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## **Progress report on health issues facing populations affected by disasters and emergencies, including the International Health Regulations (2005)**

### **Introduction**

1. This report provides an update on WHO's work in relation to health emergencies from 1 June 2022 to 31 May 2023, under resolution EBSS3.R1 of the WHO Executive Board (2015) and decision WHA68(10) of the Sixty-eighth World Health Assembly (2015).
2. The report also provides an update on progress in implementing the International Health Regulations (IHR) (2005) in the Eastern Mediterranean Region in the context of resolution EM/RC64/R.1 (2017), which deals with monitoring and evaluation of IHR implementation, and of resolution WHA61.2 (2008), which deals with annual reporting on the implementation of the Regulations by States Parties, under paragraph 1 of Article 54 of the IHR.
3. In 2021, the 68th session of the Regional Committee for the Eastern Mediterranean adopted resolution EM/RC68/R.2, which endorsed a plan of action for ending the COVID-19 pandemic and preventing and controlling future health emergencies in the Region. Therefore, this report also provides an overview of progress at the country and regional levels in implementing the activities outlined in the plan of action.

### **WHO's work in health emergencies**

4. The Eastern Mediterranean Region faces multiple health emergencies caused by a range of hazards – natural, biological, societal (including armed conflict) and technological – leading to an overwhelming burden of morbidity and mortality. As of 31 May 2023, WHO was responding to 20 graded emergencies across the Region, including seven complex humanitarian emergencies and the COVID-19 pandemic. Eight of the emergencies were classified as grade 3 (the COVID-19 pandemic; the cholera outbreak; complex emergencies in Afghanistan, Somalia, Syrian Arab Republic and Yemen; an earthquake affecting Syrian Arab Republic and Türkiye; and the food security crisis in the Horn of Africa). Five of the emergencies – the COVID-19 pandemic, the global cholera outbreak, the food security crisis in the Horn of Africa, the earthquake affecting Syrian Arab Republic and Türkiye, and the epidemic of mpox (monkeypox) – affected multiple regions and countries. At the time of writing, WHO was also responding to more than 50 outbreaks across the Region, while conflict and other emergencies have left more than 127 million people in need of assistance. Recent crises in Pakistan, Syrian Arab Republic and Sudan have severely tested response capacities.
5. In the complex and challenging context of the Eastern Mediterranean Region, WHO further professionalized its approach to managing emergencies, including adopting a comprehensive all-hazards approach, focusing on all phases of the emergency management cycle – prevention, preparedness, detection, response and recovery. In line with WHO's emergency response framework, all graded emergencies were managed through WHO's incident management system. Where required, the Contingency Fund for Emergencies (CFE) was used to fund the initial response to acute emergencies and scale up life-saving health operations in protracted crises in response to escalating needs. In total, more than US\$ 22 million was released from the CFE for 12 different emergencies over the course of 2022.

### **Preparing for health emergencies**

6. Improving country capacities to prepare for, detect and respond to emergencies remains a priority in the Eastern Mediterranean Region. Enhancing preparedness for all hazards is vital for an effective emergency response. The COVID-19 pandemic brought attention to the urgent need to scale up efforts to improve preparedness for all hazards in order to ensure efficient emergency response and resilience. Rebuilding from

COVID-19 means building health systems that are better equipped to prevent, prepare for and respond to future pandemics, and addressing the growing health implications of conflict, climate change and environmental degradation.

7. The International Health Regulations (IHR) (2005) continue to serve as the Region's legal framework for developing national capacities to prevent, prepare for, detect and respond to public health emergencies and events. Progress has been made on the implementation of the Regulations, as described below in the IHR (2005) section of this report.

8. The COVID-19 pandemic also brought to light additional cross-cutting areas required for preparedness, such as using a whole-of-government and whole-of-society approach to emergency management, enhancing readiness, setting up suitable emergency care systems, integrating primary health care (PHC) into preparedness and response, fostering One Health capacities and collaboration, empowering and engaging communities, managing misinformation, empowering and protecting the health workforce, and promoting domestic financing for preparedness.

9. Various plans are in place in countries to manage emergencies, including public health emergency preparedness and response plans, disaster risk reduction strategies, hazard-specific plans such as those for climate-related and other natural disasters, and disease-specific plans such as those for influenza, cholera and COVID-19. However, all relevant sectors are not yet fully incorporated in these plans. Most countries also lack a clearly defined national structure for emergency management that involves all sectors (whole-of-government and whole-of-society), and the incident management system – a best practice for emergency response – is applied inconsistently for the management of emergencies. Building on several discussions related to preparedness and response to health emergencies, WHO continues to support countries to assess their emergency management structure and ensure preparedness to respond to high-priority risks, particularly those countries with minimal health system capacities.

10. Some progress has been made in the area of operational readiness. A practical country guide for health emergencies operational readiness has been developed, which is undergoing expert consultation. WHO continues to work closely with countries and territories in the Region to refine the multi-hazard risk assessment methodology. The Strategic Toolkit for Assessing Risks (STAR) continues to be in use in countries to further develop their risk profiles. The updated methodology has been implemented to develop risk profiles in Afghanistan, Sudan, Syrian Arab Republic, United Arab Emirates and Yemen, and will be rolled out in other countries and territories over the next 12 months, including in Kuwait, Libya and Palestine. STAR was also used in Qatar to develop a risk profile for the 2022 FIFA World Cup.

11. As the foundation of effective emergency management, the establishment and strengthening of public health emergency operations centres (PHEOCs) remains a priority for WHO in the Region. The WHO Regional Office for the Eastern Mediterranean is providing the needed support to countries to implement the PHEOC strategic plan for 2023–2027 and deploying the electronic Public Health Emergency Management (ePHEM) software for data management. Progress is on track to achieve the set targets of the strategic plan.

12. The COVID-19 pandemic revealed flaws and deficiencies in emergency care facilities/systems throughout the Region. To address the shortcomings and strengthen emergency, trauma and critical care systems, missions to undertake assessments and develop road maps were conducted in Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Libya, Pakistan, Qatar, Sudan, Tunisia and Yemen. Implementation of the road maps is progressing slowly and will require increased investments. An emergency care toolkit training programme was developed to enable and support the delivery of quality emergency care in emergency units, enabling frontline health care providers to become certified trainers and cascade their experience. These trainings were rolled out in Afghanistan, Iraq, Jordan, Palestine, Sudan, Tunisia and Yemen.

13. Developing safe and disaster-resilient health facilities and hospitals remains a major focus of support in the Region. To support this area of work, a Hospital Emergency Preparedness and Response to Infectious Disease Outbreaks (HEPRIDO) course was developed and virtual trainings were rolled out to enhance the preparedness and response of hospitals and health facilities in managing infectious disease outbreaks. A framework for hospital resilience, with an operational matrix and guide to support implementation, was

developed and discussion is ongoing with countries for its implementation. A virtual webinar on the Capacity for Disaster Reduction Initiative (CADRI) digital tool for disaster risk reduction and climate change adaptation was organized, to train countries on the tool and to provide guidance to assess countries' management capacities in disaster risk reduction. To enhance research on disaster risk reduction, together with the WHO Centre for Health Development in Kobe, Japan, the *WHO guidance on research methods for health emergency and disaster risk management* was published in 2021.

