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Ministry of Health



Public Health & Healthcare Actions taken to combat the COVID-19 Pandemic

**KUWAIT MINISTRY OF HEALTH
EXPERIENCE**



Since the first case of the novel coronavirus (COVID-19) was reported in Wuhan (China), **Kuwait** represent by **Ministry of Health** start to takes precautions and actions regarding this issue.



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Six examples

of Public Health & Healthcare
Actions taken to combat the
COVID-19 Pandemic

1

**Risk
Communication
and Education**

2

**Testing strategy
and Testing
Capacity**

3

**Socio-economic
restriction and
Transmission
Suppression &
Epidemiological
Monitoring**

4

**Healthcare
Services
Capacity**

5

**Healthcare
Workers
Capacity,
Training &
Protection**

6

**Overall
Assessment of
country risk for
decision making**

1

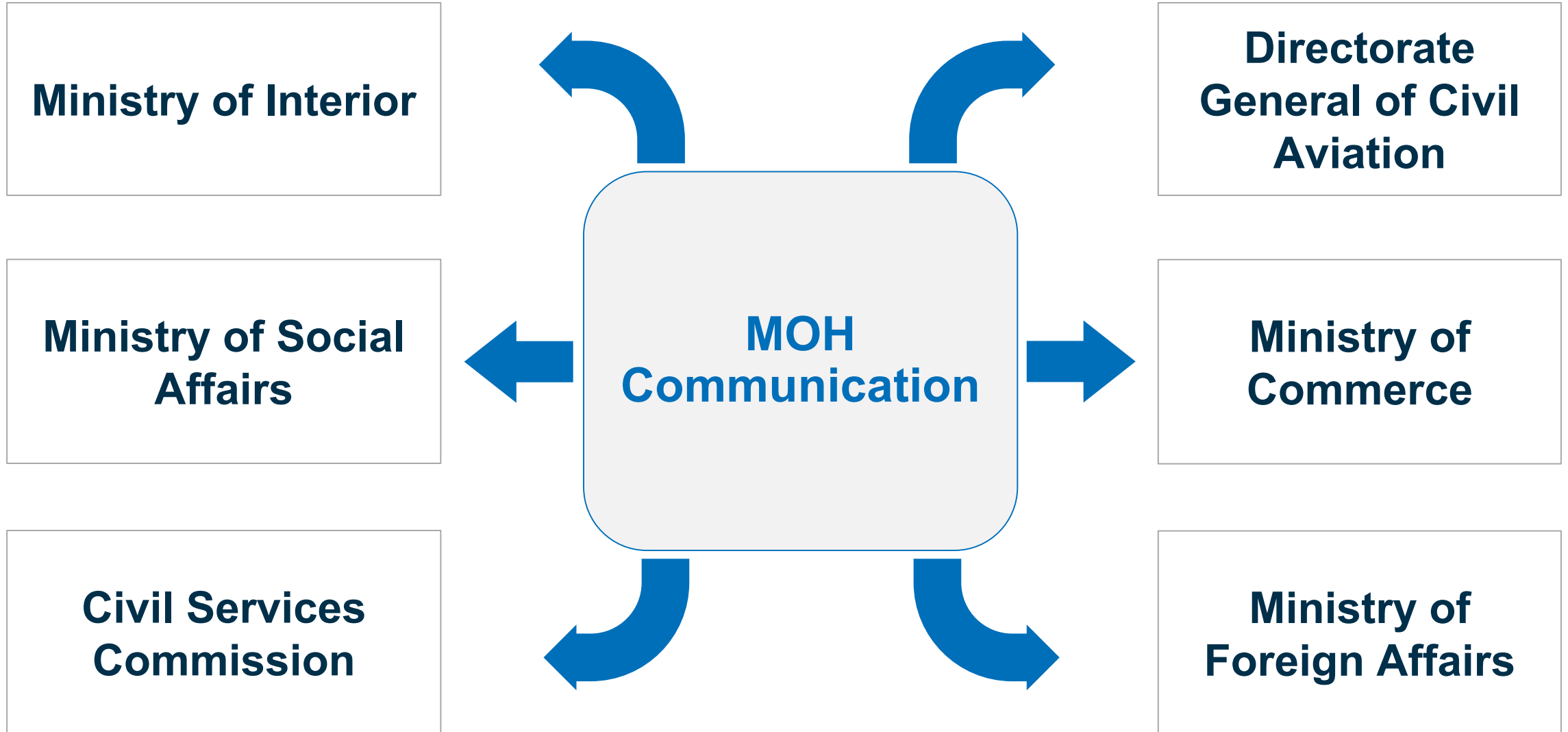


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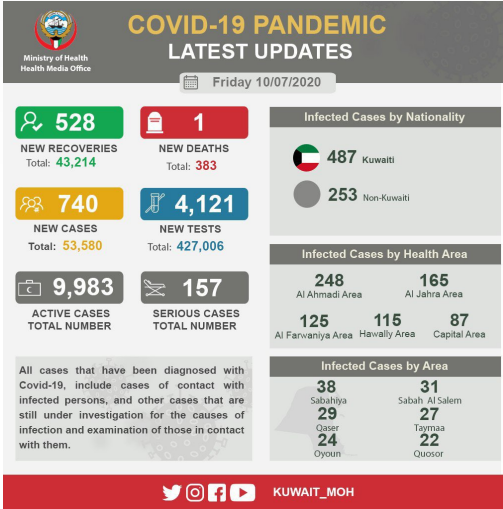
Risk Communication and Education

