

REGIONAL OFFICE FOR THE **Eastern Mediterranean** Regional Committee for the Eastern Mediterranean Sixty-eighth session Provisional agenda item 2(k)

# Progress report on COVID-19 preparedness and response activities in the Eastern Mediterranean Region

# Introduction

1. During its 67th session in October 2020, following the May 2020 World Health Assembly resolution WHA73.1 on the COVID-19 response, the WHO Regional Committee for the Eastern Mediterranean called on Member States to take action on the COVID-19 pandemic in the Region in resolution EM/RC67/R.3.

2. The resolution requested the Regional Director to report to the 68th session of the Regional Committee on progress made in COVID-19 preparedness and response activities in the Region. In line with the regional strategic priorities presented in *Vision 2023*,<sup>1</sup> the Sustainable Development Agenda 2030 and WHO's Thirteenth General Programme of Work (GPW 13), the resolution also listed 16 actions, urging Member States to implement initiatives and interventions with regard to COVID-19. These wide-ranging actions relate to governance, reporting, case management, monitoring and evaluation (M&E), infection prevention and control (IPC), the International Health Regulations (IHR) (2005), essential health services and systems, vulnerable populations, supplies and logistics, research and development, and vaccination.

3. The Regional Committee also requested the Regional Director, through nine specified actions, to strengthen WHO cooperation, capacities and technical support, to advocate for equitable access to COVID-19 diagnostics, therapeutics and vaccines, to promote and support intra-action reviews, to support efforts to ensure the maintenance of essential health services, to undertake research, to disseminate lessons learned and to share the report of the Ministerial Group on COVID-19.

4. This report summarizes the progress made by WHO since the adoption in October 2020 of resolution EM/RC67/R.3 on COVID-19 pandemic preparedness and response in the Eastern Mediterranean Region.

### Situation analysis

5. As of 31 July 2021 (epidemiological week 30), the global cumulative incidence of COVID-19 had reached 197.2 million reported cases and 4.2 million associated deaths, with a case fatality ratio (CFR) of 2.1%. Regionally, the 22 countries and territories of the Eastern Mediterranean Region had reported a total of around 12.6 million cases (representing about 6.4% of the global total), with 236 576 associated deaths (CFR 1.9%). As of 31 July 2021, the Region was ranked fourth in total numbers of cases and deaths among the six WHO regions. The six most affected countries in the Region are the Islamic Republic of Iran (30.7% of total regional cases), Iraq (12.9%), Pakistan (8.2%), Jordan (6.1%), the United Arab Emirates (5.4%) and Morocco (4.9%).

6. Since the start of the pandemic, the highest weekly number of cases across the Region (459 477 cases) was reported during epidemiological week 30 of 2021. The number of reported cases had started to increase after week 23, showing a weekly increase of 3–34%. The SARS-CoV-2 Delta variant is spreading faster and is becoming the dominant strain in many countries in the Region. This is fuelling the resurgence of new cases and deaths in the Region and causing a "fourth wave" of the pandemic. The number of daily reported deaths increased from week 7 to week 17 of 2021 (peaking at 6400 deaths in a single week) with a continuous decline then occurring until week 25. Although this has been followed by a continuous increase in subsequent weeks, the number of deaths has not yet reached the peak number reported in week 17. The regional CFR is 1.9% with a median country-specific CFR of 1.5% (range: 0.3–19.5%). Yemen has the highest CFR (19.5%)

<sup>&</sup>lt;sup>1</sup> Vision 2023: Eastern Mediterranean Region: health for all by all. Cairo: WHO Regional Office for the Eastern Mediterranean; 2018 (<u>http://applications.emro.who.int/docs/RD\_Vision\_2018\_20675\_en.pdf</u>, accessed 9 August 2021).

followed by Sudan (7.5%), the Syrian Arab Republic (7.4%), Egypt (5.8%), Somalia (5.3%), Afghanistan (4.6%), Tunisia (3.4%) and the Islamic Republic of Iran (2.3%).

7. The median attack rate in the Region is 3796 per 100 000 population. The highest attack rate per 100 000 population was recorded in Bahrain (15 397) followed by Kuwait (9191), Lebanon (8293), Qatar (7720) and Jordan (7505). Reported attack rates are highly dependent upon national capacity to detect and confirm cases through laboratory testing and upon the testing strategy, both of which vary between countries in the Region.

8. Across the Region, a total of around 191.2 million laboratory polymerase chain reaction (PCR) tests have been conducted since the start of the pandemic, including around 5.2 million tests in week 30 (representing a 31% increase compared to the previous week). The median country-specific number of such tests conducted in the Region is 24 789 per 100 000 population (range: 436–659 814). The highest number of PCR tests was reported from the United Arab Emirates (65.9 million) followed by the Islamic Republic of Iran (25.9 million) and Saudi Arabia (25 million). The United Arab Emirates and Bahrain have performed the highest rates of testing per capita (659 814 per 100 000 and 311 574 per 100 000, respectively). The average test positivity ratio for the Region is 6.6% (range: 1–33%) with the highest test positivity ratio recorded in the Syrian Arab Republic (33%) followed by Tunisia (26%) and Afghanistan (21%). The lowest test positivity ratio was recorded in the United Arab Emirates (1%) followed by Saudi Arabia (2%) and Yemen (3%).

9. The most affected age group in the Region is 20–54 years old, accounting for 72% of total cases. The proportion of males affected by the pandemic is higher than that of females, with a sex ratio of 1.6 males to every female. Of all deaths, 78% have occurred in patients aged 50–84 years. Patients with one or two comorbidities have a higher risk of dying from COVID-19 than those with no comorbidity.

10. New SARS-CoV-2 variants of concern (VOCs) continue to circulate in many countries across the Region. As of 31 July 2021, 20 countries had officially reported the detection of the Alpha VOC, 16 the Beta VOC, 14 the Delta VOC and four the Gamma VOC. Although the Alpha variant is currently the most commonly circulating variant in the Region, the Delta variant is spreading faster and is expected to become the most dominant variant in the coming weeks and months.

# WHO response

### Leadership, partnership and coordination

11. The regional Incident Management Support Team (IMST) was activated by the Regional Director on 22 January 2020 to coordinate and reinforce readiness and response efforts during the COVID-19 pandemic. The IMST provides a strong leadership and coordination platform for pandemic response activities through regular meetings, joint planning, resource mobilization, technical support missions and engagement with Member States, partners and media organizations. The IMST has 12 technical pillars with over 250 members drawn from the WHO Regional Office for the Eastern Mediterranean, WHO country offices and partners in Member States, United Nations agencies and other agencies in the international community. The IMST organized over 247 meetings attended by the Regional Director and other senior management, over 30 weekly and biweekly meetings with regional partners, and over 120 country support meetings.