14. Given the growing health risks posed by zoonoses and environmental threats, WHO has increased its engagement in the One Health approach. The One Health Quadripartite – comprising the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP), the World Organisation for Animal Health (WOAH) and WHO – has been operationalized at the regional level through establishing a Regional Quadripartite Working Group to coordinate support to countries. The WHO Regional Office has established its own interdepartmental, multidisciplinary One Health task force to streamline support to countries. At country level, WHO has supported relevant stakeholders to undertake joint risk assessments in Egypt, Jordan, Qatar, Sudan and United Arab Emirates to prioritize country-specific zoonotic diseases. A One Health curriculum has been tested in Jordan and a “One Health week” was organized in Qatar in 2022 for countries to pledge political commitment and endorse the regional One Health framework. A common observation is that intersectoral coordination mechanisms for One Health remain weak at country level, and strengthening these is a priority.

15. All health emergencies begin and end in communities. The COVID-19 pandemic provided WHO with an opportunity to strengthen risk communication and community engagement (RCCE) for preparedness and response. Throughout the pandemic, WHO took the lead across the Region in multiple RCCE activities, such as knowledge, attitudes and practices (KAP) surveys and behavioural insights assessments to guide the development of COVID-19-related messages and information, education and communication materials. Training was conducted by WHO for the media and other stakeholders to boost accuracy, timeliness and applicability of COVID-19-related messaging. This included adaptive training for health care and community workers on COVID-19 messaging and vaccine updates. The Regional RCCE Interagency Working Group, established during the COVID-19 pandemic by WHO, the International Federation of Red Cross and Red Crescent Societies (IFRC) and the United Nations Children's Fund (UNICEF), has expanded its mandate to address ongoing outbreaks and emergencies in the Region. Support is being provided to countries to replicate this coordination mechanism at national level.

16. Multisectoral coordination has been demonstrated as an essential element of success for health emergency management efforts. Coordination and collaboration between public health and law enforcement sectors have been identified as critical, particularly in managing deliberate events. In collaboration with partners, the WHO Regional Office has provided ongoing support to Bahrain, Kuwait, Oman and United Arab Emirates to enhance country capacities to prevent and manage deliberate events of a chemical and radio-nuclear nature.

17. The Eastern Mediterranean Region is home to some of the world's largest mass gatherings, such as the annual Hajj in Saudi Arabia and Arba'een in Iraq, as well as one-time events such as the Expo 2020 Dubai in the United Arab Emirates in 2021, the FIFA World Cup in Qatar in 2022 and the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) in Egypt in 2022. To enhance public health preparedness during these events, WHO supported countries through approaches informed by efforts to limit the spread of COVID-19. WHO continues to support countries to conduct regular and event-specific risk assessments, contingency planning, simulation exercises and reviews of existing capacities.

18. The COVID-19 pandemic demonstrated the importance of developing core capacities at points of entry, in accordance with Annex 1B of the IHR (2005). To address this, WHO developed a points-of-entry training package based on regional case-studies and practical exercises, which has been pilot tested in several countries and is being published. A draft regional strategy on points of entry, safe transportation and border health (2023–2028) has also been developed, based on extensive consultation with countries. In addition, two bi-regional training-of-trainers rounds were delivered, targeting port health inspectors from nine countries of the WHO European and Eastern Mediterranean regions, and a training-of-trainers workshop was delivered in Sudan on outbreak investigation and food safety at points of entry. The need for information sharing and cross-border collaboration was highlighted during the COVID-19 pandemic, and therefore an operational framework for

cross-border collaboration for information sharing has been developed and formalized to improve information sharing between Afghanistan, Islamic Republic of Iran and Pakistan, between Jordan and the Syrian Arab Republic, between Egypt and Sudan, and between Somalia, Sudan and Ethiopia.

19. Use of the WHO classification mechanism to establish and strengthen emergency medical teams (EMTs) is a work in progress. Last year, several workshops were conducted jointly with IFRC to raise awareness about EMTs. A meeting to develop a regional strategy for EMTs took place in Tunisia in June 2023. Among the most important outcomes of the meeting was the agreement on a regional governance structure for EMTs and the establishment of a regional network of EMT focal points. A mentorship process has been initiated for the global classification of the Saudi Disaster Medical Assistance Team as a type 3 EMT. The Kuwait national EMT has also applied for global classification as type 3 and been allocated mentors, although the mentorship process is yet to start. The Jordan Paramedic Society, the Ministry of Public Health of Qatar, and the Ministry of Public Health of Tunisia jointly with the Tunisian civil defence have all applied for EMT global classification as type 1, and WHO will support these classification applications in the coming year.

### **Detecting public health events**

20. Timely detection of public health events, especially potential outbreaks, is vital to controlling them early and preventing national and international spread. WHO has invested substantial resources to strengthen the detection of potential public health events across the Eastern Mediterranean Region. WHO continues to provide technical support to countries to strengthen epidemiological surveillance and information management, including developing tools to collect, manage and analyse data on public health events and communicate results.

21. A team of experts at the Regional Office actively gathers information 24 hours a day, 7 days a week, from a range of formal sources (e.g. health ministry websites, IHR national focal points) and informal sources (e.g. reliable news outlets, social media).

22. Through these efforts, between 1 June 2022 and 31 May 2023 a total of 4808 signals were captured and 58 new public health events were monitored. Eighteen rapid risk assessments and public health situation analyses (PHSA) were conducted for: Crimean-Congo haemorrhagic fever (CCHF) and cholera in Iraq; cholera and dengue in Somalia; cholera, measles and floods in Pakistan; cholera in Afghanistan; earthquake (PHSA) and cholera in Syrian Arab Republic; cholera in Lebanon; malaria in Djibouti; floods in Islamic Republic of Iran (PHSA); and biological hazards, dengue and conflict (PHSA) in Sudan. The Region contributed to nine global risk assessments: three for COVID-19, three for mpox and three for cholera. Twelve updates were posted on the IHR Event Information Site, 15 Disease Outbreak News items were published on the WHO global emergencies website, and 248 daily bulletins of signals and events and 46 weekly summaries of events were disseminated.

23. Under Article 10 concerning verification, the IHR (2005) stipulate that States Parties acknowledge verification requests and provide the information requested regarding potential public health events in a timely manner. During the period from 1 June 2022 to 31 May 2023, verification requests for 193 signals for public health threats, including for COVID-19, were issued; these were all diligently addressed, albeit not comprehensively, in the timely manner required by the Regulations.

24. Between 1 June 2022 and 31 May 2023, more than 3806 signals related to COVID-19 were captured. Daily, weekly and monthly products to communicate the epidemiological situation were produced, including more than 200 daily updates and social media posts, and 12 epidemiological updates included in monthly situation reports. WHO also produced and updated thematic maps that illustrated various COVID-19 data analyses, including the evolution of numbers of cases and deaths at national and subnational levels, and the distribution of SARS-CoV-2 variants.

25. To improve the surveillance of communicable diseases at the country and regional level, an integrated diseases surveillance (IDS) strategy was adopted during the 68th session of the Regional Committee for the Eastern Mediterranean in October 2021. In May 2023, a significant milestone was achieved with the convening of the first regional meeting on IDS and a workshop on District Health Information Software version 2 (DHIS2) as an electronic platform for IDS. The event brought together ministries of health, WHO country offices and partners to: collectively assess the current state of surveillance systems

across the Region; guide countries in developing implementation plans; and establish a robust monitoring and evaluation framework to strengthen IDS. The active participation and collaboration of all stakeholders underscored the shared commitment to strengthen disease surveillance systems in the Region and fostered an environment conducive to the exchange of knowledge and best practices. (Details on implementation of the regional strategy for IDS to overcome fragmentation of surveillance and data systems are included in progress report EM/RC70/INF.DOC.12.)