For COVID19

Leadership and Governance



Direct public reports & Risk communication



Two-way public communication



وزارة الصحة - الكويت
8,563 Tweets



4 18 31

Continuous Public Education

الإرشادات الوقائية

الالتزام بلبس الكمام طوال وقت العمل



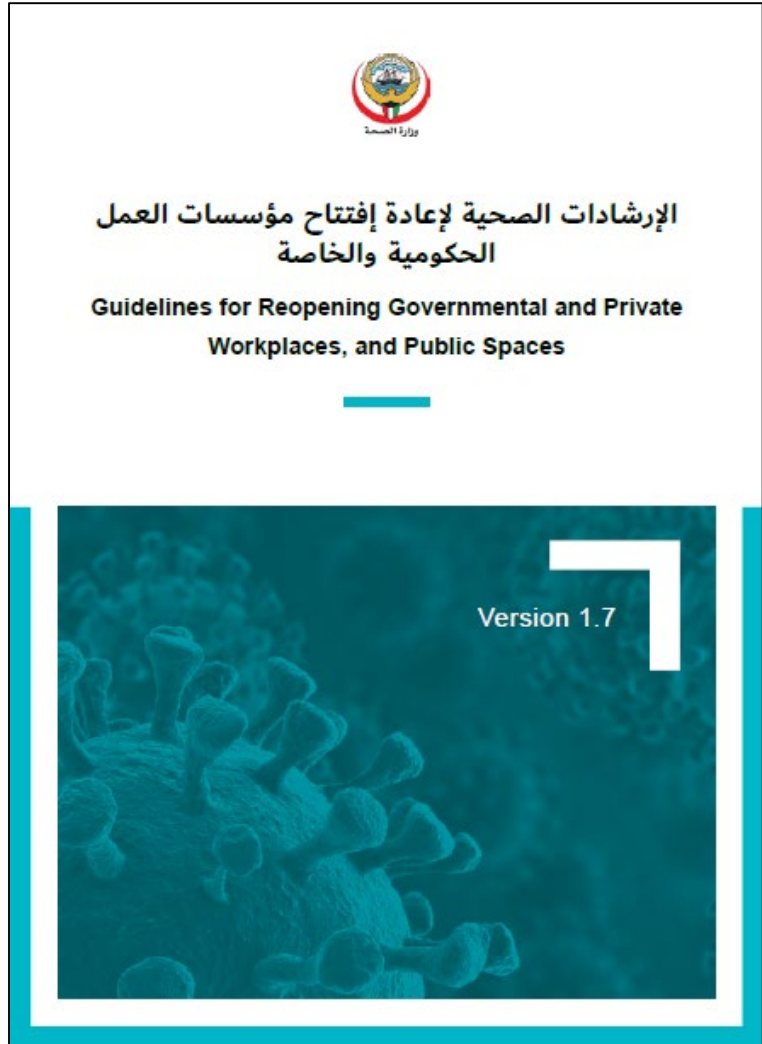
ممنوع تناول الأطعمة أو المشروبات في مجموعات



الالتزام بالمحافظة على مسافة تباعد لا تقل عن متر حتى في حال ارتداء الكمام



Community & Business Place Guidelines



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الإرشادات الصحية لإعادة إفتتاح مؤسسات العمل الحكومية والخاصة

Guidelines for Reopening Governmental and Private Workplaces, and Public Spaces

Version 1.7

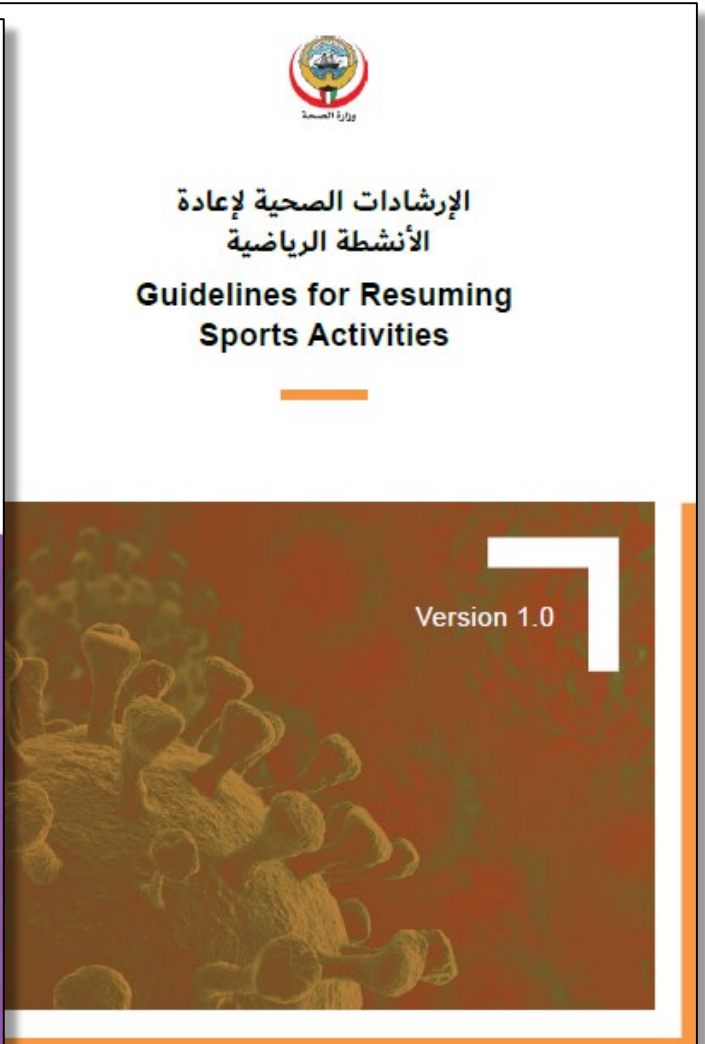


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الإرشادات الصحية لإعادة إفتتاح المطارات

Guidelines for Reopening Airport Terminals

Version 1.0



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الإرشادات الصحية لإعادة الأنشطة الرياضية

