

The COVID-19 pandemic in the Eastern Mediterranean Region

Introduction

1. The COVID-19 pandemic poses specific challenges in the WHO Eastern Mediterranean Region – home to almost 700 million people in 22 socioeconomically and geopolitically diverse countries. Eleven of those countries are currently being directly or indirectly impacted by complex humanitarian emergencies, with more than 40% of all people in need of humanitarian assistance globally living in the Region. Countries facing humanitarian crises have fragile health systems with inadequate disease surveillance and preparedness and response capacities, increasing their vulnerability to the emergence and rapid transmission of a novel pathogen. The Region is also home to approximately one third of the world's internally displaced persons (IDPs), while over 43 million displaced people in the Region have limited access to basic services, including health, education, sanitation and drinking-water. In recent years, the Region has seen significant outbreaks of emerging and re-emerging infectious diseases including Middle East respiratory syndrome (MERS), avian influenza (H7N9 and H5N1), cholera, Crimean-Congo haemorrhagic fever, dengue, Rift Valley fever, multidrug-resistant typhoid fever and West Nile fever.

2. Effective preparedness and response capacities to prevent and mitigate the impact of public health emergencies and resilient health systems to sustain essential health services are critical to achieving the targets of WHO's vision for the Region, *Vision 2023*,¹ and the Sustainable Development Agenda 2030. WHO's Thirteenth General Programme of Work (GPW 13) provides a roadmap for expanding universal health coverage (UHC) and ensuring better preparedness for and response to health emergencies. In recognition of the public health threats posed by emerging infectious diseases, as well as their economic and social impact, countries in the Region have invested in improving their national preparedness and response capacities, in accordance with the International Health Regulations (2005).

3. This document provides an overview of the evolution and current status of the COVID-19 pandemic in the Region and associated response activities, including the comprehensive guidance and support activities of WHO during the first 6 months of the pandemic. It addresses both the direct impact of COVID-19 on morbidity and mortality and the wider impacts of the pandemic on essential health services. While some countries have experienced intermittent declines or stabilization of case numbers in recent weeks, new outbreaks and resurgences persist.

Situation analysis

4. On 31 December 2019, in accordance with the IHR (2005), WHO was alerted to several cases of pneumonia of unknown origin in Wuhan, China. One week later, on 7 January 2020, Chinese authorities identified a novel coronavirus as the cause of the disease, now named "coronavirus disease 2019" (COVID-19). The virus was subsequently named "severe acute respiratory syndrome coronavirus 2" (SARS-CoV-2). Although investigations are still ongoing, all available evidence suggests that this novel coronavirus is of zoonotic origin, though the intermediate animal host or zoonotic source has not yet been identified.

5. On 30 January 2020, the Director-General of WHO declared the COVID-19 outbreak to be a public health emergency of international concern (PHEIC) following a second meeting of the Emergency

¹ Vision 2023: Eastern Mediterranean Region: health for all by all. Cairo: WHO Regional Office for the Eastern Mediterranean; 2018 (http://applications.emro.who.int/docs/RD_Vision_2018_20675_en.pdf, accessed 15 September 2020).

Committee under the IHR (2005). On 11 March, COVID-19 was declared to be a pandemic by the Director-General of WHO, who subsequently convened a third meeting of the Emergency Committee, which provided its updated temporary recommendations. On 31 July, the Emergency Committee held its fourth meeting and unanimously agreed that COVID-19 still constituted a PHEIC. The United Nations General Assembly subsequently adopted seven resolutions and 13 decisions in relation to the COVID-19 pandemic.

6. On 29 January 2020, the United Arab Emirates reported the first cases of COVID-19 in the Region and determined these to be travel related. This was followed on 14 February by the first confirmed case in Egypt. The Islamic Republic of Iran reported its first two cases in Qom on 19 February. Lebanon then reported its first confirmed case 2 days later on 21 February; identified as a traveller from Qom. Afghanistan, Bahrain, Iraq, Kuwait and Oman reported their first cases on 24 February, all of which were also related to international travel. Thereafter, many countries in the Region began implementing strict border controls or closures in order to mitigate the risk of travel-related transmission. The epidemiological situation in almost all affected countries transitioned rapidly from clusters of cases to community transmission. As of 31 August 2020, all 22 countries in the Region were reporting COVID-19 cases, though the impact and magnitude of the outbreaks vary among them.