12. Despite facing many challenges over the past 18 months, IMST leaders and members demonstrated a strong commitment, team spirit and passion to coordinate the pandemic response and support Member States and partners. Over 100 emergency surge support staff were deployed from the Regional Office and partner agencies to support and scale up local response efforts. The IMST maintains a regional network of 35 partners that contribute to the pandemic response at regional and country levels, including United Nations agencies, nongovernmental organizations, donors and academia. Strong collaboration has been achieved through the establishment of country health clusters and other coordination mechanisms at regional and national levels.

13. Under the leadership of the IMST, a regional strategic preparedness and response plan has been developed and regularly updated, while support was also provided to Member States in updating their respective national pandemic preparedness and response plans. The IMST continues to provide technical support in strengthening the capacity of national incident management systems to better lead and coordinate the national response. The Director-General's Special Envoy on COVID-19 for the Eastern Mediterranean

Region and other regional leaders continue to support the Regional Director's efforts to engage political and community leaders in supporting the pandemic response. As part of this, the Regional Director has continued to engage with the Islamic Advisory Group and other faith-based organizations to work with governments and contribute to the implementation of effective public health responses.

14. The Regional Director also closely engaged with ministers of health, resident coordinators/humanitarian coordinators and the regional directors of United Nations agencies on a regular basis to update them on the progress of the pandemic response and to seek their advice on ways to overcome challenges. The Regional Director organized numerous calls with health ministers to better understand their concerns and to advocate for global and regional solidarity and cooperation. The Regional Director also established a Ministerial Group on COVID-19 in the Region consisting of seven countries (Egypt, the Islamic Republic of Iran, Lebanon, Morocco, Oman, Saudi Arabia and Somalia) with the aim of identifying ways to accelerate and scale up the response to the pandemic. As requested in resolution EM/RC67/R.3, the report of the Ministerial Group was presented at a meeting held on 10 December 2020 and then disseminated to all ministries of health in the Region. The report summarized the key discussions of the Ministerial Group and provided recommendations and lessons learned to guide regional and national strategic plans for 2021.

15. Between October 2020 and July 2021, 73 technical country support missions were conducted in 18 countries across the Region. Among these, eight initial support missions and five review and assessment missions were conducted to strengthen WHO technical support to countries on the COVID-19 response. These modified and enriched Intra-Action Review (IAR) missions supported ministries of health in conducting a qualitative review of their respective COVID-19 response activities, documenting strengths on which to build, identifying areas for improvement, sharing best practices and lessons learnt and providing recommendations to address gaps. The Regional Office will continue to advocate for and promote the reviewing of national COVID-19 responses through the WHO IAR tool and to provide the necessary support to countries. As of 31 July 2021, 11 countries<sup>2</sup> had been supported in conducting their own internal IARs. Thirteen related support missions prioritized certain pillars of the response based on country needs, such as maintaining essential health services (EHS) or rolling out an effective vaccination campaign. Additional countries have also requested WHO support in carrying out IARs and these are planned to take place in 2021. The findings and recommendations of these missions were summarized in mission briefing reports and shared with ministries of health for follow-up on their implementation. The IAR missions allow governments and their partners to take stock of what worked well, identify what needs to be improved and prioritize recommendations arising from the mission. The findings and recommendations from these missions were incorporated into the national and regional Strategic Preparedness and Response Plans (SPRPs) for COVID-19 in 2021.

16. The regional SPRP was updated in early 2021 to set the priorities for reinforcing collective readiness and response to the COVID-19 pandemic in the Region. The goal set in the SPRP for 2021 is "to continue supporting countries in the Region to leverage and sustain an effective response to suppress transmission, reduce exposure and minimize the impact of the COVID-19 pandemic, while exploring options to build resilient health systems for improved preparedness and response". A monitoring and evaluation (M&E) framework is integrated into the SPRP for 2021 to track the progress made on the priorities set and to identify response gaps at regional and country levels. The regional SPRP and its M&E framework are aligned with the overall objectives of the global WHO COVID-19 SPRP and with *Vision 2023*.

17. The achievements of the IMST and its nine technical pillars in regional capacity building, coordination and guidance have made the Regional Office a central player and global asset in responding to the COVID-19 pandemic. In 2020, US\$ 483 million were mobilized for the COVID-19 response in the Region, helping the Regional Office to secure the highest level of funding among all six WHO regions and to achieve the highest utilization rate of funds received.

<sup>&</sup>lt;sup>2</sup> Afghanistan, Bahrain, Egypt, Jordan, the Islamic Republic of Iran, Iraq, Kuwait, Lebanon, Pakistan, the Syrian Arab Republic and Tunisia.

### Communications (internal and external)

18. Even before the first case of COVID-19 was reported in the Region, the IMST worked with communications counterparts at WHO headquarters and country offices to strategically plan and provide guidance on communicating the facts about the new disease and WHO's position. A regional communications strategy for COVID-19 was developed and harmonized through regular coordination calls with WHO headquarters, other regional offices and country offices in the Region to ensure the regular development, timeliness, accuracy and relevance of all content before dissemination.

19. WHO's regional achievements and its position on key issues were communicated to the media, partners and the public through more than 45 statements from the Regional Director and through Regional Office press releases, as well as multiple feature stories and web updates on the evolving situation in the Region. In addition, more than 344 messages from the Regional Director on WHO guidance and on relevant and timely topics were developed and shared with ministers of health. To monitor the reach of such messaging, more than 70 media review reports were compiled to analyse the impact of Regional Office external communications, including regional press briefings on the arrival and deployment of COVAX vaccines in the Region.

20. To better engage and update the media, biweekly press conferences were hosted by the Regional Office, initially in person and then virtually due to the COVID-19 restrictions. In late 2020, the scope of the press briefings was extended to include ministers of health, the WHO Director-General, other WHO regional directors, United Nations agencies and resident coordinators, and WHO country representatives (WRs). By the end of July 2021, 50 virtual media briefings had been held to cover timely and important public health issues, with 200 journalists attending physical briefings in early 2020, and an average of 40 journalists submitting questions to the subsequent virtual briefings. The number of people viewing the press briefings on social media reached up to 70 000 per event. With the assistance of a United Kingdom-based company, a media spokesperson training programme was conducted for IMST technical experts, senior management, and WRs to ensure that they were able to handle difficult questions and establish WHO's position effectively. More than 180 interviews were facilitated between the media and regional spokespersons.