Guidelines for Resuming Sports Activities

Version 1.0

2



Testing strategy and Testing Capacity

For COVID19



COVID-19 Laboratory Testing Capacity

Tests per day at different stages of the epidemic

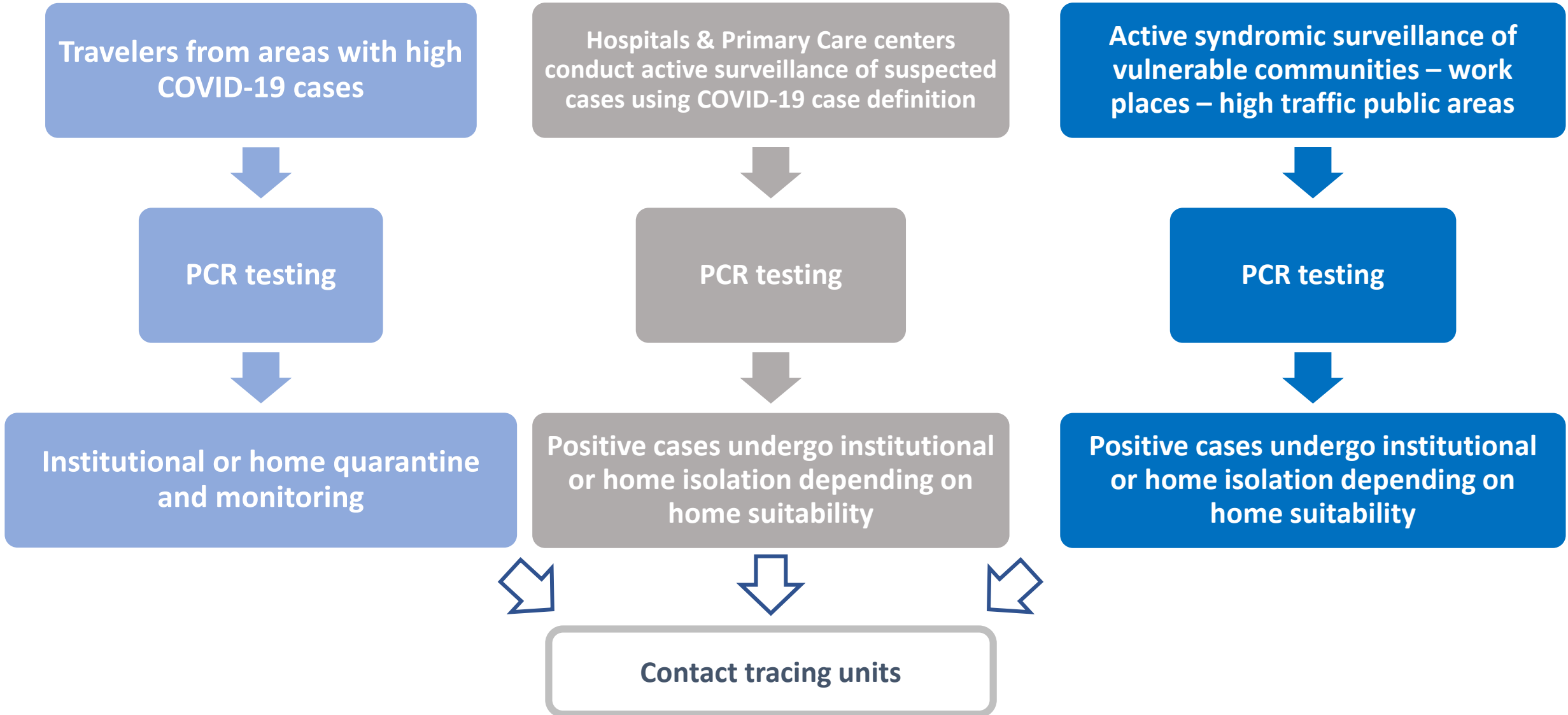


Testing All suspected cases with Influenza Like Symptoms (*ILI*) + history of travel to areas with outbreak

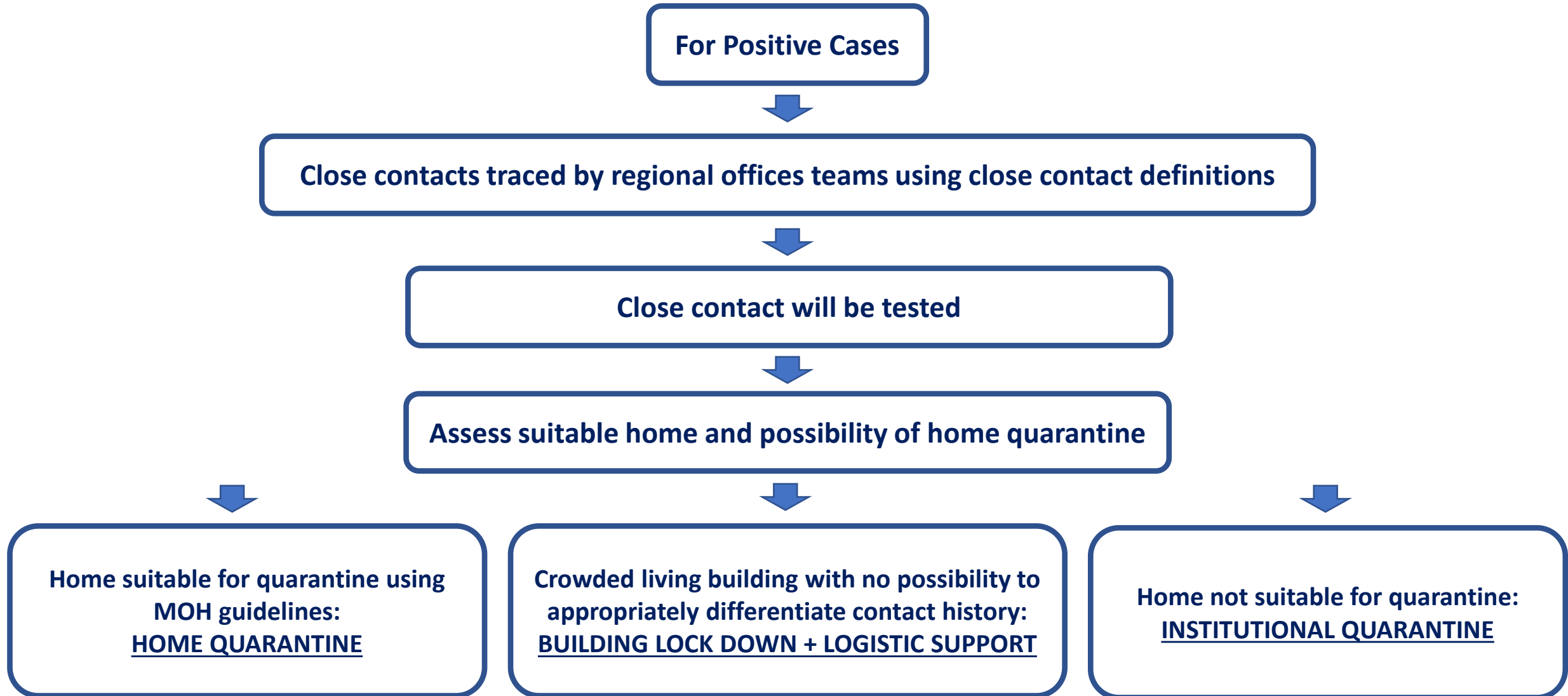
Aggressive testing for suspected cases

Testing prioritized for symptomatic cases and their contacts
Intensive community level testing ongoing for vulnerable areas

