- A new era of international cooperation is required to better support IHR (2005) implementation.

**Box 2. Universal Health and Preparedness Review**

A need for a regular and transparent process of peer review of health emergency preparedness has been proposed by some Member States. The IHR Review Committee also recommended that WHO and States Parties implement a universal peer-review mechanism to foster whole-of-government and whole-of-society accountability for implementing the IHR (2005).

This Universal Health and Preparedness Review is proposed as a Member State-led, voluntary peer-to-peer review mechanism to strengthen public health systems in order to promote greater global action by bringing nations and stakeholders together, and to make the world safer. The country reviews conducted under UHPR will complement the existing general monitoring and evaluation (M&E) frameworks and support countries to:

- Promote **high-level political engagement** in health and emergency preparedness as a priority area within government agendas and serve as an impetus for raising visibility, investment and support towards emergency preparedness and UHC.
- Demonstrate to the global community the country’s **transparency, accountability and commitment** to improving health and emergency preparedness.
- Create and strengthen **shared accountability and collective responsibility** among government ministries, civil society, the private sector and other stakeholders in terms of health security and pandemic preparedness.
- Promote **reliable and sustainable domestic funding** to build long-term preparedness capacity, including investments by public and private sectors towards strengthening health systems as a path to the full implementation of IHR (2005) and the achievement of SDGs.
- Provide **evidence for countries to track their progress** in maintaining and strengthening preparedness capacity and transitioning towards UHC.
- Promote **engagement and alignment of national initiatives** with subregional and regional initiatives and strategies.
- Promote **sharing and learning** among countries, including through the peer review process.

In order to develop the UHPR, pilots would be conducted in Member States that had expressed interest. Pilots would take place across all regions and a range of socioeconomic settings to ensure that its use is not restricted to a specific context. Lessons learnt from the process would help refine the UHPR ahead of its formal adoption. The overall UHPR pilot phase will be from July to December 2021.
The Independent Panel on Pandemic Preparedness and Response

45. The report submitted by the Independent Panel for Pandemic Preparedness and Response (IPPPR) to the Seventy-fourth World Health Assembly included immediate recommendations aimed at curbing COVID-19 transmission; and recommendations aiming to transform the international system for pandemic preparedness and response to prevent a future outbreak from becoming a pandemic.

46. Recommendations for immediate actions to end the COVID-19 pandemic include:

- High-income countries should commit to provide vaccines to the 92 low- and middle-income countries that are part of the COVAX Gavi Advance Market Commitment.
- Voluntary licensing and technology transfer for COVID-19 vaccines should be agreed upon, or a waiver of intellectual property rights under the Trade-related Intellectual Property Rights (TRIPS) Agreement must be applied.
- G7 and G20 countries and other high-income countries must immediately commit funds for Access to COVID-19 Tools Accelerator (ACT-A) in 2021 for vaccines, diagnostics and therapeutics and for strengthening of health systems.
- Countries should apply non-pharmaceutical public health measures at the scale that the epidemiological situation required, using evidence-based strategies agreed at the highest levels of government.
- WHO to immediately develop a roadmap with clear goals, targets and milestones to guide and monitor the implementation of country and global efforts towards ending the pandemic.

47. Recommendations to ensure that a future outbreak does not become a pandemic include:

- Elevate pandemic preparedness and response to the highest level of political leadership.
- Strengthen the independence, authority and financing of WHO.
- Invest in preparedness now to prevent the next crisis.
- A new agile and rapid surveillance information and alert system to be in place.
- Establish a pre-negotiated platform for tools and supplies.
- Raise new international financing for pandemic preparedness and response.
- National pandemic coordinators to be given a direct connect with the Heads of State or Government.

Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme

48. An Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme (the Programme) (IOAC) was established by the WHO Director-General to provide oversight into and monitoring of the development and performance of the Programme and to guide its activities. IOAC released its statement at the Seventy-fourth World Health Assembly on 25 May 2021. Key points include that IOAC:

- was satisfied with the achievements made, and the continuous efforts by WHO to implement the IOAC recommendations.
• considered the Access to COVID-19 Tools (ACT) Accelerator to be an example of an unprecedented level of global collaboration, but also noted that its implementation has been hampered by insufficient political will and global solidarity, limited production capacity of vaccines, and inadequate funding.
• recommended that the role and impacts of travel restrictions and other border measures, as well as the international coordination of such measures, should be reviewed in preparation for the next pandemic.
• considered that the COVID-19 pandemic has revealed shortcomings in the IHR (2005) and highlighted the primary role of Member States in preparing for, and responding to, outbreaks and emergencies.
• welcomed all efforts towards preparing for future pandemic threats, hence recognized the call to establish a new international treaty for pandemic preparedness and response under the auspices of WHO.
• recommended increasing current investment in resilient health systems, and universal health coverage, to ensure continuity of essential health services, and
• urged WHO to immediately implement preventive and response measures in areas that are potentially high-risk for sexual exploitation and abuse.