7. Between 29 January and 31 August 2020, a total of 1 924 511 laboratory-confirmed cases of SARS-CoV-2 infection, including 51 019 deaths, were reported from the 22 countries of the Region. The Region reached one million reported cases on 28 June, almost 5 months after the first case was reported. As of 31 August 2020, the Eastern Mediterranean Region had the third highest number of cases and deaths among the six WHO regions. The six most affected countries in the Region are the Islamic Republic of Iran, Saudi Arabia, Pakistan, Iraq, Qatar and Egypt, which represent 20%, 16%, 15%, 12%, 6% and 5%, respectively, of the regional burden of cases.

8. The most affected age group in the Region is 25–65 year olds, accounting for 76.5% of total cases, with the median age of affected individuals being 36 years. The proportion of males affected by the pandemic is higher than that of females, with a sex ratio of 2:1. Eighty two percent of all deaths have occurred in patients aged 45–84 years with, according to one subset of data, a higher case-fatality ratio (CFR) observed in females (2.3%) than in males (1.9%). Patients with one or two comorbidities have a higher risk of dying from COVID-19 than those with no comorbidity. The most frequently observed symptoms are fever (24.6%) and cough (22.7%). The median times from date of symptom onset to date of report and from symptom onset to hospitalization are 2 days and 1 day, respectively.

9. The highest daily number of cases across the Region was reported during the week of 14 June 2020, at 21 777 cases in one day. The number of reported daily cases then declined until the week beginning 9 August, after which weekly increases of 4–12% were observed up to the week of 30 August. The number of daily reported deaths increased until the week beginning 28 June and since then has remained stable at around 414 deaths per day as of the week beginning 30 August. The regional crude CFR is 2.6%, while the median country-specific CFR is 2% (range: 0.2–28.2%). Yemen has the highest CFR (28.2%) followed by Sudan (6.5%), the Islamic Republic of Iran (5.7%), Egypt (5.4%) and the Syrian Arab Republic (4.1%). The median attack rate in the Region is 228 per 100 000 population but reported attack rates are highly dependent upon laboratory testing capacity and testing strategy, both of which vary between countries. The median number of tests conducted in the Region is 4617 per 100 000 population.

10. Following initial declines in reported cases and deaths in the Region, case numbers have slowly been increasing since the week beginning 9 August. After initially demonstrating relatively effective control of the outbreak, Jordan, Morocco, Lebanon and Tunisia have recently documented concerning increases in reported cases. This has been especially pronounced following the easing of public health and social measures (PHSM), for example the relaxing of travel restrictions, and the reopening of schools and businesses. Other countries reporting recent increases in cases include Iraq, Libya, Palestine, the Syrian Arab Republic and United Arab Emirates, while decreasing trends are being reported in Afghanistan, Bahrain, Djibouti, Egypt, Oman, Pakistan, Qatar, and Saudi Arabia.

11. In the early phase of the pandemic, most countries in the Region followed WHO recommendations on containment by prioritizing the expansion of testing, treatment and isolation of cases, infection prevention and control (IPC), and contact tracing and quarantining – though the degree of application of these measures varied substantially. Countries also implemented a range of social measures to limit virus transmission, including but not limited to travel and movement restrictions (including domestic and international flight restrictions), closure of borders, schools and non-essential businesses, suspension of mass gatherings, curfews, partial-to-full lockdowns and intensive community engagement. By mid-March, all countries had applied some form of PHSM² and the early implementation of such measures undoubtedly reduced virus transmission. However, these measures also resulted in significant economic and societal costs, and ultimately many countries lifted PHSM after taking such costs into consideration. Socioeconomic pressure and community fatigue thus influenced public health decisions related to COVID-19, particularly in relation to the relaxation of social measures. In many countries, a significant proportion of new cases are imported or result from insufficient observance of physical distancing measures and/or mask wearing, contributing to the occurrence of new clusters.