Surveillance Activities conducted in Kuwait to combat COVID-19 risk



Contact Tracing & Quarantine procedures



3



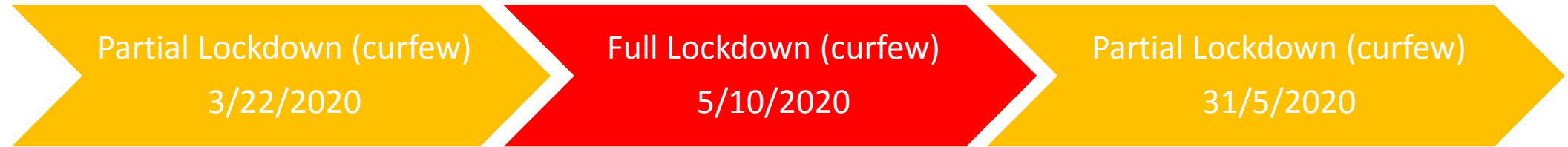
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Socio-economic restriction and Transmission
Suppression & Epidemiological Monitoring

For COVID19

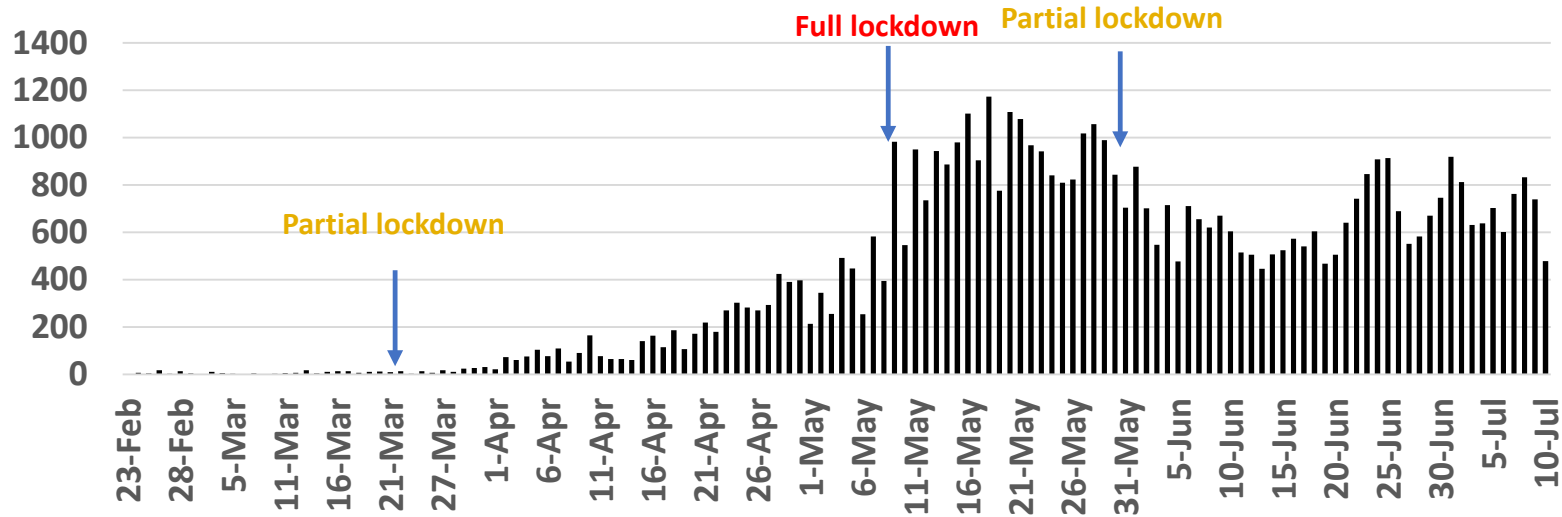
Social distancing & Transmission suppression

- **Reduction in community mobility**

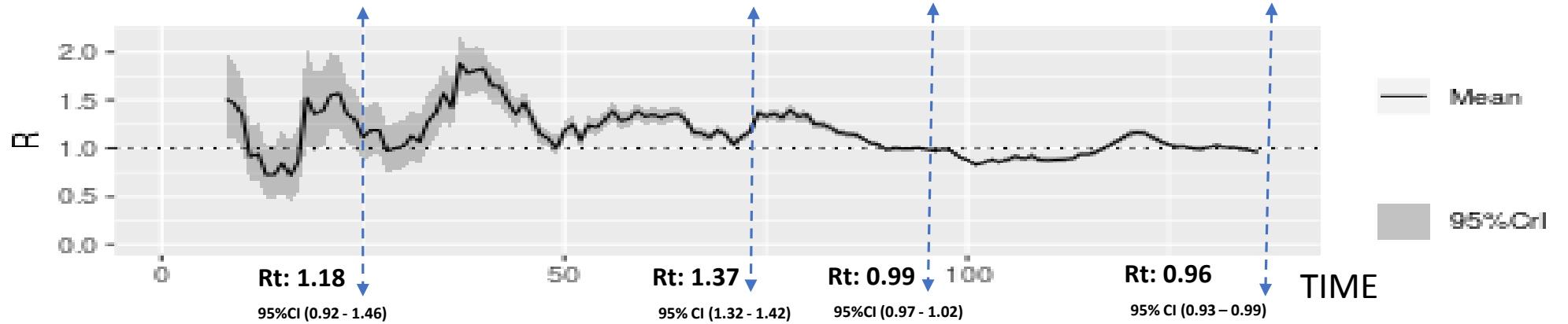


- | | |
|---|--------------|
| <ul style="list-style-type: none"> • Halting government and private work • Halting of schools • Closing public places (Cinemas, dine-in restaurants, mosques, banning weddings and funerals) | March 2020 |
| <ul style="list-style-type: none"> • Slow return of businesses and work after slowing and stabilization of new cases | 21 June 2020 |

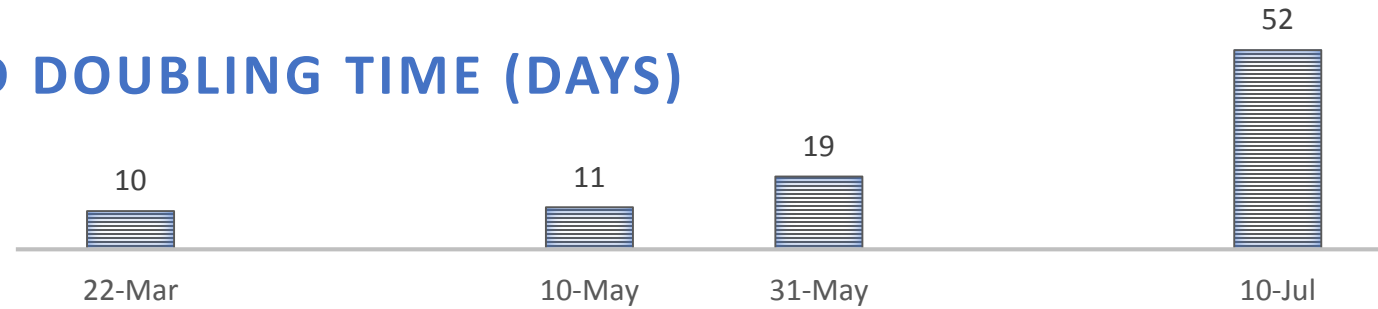
Daily new COVID 19 confirmed cases



Estimated Rt (7 day window)