26. Seven countries in the Region have been supported to establish and enhance their event-based surveillance systems, thereby strengthening capacity for early detection of public health events. Through this targeted assistance, Afghanistan, Iraq, Jordan, Libya, Morocco, Sudan and Tunisia have fortified their surveillance capabilities, enabling prompt identification and response to emerging health threats. This collaborative effort aligns with international standards, underscoring a commitment to proactive surveillance practices.

27. Four countries (Afghanistan, Libya, Somalia and Sudan) have adopted DHIS2 as a data solution at national level, which will facilitate the integration of data from different systems. A further six countries and territories (Iraq, Lebanon, Pakistan, Palestine, Syrian Arab Republic and Yemen) are piloting or implementing specific modules of DHIS2.

28. Epidemic Intelligence from Open Sources (EIOS), the WHO-led initiative that targets improving country detection capacities and strengthening public health intelligence, has also been implemented in 12 countries of the Region.

29. Building on the lessons of COVID-19, new tools such as *epitweetr* and *Citibeats* were further disseminated to allow timely event detection through social media monitoring. A rapid risk assessment and capacity mapping was also conducted to enable tailor-made, context-specific training on detection and public health intelligence for countries.

30. Furthermore, in 2022, the WHO Health Emergencies Programme invested in the Field Epidemiology Training Program (FETP) through a collaboration with the Eastern Mediterranean Public Health Network (EMPHNET), resulting in the hosting of three fellows for 4 months who were engaged in various public health intelligence processes.

31. Capacities for the use of geographic information systems (GIS) have also been expanded among countries and WHO country offices. Four workshops were conducted – including a training of trainers – both to develop technical skills and to establish a regional network of GIS practitioners. A regional GIS road map has been developed to enhance capacities in countries and is progressively being implemented; seven countries have developed their own related plans, based on the road map. Updated geo-country profiles of the base layers data have been developed to insure the timely and accurate response during health emergencies. A GIS portal has been developed to host the geo-country profiles, dashboards and StoryMaps for health emergencies. The GIS team is also very active at the regional level, and regularly supports incident management support teams during health emergencies through the provision of maps, spatial analysis and data to support ongoing response decisions. Between June 2022 and May 2023, more than 700 maps were developed to support the WHO Regional Office and country offices as well as Member States.

32. Automated analysis tools were improved and additional datasets were integrated, such as Google Community Mobility Reports and Google COVID-19 Vaccination Search Insights data, to facilitate the triangulation of information. Research projects were implemented to estimate vaccination coverage and to investigate the potential impact of new variants on COVID-19 evolution in the Region. Daily counts of SARS-CoV-2 infections/COVID-19 cases and deaths continue to be compiled by the WHO Regional Office, which in turn receives data either directly from countries or through extraction from official government public sources (i.e. ministry of health websites). As of 31 May 2023, data on COVID-19 cases and deaths are regularly available from six countries. The numbers of confirmed infections and deaths are reported in situation reports and on the global dashboard.

33. WHO has initiated the first national excess mortality estimation project in Somalia. The project, undertaken in collaboration with United Nations, government and academic partners, has produced

prospective and retrospective estimates of crude and under-5 excess deaths to inform the response to the ongoing food security crisis affecting Somalia and the wider Horn of Africa region. The project will continue to issue routine estimates for the duration of the crisis. Plans to undertake similar projects in other fragile, conflict-affected and vulnerable (FCV)<sup>1</sup> countries within the Region are currently under development, beginning with Afghanistan and Sudan.

34. In collaboration with the Johns Hopkins Centre for Humanitarian Health, WHO continues to support a response monitoring project in five countries and territories: Libya, Palestine, Somalia, Syrian Arab Republic and Yemen. The project aims to increase the effectiveness, efficiency and timeliness of emergency response, and includes monitoring of health status, health hazards and operational response to better inform strategic and operational decision-making. The framework for monitoring the response, which includes standardized indicators, efficient data-gathering techniques and better analytics, is a crucial component of this endeavour. By using the framework, WHO can better monitor the effectiveness of its response in humanitarian settings, including tracking the progress of key metrics over time, tracking progress towards meeting targets and comparing achievements with global standards. Informed by experience and lessons learned in the pilot countries and territories, WHO intends to expand the framework to all FCV countries in the Region.

35. WHO has implemented the Health Resources and Services Availability Monitoring System (HeRAMS) initiative in six countries as a complement to regional response monitoring at the country level. HeRAMS is used to gather and analyse health system capacity, including service availability and gaps, in order to guide actions aimed at improving health services in health care facilities. More than 60% of the indicators required by the regional response monitoring framework are drawn from HeRAMS data. Standard descriptive and geospatial accessibility modelling reports are generated for Afghanistan, Iraq and Yemen, and national interpretation workshops are held to utilize the reports. In June 2023, a regional workshop was held to share experiences among participating countries. The Regional Office provided in-country technical support missions to Iraq, Libya and Yemen. HeRAMS data is increasingly being used to identify gaps in service availability and develop action plans to address these gaps.

36. Information managers and epidemiologists were deployed to lead the health information management functions for the drought and food security crises in the Horn of Africa to support Djibouti, Somalia and Sudan, and also provided surveillance support to Afghanistan, Iraq, Lebanon, Libya, Morocco, Pakistan, Somalia, Sudan and Yemen.

37. Challenges facing countries include a lack of strong governance related to surveillance activities, shortage of trained human resources, frequent turnover of personnel, high workload due to COVID-19 and related staff shortages, limited alignment of activities with non-surveillance departments and non-health sectors, and political instability.

### **Managing epidemics and pandemics**

38. Emerging and re-emerging infectious disease outbreaks, as well as other public health emergencies, continue to pose major threats to public health in the Eastern Mediterranean Region. Controlling and preventing the spread of infectious diseases is exceedingly challenging due to the complicated humanitarian crises and lengthy conflicts affecting nine out of 22 countries and territories in the Region. In order to detect, investigate and respond to emerging and high-threat pathogens, as well as to stop their global spread, the WHO Regional Office continues to provide countries with strategic, operational and technical support. All countries and territories in the Region continue to be vulnerable to threats from emerging infectious diseases.

39. In 2022, all 22 countries and territories of the Region continued to suffer the negative health consequences of the ongoing COVID-19 pandemic. As of 31 May 2023, countries and territories of the Region had reported over 23 million cases of COVID-19, including more than 351 360 associated deaths, representing a case fatality ratio of 1.5%. Between June 2022 and May 2023, in addition to COVID-19, WHO assisted 20 countries in investigating and responding to 58 outbreaks of infectious diseases, including measles

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<sup>1</sup> Based on World Bank definitions, nine countries and territories in the Eastern Mediterranean Region are classified as fragile and conflict-affected: Afghanistan, Iraq, Lebanon, Libya, Palestine, Somalia, Sudan, Syrian Arab Republic and Yemen (<https://thedocs.worldbank.org/en/doc/69b1d088e3c48ebe2cdf451e30284f04-0090082022/original/FCSList-FY23.pdf>).

(11 countries), mpox (11), acute watery diarrhoea (nine), dengue (six), malaria (four), circulating vaccine-derived poliovirus (three), CCHF (three), Middle East respiratory syndrome (MERS) (three), poliomyelitis (two), diphtheria (one), HIV (one), shigellosis (one), meningitis (one), hepatitis A (one) and hepatitis E (one). A cluster of travel-associated Legionnaires' disease was also documented in one country. The drivers of these recurring disease outbreaks in the Region include climate change, natural disasters, deteriorating public health infrastructure, weak health systems and population movement.