12. The pandemic has also significantly impacted essential health services. As the pandemic progressed, many people refrained from accessing health care facilities unless urgently needed. Services such as immunization, elective surgery, chronic disease management, preventive reproductive health and dental health services, and many others, became less of a priority for individuals. This was then compounded by the lockdowns imposed early in the pandemic in many countries, which led to major limitations on mobility, increased fears of infection and stigma, and the circulation of rumours. In addition, many health care workers became concerned about potential occupational exposure to COVID-19 due to inadequate or unavailable personal protective equipment (PPE) and other limited IPC measures, which led to health care facilities being poorly staffed. Furthermore, as countries closed ports of entry the supply chains for various essential medicines and vaccines were disrupted, leading to major shortages and further impacting the management of chronic illnesses. In order to assess the impact of the pandemic on essential health services, various surveys were conducted by WHO. During May–June 2020, a rapid assessment was conducted using a brief questionnaire, to which 13 countries in the Region responded (59%). The most frequently disrupted services reported included family planning and contraception (92%), dental services (92%), rehabilitation services (92%), palliative services (92%), antenatal care (85%), noncommunicable disease (NCD) diagnosis and treatment (85%) and mental health services (85%). The median level of reported disruption was highest in the Eastern Mediterranean Region compared with other WHO regions (excluding the WHO Region of the Americas).

13. A further assessment was carried out by WHO in May 2020 to assess the impact of the pandemic on NCD services, with responses received from 19 countries (86%). The most common reasons reported for discontinuing or reducing services (47%) were the closure of outpatient clinics and a decrease in inpatient volume due to cancellation of elective care. Over half of countries reported either insufficient staff to provide services (26%) or deployment of NCD clinical staff to COVID-19 activities (32%). More specifically, over half (53%) of the countries surveyed had partially or completely suspended services for hypertension treatment and urgent dental care, 48% for palliative care, 47% for asthma care and rehabilitation, 42% for diabetes treatment and cancer management, and 26% for cardiovascular emergencies.

WHO response

14. WHO has actively engaged with the countries of the Region even before confirmation of the very first case, and has led a swift, coordinated and evidence-based strategic response to the pandemic and associated crises in the Region. On 22 January 2020, the Regional Director activated the Incident Management Support Team (IMST) in accordance with the Emergency Response Framework. This internal emergency management and coordination mechanism comprises multidisciplinary pillars reflecting critical functions,

² See: ACAPS #COVID 19 Government Measures Database: <https://www.acaps.org/covid19-government-measures-dataset>.

and has since been expanded to include other important functions to reflect the scale and complexity of the emergency. The Regional Director actively participates in the daily IMST meetings and communicates with ministers of health and other leaders through daily messages and bi-weekly calls to update technical guidance and exchange experiences and best practices. Other regional health leaders have also provided high-profile support for the response, notably the Director-General's Special Envoy on COVID-19 for the Region.

15. Sixteen country support teams were also established at the regional level to provide tailored and timely technical and operational support to all 22 countries and to the corresponding WHO country offices. Eight country support missions were undertaken to provide high-level technical assistance to ministries of health. Although further missions were postponed due to travel restrictions, these have now resumed, starting in August after the lifting of such restrictions.

16. Utilizing existing coordination mechanisms, as well as the newly developed WHO global COVID-19 Partners Platform, WHO has guided the efforts of national and international partners to support governments in urgently preparing for, detecting and responding to the pandemic, and to inform national planning.

17. A regional COVID-19 Crisis Group has also been established comprising 35 technical and operational partners that convene virtually on a weekly basis to coordinate support for country-level responses. WHO has also continued to act as the health cluster lead in the response to the pandemic at global, regional and national levels. In addition, WHO continues to leverage the capacities of the Global Outbreak Alert and Response Network (GOARN) and emergency medical team initiatives to support country operations across the Region and globally.

18. All 22 countries of the Region, with WHO support, have activated a national multisectoral coordination mechanism to facilitate efficient and comprehensive response activities, with the active engagement of local partners and donors. Many countries have established a dedicated multidisciplinary committee to lead the coordinated response. Overall, considerable coordination now exists among senior political leaders, with officials from a wide range of ministries and sectors involved, reflecting in most instances a whole-of-government approach. In February 2020, the Regional Office developed a regional strategic preparedness and response plan outlining the key strategic response interventions recommended to contain the outbreak and mitigate its socioeconomic impacts. This plan was used as a guide by countries for developing their national plans. In order to monitor the strategic response, WHO developed and implemented a regional monitoring and evaluation framework, incorporating a user-friendly data-collection tool and comprehensive dashboard of summary indicators.