ESTIMATED DOUBLING TIME (DAYS)



4



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Healthcare Services Capacity

For COVID19



Capacity building & Ensuring Healthcare Service Delivery

Facilities structure

- Reinforce infrastructure and increase ER, ward, and ICU capacity designated for COVID-19
- Ensuring continuation of standard of care for non-COVID 19 cases

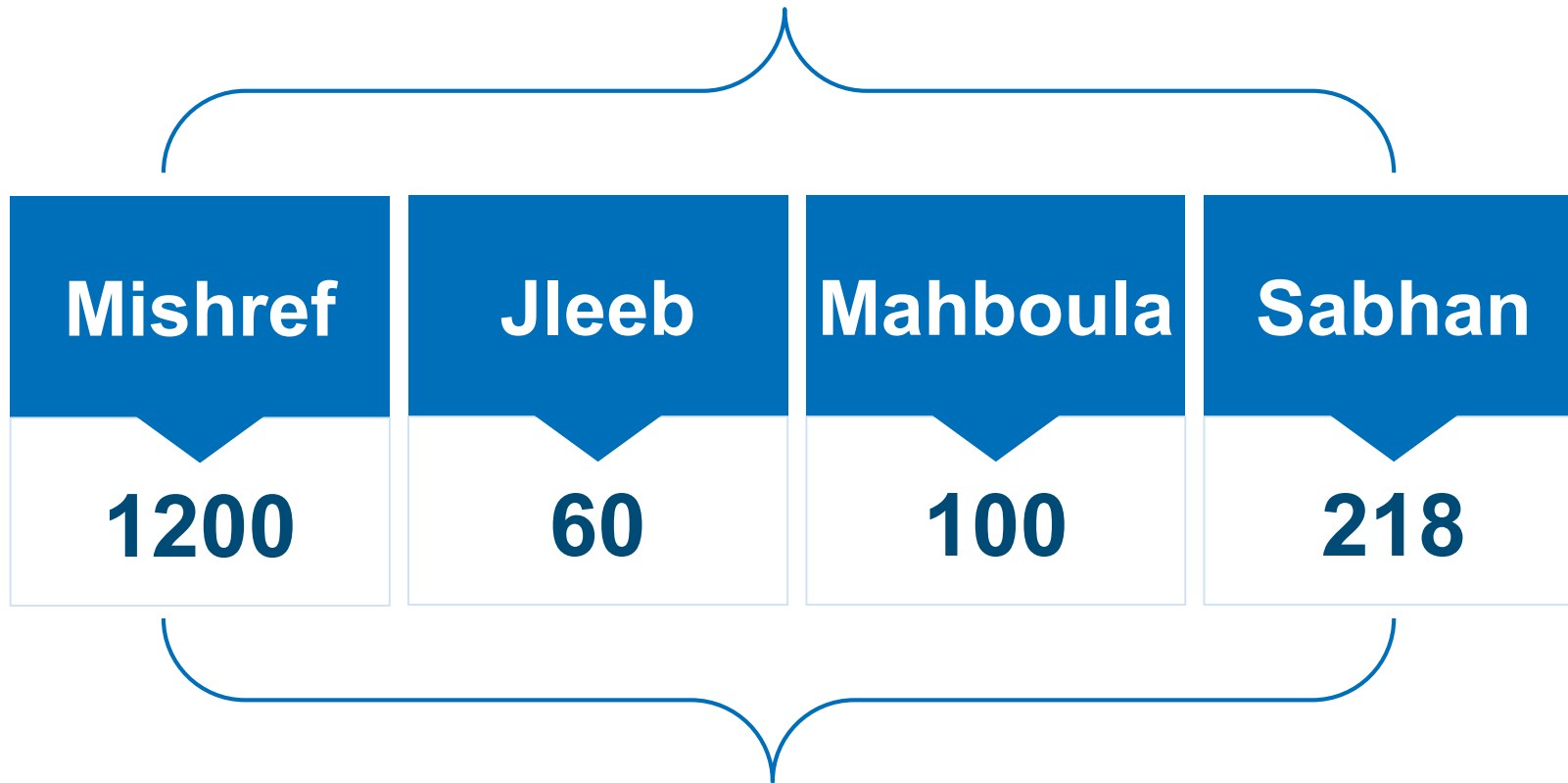
Standard care delivered

- **Develop and updated management protocols & flow charts:**
 - Hospital infection control protocols
 - Triaging suspected cases
 - Management ER and ICU cases
 - Management of in-patients.
 - Discharge and home isolation.