40. The WHO Regional Office for the Eastern Mediterranean continued the provision of technical, management and logistic support to affected countries to prevent, prepare for, detect, confirm, contain, limit spread and mitigate outbreaks through evidence-based control measures. The *Strategic framework for prevention and control of emerging and epidemic-prone infectious diseases in the Eastern Mediterranean Region 2020–2024* continues to provide guidance and direction in strengthening the capacity of countries to better prevent, prepare for, respond to and contain these disease outbreaks and minimize their negative social and economic impact.

41. In FCV countries, WHO continued the implementation of a strengthening plan for the Early Warning, Alert and Response Network (EWARN). As of the end of 2022, the EWARN is functioning in eight countries (Afghanistan, Iraq, Libya, Pakistan, Somalia, Sudan, Syrian Arab Republic and Yemen). Its successful implementation has been reflected by the high percentage of completeness of reporting (e.g. 95% in Yemen, 88% in Afghanistan and 87% in Syrian Arab Republic) and verification of the majority of alerts received within 48 hours (e.g. 95% in Afghanistan and 89% in Sudan).

42. Rapid response teams are central to the overall control of disease outbreaks. With technical assistance and training from WHO, all 22 countries and territories now have rapid response teams at national and subnational levels. In 2022–2023, 160 rapid response teams were trained in Egypt, Saudi Arabia, Somalia and north-west Syrian Arab Republic. WHO developed a monitoring and evaluation framework, in collaboration with the Centers for Disease Control and Prevention (CDC) and EMPHNET, to assist countries to assess the capacities and operations of their rapid response teams for collective learning and continuous improvement. The monitoring and evaluation framework was developed through a consultative process, whereby experts from health ministries of 15 countries/territories (Bahrain, Djibouti, Egypt, Iraq, Jordan, Libya, Morocco, Palestine, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates and Yemen) and other regional experts validated the content of the manual.

43. Twenty-five technical missions were conducted by WHO to support 10 countries – Afghanistan, Egypt, Iraq, Jordan, Lebanon, Oman, Pakistan, Saudi Arabia, Syrian Arab Republic (including a mission to the north-west of the country) and Tunisia – in the activation of EWARN to support dengue, CCHF and cholera risk assessments, and for outbreak response and emergency deployment related to floods and earthquakes. Moreover, WHO and its partners, through the Global Outbreak and Response Network (GOARN), frequently deployed experts to support the national response to disease outbreaks or other public health emergencies, including cholera in Lebanon, Pakistan and Syrian Arab Republic, and CCHF in Afghanistan, Iraq and other countries.

44. Early warning needs to be complemented by reliable laboratory diagnosis and by timely and effective investigation and response. WHO invested heavily in building laboratory capacities during the COVID-19 pandemic and has leveraged this opportunity to expand testing capacities for a broader range of pathogens (e.g. for arboviral disease in Afghanistan and Somalia; CCHF in Iraq; cholera in Lebanon and Syrian Arab Republic; and mpox in Egypt, Lebanon and Sudan). With WHO support, all 22 national reference laboratories and more than 300 other laboratories had passed external quality control reviews by 2022.

45. In line with World Health Assembly resolution WHA57.13, significant efforts have been made to expand genomic surveillance across the Region. A regional strategy has been developed for the surveillance of emerging and re-emerging pathogens of epidemic and pandemic concern, with valuable input from countries during a regional meeting in Oman. New genomic sequencing hubs in Morocco, Oman and the United Arab Emirates have received logistical and technical support to broaden their pathogen coverage beyond COVID-19. Twinning initiatives have been launched to establish partnerships between countries that are developing their genomic networks and well-established public health authorities. In-country support and trainings for sequencing respiratory, diarrhoeal and arboviral pathogens were conducted in response to outbreaks in Afghanistan, Somalia, Sudan and Yemen, building upon existing capacities developed during the COVID-19 pandemic.

46. WHO continued supporting countries in the Region to establish, sustain and enhance influenza and other emerging respiratory disease surveillance systems. Through this support, 19 out of the 22 countries and territories have established functional sentinel surveillance systems for influenza-like illnesses and/or severe acute respiratory infections. These countries/territories routinely collect, analyse and share influenza and other respiratory virus data with the regional or global data platforms (EMFLU or FluMart). Five countries (Iraq, Oman, Saudi Arabia, Somalia and Syrian Arab Republic) have successfully rolled out the EMFLU 2.0 platform after WHO provided the necessary training and technical backing.

47. WHO has also been assisting countries to integrate SARS-CoV-2 and other respiratory viruses, such as MERS-CoV and respiratory syncytial virus, into the existing influenza sentinel surveillance system. During the reporting period, WHO conducted technical missions to Iraq, Lebanon, Morocco and Saudi Arabia to assist operationalization of the IDS framework. By the end of 2022, six countries – Egypt, Saudi Arabia, Morocco, Oman, Qatar, Saudi Arabia and United Arab Emirates – had made progress towards integrating SARS-CoV-2, respiratory syncytial virus and MERS-CoV into existing influenza sentinel surveillance systems.

48. WHO and countries of the Region play an important role in the prevention and control of seasonal and pandemic influenza. WHO has been working closely with all countries and territories in the Region to strengthen, scale up or (re)establish sentinel surveillance for influenza and other emerging respiratory viruses. As of the end of 2022, 19 countries/territories have functional influenza sentinel surveillance and virological surveillance and contribute influenza data and virus isolates to the Global Influenza Surveillance and Response System (GISRS). The Region contributed approximately 25% of all virus isolates to GISRS for seasonal vaccine development – one of the highest rates of the six WHO regions.

49. In the context of climate change, natural disasters and deteriorating public health infrastructure, cholera has resurged across the globe. By the end of 2022, 30 countries worldwide were experiencing cholera outbreaks, including eight in the Eastern Mediterranean Region (Afghanistan, Iran (Islamic Republic of), Iraq, Lebanon, Pakistan, Somalia, Syrian Arab Republic and Yemen). To address the multiple outbreaks, WHO has been collaborating with UNICEF, IFRC and other partners to establish multisectoral cholera control platforms at national and regional levels. Early detection and improved case management meant that case fatality ratios for seven of the eight cholera outbreaks documented in 2022 were within international standards (median case fatality rate = 0.19%; range: 0.001% to 1.67%). Despite global shortages, oral cholera vaccine has remained an important tool for the control of outbreaks. High vaccination coverage rates in Lebanon (80%), Pakistan (94%) and Syrian Arab Republic (98%) contributed to reductions in disease incidence during 2022.

50. WHO continued to support countries to strengthen their prevention and control capacity for emerging vector-borne and zoonotic diseases (VBZDs) through technical missions, clinical and operations training and mentoring, integration with surveillance and laboratory services, and provision of medical supplies. An increasing number of countries in the Region have experienced disease outbreaks caused by emerging VBZDs during the reporting period, and WHO has stepped up to extend technical and financial support to minimize the impact of these outbreaks. WHO organized a regional consultative meeting to address key challenges in the prevention and control of VBZDs and has developed guidelines to reinforce the prevention and control efforts.

51. WHO maintained technical support to countries of the Region to strengthen clinical management capacity for diseases caused by high-threat pathogens, including CCHF, dengue, respiratory diseases (including influenza, MERS, COVID-19) and haemorrhagic fevers, among others. WHO technical teams conducted field missions to Afghanistan and Iraq to strengthen CCHF outbreak management and clinical practices, and trained health workers on the new guidelines resulting in improved capacity for patient screening, triage, and appropriate and timely treatment. Based on the Ebola virus disease readiness assessment in Djibouti, Somalia and Sudan, which identified gaps, needs and priorities, WHO undertook several measures for preparing the countries to respond effectively to future outbreaks. These include training provided to 28 experts (Sudan) and the procurement and supply of PPE (Djibouti and Somalia). These measures were aimed at delivering better clinical care to reduce mortality, reduce health care-associated (nosocomial) transmission, and protect the health care workforce.