The Global Preparedness Monitoring Board
49. On 14 September 2020, the Global Preparedness Monitoring Board (GPMB) had released its second report titled “A World in Disorder” 4. In this report, GPMB provides a critical assessment of the global COVID-19 response, warning that the world cannot afford to be unprepared again when the next pandemic hits. The Board called for five urgent actions to be taken to restore a semblance of order out of the catastrophe and chaos currently facing the world:
  • responsible leadership;
  • engaged citizenship;
  • strong and agile systems for health security;
  • sustained investment; and
  • robust global governance of preparedness.

The way forward
50. Based on the review of lessons learnt through the response to COVID-19, progress and challenges in implementing regional strategic plans, and recommendations based on the global review of the pandemic response, the following have been identified as potential regional priorities to be considered in order to upgrade health emergency preparedness and response capacities in the South-East Asia Region:

51. **Contribute to the development of the global pandemic treaty and improvement in global health emergency architecture:** Member States in the Region should proactively contribute to guide the improvement of the global health security architecture. This includes providing policy inputs into the processes of developing the conventions of pandemic preparedness and response, or the planned “global pandemic treaty”, to ensure sustainable financing and effective preparedness and response actions in ongoing and future pandemics. The need for more robust global mechanisms to ensure equitable access to vaccines and therapeutics should be highlighted. This may include strengthening global platforms for equitable allocation and delivery of global public health goods, promoting technology transfer, and using TRIPS flexibilities for better leverage on intellectual property rights. Member States should also proactively participate in deliberation at the Member States Working Group on Strengthening WHO Preparedness and Response to Health Emergencies (as per the Seventy-fourth World Health Assembly resolution WHA74.7) to make collective impact. Member States are also expected to contribute in development of UHPR through the pilot implementation (see the Box 2).

52. **Strengthen multisectoral health emergency leadership and coordination:** National multisectoral arrangement for public health emergency alerts, preparedness and response should be further bolstered, based on the reviews of their functioning during COVID-19. Such arrangements should enable timely, coordinated and decisive action when risks for potentially significant public health emergencies are foreseen. At the same time these should provide oversights into national efforts to continue strengthening national health security systems. Member States should ensure that the IHR NFPs are appropriately organized, resourced and positioned, with sufficient seniority and authority ensured among their members to meaningfully engage with all relevant sectors. Furthermore, in line with Article 4 of IHR (2005), Member States should designate and inform WHO about the establishment of their national competent authorities (not merely NFPs) who will be responsible for the overall implementation of IHR (2005), and will also be accountable for the delivery of IHR (2005) obligations.

53. **Enhance sustainable financing:** Effective strengthening of health security systems require predictable and sustainable financing at the regional, national and subnational levels. It is crucial to capitalize on the momentum triggered by COVID-19 to facilitate reform, and mobilize greater and sustainable investment in the long term to strengthen health security and build more resilient health systems.

54. **Continue to strengthen public health emergency preparedness and resilient health systems:** Member States should conduct intra-action/after-action reviews of COVID-19 pandemic response regularly in order to identify priority actions to further strengthen national and subnational health security systems. These findings should be used to develop, update and more effectively implement national action plans for health security to advance core capacities mandated by IHR (2005). The core capacities should be integrated into the broader health systems to ensure that these systems are sufficiently resilient to function effectively during health emergencies. Effective legal frameworks must be in place to manage health risks and emergencies. Member States are also encouraged to participate in the pilot for Universal Health and Preparedness Review (see the Box 2), and demonstrate the leading roles that the South-East Asia Region can play to promote transparent peer review processes.