Number of beds in field hospitals

Field Hospitals



*No. of beds

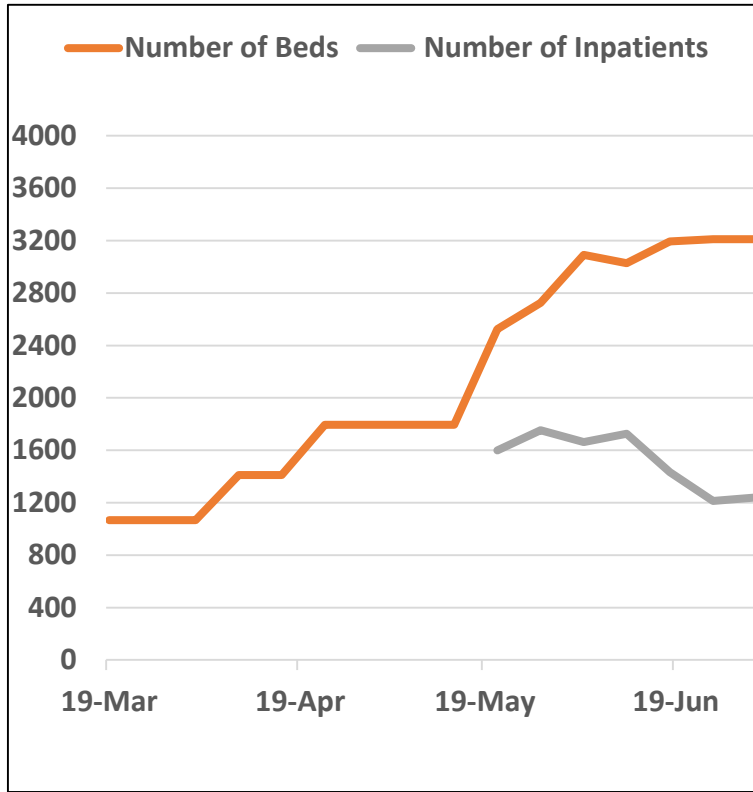


*12th July 2020 MOH census

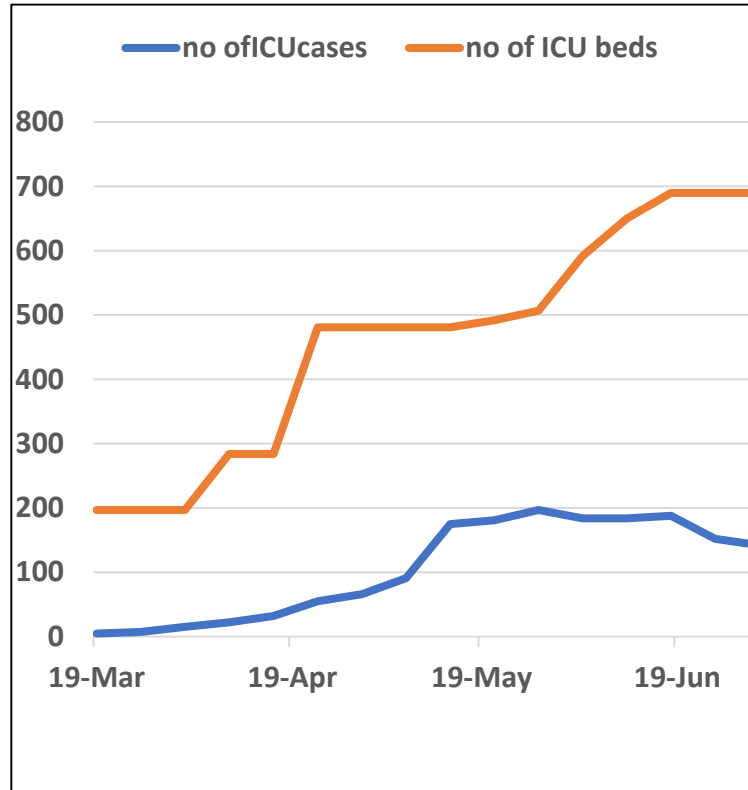


Successful resource reallocation & Capacity increase

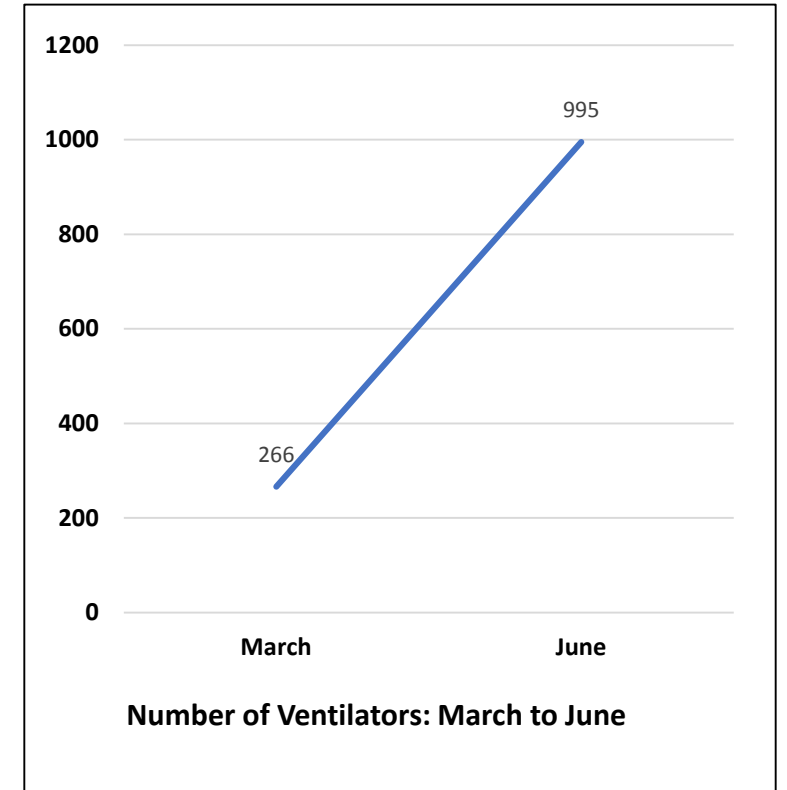
Increase in Inpatient bed capacity



Increase in ICU bed capacity



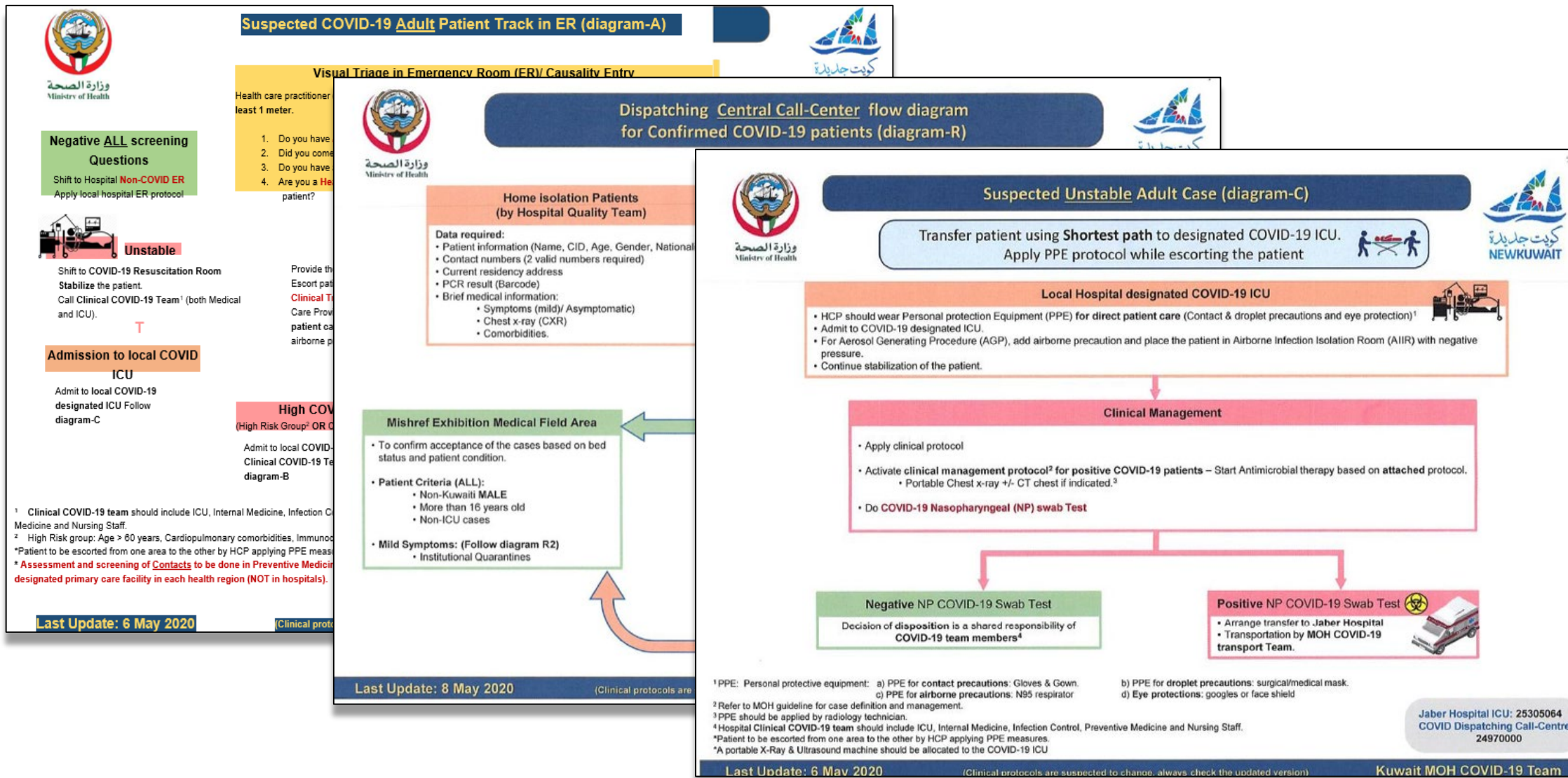
Increase in Ventilators



Target: Bed capacity \geq 20% patient admission rate on Weekly assessment



Examples of prepared and updated management protocols



5