21. Social media posts, cards, infographics, videos and other content were developed for the regional social media platforms, with more than 80 videos produced featuring technical experts breaking down technical topics into easy-to-understand information for the public. A regional partnership with Facebook was launched in early 2020 to develop integrated social media campaigns on key issues related to COVID-19, such as preventive measures, vaccines, Ramadan and Eid. From January 2020 to July 2021, the partnership with Facebook resulted in WHO-sponsored posts reaching a total of 147 million people, with almost 20 million people directly engaging with the content through comments, shares and likes.

22. Internal communications, including regularly updated talking points for spokespersons and briefing notes on evolving subjects related to COVID-19 such as vaccines and new VOCs, were shared with senior management, the IMST, WRs and communications officers at the country level. Vaccine hesitancy and rumours concerning vaccine safety also provided challenges that were addressed through the development of a vaccine-specific communications plan in coordination with the regional vaccine working group. A communications plan was developed to guide crisis communications in Libya, Palestine, the Syrian Arab Republic and Yemen.

23. Throughout the pandemic, media criticism of WHO created challenges in its efforts to communicate facts and relevant information. The rapid spread of misinformation created a need to ensure that facts were just as quickly and widely communicated. At the country level, public mistrust of the information provided by the government and lack of adherence to preventive measures led to challenges in communicating the need for the public to play its role in reducing virus transmission.

### Surveillance and information management

24. WHO continued to provide technical support to Member States to strengthen epidemiological surveillance and information management related to COVID-19 by working with countries to detect new cases, monitoring and forecasting the evolution of the pandemic, understanding the disease and its determinants, and communicating the results of their analyses. WHO developed tools to collect, manage and

analyze COVID-19 data from countries in the Region and to communicate the results to Member States and other stakeholders. WHO also provided support to countries through online webinars, technical missions and emergency deployments to strengthen national information management capacities to guide response interventions. To improve national early case detection during public health events, the Epidemic Intelligence from Open Sources (EIOS) media scanning tool developed by WHO was deployed in Afghanistan, Lebanon, Sudan, the Syrian Arab Republic and Tunisia, and more than 8000 COVID-19-related signals were detected. In addition, WHO started using the Sprinklr and Epitweetr tools to capture information from social media.

25. Several electronic data management and visualization platforms were developed or improved to report on the COVID-19 situation in countries of the Region (the regional COVID-19 dashboard, Rt dashboard, public health and social measures (PHSMs) dashboard, and country-specific platforms) or to support regional activities (such as vaccination and M&E activities). In addition, the online Signal Module developed by the Regional Office was used to manage emergency signals, complemented by a well-structured and secure regional data system based on the District Health Information Software (version 2) to manage regional data and (through data analysis tools) to automatically produce graphs, tables, maps and communication materials. Existing indicators to monitor the weekly evolution of the pandemic were improved and new ones were developed. The COVID-19 M&E framework for monitoring response activities at regional and country levels was updated in the SPRP 2021 and a user-friendly data collection tool and training toolkit were developed and rolled out. The Regional Office also conducted online training events for M&E of the COVID-19 response in eight countries and provided support to Pakistan in developing its national M&E framework.

26. Daily, weekly and monthly COVID-19-related communications products on the epidemiological situation were designed and widely disseminated. Such products included over 700 daily updates, 25 weekly and six monthly WhatsApp posts, and 15 biweekly situation reports. Thematic maps visualizing various COVID-19 data analysis results were produced and disseminated through regional networks. Examples of such visualizations included the evolution of case numbers and deaths at national and subnational levels, and the geographical distribution of SARS-CoV-2 variants.

27. Given the importance of contact tracing in interrupting human-to-human virus transmission and thus limiting the spread of infection, WHO supported the implementation of its Go.Data digital contact tracing tool through its deployment in two countries and through the training of trainers in Egypt, Libya and the Syrian Arab Republic to support its rollout.

28. The EMFLU regional platform was updated to collect and manage daily COVID-19 case report forms and weekly aggregate forms. As of 30 July 2021, the EMFLU database contained 2.76 million COVID-19 case report forms from 16 countries in the Region. The Regional Office surveillance team maintained regular communication with national IHR (2005) focal points in order to share relevant updates and collect new information.

29. WHO improved its modelling capacities and ran 24 rounds of modelling analyses across nine countries and territories<sup>3</sup> to forecast the numbers of cases, deaths and hospitalizations, and to guide decisions on the implementation of PHSMs. Epidemiologists and other public health officers were deployed in Afghanistan, Libya, Morocco, Pakistan and Sudan to support surveillance and information management activities related to the COVID-19 pandemic. Assessments of event-based surveillance (EBS) were conducted in Afghanistan, Libya and Sudan followed by the development of national EBS guidelines in Afghanistan. The regional contact tracing strategy was also strengthened and used to support contact tracing activities in Afghanistan, Jordan, Lebanon and Tunisia. WHO continued to provide support to countries experiencing complex emergencies in order to enhance and expand active surveillance to detect, verify and report COVID-19 cases through the existing Early Warning, Alert and Response Network (EWARN).

30. Most countries of the Region lack functional software to manage public health emergency information and resources which are the essence of a Public Health Emergency Operation Centre (PHEOC). The Regional Office is therefore developing the Public Health Emergency Response Management (ePHERM) software, which includes modules on signal management, One Health surveillance, incident information and response,

<sup>&</sup>lt;sup>3</sup> Afghanistan, Egypt, Jordan, Lebanon, Pakistan, Palestine, the Syrian Arab Republic, Tunisia and Yemen.

workforce, partnership, finance and logistics. Currently being piloted in Jordan and Sudan, the software will also be implemented in Somalia and Tunisia. In addition, PHEOC training was provided to Libya and Sudan, and PHEOC implementation guidance provided to Djibouti, Lebanon, Libya, Palestine, Somalia, Tunisia and Yemen. Since September 2020, more than 30 training webinars have been provided to PHEOC staff and public health emergency actors in the Region.

31. The Regional Office provided support to countries in establishing and strengthening their emergency medical teams (EMTs) through a series of communications, awareness-raising and capacity-building efforts. The EMT initiative supported a nationally led response in Lebanon under the leadership of the PHEOC. EMT workshops on case management and IPC were held in Lebanon, Palestine and Yemen. Technical support in the international classification of their national EMTs is currently being provided to Jordan, Kuwait, Morocco, Qatar and Saudi Arabia.