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55. **Further improve alert functions and information-sharing platforms**: Member States and WHO should collaborate to further improve national and regional alert functions. This includes further strengthening of national capacities for event-based surveillance, rapid response, investigation and risk assessment. Member States are expected to share the relevant public health information needed by WHO’s risk assessment as soon as it becomes available, and continue to share information with WHO after notification or verification, in order to allow WHO access to updated and reliable risk assessment. Timely sharing of genomic sequencing information should be promoted through upgrading regional and global genomic surveillance network. WHO should also improve information sharing with Member States to provide timely alerts, including of unverified information when needed, and also monitor and document countries’ compliance with their IHR (2005) requirements for information sharing and verification of requests. Member States and WHO should jointly promote digital platforms to facilitate real-time information-sharing and event communication under IHR (2005). The “One Health” approach should be buttressed for early detection, alert and coordinated response to address emerging zoonotic diseases.

56. **Continue to improve coordinated response capabilities**: Robust multisectoral emergency arrangements should be operationally supported by functional health emergency operations centres and incident management teams. Emergency operations require trained workforce as well as adequate surge capacity and rapid deployment. Member States should strengthen their plans to mobilize functional surge capacities nationally and internationally. This may require scenario-based planning, amendments of legal frameworks, and continuous professional training for surge capacity. WHO should optimize networks, such as GOARN and emergency medical teams, to strengthen international surge capacities to meet the needs of Member States. End-to-end supply management systems require improvements to enable timely distribution of the essential equipment and goods. Systems to apply risk-based and precautionary approach in implementing international measures proportional to risks must be strengthened to enable timely control importation of an emerging pathogen with pandemic potential, or new variants that still do not exist in the country.

57. **Invest in risk communication and community engagement**: Experiences and lessons learnt from the COVID-19 experience in risk communication and community engagement should be reviewed.

- Risk communication capacity can be bolstered through regular training courses in all countries. The management of the infodemic should be improved by establishing an informal network of key stakeholders. Tools for socio-behavioural surveillance mechanisms must be developed and implemented to understand and respond to public perceptions in emergencies. Sustained engagement with CSOs working in public health emergencies must be made more robust to build greater community resilience.

- The community has major potential to contribute in pandemic preparedness and response; however, efforts and investment for sustainable systems strengthening and capacity-building is critical for them to play effective roles in pandemic response. Countries may review and update policies to enable sustainable mechanisms to support community health workers, and to set up necessary training programmes and networks.
58. **Upgrade the regional platform for preparedness, alert and response:** Member States and WHO should continue to strengthen their platforms for information sharing and collaboration within the Region and beyond. Building upon existing mechanisms, such as technical advisory group of APSED III, South-East Asia IHR Knowledge Network and regular meetings among IHR NFPs of the Region, innovative initiatives and collaborative mechanisms should be conceptualized and developed for improved cross-border information sharing for risk assessment. These mechanisms include the regional laboratory network for detection and genomic surveillance, regional roster of the public health workforce, the Regional Fellowship Programme to strengthen human resources to implement IHR (2005), and enhanced interoperability to facilitate information exchange. A call was also made to strengthen regional strategic stockpile of medical and health commodities, including possible establishment of a regional facility to stockpile medical supplies.

59. **Further synthesize lessons and develop regional strategic roadmap:** Member States in the Region and WHO should work together to further synthesize lessons gained from COVID-19 pandemic response and examine implications of recommendations made by global committees and panels, building upon this working paper. Based on such deliberations, Member States and WHO should develop a regional roadmap to provide strategic actions to transform preparedness in the Region for future pandemics and other health emergencies. The Roadmap should aim to accelerate implementation of Delhi Declaration and to inform development of future health security framework in the Region.

**Conclusions**

60. Member States in the Region have made considerable progress in advancing IHR (2005) for health emergency preparedness and response. Countries have fully utilized the existing core capacities to respond to the unprecedented pandemic to control transmission and save lives of the population.

61. However, the pandemic also revealed the health security systems are still not yet fully ready to cope with a severe and largescale emergency such as the COVID-19 pandemic. Building national health security systems, linked to resilient health systems with a whole-of-society approach, requires long-term vision, political leadership and sustainable financing. We must learn from the experiences and lessons of the ongoing pandemic response. While the fight against COVID-19 continues, Member States, WHO and other partners must work together to identify priority actions to further strengthen health emergency preparedness and response capacities to more effectively respond to the ongoing pandemic and to prepare for future pandemics, emergencies and disasters.