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Healthcare Workers Capacity, Training & Protection

For COVID19



Objectives Achieved for protecting, training and increase capacity of Healthcare workers



Ensuring PPE availability

(No recordable event of run out stocks)



Allocating housing facilities for HCWs

(for more than 2000)



Swab clinics for HCWs

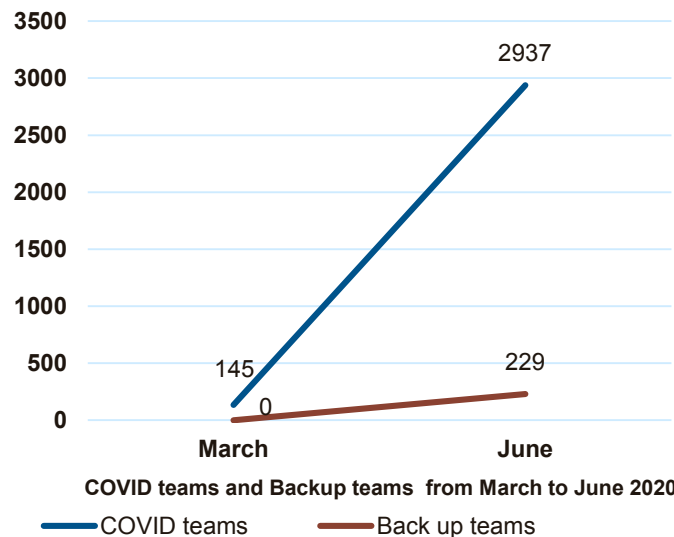
(more than 7000 swab)



Special quarantine places for HCWs COVID cases



Increase core staffing and back-up COVID teams



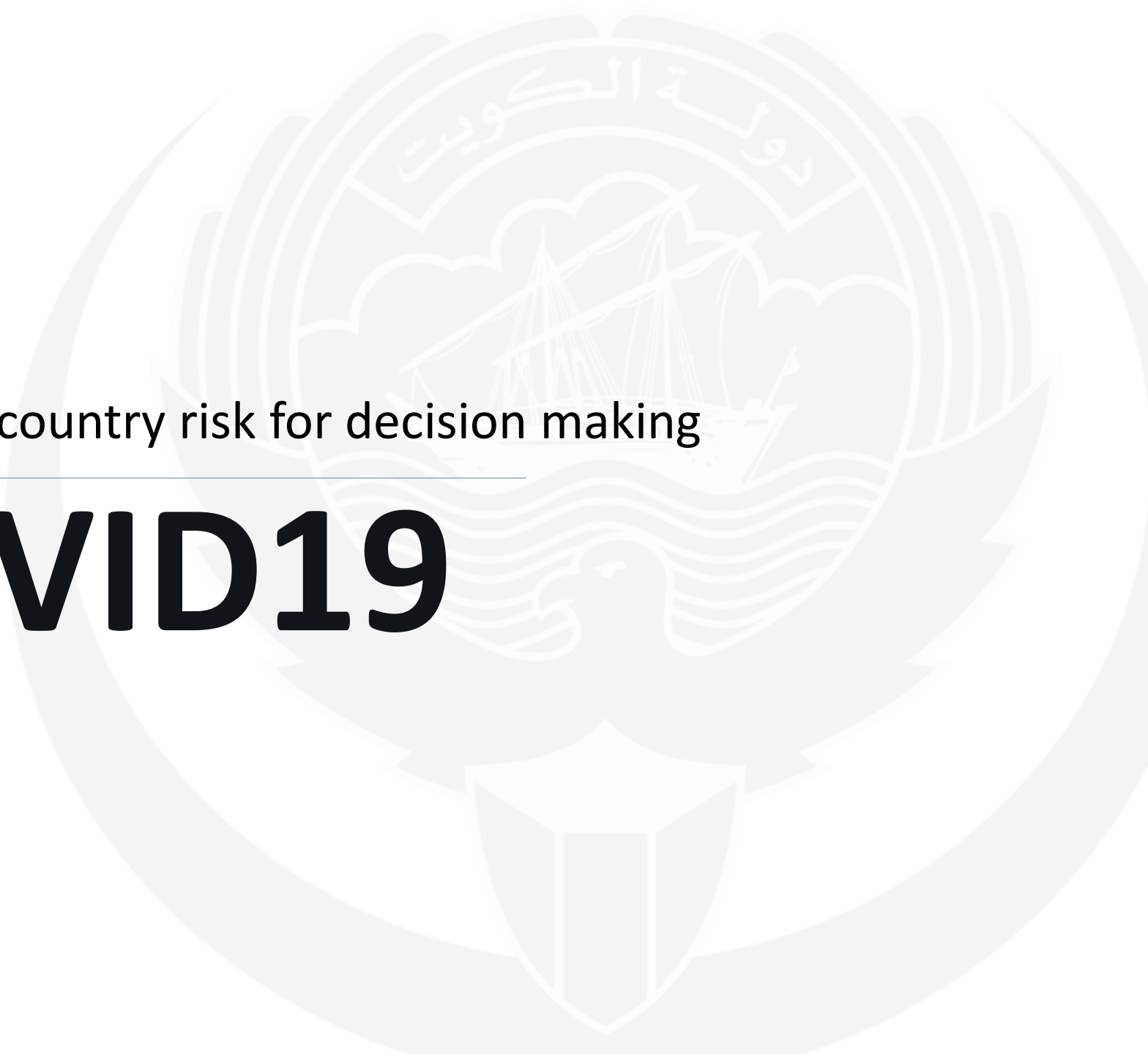
Contingency accredited training programs