19. Points of entry played an integral role in the preliminary stages of the pandemic as its global spread was accelerated by international movements and early repatriation efforts. Recognizing this, WHO provided targeted technical support to Member States in strengthening preparedness and response activities at these key conduits of travel and trade. The Regional Office liaised with countries in the Region to assess and strengthen key capacities via site visits, webinars and training, and the development and dissemination of guidance. During the window in which points of entry were shut down following the cessation of travel and closure of borders, WHO helped countries to align their national efforts and strategies at points of entry with the urgent need to respond to the threats posed by COVID-19. Additionally, the Regional Office established an Inter-Agency Working Group among point-of-entry stakeholders to improve collaboration and promote streamlined approaches.

20. WHO supported countries in adapting its surveillance and contact-tracing guidance to their national context, and in implementing the guidance. A regional electronic platform for surveillance data reporting (EMFLU) was established using the existing regional mechanism for influenza surveillance. In line with Article 44 of the IHR (2005), WHO called upon Member States to promptly share surveillance data on detected COVID-19 cases, while simultaneously providing WHO technical support to reporting sites. Most countries in the Region now regularly share such data through the platform and WHO has been providing

technical support to address any inconsistencies or incompleteness in the data shared. Furthermore, the Epidemic Intelligence from Open Sources (EIOS) tool, developed by WHO, was deployed in countries to facilitate early case detection, and support was provided in building and strengthening national capacities to use the tool. WHO support was also provided to Member States in (a) conducting regular risk assessments; (b) expanding national surveillance systems; (c) analyzing data to monitor trends and guide public health actions; and (d) developing situation reports and dashboards to visualize and document the epidemiological situation. WHO is also investigating the utility of mathematical modelling as an innovative approach for responding to the pandemic. WHO is helping countries to conduct modelling analyses to explore and understand the consequences of a variety of plausible scenarios for the potential spread of the virus, and its impact on hospital treatment requirements.

21. Despite the considerable efforts made at both regional and country levels, the timely sharing of detailed information on COVID-19 cases remains a major challenge in most countries of the Region. In some cases, the IHR (2005) national focal point (IHR NFP) required the approval of a higher authority before sharing information with WHO, which is not consistent with the IHR NFP terms of reference as explicitly defined within Article 4 of IHR (2005).

22. With the support of WHO, rapid response teams (RRTs) have previously been established in all countries of the Region. These have played important roles in COVID-19 case finding, case investigation, contact tracing and community outreach. Several countries also managed to effectively enhance the capacity of emergency medical teams and deploy them in support of the medical management of COVID-19 cases. International emergency medical teams were deployed in Iraq, Pakistan and Yemen.

23. WHO support has also been provided to countries to establish, enhance and expand testing capacities for SARS-CoV-2 at national and subnational levels, and to develop and/or adapt testing strategies based on the epidemiological situation. All 22 countries have developed the capacity to conduct real-time reverse transcriptase polymerase chain reaction (rRT-PCR) testing for SARS-CoV-2 in at least one national public health laboratory. To date, more than 400 national and subnational public health laboratories across the Region have this capacity. With WHO support, seven national laboratories were also able to conduct genetic sequencing analysis for SARS-CoV-2. Tunisia was the first country in the Region to perform a full genome sequence analysis on a positive sample, and to upload the result to the GenBank public access database. To promote good laboratory practice and improve capacity to detect COVID-19 cases, WHO implemented its External Quality Assessment Project (EQAP) for SARS-CoV-2 detection. Twenty-nine laboratories from 18 EMR countries participated in the EQAP, with 83% of laboratories achieving 100% correct results. With regard to the provision of laboratory supplies, more than 500 000 diagnostic kits were distributed by the regional logistics hub in Dubai to 18 countries in the Region, and technical advice was provided on their use.

24. WHO has worked closely with countries to provide technical support for the clinical management of COVID-19, including comprehensive guidance on clinical care in various operational settings and the development of country-specific training to meet needs and build health care worker capacities. To date, such training has been provided to more than 5000 health care workers across the Region. WHO has also supported front-line clinicians in twice-weekly calls with the Global Clinicians Network to share experiences, challenges and questions. WHO has helped countries to identify and procure appropriate biomedical supplies and equipment to fill gaps in local health care settings. One key challenge in clinical management is that the treatment protocols used by countries in the Region range from supportive treatment to the compassionate use of other drug regimens outside the framework of a clinical trial.