52. WHO contributed to capacity-building of front-line health workers and local health authorities – particularly in FCV countries – on comprehensive clinical management and critical care/intensive care units.



Extensive technical support and efforts have been made to enhance the critical care/intensive care unit capacities in resource-limited countries and to improve the practice of clinicians. The online oxygen platform developed by WHO has helped countries to improve real-time assessment of oxygen capacity. Fourteen national biomedical engineers were recruited and are currently working in Afghanistan, Djibouti, Iraq, Libya, Pakistan, Somalia, Sudan, Syrian Arab Republic and Yemen to assess and strengthen the use of oxygen in health facilities. This, together with training and capacity-building at the local level to manage the oxygen facilities, has helped to improve the optimal use of oxygen, timely filling of oxygen gaps, management of equipment and functionality of health facilities – resulting in increased oxygen availability and reduced mortality.

53. In March 2023, WHO organized the sixth meeting of the Eastern Mediterranean Acute Respiratory Infection Surveillance (EMARIS) Network in conjunction with the Second/Third Scientific Conference on Acute Respiratory Infection in the Eastern Mediterranean, in Muscat, Oman. This high-level meeting facilitated discussion and agreement on the road map to strengthen and enhance integrated surveillance for influenza and other emerging respiratory viruses; improved the use of surveillance data to strengthen disease control programmes; promoted quality data generation from local surveillance systems to enable evidence-informed public health policy-making; and facilitated research related to influenza and other respiratory viruses.

54. Despite the efforts exerted by WHO, managing high-threat pathogens with epidemic/pandemic potential in the Eastern Mediterranean Region remains challenging. The main challenges encountered include the protracted emergency situations in nine countries and territories that continue to negatively impact routine service delivery and limit access to vulnerable populations, as well as poor governmental investment in infectious hazards preparedness plans which contributes to delays in response to outbreaks of high-threat pathogens. Delays in data sharing by countries and inconsistency of shared data represent additional challenges.

### **Responding to health emergencies**

55. The number of people needing humanitarian assistance in the Eastern Mediterranean Region increased from 102 million in 2021 to 127 million by the end of 2022. Countries and territories of the Region account for 9% of the global population but carry 38% of the humanitarian burden. The Region is also the source of more than half (55%) of the world's refugees. The Eastern Mediterranean Region is experiencing a convergence of crises in many countries, with protracted humanitarian needs, caused by multiple hazards including societal, natural and technological risks. Political uncertainties and the varying levels of economic development across the Region have hindered the timely and proper management of health emergencies.

56. The WHO Regional Office continued to respond to the COVID-19 pandemic in 2022. A number of the key accomplishments of the COVID-19 response are documented above and in the subsequent section on implementation of resolution EM/RC68/R.2. The past year also saw significant humanitarian crises in eight of the 22 countries and territories in the Region, as discussed below.

57. In Sudan, the recent escalation in conflict has led to shocking levels of violence and attacks on health care. Around 25 million people require humanitarian assistance after more than 2 million people were newly displaced between 15 April and 31 May 2023, having to flee to safer areas both inside and outside the country. At least 60% of health facilities located near conflict areas are out of service and 46 attacks on health care have been verified by WHO. The ability to deliver aid is gravely constrained by insecurity, leading to a lack of access to some areas of the country, bureaucratic impediments, looting and diversion of aid. Despite the challenges, WHO has delivered more than 200 tonnes of supplies and mobilized US\$ 3.6 million through the CFE to mount a rapid response to the rising levels of humanitarian need. WHO continues to reinforce surveillance and response to disease outbreaks and is providing ongoing support to maintain the delivery of essential health services in conflict-affected areas. WHO is also prioritizing support for facility-based care of acute malnutrition, providing health response leadership and coordination.

58. In the Syrian Arab Republic, at least 8.8 million people were affected by the recent earthquake, with the majority anticipated to need some form of humanitarian assistance. Prior to the earthquake, an estimated 15.3 million people were already in need of assistance and this new emergency has compounded suffering in a country already devastated by 12 years of crisis. WHO maintained a swift and scalable response to meet the health needs of populations affected by earthquake and conflict in all affected governorates; continued to fill critical gaps in

primary and secondary health care services; provided essential medicines and medical supplies; supported psychosocial interventions for the survivors of gender-based violence; and strengthened the provision of cross-conflict-line and cross-border medical supplies. The health sector delivered assistance to people in need across the country and ensured the continuity of essential health care. Health sector partners in the Syrian Arab Republic administered 5.6 million medical procedures and 6.2 million treatment courses, of which WHO provided 0.52 million and 4.9 million, respectively. In the country's north-west, WHO provided life-saving and life-sustaining medicines and medical equipment worth US\$ 12.2 million to 200 health facilities, sufficient to cover 6.7 million treatment courses in 2022. In the country's north-east, WHO pre-positioned vaccines and surgical supplies, as well as trauma supplies, and supported COVID-19 vaccination activities, including in hard-to-reach areas and camps. WHO continues to strengthen local capacities in immunization and the treatment of mental illness and disability. For WHO, the "Whole of Syria" (WoS) approach remains essential in creating opportunities to reach the most vulnerable populations in different parts of the country using all operational modalities, including both cross-border and cross-conflict-line. Through strong intersectoral coordination between the WoS water, sanitation and hygiene (WASH) and health sectors, cholera case fatality rates have been maintained below the 1% threshold. The Programme Completion Review by the Government of the United Kingdom of Great Britain and Northern Ireland gave WHO's WoS programme an A rating for the period 2016–2022, as was the case for each year of the project. The final report stated: "WHO played an essential role in the delivery and coordination of the humanitarian health response amongst international actors, particularly on COVID-19 preparedness and response, and have contributed to better coordination of health services across Syria".

59. In Pakistan, severe monsoon floods in June 2022 damaged over 2000 health facilities, contributing to the disruption of essential health care, referrals and immunization campaigns. At least 90 districts were declared calamity hit, with 12 867 people injured, 1738 people reported dead and 6.4 million people needing immediate humanitarian assistance. WHO declared the emergency as Grade 3 on 28 August 2022 and activated the incident management system across the Organization on 29 August 2022. Immediately after the grading, WHO released US\$ 10 million from the CFE to fund the initial rapid response and scale-up, and repurposed staff at the country level to support large-scale response efforts. By September 2022, WHO had established three operational hubs and 10 field operations centres in flood-affected districts, and had deployed senior experts in coordination, surveillance and information management (around 20 international and 80 national staff). A total of 33 districts were targeted by WHO's immediate response. Based on rapid risk assessment, the absolute priority was to enhance service delivery, case management, disease surveillance and outbreak control to prevent a health crisis. By December 2022, WHO had supported local authorities to reach 2.4 million of the 6.4 million people targeted with an integrated package of essential health services for displaced people, delivered through static and mobile health camps. The 2022 Pakistan Floods Response Plan was jointly launched by the Government of Pakistan and the United Nations on 30 August 2022, with an overall funding requirement of US\$ 160 million, of which US\$ 22.8 million was required for urgent health needs. The WHO Emergency Appeal was issued in September, with an overall funding requirement of US\$ 81.5 million for the period September 2022 to May 2023. As of December 2022, the health response had a funding gap of 82%, resulting in increasing gaps in the provision and recovery of health services in the flood-affected areas.