#### Influenza surveillance

32. During the COVID-19 pandemic, influenza surveillance and response infrastructure and capacities have played a crucial role in COVID-19 activities. In particular, the WHO-coordinated Global Influenza Surveillance and Response System (GISRS) and the Pandemic Influenza Preparedness (PIP) Framework have provided considerable support, including through the PIP Partnership Contribution programme in priority countries. Influenza surveillance conducted at sentinel sites across countries and national influenza centre (NIC) laboratories has been instrumental in the detection of and response to COVID-19 cases. Nineteen countries used their existing severe acute respiratory infections (SARI) and influenza-like illness (ILI) sentinel sites to detect suspected COVID-19 cases, collect specimens and forward these to reference laboratories. All 22 countries and territories of the Region used their existing NIC or other influenza laboratories to test specimens from suspected cases and then reported results to the existing influenza reporting platforms (FluNet and FluId) through EMFLU, while also repurposing influenza staff to support the pandemic response. Fourteen countries used existing genomic surveillance capacities and eight countries with no national genomic capacity accessed external sequencing facilities. A total of 17 countries received multiplex test kits for influenza and SARS-CoV-2 along with the required enzymes, RNA extraction kits and specimen collection kits. Under the PIP Partnership Contribution programme, nine countries directly received financial and technical support to strengthen laboratory and epidemiological surveillance, rapid response capacities, pandemic planning and risk communications. The Regional Office provided sustained technical support and data management backup to countries to ensure the continued monitoring of influenza (including avian influenza) and other respiratory pathogens with epidemic and/or pandemic potential (such as MERS-CoV) and to ensure coordination with the global FluNet and regional EMFLU reporting platforms.

33. With the increasing focus placed on COVID-19 surveillance and response activities, routine influenza surveillance has been seriously disrupted, especially during the early phase of the pandemic. As a result, overall influenza activities declined and sample sharing for seasonal influenza vaccine development significantly decreased. However, between late 2020 and early 2021, influenza activities gradually increased as countries gave this more attention. The persistent epidemic and pandemic threat posed by influenza viruses requires sustained surveillance and investments in preparedness and response. Building upon the experiences of leveraging the GISRS and other influenza capacities and support during the COVID-19 pandemic response, and recognizing the inevitability of future pandemics caused by respiratory viruses, WHO is proposing a strategic and programmatic approach to addressing respiratory viruses with epidemic and pandemic potential based on a broader GISRS+ platform. Aligned with the WHO Global Influenza Strategy 2019–2030, this initiative aims to further strengthen and support the evolution of GISRS towards an integrated system of laboratory and epidemiological surveillance to inform and guide public health decision-making for respiratory viruses with epidemic and/or pandemic potential. The Regional Office and WHO headquarters have now initiated the planning and implementation of GISRS+ activities in four pilot countries in the Region (the Islamic Republic of Iran, Lebanon, Morocco and Oman). Similarly, under the PIP Framework, the number of directly supported countries will be increased to 10 in 2021-2022. The Regional Office also intends to leverage its regional-level partnership with the Centers for Disease Control and Prevention to complement surveillance, preparedness and response systems strengthening in countries of the Region.

## Laboratory diagnostics

34. WHO continued to support the countries and territories of the Region in strengthening SARS-CoV-2 testing capacities at national and subnational levels, to improve or maintain testing quality, and to provide guidance on detection and diagnostic testing in collaboration with WHO headquarters and partners. As of January 2020, only four countries had established in-country SARS-CoV-2 testing capacity. By 30 July 2021, over 450 national and subnational public health laboratories with molecular diagnostic capacity for the detection of SARS-CoV-2 had been established and sustained across all 22 countries and territories of the Region. All of the countries and territories had successfully decentralized molecular testing to subnational levels, while two regional reference laboratories (in Oman and the United Arab Emirates) had been engaged to provide testing support in the Region.

35. Regional SARS-CoV-2 genetic sequencing capacity has now been scaled up to 14 countries and territories (Bahrain, Egypt, the Islamic Republic of Iran, Jordan, Kuwait, Lebanon, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Tunisia and the United Arab Emirates), while the eight countries without genome sequencing capacity are receiving support from reference laboratories both within and outside the Region. WHO advocated for the expansion of testing capacity through the involvement of available private laboratories, and many countries have leveraged these to complement their public laboratory diagnostic capacities. Despite numerous challenges in shipping positive specimens to international reference laboratories for genome sequencing, WHO had by 30 July 2021 assisted five countries in the Region in successfully sending out over 2000 such specimens. Furthermore, WHO is currently providing technical and financial support to the eight countries without genome sequencing capacity to establish and strengthen their capacity to detect emerging variants. Such support includes the procurement of essential equipment and supplies, and conducting training events in collaboration with key partners.

36. The prompt detection of new variants would help to inform public health measures and clinical care strategies, and would allow for monitoring of the impact of such variants on currently used diagnostics, therapeutics and vaccines. WHO is therefore working to ensure that priority countries have access to quality testing and sequencing kits, as well as other essential equipment and consumables, through the United Nations COVID-19 Supply Chain System.

37. WHO implemented the External Quality Assessment Project (EQAP) for SARS-CoV-2 detection by real-time reverse transcriptase PCR (RT-PCR) to allow for evaluation by a WHO Collaborating Centre of the quality and diagnostic performance of laboratory testing. National and subnational laboratories performing SARS-CoV-2 molecular detection across all 22 countries and territories in the Region were encouraged to participate in the EQAP evaluation. In 2020, 27 national and 249 subnational laboratories participated in the project, with EQAP test panels also now being shipped to countries and territories that could not participate, including Iraq, Palestine and the Syrian Arab Republic. Overall performance by participating laboratories across the Region was acceptable, with 25 out of 27 national reference laboratories (93%) and 214 out of 249 subnational laboratories (86%) achieving 100% correct results for all EQAP test panels. WHO has worked with ministries of health and partners to undertake corrective actions to address the identified capacity gaps by re-evaluating national protocols and internal quality control processes according to laboratory guidelines for SARS-CoV-2 molecular testing. WHO will continue to monitor and strengthen regional laboratory capacities for SARS-CoV-2 molecular testing.

38. The Region continues to face many challenges in relation to laboratory testing, especially in countries experiencing complex emergencies and which have very limited testing capacity due to a lack of reagents and supplies, as well as limited availability of the trained staff and capacities needed to scale up.