25. Thousands of health care workers have been infected with COVID-19 across the Region and tragically, many have died in the line of duty. Despite improvements, IPC practices in many countries remain a major concern. WHO is therefore actively supporting 12 countries in strengthening their national and facility-level IPC programmes, while providing technical support to the remaining countries in the establishment of national IPC programmes. WHO has now conducted intensive country-specific virtual training and webinars for over 200 participants from five countries, and continues to disseminate up-to-date evidence-

based IPC guidelines and to provide real-time technical support via country-specific WhatsApp groups. One key challenge has been recurring shortages or stockouts of essential PPE, and WHO has made concerted efforts to provide PPE to priority countries.

26. In partnership with others, WHO is supporting countries in the development, implementation and monitoring of national risk communication and community engagement (RCCE) strategies and plans for COVID-19. All countries in the Region have now developed and disseminated timely and credible information to the public, health authorities, decision-makers, health professionals and other key audiences, including vulnerable populations, using appropriate formats, two-way communication and accessible platforms. A regional inter-agency working group has been established involving WHO, UNICEF, the International Federation of Red Cross and Red Crescent Societies and others to harmonize risk communication materials and better coordinate the relevant support provided to countries. These efforts are key, as “COVID fatigue” and the “COVID infodemic” have become major problems after 8 months of the pandemic both within the Region and globally. WHO has also coordinated with social media network companies such as Facebook and other media outlets to tackle misinformation and rumours, especially by supporting translation into local languages and disseminating standardized materials through optimized search engine results. COVID-19 RCCE training modules targeting front-line community health care workers, as well as WHO staff and media personnel, have been developed and distributed. In coordination with WHO headquarters and UNICEF, the Regional Office is also collaborating strongly with faith leaders in promoting community engagement and empowerment through the Islamic Advisory Group and other faith-based organizations. Such innovative and coordinated approaches are essential to a successful COVID-19 response, especially in a region where mass gatherings such as religious events and pilgrimages attract thousands of people each year.

27. WHO technical support and related guidance documents have been provided to support countries conducting risk assessments for mass gatherings during the COVID-19 pandemic. For example, the cancellation of Umrah and the restricting of Hajj attendance to nationals were both decided upon following dedicated and thorough national risk assessments in consultation with all concerned sectors. The Formula One race in Bahrain was subjected to a similar process, and the attendance of spectators prohibited. Other mass gathering events in the Region have also been cancelled. Discussion is ongoing with Iraq to support national authorities in planning for the Ashura and Arba’een mass gatherings. The Supreme Committee for Health and National Safety in Iraq has decided to allow these religious mass gatherings to take place with the participation of Iraqi nationals only.

28. Public Health Emergency Operations Centres (PHEOCs) represent a best practice platform for the strategic management of all-hazards health emergencies, including the current COVID-19 pandemic. With WHO support, several countries have now developed PHEOCs based on a standardized checklist for planning and implementation. Globally, the Regional Office is leading the development of customized software for PHEOCs to support the management of emergency operations. Countries in the Region that have developed well-functioning PHEOCs include the Islamic Republic of Iran, Oman, Saudi Arabia and the United Arab Emirates. Other countries are also making progress in strengthening these important facilities.

29. WHO, in collaboration with the International Labour Organization, the International Organization for Migration and the United Nations Economic and Social Commission for Western Asia, has established the Task Force on COVID-19 and Mobility/Migration to provide country-specific support and to advocate for adequate access to testing, treatment and other essential services for refugees, IDPs, migrants and returnees. During the early stages of the pandemic, 60–92% of infections were documented among migrant workers, particularly in Gulf Cooperation Council countries. Many of these were front-line essential workers who were often unable to maintain physical distancing due to overcrowded living and working conditions and lack of social and economic support. WHO is working with countries and relevant partners to protect migrant workers and displaced populations by promoting public health measures to reduce their risk of infection, and by advocating for adequate access to COVID-19 testing and treatment services and the inclusion of such groups within national UHC efforts. WHO has also published an interim guidance note on

health system responses to COVID-19 in the context of refugees, IDPs, migrants and returnees in the Region.