60. In Afghanistan, WHO scaled up surveillance, preparedness and response to outbreaks, health emergencies and natural hazards in 2022. WHO continued to lead the health cluster and supported the implementation of humanitarian response and recovery measures to natural and human-made disasters by providing medicines, medical supplies, and logistical and technical support. WHO also worked to strengthen trauma care and mass casualty management, while providing emergency primary- and secondary-level care to vulnerable, displaced and disaster-affected populations in underserved areas. The WHO-supported EWARN system detects and assists in the management of infectious disease outbreaks in all provinces. WHO responded to 935 alerts in 2022, in coordination with the national disease surveillance and response. The Organization has been able to maintain static and mobile health teams to support life-saving health service provision; the mobile health teams have been crucial for providing emergency health services and outbreak response. In 2022, WHO supplied a total of 5217 tonnes of basic and specialized medical kits to cover illnesses including noncommunicable diseases, and trauma and emergency surgery kits to major hospitals in the country. In addition, WHO increased outreach to health facilities and hospitals in previously unserved areas, reaching 12.9 million people in need of health assistance. WHO increased women-focused services by opening the National Advanced Referral Center for Survivors of Violence, which provided health services and treatment to 423 people. The Organization also supported the

Inpatient Department for Severe Acute Malnutrition centres in 116 hospitals and 11 comprehensive health centres across the country; more than 46 000 children suffering from complications of severe acute malnutrition were admitted in these centres in 2022 – the highest number in the past 3 years. WHO continues to play a vital role within the World Bank-supported Health Emergency Response project, including leadership on disease control efforts and monitoring and evaluation of service delivery.

61. In 2022, Yemen was affected by conflict and insecurity, severe drought, intense flooding and an unstable economy. Due to the severely weakened health system, access to health services remained limited. Malnutrition was widespread and disease outbreaks included COVID-19, measles and polio during 2022. More than 21.9 million people were in need of humanitarian assistance in the country. WHO continued to support the provision of primary and secondary health care services, and to prioritize vulnerable populations. Together with the Ministry of Health and 47 national and international partners, WHO targeted more than 12.6 million people across Yemen. However, due to funding constraints (only 42% of the required funding was raised), only 7.8 million beneficiaries were reached in 2022. More than 1 million children were protected from vaccine-preventable diseases. WHO continued to support health service delivery in 72 hospitals. Cure rates for severe acute malnutrition were maintained at well over 90% and the case fatality ratio was less than 1%, consistent with international standards. WHO and partners worked to strengthen, sustain and expand access to a minimum package of quality health services at the community, primary and secondary levels and to improve services at tertiary care level. The COVID-19 pandemic had a major impact on health service delivery, therefore WHO and partners continued to work towards strengthening all aspects of the COVID-19 response. This included the installation of oxygen plants, provision of technical assistance in line with the emergency response framework, training of health staff on key skills (e.g. more than 1200 health workers were trained on basic and advanced life support), and strengthening surveillance and response efforts (including provision of training and equipment for improving laboratory capacity). The joint WHO-UNICEF 5-year Emergency Health and Nutrition Programme in Yemen received a rating of highly satisfactory – the highest level on a 6-point system – at the completion of the project. The final report stated: “The project was carried out in a high-risk environment but achieved its Project Development Objective by providing essential services to people in need and strengthening the national and local systems for improved and resilient service delivery.”

62. Somalia is experiencing a worsening drought due to five consecutive failed rainy seasons. More than 3.7 million individuals have been displaced (internally or across borders) by conflict, insecurity, forced evictions, drought and floods. By December 2022, droughts had affected 8.3 million people in the country and resulted in the displacement of more than 1.4 million individuals, and an estimated 43 000 excess deaths. High levels of malnutrition, as well as outbreaks of cholera, measles, malaria and circulating vaccine-derived poliovirus type 2, were recorded across the country. In 2022, WHO supported large-scale vaccination campaigns against cholera, measles and polio. WHO continued to lead the health cluster, working with 55 national and international partners to improve the health outcomes of affected populations; health cluster partners targeted more than 4.9 million people and reached 4 million beneficiaries in 2022. Funding was prioritized by the health and nutrition clusters for the most severely affected districts and rapid response teams were deployed to the areas worst affected by cholera. Over the reporting period, WHO deployed 2164 community health workers to conduct risk communication, community education, alert detection, reporting, and screening for malnutrition. WHO also deployed 148 mobile outreach teams across the country and trained health staff on a wide variety of topics.

63. The ongoing conflict in Palestine is further straining a health system that is already stretched due to the COVID-19 pandemic and protracted complex emergency. Given the chronic lack of supplies for life-saving medicines and the fragmented state of the health system, there is a pressing need for health care. WHO and partners continue to enhance the capabilities of health care professionals and their ability to respond. Attacks on health care continue to be documented by WHO: between June 2022 and May 2023, 204 attacks were recorded, including assault and detainment of paramedics, barring access of ambulances and paramedic teams, attacks on ambulances, and breaking into health care facilities.

64. In the midst of ongoing instability and the COVID-19 pandemic, Libya continues to rely heavily on the life-saving and life-sustaining health care services provided by the humanitarian response. WHO continued to support disease surveillance, the distribution of medications and supplies, and the execution of vaccination

campaigns in regions with the highest needs, all while enhancing collaboration with health authorities at all levels and respecting their leadership role. WHO continues to aim for an equitable distribution of humanitarian aid to help to increase services in neglected and vulnerable areas of the country. This is being achieved through the deployment of mobile medical teams, expanding the presence of district field coordinators and maintaining a network of community health workers.

65. Attacks against health care are still being recorded in various countries and territories of the Region, despite advocacy efforts by WHO and partners. According to WHO's Surveillance System for Attacks on Health Care, in 2022, 261 instances of attacks on health care were recorded in seven countries/territories (Afghanistan, Libya, Palestine, Somalia, Sudan, Syrian Arab Republic and Yemen). In total, these incidents caused 154 injuries and 81 deaths among patients and health care professionals.

## **Progress of States Parties in implementing the IHR (2005)**

### **IHR monitoring and evaluation framework**

66. The IHR Monitoring and Evaluation Framework, with its four components of State Party Self-Assessment Annual Reporting (SPAR), joint external evaluation (JEE), intra/after-action reviews and exercises, continues to be widely accepted and used by countries and territories in the Eastern Mediterranean Region.

67. The SPAR tool continues to be provided in an electronic format which allows States Parties to report online, and WHO to provide real-time monitoring of submitted reports and quality checks of data provided. All the 22 countries/territories in the Region completed the 2022 SPAR on the achievement of IHR-related core capacities, in accordance with Article 54 of the IHR (2005).

68. Between May and June 2023, as well as successfully completing the SPAR, the Syrian Arab Republic and Yemen completed the external phase of the first round of JEE and Pakistan completed the second round.

69. During the reporting period, a tabletop exercise was conducted in Sudan and Yemen, and a simulation exercise was conducted in Egypt to test the country's readiness to host the 27th Conference of the Parties to the UNFCCC. In January 2023, a tabletop simulation exercise was completed in Somalia to test the implementation of the IHR national focal point functions.

### **IHR core capacities**

70. Analysis of the 2022 SPAR data indicates that the overall regional average score of IHR capacity is 66%, ranking slightly higher than the regional average of 64% reported in 2021. However, the SPAR overall score has remained essentially unchanged in the Region between 2018 and 2022, ranging from 63 to 66 out of 100; this is largely due to inadequate investments in national action plans for health security (NAPHS).