# Clinical management

39. With the support of the Regional Office, countries in the Region have taken steps to ensure the effective clinical management of COVID-19 cases (including moderate, severe and critically ill patients) and to improve clinical outcomes through capacity-building and the provision of essential medical supplies. WHO has conducted clinical management training events and established a knowledge-sharing network in the Region to build the required capacities among health care workers. Activities included online courses, direct

training involving hands-on practice, webinars, guidance documents and on-demand country-tailored training packages. An emphasis was placed on strengthening intensive care unit (ICU) and critical care capacities in priority countries, including Iraq, Jordan, Palestine, Somalia, Sudan and Yemen. WHO has also developed an ICU/critical care management training package adapted to countries experiencing complex emergencies, and has conducted technical missions to these countries to facilitate the implementation of the training package. These missions also aimed to assess and monitor clinical management practices, and to support countries in developing an ICU standard operating procedure for each local context and ensuring the timely procurement of required essential supplies, including ICU equipment and training tools.

40. WHO provided support in identifying and contracting national health care professionals capable of leading cascade training for ICU/critical care, thus ensuring skills implementation in countries in the long term. To date, more than 20 000 health care workers have been trained in the case management of COVID-19 patients across the Region. WHO extended technical support to countries in updating their clinical management protocols for COVID-19 and aligning these with the evidence-based global clinical management guidelines. Standardized protocols for the screening, triage and referral of patients with respiratory symptoms were developed and implemented in priority countries.

41. In light of global and national shortages, WHO has been working with its partners to scale up the availability of medical oxygen, and biomedical equipment and supplies in priority countries. In collaboration with the United Nations COVID-19 Supply Chain System, WHO provided support to 16 countries in the procurement of medical oxygen, and biomedical equipment and supplies to fill gaps in local health care settings. Given a recent increase in severely and critically ill patients requiring oxygen, WHO conducted a regional training event on the use of oxygen and biomedical equipment, and extended technical support for related resource-mobilization efforts.

42. WHO also provided support to countries undertaking priority clinical research related to COVID-19 patient management. Ten countries in the Region joined the global WHO Solidarity trial for therapeutics and other clinical research, while several countries contributed to the WHO clinical data platform by sharing inpatient data. Currently, the WHO regional departments for Science, Information and Dissemination and Universal Health Coverage/Heath Systems are working jointly on a number of research projects on COVID-19 clinical management in the Region. Regional and international coordination was also strengthened by expanding the network of global clinicians for improved regional collaboration on COVID-19 clinical management, and through the development of a regional network for ICU/critical care.

43. Numerous challenges in COVID-19 clinical management have been identified, including poor sharing of national clinical data, shortages of ICU beds and limited availability of doctors and nurses to manage ICU-admitted critically ill patients. Analyzing clinical data helps to identify local clinical knowledge and practical gaps, and to ensure provision of the most efficient and tailored support to individual countries. Other challenges include: (a) increased levels of mortality in countries experiencing complex emergencies; (b) government payment issues for clinical staff working in COVID-19 hospitals, leading to workforce shortages; (c) chronic shortages of medicines, oxygen, and biomedical equipment and supplies; (d) a reluctance to follow the available evidence-based global treatment protocol; (e) the misuse of medicines such as antibiotics; (f) poor health-care-seeking behaviours due, for example, to COVID-19 stigma, distrust of government facilities and financial concerns; (g) low testing rates resulting in the under-reporting of cases and deaths at home; and (h) referral issues such as the lack of a proper ambulance system, no protocol for referral and no higher-level health facilities.

### Infection prevention and control

44. To provide technical guidance and support to countries in enhancing their infection prevention and control (IPC) practices, fourteen IPC guidance documents from WHO headquarters were disseminated to all countries and territories in the Region. Most of these documents were translated into Arabic to facilitate their circulation and uptake by countries, and important updates were highlighted. WHO also provided support to eight countries in reviewing and updating their national IPC guidance documents in collaboration with the WHO Collaborating Centre in Saudi Arabia. A total of 13 country missions were conducted in eight countries (Afghanistan, Bahrain, Iraq, Lebanon, Morocco, Pakistan, the Syrian Arab Republic and Tunisia) to assess

and advise on national and facility-level IPC quality improvements. Four comprehensive IPC training packages were also developed for various groups, including hospital IPC teams, primary health care physicians and front-line health care workers. Training was conducted in the form of regional IPC webinars and workshops, and country-specific training courses, with 4200 health care staff trained across the Region. A special IPC training programme for 2518 health care workers at UNRWA contributed to a reduction in the number of infected staff. In addition, WhatsApp groups involving more than 500 participants were set up in Afghanistan, Iraq, Pakistan, Sudan and Tunisia to provide continual technical support to front-line health care workers and national IPC teams.

45. WHO also supported several countries in developing and endorsing national guidance on the detection and management of COVID-19 infections among health care workers, including guidance on screening, triage, testing and management. WHO is currently providing support to Afghanistan, Iraq and Jordan in establishing continuous national surveillance systems for COVID-19 infections among health care workers. Additionally, four countries (Egypt, Jordan, Saudi Arabia and the Syrian Arab Republic) are conducting case-control studies on COVID-19 infections among health care workers to identify IPC-related risk factors.

46. WHO helped the countries and territories of the Region celebrate World Hand Hygiene Day on 5 May 2021. Hand hygiene is a key and effective element of IPC in keeping patients, health care workers and the general public safe. Several regional communications materials were shared with countries in this regard, including a video message from the Regional Director, Region-specific promotional materials and social media cards. Specific country success stories were also documented and shared, including the establishment of national-level IPC structures in Afghanistan and Pakistan, the restructuring of national and facility-level IPC programmes in Iraq and the development of national IPC guidelines in Pakistan and Tunisia, with WHO currently providing support to Afghanistan, Iraq and Palestine in the development of their own national IPC guidelines.

### Risk communication and community engagement

47. Recent risk communication and community engagement (RCCE) efforts have been geared towards operationalizing the four strategic objectives set out in the WHO *Regional guiding framework for risk communication and community engagement for the COVID-19 response*, namely: (1) localize the response to facilitate community-led approaches and improve the quality and consistency of RCCE approaches; (2) strengthen evidence and innovation; (3) enhance local capacity; and (4) improve coordination at all levels. The regional guiding framework was jointly developed by WHO, IFRC and UNICEF and was launched in December 2020 to guide national authorities and their partners in the Region in developing effective RCCE approaches to driving down COVID-19 cases while simultaneously learning to live with COVID-19 in the longer term.