30. WHO continues to promote evidence generation in the Region in line with the WHO Research & Development Blueprint for Action to Prevent Epidemics. Fourteen countries of the Region have now enrolled in the global WHO “Solidarity” clinical trial for therapeutics. In addition, seven countries received WHO support to conduct WHO Unity Studies, almost all of which are national seroprevalence studies. Such studies aim to further understanding of the risk factors for infection, transmission patterns, clinical manifestations and immunity. Moreover, 120 proposals have been received and vetted through the Regional Office Special Grants for Research in Priority Areas of Public Health, with 18 of these proposals selected for support. The Regional Office is also promoting innovation through the creation of a platform to identify and share the best innovative practices in the Region, and to support 1–2 innovations per country following evaluation.

31. As the impact on essential health services became evident early in the pandemic, WHO strongly advised countries to ensure the continuity of these services. Twelve countries in the Region have integrated essential health service continuity into their COVID-19 strategic preparedness and response plans. To support efforts in this area, WHO developed and disseminated operational guidance on maintaining essential health services in March 2020 followed by a more detailed version in June 2020 that included additional implementation guidance.³ The activities of selected programmes can serve as models for ensuring the continuity of service delivery during the pandemic. Examples include the efforts made to ensure access to uninterrupted treatment for patients with HIV and/or hepatitis, with countries asked to review the status of their medical supplies and to promote multi-month dispensing of medication. In the area of NCDs, WHO provided support to countries by developing a series of recommendations on how both the general public and people living with NCDs could be helped to maintain healthy lifestyles and manage their conditions during the pandemic. The most frequently included services in national COVID-19 response plans were those for cardiovascular disease (68%), cancer (68%), diabetes (68%) and chronic respiratory disease (58%). Guidance was also provided to countries on recommended tobacco control policies during COVID-19 which resulted in 17 countries strengthening their efforts to address tobacco use in general.

32. As part of a joint initiative, WHO, the World Food Programme, the Food and Agriculture Organization of the United Nations and UNICEF issued a policy statement in May 2020 on nutrition and food security which identified the essential nutrition services needed during the COVID-19 pandemic. Subsequently, a regional nutrition action plan was adopted by countries, particularly low-income countries and countries experiencing emergencies. WHO continued to support countries that reported cases of severe acute malnutrition (Afghanistan, Iraq, Pakistan, Sudan, the Syrian Arab Republic and Yemen) through the development of updated guidelines adapted to the COVID-19 situation.

33. WHO continues to provide extensive support for the adaptation of WHO guidelines and recommendations on delivering reproductive, maternal, newborn, child and adolescent health (RMNCAH) services during and beyond the COVID-19 pandemic, including through community-level and home care for newborns, infants and children up to 5 years of age. Innovative methodologies such as telemedicine and the use of mobile phones and social media for service provision, as well as virtual training to ensure service continuity amid the pandemic, have been promoted and implemented in countries.

34. The COVID-19 pandemic has had a significant adverse impact on mental health, often exacerbating pre-existing mental health conditions. WHO has focused on integrating mental health and psychosocial support (MHPSS) into national COVID-19 response plans and ensuring access to MHPSS services. With WHO support, 17 countries have now established MHPSS hotlines and/or platforms for remote MHPSS delivery. WHO has also developed and disseminated technical guidance and information products through a dedicated website and mainstream media.

³ See: <https://www.who.int/publications/i/item/WHO-2019-nCoV-essential-health-services-2020.1>.

35. WHO provided assistance to countries in overcoming supply chain disruptions and maintaining effective supply chain management through the WHO regional logistics hub in Dubai. The Dubai hub played a critical role in pre-positioning and distributing essential COVID-19 supplies to countries both within and outside the Region by facilitating the packaging and shipment of 200 consignments of PPE, diagnostics and clinical care products in 105 countries across all six WHO regions. The Dubai hub also organized nine charter flights valued at US\$ 1.5 million to support the rapid dispatch of supplies across the Region, especially to conflict-affected countries.