71. The highest average implementation scores were for capacities related to surveillance (83%), health service provision (74%) and laboratories (72%). Less well-performing areas included capacities related to food safety (57%), chemical events (58%), legal instruments and human resources (60%), and infection prevention and control (62%). The scores for the 13 IHR capacities in countries and territories of the Region are given in Annex 1.

72. As previously reported, NAPHS are developed in 19 countries and territories of the Region. These plans are currently being updated in a number of countries, building on the lessons learned from COVID-19. Sudan and Tunisia have successfully completed the update of their NAPHS. The Syrian Arab Republic has developed its NAPHS following the JEE, and development of the Yemen NAPHS is planned for August 2023.

73. Data from the JEEs and NAPHS have been used to develop proposals for the Pandemic Fund, which is an initiative put in place by the World Bank and WHO to coordinate the mobilization of resources for building country capacity for pandemic prevention, preparedness and response. Fourteen countries and territories in the Region managed to submit their applications for the first round of the Call for Proposals, with both Palestine and Yemen being successful. The Pandemic Fund proposals have generated demand for JEEs and

updates to NAPHS, and the following countries/territories will be supported to meet these requests before the end of 2023: Bahrain, Iraq, Libya, Palestine and United Arab Emirates.

## **Procedures under the Regulations**

### *IHR Emergency Committees, Review Committee and related progress*

74. The IHR Emergency Committee for COVID-19 has met 15 times since its establishment in January 2020. At the latest meeting on 4 May 2023, the WHO Director-General concurred with the advice offered by the Committee regarding the ongoing COVID-19 pandemic and declared that the pandemic is now an established and ongoing health issue that no longer constitutes a public health emergency of international concern (PHEIC).

75. The IHR Emergency Committee on the international spread of poliovirus is ongoing and has met 35 times since its establishment in April 2014. Following the advice of the latest Emergency Committee meeting on 3 May 2023, the WHO Director-General agreed that the risk of international spread of poliovirus still remains a PHEIC and recommended the extension of Temporary Recommendations for a further 3 months.

76. The IHR Emergency Committee on the multi-country outbreak of mpox is ongoing and has met five times since its establishment in June 2022. After considering the significant decline in the global spread of mpox and the gains achieved in the control of the outbreak in many countries, the Committee advised in May 2023 that the event required a transition from a PHEIC to a robust, proactive and sustainable mpox response and control programme that prevents resurgence of global spread, aims to eliminate person-to-person transmission, and mitigates the impact of local spill-over effects.

77. The IHR Review Committee regarding amendments to the IHR (2005) was convened pursuant to Articles 50.1.(a)2 and 47 of the IHR, as well as decision WHA75(9). The Review Committee is functioning in accordance with the WHO Regulations for Expert Advisory Panels and Committees. The sole purpose of this Review Committee is to provide technical recommendations to the Director-General on amendments proposed by States Parties to the IHR, as decided by the Health Assembly in decision WHA75(9). The Review Committee began its work on 6 October 2022 and provided its report to the WHO Director-General in January 2023. In accordance with decision WHA75(9), the technical recommendations formulated by the Committee will inform the work of the Member States' Working Group on Amendments to the International Health Regulations (2005) (WGIHR). In accordance with the same decision, the WGIHR was convened three times (in November 2022, February 2023 and April 2023) to review and discuss the proposed amendments. The WGIHR will present a package of proposed amendments for consideration by the Seventy-seventh World Health Assembly in 2024.

78. The Intergovernmental Negotiating Body (INB) was established by decision SS2(5) of the Second Special Session of the World Health Assembly in December 2021, to draft and negotiate a WHO convention, agreement or other international instrument on pandemic preparedness and response (referred to as the WHO CA+). The INB first proposed a conceptual zero draft, which was followed by a zero draft of the WHO CA+ for the feedback of Member States. INB meetings and intersessional meetings are being organized to facilitate discussion and negotiation of the different elements of the WHO CA+.

79. Only eight Member States from the Region have been actively participating in both INB and WGIHR negotiation processes.

### *IHR national focal points and event-related information*

80. Support continued to be provided to IHR national focal points to enhance their knowledge and capacities in the implementation of the IHR (2005). This included a series of virtual meetings and webinars with the national focal points to strengthen and scale up preparedness, operational readiness and response capacities, including for COVID-19. From September 2022 to June 2023, 14 sessions were delivered covering the Pandemic Fund, IHR amendments, WHO CA+ and other technical subjects. In March 2023, WHO organized the tenth IHR stakeholder meeting in which IHR national focal points from all 22 countries/territories of the Region participated. The meeting offered a platform for cross-country learning and capacity-building. Draft guidance on the terms of reference of the IHR national focal points was also developed and discussed during the meeting.

81. From 1 June 2022 to 31 May 2023, national focal points from the Region accessed the IHR Event Information Site a total of 2102 times, with the IHR national focal points of Kuwait (587), Egypt (377), Iraq (271) and Jordan (175) being the most frequent users of the site.

#### *Travel and additional health measures*

82. According to the 2022 SPAR, countries and territories of the Eastern Mediterranean Region have designated 109 ports, 94 airports and 59 ground crossings for IHR (2005) implementation. Of these, 19 countries reported having authorized ports to issue ship sanitation certificates in accordance with Annex 3 of the IHR (2005). The Region's capacity for IHR implementation at points of entry has increased from 60% in 2021 to 68% in 2022. This is slightly above the global average of 64%.

83. Travel advice and recommendations in relation to COVID-19 and emerging variants of concern, as well as on other public health threats including mpox, Marburg virus disease and cholera, have been consistently provided to countries/territories, including the recommendations of the IHR Emergency Committee for COVID-19 on performing risk assessment to inform travel-related decisions.

84. In accordance with mutual obligations under Article 43 of the Regulations, and to meet the challenges in reporting and cataloguing additional health measures during the COVID-19 pandemic, WHO developed the Eastern Mediterranean Region travel measures platform in November 2020 and has continued to monitor the measures ever since. The platform enables IHR national focal points to report travel measures via a secure log-in, while a dashboard function reflects the weekly regional epidemiological situation for each measure implemented in each country. All countries and territories of the Region have utilized the platform to provide validated information. In 2023, based on ongoing risk assessments and country contexts, entry restrictions and COVID-19-related travel measures were relaxed. After the widescale resumption of international commercial traffic, countries continued to adjust their travel-related measures including the application of testing, isolation, quarantine and vaccination requirements. As of May 2023, four countries in the Region require PCR testing certificates and five countries require pre-arrival vaccination; the number of required vaccine doses varies among countries, with four countries requiring a booster dose.

85. The situation for maritime traffic has followed a similar pattern, with many countries of the Region easing restrictions on crew changes and the overall movement of seafarers, given previous consequences for the global supply chain and the health of seafarers operating vessels.

86. Countries and territories in the Eastern Mediterranean Region continue to pursue national strategies to mitigate risks associated with international travel and are increasing their capacities at points of entry, while maintaining capacities built during the COVID-19 pandemic.

#### *Yellow fever*

87. As of May 2023, all 22 countries and territories of the Region had responded to the annual questionnaire on requirements for yellow fever vaccination for international travellers. Out of the 22, nine countries request a vaccination certificate for incoming travellers and have confirmed that the international certificates of vaccination against yellow fever, using WHO-approved vaccines, are now accepted as valid for the life of the person vaccinated, in accordance with Annex 7 of the Regulations, as amended by resolution WHA67.13 (2014).