48. To facilitate the implementation of the regional guiding framework, the Regional Office provided support for several recent initiatives. These included the launch of a regional knowledge, attitude and practices survey jointly conducted with UNICEF Middle East and North Africa to collect behavioural insights in relation to COVID-19 and COVID-19 vaccine acceptance. A national behavioural data package was also developed jointly with UNICEF and the World Bank to help countries develop their national data strategies. This data package includes a survey instrument, reference technical document and training slides. A series of interactive RCCE training packages for community and health care workers was also developed and implemented covering an introduction to RCCE, vaccine hesitancy, mental health and psychosocial support, and contact tracing. The Regional Office also supported two courses organized by New York University on behavioural communication strategies for global epidemics and vaccine demand generation, through course development, facilitation of sessions, mentorship and review of final student projects.

49. WHO also conducted a landscape analysis of community engagement best practices and developed five thematic case studies (on youth engagement, community networks, exclusion and representation, coordination and collaboration, and COVID-19 vaccination) covering Afghanistan, Iraq, Jordan, Lebanon, Morocco, Pakistan and Yemen. In parallel, a process of mapping and profiling civil society organizations (CSOs) active in the emergency response in the Region was undertaken as part of strengthening the community engagement aspect of the response. The strengthening of key CSO capacities is ongoing in Egypt, Iraq, Lebanon, Libya, Morocco, Pakistan, Palestine, the Syrian Arab Republic and Yemen to help build resilient communities through the meaningful engagement of CSOs.

50. Existing mechanisms and platforms for social listening and community feedback were mapped across the countries of the Region. A roadmap and action plan for regional and national levels to strengthen social listening and community feedback in the Region were developed based on the findings, and these were discussed during an expert consultation held in July 2021. A series of workshops was also conducted to build national capacities for social listening and community feedback, attended by ministries of health, international organizations, CSOs and other partners.

51. Technical support was extended to all countries and territories of the Region in communicating information on COVID-19 vaccines, generating vaccine demand and addressing vaccine hesitancy. Such support was provided through: (a) regular country and interagency support and coordination activities; (b) the development and adaptation of awareness-raising materials; (c) the development of high-level messaging for vaccine advocacy among ministers of health and public health leaders; and (d) a series of nine webinars conducted jointly with IFRC and UNICEF which involved a wide range of participants from the Region's ministries of health, academia, international organizations and civil society.

52. Joint RCCE country discussions have taken place between WHO and UNICEF country offices in order to assess the RCCE support needed, align planning and interventions, and support vaccine acceptance and rollout. A series of rapid assessments of the RCCE support provided to national deployment and vaccination plans (NDVPs) has been conducted to guide discussions and monitor progress.

### Social and travel-related measures

53. Countries in the Region enacted a diverse range of travel-related measures intended to curb SARS-CoV-2 transmission. All countries require negative PCR certificates for incoming passengers, with testing windows ranging from 48 to 120 hours before departure. Entry restrictions have also evolved as countries began to implement restrictions in response to emerging VOCs. As of 31 July 2021, countries in the Region were implementing such entry restrictions for travel from India (12 countries), Brazil (five countries), South Africa (six countries), Viet Nam (five countries) and the United Kingdom (one country).

54. Country support missions, meetings and direct bilateral engagements on points of entry operations revealed pressing capacity needs and deficiencies in the implementation of IHR (2005) Annex 1B, particularly regarding the availability of emergency contingency plans, operational guidelines/standard operating procedures and the multisectoral coordination needed to enact the required measures. Human resource gaps (both in terms of numbers and training) and the need for investment in electronic systems and subsequent generation of real-time data were also highlighted.

55. To support points of entry during the COVID-19 pandemic, the Regional Office developed a training package to address health staff and non-health staff capacity, and provided tools/techniques for assessments and technical improvements, including the mapping of human resources and restructuring of operational environments. A regional strategy and professional roster were prepared as part of tailored support to countries.

56. Cross-border collaboration was also identified as a pressing need. The Regional Office has therefore supported bi-regional efforts with the WHO Regional Office for Europe and the WHO Regional Office for Africa to promote dialogue among countries, galvanizing the lessons learned from the COVID-19 pandemic at points of entry. Countries have taken different approaches to mass gatherings and support was tailored based on country needs. Many countries in the Region performed risk assessments to inform decisions on gatherings and the use of PHSMs, and WHO was frequently consulted bilaterally in this regard.

57. Region-wide webinars and training were conducted to meet these unique needs. The WHO Collaborating Center for Mass Gathering Medicine in Saudi Arabia provided useful technical support, including in Hajj preparations. Other WHO technical support included training on using the risk assessment tool at the national level and improving the capacity to replicate this at different administrative levels. Championing a risk-based approach promoted rational and metric-informed decision-making and allowed WHO to provide technical and strategic support to national governments on the feasibility and safety of hosting events. The Regional Office also took the lead in 2020 in developing and disseminating technical advice on Ramadan, Eid al Fitr

and Eid Qurban, and then updated the advice in 2021 in consultation with the Islamic Advisory Group, based in Cairo, Egypt.

58. The Regional Office continues to strengthen collaboration with national, regional and global One Health partners, and multiple initiatives in this area have been undertaken, including: (a) collaboration with Chatham House and the Royal Institute of International Affairs on the operationalization of One Health in the Southern European and Mediterranean Region; (b) sharing regional experience of the implementation of the One Health approach at the One Health Congress 2020; and (c) the joint development with WHO headquarters, the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (OIE) of a webinar-based course that provides insight into some of WHO's work on the animal-human-environment interface.

59. At the regional level, WHO initiated the development of an integrated surveillance module for zoonotic diseases to facilitate systematic notification, information-sharing, communication and response between the public health and animal health sectors. Guidance and technical support were provided to countries and territories of the Region to help them meet their One Health-related obligations under IHR (2005). In this context, countries were encouraged to establish their own One Health hub, enhance multisectoral coordination, and draft and review their national plans. Building national capacities to address and mitigate health risks/threats at the animal-human-environment interface was achieved through training workshops for Egypt and Jordan. In collaboration with FAO, technical support is also being provided to Oman to conduct a study to assess the risk of transmission of SARS-CoV-2 from human COVID-19 patients to farm and companion animals.