36. Concerted efforts were also made by WHO to mobilize the required funds to support implementation of regional and national preparedness and response plans. Between January and August 2020, WHO mobilized US\$ 373 million (funds pledged and received) against ever-increasing regional needs of US\$ 613 million to support the COVID-19 response in the Region, surpassing all other regions in terms of resource mobilization. Approximately 65% of all funds were mobilized by WHO country offices from sources within the Region, while the remaining 35% was sourced through global allocations. Overall, 31 donors are contributing to efforts to mitigate the impact of COVID-19 in the Region.

Recommendations to enhance the response to the pandemic

37. In the absence of effective vaccines and therapeutics for the immediately foreseeable future, the overarching goal in the Region is for all countries to control the pandemic by slowing down transmission and reducing mortality associated with COVID-19, including by prioritizing efforts to maintain essential health services. Given the course of the pandemic to date, the pattern of lifting and easing of restrictions followed by concomitant resurgences in case numbers is expected to continue until there are tangible advances in the realms of vaccine and/or therapeutic development. Moving forward, it is proposed that response efforts be further strengthened through implementation of the following recommendations:

Recommendations for Member States

1. Establish, strengthen and maintain a whole-of-government, whole-of-society approach to the response in light of the multisectoral dimensions of the COVID-19 pandemic.
2. Invest in improving capacities for preparedness for and emergency management of public health events at the national and subnational levels, while strengthening national capacities to manage emerging infectious diseases.
3. Adjust public health and social measures based on a nuanced analysis of health considerations as well as socioeconomic data and factors, while recognizing that such adjustments must be balanced against the unintended effects on other sectors that may also lead to loss of life and livelihoods.
4. Provide timely, accurate and sufficiently detailed public health information related to the COVID-19 pandemic to WHO as required by the IHR (2005).
5. Prioritize and sustain early identification of cases, adequate testing, isolation of cases, contact tracing and quarantining of contacts in order to rapidly detect new cases, conduct risk assessments, monitor disease trends and guide public health actions. This will involve improved disease surveillance (leveraging the existing SARI/ILI and EWARN surveillance systems), active case finding in hospitals, community surveillance systems and event-based surveillance using innovative tools.
6. Strengthen existing influenza surveillance and laboratory systems as part of the Global Influenza Surveillance and Response System (GISRS) to allow for the detection of novel influenza viruses and other emerging respiratory pathogens that could be co-circulating with SARS-CoV-2.
7. Strengthen the capacities of in-country laboratory networks to detect SARS-CoV-2 at national and subnational levels, while ensuring the quality of testing and biosafety of the laboratories.
8. Prioritize the establishment and resourcing of effective national IPC programmes, and ensure the consistent application of comprehensive IPC measures in health care settings, supported by strong governance and oversight.

9. Strengthen the capacity of health systems to improve responses during resurgences of COVID-19 cases and to maintain effective delivery of essential health services during and after the pandemic
10. Provide all support needed to ensure the continuity of essential health services, which is also in line with the framework for action on advancing UHC in the Region and the Salalah Declaration of 2018. It is critical to provide adequate financial and human resources to support essential health services, and to make sure health care workers are adequately protected and health care facilities are adequately prepared to provide care in environments that are safe for both patients and health care workers.
11. Develop advocacy materials and manage the negative impact of misinformation and “infodemics” through strong RCCE strategies, best practices and partner engagement to increase public awareness, change behaviour and secure further political commitment to prevent and control COVID-19 and other emerging infectious diseases with epidemic and pandemic potential.
12. Engage in global research and development activities for therapeutics, vaccines and diagnostics, including through the Access to COVID-19 Tools (ACT) Accelerator, to help improve understanding and better control the COVID-19 pandemic, and to enhance the capacities of Member States in these technical areas.

Recommendations for WHO

1. Establish a network of national and regional centres of excellence with competent epidemiological and laboratory capacities capable of contributing to the prevention and control of COVID-19.
2. Strengthen contingency planning and supply chain management to improve the availability and accessibility of essential medical supplies required for the response to the COVID-19 pandemic.
3. Prioritize the development and implementation of a monitoring and evaluation framework for the response at regional, national and subnational levels, based on appropriate indicators.
4. Promote timely and equitable access to and fair distribution of all quality, safe, efficacious and affordable vaccines and therapeutics required for the response to the COVID-19 pandemic.