| MOH Contingency training program(Feb-June2020) | |
|--|-------------|
| ER/ Airway& isolation precautions | 3250 |
| BLS | 1000 |
| Online COVID Webinars | 300 |
| ER triage | 163 |
| ER/ Basic ICU | 149 |
| ACLS | 25 |
| Total trained | 5200 |

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Overall Assessment of country risk for decision making

For COVID19



Quantitative and Qualitative Indicators by level of COVID19 alert

| | Reproductive Number (R) \geq 1.0 | | Reproductive Number (R) $<$ 1.0 | |
|-------------------------------|--|---|--|--|
| | Level 4 | Level 3 | Level 2 | Level 1 |
| Overall Assessment | Current COVID-19 transmission is NOT sustainable and is currently or projected to quickly overwhelm the healthcare system. | Current COVID-19 transmission is still high and expanding but Relatively Sustainable, and is not currently or projected to overwhelm the healthcare system soon | Current COVID-19 transmission is low and limited and easily controllable and Sustainable by contact tracing, testing, and isolation; and is not at levels that would overwhelm the healthcare system | Very low transmission, with sporadic cases and no active transmission expansion is occurring. COVID-19 infection is Controlled. Contact tracing, testing, and isolation is successfully preventing any transmission. |
| Epidemic Curve Status | <ul style="list-style-type: none"> • Considerable increase in new cases and deaths • $R_0 \geq 1$ • $DT^* < 2$ weeks • Home + community + unknown transmission • Test positivity $> 5\%$ | <ul style="list-style-type: none"> • Increase in new cases and deaths • $R_0 \geq 1$ • $DT > 2$ weeks & < 4 weeks • Home + community transmission • Test positivity $> 5\%$ | <ul style="list-style-type: none"> • Considerable decrease in new cases and deaths by at least 50% from peak on a weekly rolling average • $R_0 < 1$ • $DT > 4$ weeks • Predominantly home transmission • Test positivity $< 5\%$ | <ul style="list-style-type: none"> • Consistently negligible numbers of new cases and deaths • $R_0 < 1$ • $DT > 4$ weeks • Predominantly home transmission • Test positivity $< 5\%$ |
| Health System capacity | <ul style="list-style-type: none"> • ICU capacity projected to reach COVID-19 occupancy $> 50\%$ within 3-4 weeks or less • PPE not sufficient • Healthcare worker not sufficient | <ul style="list-style-type: none"> • ICU capacity projected to reach COVID-19 occupancy of 25-50% within 4 weeks or less • PPE shortage • Healthcare worker shortage | <ul style="list-style-type: none"> • ICU COVID-19 occupancy $< 25\%$ • PPE sufficient • Healthcare worker sufficient | <ul style="list-style-type: none"> • ICU COVID-19 occupancy $< 25\%$ • PPE sufficient • Healthcare worker sufficient |
| Public Health capacity | <ul style="list-style-type: none"> • Contact tracing unable to cover most cases • PCR Test unavailable for most cases • Surveillance system is ineffective | <ul style="list-style-type: none"> • Contact tracing able to cover some cases • PCR Tests unavailable for some cases • Surveillance system is stressed | <ul style="list-style-type: none"> • Contact tracing able to cover most cases • PCR Tests available for all cases • Surveillance system is effective | <ul style="list-style-type: none"> • Contact tracing able to cover all cases • PCR Tests available for all cases • Surveillance system is effective |

Examples of Quantitative and Qualitative Indicators by level of COVID19 alert

| Category | Indicators | Description | Level |
|------------------------|-------------------------------------|---|---------|
| Overall Assessment | COVID-19 transmission | 1 Overall assessment of COVID-19 transmission | 1 2 3 4 |
| Epidemic Curve Status | new cases and deaths | 2 The assessment of the daily new cases and deaths | 1 2 3 4 |
| | The basic reproduction number (R0) | 3 The contagiousness or transmissibility of infectious agents | 1 2 3 4 |
| | Covid-19 doubling time | 4 The number of days it takes of the count of cases to double | 1 2 3 4 |
| | Testing positivity rate | 5 The % of positive cases from the total number of the tested cases | 1 2 3 4 |
| Health System capacity | ICU bed capacity | 6 ICU bed occupancy rate | 1 2 3 4 |
| | COVID bed capacity | 7 COVID bed occupancy rate | 1 2 3 4 |
| | Personal protective equipment (PPE) | 8 The availability of personal protective equipment | 1 2 3 4 |
| | Healthcare workers | 9 The availability of the healthcare workers | 1 2 3 4 |
| Public Health capacity | PCR testing capacity | 10 The ability of performing the PCR testing for the cases | 1 2 3 4 |
| | Contact tracing | 11 The ability of performing contact tracing for the the cases | 1 2 3 4 |
| | Surveillance system | 12 How effective is the surveillance system | 1 2 3 4 |



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Thank you

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