60. Countries in the Region implemented a number of PHSMs to control the spread of the pandemic, as well as specific measures implemented during Ramadan and Eid. The Regional Office has been monitoring and documenting the implementation of these measures daily by scanning official sources such as ministerial websites, national social media accounts (Facebook and Twitter) and Google. A scanning platform was developed to track the implementation of PHSMs by analyzing data on PHSMs, mobility (data extracted from the Google COVID-19 mobility database) and epidemiology. The platform is being used to assess the effectiveness of the PHSMs implemented with regard to incidence and/or mortality rates to understand how PHSMs have influenced trends in COVID-19 cases and deaths.

### Essential health services and systems

61. The COVID-19 pandemic has significantly impacted access to EHS even in countries with robust health systems. As the pandemic progressed, people avoided visiting health service facilities and mobility was limited by lockdowns. In addition, many health care workers were repurposed and mobilized to the COVID-19 response effort instead of their usual role in providing EHS. Such factors resulted in poorly managed health care facilities and discontinuity of EHS provision.

62. Furthermore, the supply chain for various essential medicines and vaccines was disrupted, resulting in significant shortages, particularly affecting the management of chronic diseases. In May and June 2020, a rapid assessment (Pulse survey) was carried out in 13 countries of the Region. The survey revealed that the Region was experiencing one of the worst disruptions of EHS among all WHO regions, with more than 70% of health services disrupted by the pandemic. In general, numerous gaps in health system design and implementation were identified, including in governance, financing, and ensuring access to quality medicines and medical products. Two other surveys conducted to assess the status of noncommunicable disease (NCD) services and mental health and psychosocial services (MHPSS) each revealed widespread disruption to such services in the Region.

63. At its 67th session in October 2020, the WHO Regional Committee for the Eastern Mediterranean recommended that countries strengthen the capacity of health systems to improve responses during resurgences of COVID-19 cases and maintain effective delivery of EHS during and after the pandemic. Several weeks prior to this, WHO had established a dedicated pillar within the IMST on maintaining EHS and health systems in order to provide regular and tailored assistance to countries in achieving the Regional Committee commitments. Numerous guidelines and protocols have been developed to help countries ensure

EHS continuity, including operational guidance on maintaining EHS, along with capacity-building materials, community-based guidance and assessment tools.

64. Between January and March 2021, WHO launched the second Pulse survey on EHS continuity. The survey was based on 63 main tracer EHS indicators, including NCD services and MHPSS, in 21 countries of the Region (95% response rate) and assessed disruption to services in the 3 months preceding the date of survey administration. On average, less than 30% of examined services were disrupted in countries of the Eastern Mediterranean Region - the lowest average figure among all WHO regions globally. Rehabilitative, palliative and long-term care services (reported by 45% of countries) and primary care services (43% of countries) were among the more predominantly disrupted services. Disruptions were also reported across other major service areas, with services for neglected tropical diseases (46% of countries) and reproductive, maternal, newborn, child and adolescent health and nutrition (32% of countries) also experiencing high levels of disruption. In the area of NCDs, countries reported disruptions to services for hypertension management (26% of countries), urgent dental care (31% of countries) and cancer screening (44% of countries). For MHPSS, school mental health programmes were among the most disrupted services (56% of countries), with psychotherapy, mental health services for older adults and suicide-prevention programmes significantly disrupted in around 33% of countries. For communicable diseases, almost one quarter of countries reported disruptions to immunization services. However, none of the countries reported disruptions to HIV antiretroviral therapy, or to hepatitis B and C diagnosis and treatment services. Such examples indicate that EHS continuity is achievable and prevents excess mortality and morbidity, and that countries can, using innovative solutions, stay on course to achieve universal health coverage even during the COVID-19 pandemic.

65. Support for hospital and pre-hospital services was provided to countries in the form of technical materials and the interim pre-hospital emergency medical services readiness checklist for COVID-19. In addition, a *Hospital Emergency Preparedness and Response for Outbreak Emergencies* training package for hospital managers and a regional pre-hospital services framework were developed.

### Research, innovation and knowledge management

66. Research, innovation and knowledge management remain major priorities for the Regional Office in responding to the pandemic, and WHO has been identifying knowledge and research gaps in relation to the COVID-19 pandemic, providing advice to countries, and coordinating and assessing the impact of interventions. WHO also continues to support countries and territories in the Region in implementing the recommendations of the Global research and innovation forum on responding to the novel coronavirus held in February 2020.

67. WHO continues to advocate for the importance of conducting serological and epidemiological investigations ("Unity studies") that contribute to the global understanding of the characteristics of SARS-CoV-2, and that support national public health responses and decision-making processes. One expected outcome of these studies is an estimation of the extent of infection in a country or local community as determined by seropositivity in the general population at a given time. As of July 2021, WHO had provided technical and financial support for the implementation of 15 sero-epidemiological studies across 10 countries in the Region. These included sero-epidemiological studies among the general population, health care workers, pregnant women and neonates.

68. WHO has also promoted research initiatives to address gaps in current knowledge regarding the COVID-19 pandemic. Following a call for submissions issued in 2020, 122 COVID-19-related research proposals were received and reviewed by the Regional Office. Of these, 17 proposals have been recommended and have received funding from eight countries and territories (Egypt, the Islamic Republic of Iran, Jordan, Pakistan, Palestine, Qatar, Sudan and the United Arab Emirates). All of the studies are now under way with their reports expected by the end of 2022. Challenges faced by countries include the time commitment needed for planning and implementation from national teams, logistical challenges and time constraints in receiving shipments of standardized immunoassays.

69. Twelve countries in the Region participated in the global solidarity trial to assess potential therapies for COVID-19. WHO teams facilitated the sharing of data through the global solidarity trial platform by numerous hospitals and clinicians in the Region managing COVID-19 patients.

70. Research articles, commentaries and editorials on COVID-19 have been published in every issue of the Eastern Mediterranean Health Journal since February 2020. More than 6300 publications on COVID-19 were made available on the internal Knowledge Management Portal. The IMST were also regularly updated on the latest key research emerging from the Region and globally, covering topics such as vaccines, therapeutics and public health interventions. In the area of innovation, a successful project on the production of medical oxygen through solar power was coordinated in Somalia in response to increasing levels of mortality. Preliminary observations indicated that such production extended the distribution of medical oxygen to areas with otherwise insufficient access to it, saving around 30 lives in the month following its implementation. In terms of capacity-building, regional webinars and intercountry meetings were held on topics such as ethics in research, national health information systems and evidence-based policy-making.

### COVID-19 vaccination

71. A massive research and development effort led to the rapid availability of safe and effective vaccines that became a key tool in the pandemic response. WHO, together with Gavi, the Coalition for Epidemic Preparedness Innovations, UNICEF and other key partners, established the COVAX facility with the aim of accelerating the development and manufacture of COVID-19 vaccines and guaranteeing fair and equitable access to them in all countries of the world. All 22 countries and territories in the Region participated in the COVAX facility: 11 high-income and high-middle-income countries joined as fully self-financing participants with 11 low-income and low-middle-income countries and territories participating under the Advance Marketing Commitment (AMC) scheme funded through official development assistance. The Regional Office supported countries by providing guidance and information at all steps including: (a) readiness assessments; (b) preparation of the NDVP; (c) national emergency use authorization; (d) preparation of import licences; and (e) indemnification and liability agreements. Guidance was then provided to countries and territories on prioritizing target groups for vaccination in accordance with the WHO Strategic Advisory Group of Experts (SAGE) recommendations, and on continuing routine and essential immunization. Recommendations on the use of different vaccine products under the WHO Emergency Use Listing were also disseminated along with information on vaccine safety and efficacy, and related technical resource materials.

72. The Regional Office continuously monitored progress in vaccine delivery and vaccination coverage in the Region using country reports and data available in the public domain. Most high-income and upper middle-income countries in the Region started vaccination between December 2020 and February 2021, using vaccines procured through bilateral agreement or donations. On 3 March 2021, Sudan received the first shipment of COVID-19 vaccine through the COVAX facility, followed by 11 more countries in the same month. As of 27 July 2021, countries of the Region had administered 127 million doses of COVID-19 vaccines (17 doses per 100 population; range = 0.72-165.15 doses per 100 population). Ensuring access to vaccines for people in fragile and vulnerable settings (such as refugees, migrants and people living across divided territories) remains a challenge in many countries. Of the vaccine doses received in the Region, 24.72 million doses were provided to 21 countries and territories by the COVAX facility, and more are expected in the coming months. WHO is now coordinating research studies with countries and partners to estimate vaccine effectiveness in the field in order to guide vaccination policies, particularly in the context of the emergence of variants.

73. COVID-19 vaccination has now started in all countries and territories of the Region after the COVAX facility ensured that low-income and lower middle-income countries had access to vaccines to cover priority groups. However, most countries in the Region are not receiving adequate vaccine supplies due to global shortages and inequitable distribution, with the vast majority of doses going to developed countries. Countries in the Region experiencing complex emergencies (Afghanistan, Libya, Somalia, Sudan, the Syrian Arab Republic and Yemen) received the fewest number of vaccines through either COVAX or bilateral agreements. As a result, vaccine coverage is low in these countries (less than 1%) compared to the middle-income and high-income countries of Bahrain, Egypt, Kuwait, Morocco, Oman, Saudi Arabia and the United Arab Emirates (coverage between 6% and 60%). Going forwards, the Regional Office will continue to support

countries in addressing the main challenges, including: (a) accessing more vaccines, particularly through COVAX and donations from wealthy countries; (b) building well-funded and sustainable vaccine delivery systems to equitably reach priority groups such as migrants, refugees and people living in fragile, vulnerable and conflict-affected settings; (c) improving vaccine uptake through coordinated actions on both supply and demand; and (d) advocating for the establishment of local vaccine production capacity in the Region. Accelerating vaccination efforts and increasing vaccination coverage through the provision of adequate supplies will be vital in controlling the pandemic.

## Operations support and logistics

74. The rapid delivery of life-saving medicines and medical supplies remains a critical aspect of WHO's overall health emergency programme. Recognizing the significant and far-reaching impact of COVID-19 on the global health commodities supply chain, WHO has supported countries in expediting the provision of essential health supplies, including personal protective equipment, biomedical equipment and diagnostics, across the Region and beyond. COVID-19 has disrupted global supply chains on an unprecedented scale, with significant reductions in air and sea freight capacities coupled with soaring transportation costs and chaos within the sea freight sector. Despite these immense challenges, WHO delivered more supplies, through more shipments, to more countries than during the previous 5 years combined, with the WHO/Dubai Logistics Hub at the centre of these efforts. The strengthening of the Dubai Logistics Hub enabled the Regional Office to support the provision of medical supplies to 118 countries across all six WHO regions. In 2020, WHO successfully added state-of-the-art cold chain facilities and established new capabilities for pre-positioning temperature-sensitive laboratory diagnostics kits and other reagents. Strengthened partnerships with the International Humanitarian City and the government of the United Arab Emirates resulted in in-kind donation charter flights and support valued at over US\$ 2 million in 2020 alone.

75. The Regional Office is now on track to exceed the outputs of 2020 as demand for pre-positioned health commodities and their rapid deployment has increased significantly during the pandemic. COVID-19 health supplies currently account for approximately 50% of the value of all goods dispatched from the Dubai Logistics Hub. The Dubai Logistics Hub also continues to support operations in the multiple large-scale humanitarian emergencies in the Region and has recently supported WHO responses to numerous acute health emergencies, including the Ebola outbreak in West Africa, and cholera outbreaks in southern Africa and South-East Asia.

76. Among the key challenges are the limited human resources engaged in supply chain and logistics operations at regional and country levels. Currently a team of eight staff manage the movement of 40–50 metric tons of supplies each week from the Dubai Logistics Hub. WHO has deployed logistics staff to support the delivery of medical supplies and equipment in Sudan and provided logistics planning assistance to the WHO country office. Responding to the increased need for such logistics support at country level will require additional regional logistics expertise and capacities to ensure the timely delivery of health supplies to people in need.

### Resource mobilization and programme management

77. Between 1 January 2020 and 30 July 2021, WHO mobilized US\$ 445 million (net of programme support costs) in support of the COVID-19 response, with 57% of this funding sourced at the country level. Afghanistan, the Islamic Republic of Iran and Yemen received the largest portion of funding, while four large donors – the World Bank (IDA), Germany, Kuwait and the EU (DEVCO) – provided 54% of all income received during the pandemic. Overall, 41 donors generously contributed towards mitigating the impact of COVID-19 in the Region, designating the majority of their funding (72%) to one or more of the SPRP pillars.

78. During the above period, WHO provided support to countries and country offices in the areas of budget, finance and operational planning, coordinating 26 budget centres and more than 100 awards related to COVID-19. WHO ensured that awards and funding allocations were established in a timely and efficient manner, supported the tracking of award implementation and closure, and supported and coordinated the development of the yearly operational budgets and their adequate implementation. As a result of this vital oversight and constant engagement, the Regional Office reported the highest implementation rate of the 2020 budget of all six WHO regions.