### **Conclusion**

88. The implementation of the IHR (2005) continues to be a challenge in 2022–2023, and a clear lesson from COVID-19 is that while the IHR are necessary for promoting health security, they are insufficient alone. Complementary arrangements and metrics are required to address those areas necessary for health security that do not necessarily fall within the domain of the Regulations. Moreover, compliance with the IHR remains weak, and enhancing regional and country efforts to accelerate the implementation of the Regulations is critical. Effective engagement of countries of the Region in the related ongoing global processes is also needed, to ensure better reflection of the regional situation and the development of effective and regionally-tailored solutions.

## **Progress in implementing the plan of action for accelerating health emergency preparedness and response**

### **Progress made by countries and WHO**

89. Situation updates and adjustments to COVID-19 response plans have been regularly and transparently communicated to the public by governments of all countries and territories in the Region. High-level structures were established in most countries for the coordination of COVID-19 public health interventions; these are now being phased out or are transitioning into standing committees on emergency preparedness. Governance of essential public health functions is being strengthened as a basis for health systems transformation and resilience, and the capacity of legislators to strengthen health systems governance for universal health coverage and health security is being enhanced. An innovative training initiative in the Regional Office is enhancing leadership, technical, programme management and health diplomacy skills of staff from WHO, ministries of health and partners. Developed in collaboration with WHO headquarters and Johns Hopkins University, the programme employs a blended learning strategy that combines online, in-person and simulation approaches. As of 31 May 2023, three cohorts from five regions comprising 371 health professionals (49% female) have completed the training. The programme is seen as an important element in building the Global Health Emergency Corps.

90. WHO and partners continue to lead and coordinate efforts to prioritize access to COVID-19 vaccines, to reduce vaccine inequity and to monitor progress in vaccine supply, use and coverage. As of 24 April 2023, the average regional coverage is 50% fully vaccinated (range: 2–98%), 18% boosted, and 8% partially vaccinated. The vaccination coverage target of 70% has been achieved in Bahrain, Islamic Republic of Iran, Kuwait, Qatar, Saudi Arabia and United Arab Emirates. Vaccine safety surveillance and pharmacovigilance systems are being strengthened in countries to detect, investigate and analyse adverse events following immunization. Support continues to be provided to Egypt, the Islamic Republic of Iran, Pakistan and Tunisia, and more recently to Morocco and United Arab Emirates, for the production of safe and effective vaccines and to enhance the capacity of national regulatory authorities.

91. Risk assessment continues to inform public health and social measures, particularly those related to international travel. Measures were applied in response to COVID-19 and other events (such as the cholera outbreak in Lebanon and Syrian Arab Republic, and the multicounty outbreak of mpox) and to enhance country preparedness in the Region in the light of the Marburg virus disease outbreak in Equatorial Guinea and the United Republic of Tanzania. WHO provides technical support to countries to assess risk and collect information on travel-related measures through a regional platform established for the purpose, which is accessible to the IHR national focal points. Contingency plans for all-hazard public health threats and standard operating procedures have been developed at all main international airports and ports, and to a limited extent at ground crossings. Cross-border dialogue has been facilitated and supported between Afghanistan, Islamic Republic of Iran and Pakistan, between Jordan and the Syrian Arab Republic, between Egypt and Sudan, and between Somalia, Sudan and Ethiopia. WHO is providing support and guidance to countries to develop IHR (2005) capacities at points of entry and activities related to international travel are being coordinated with relevant partners at all levels.

92. Countries have made efforts to utilize behavioural insights to promote the implementation of public health and social measures related to COVID-19 and other public health events. Behaviour-change activities were implemented in Bahrain, Egypt, Iran (Islamic Republic of), Iraq, Lebanon, Saudi Arabia, Sudan, Syrian Arab Republic and Yemen. Activities to fight the infodemic have also been conducted and supported in most countries and territories in the Region. Afghanistan, Bahrain, Egypt, Iran (Islamic Republic of), Iraq, Lebanon, Morocco, Oman, Palestine, Sudan, Syrian Arab Republic, Tunisia and Yemen were supported to review and update their national RCCE plans and build capacity of relevant officials. The Regional RCCE Interagency Working Group established during the COVID-19 pandemic by WHO, IFRC and UNICEF has expanded its mandate to address ongoing outbreaks and emergencies in the Region. The WHO Regional Office continues to use the social listening platform for COVID-19 and has expanded its use for other public health events to inform interventions and obtain community feedback. Several efforts are ongoing to build resilient communities, such as expanding the existing multisectoral coordination mechanism to include communities, and assessing and adjusting existing structures for managing health emergencies.

93. The detection and reporting of COVID-19 cases has decreased, in part due to changes in health-care-seeking behaviours. The target of integrating SARS-CoV-2 surveillance into national disease surveillance systems has been met in all countries. Specific work has been initiated on advancing IDS for high-threat respiratory pathogens including influenza, SARS CoV-2, MERS-CoV and respiratory syncytial virus. (Details on implementation of the regional strategy for IDS to overcome fragmentation of surveillance and data systems are included in progress report EM/RC70/INF.DOC.12.) WHO has supported the expansion and use of the DHIS2 data management platform in countries, and the target related to analysing COVID-19 surveillance data to identify and share lessons learned with countries has been achieved. Social media scanning tools for the detection of public health events are being deployed in 15 countries, and use of GIS for monitoring of public health events and dissemination of information has been expanded.

94. The target of decentralizing laboratory testing capacity has been met. The number of laboratories with polymerase chain reaction (PCR) capacities is believed to be far higher than the 700 reported among health ministries in the Region in 2002, when taking into consideration those managed by different public and private sector providers. Genome sequencing capacity has been expanded to all 22 countries and territories (from a pre-pandemic level of 10 countries), and genomic sequencing data are shared in a timely manner through regional and global platforms by 21 countries and territories. All national reference laboratories are participating in WHO's External Quality Assessment (EQA) Programme to improve performance in SARS-CoV-2 testing. All national reference laboratories passed the EQA and assessment is being expanded to subnational laboratories. Progress has also been made in increasing and maintaining capacities for molecular testing and to develop and implement national frameworks for maintaining the highest standards of laboratory biosafety and biosecurity. Building laboratory infrastructure, workforce and equipment capacities continues at national and subnational levels. The three regional reference laboratories for COVID-19 in Morocco, Oman and the United Arab Emirates continue to provide support to countries. Operational and logistical support continues to be provided by WHO to laboratory supply chains.

95. Clinical management, infection prevention and control capacities, and oxygen generating capacity have been strengthened in countries. An innovative, award-winning project to expand oxygen generating capacity through the use of solar power was established in Somalia in 2021. A unique twinning project to strengthen critical care capacities was established between Oman and Yemen in 2022; the training programme has resulted in a national certification in critical care. Shorter term certification programmes on critical care were also conducted in 10 low- and middle-income countries.

96. Research and innovation capacities in the Region are also improving. Sero-epidemiological investigation using WHO Unity Studies protocols was conducted in Afghanistan, Jordan, Lebanon, Pakistan, Palestine, Syrian Arab Republic, Tunisia and Yemen to generate evidence. Five countries (Egypt, Islamic Republic of Iran, Oman, Pakistan and Saudi Arabia) participated in the global Solidarity trials for COVID-19 therapeutics. In 2022, two special issues of BMJ Global Health were published with WHO support to better document the epidemiology of and lessons learned from the COVID-19 pandemic across the Region. More than 200 global and regional experts attended the third Scientific Conference on Acute Respiratory Infections in the Eastern Mediterranean Region, held in Muscat, Oman in March 2023. A special issue of Influenza and Other Respiratory Viruses included some of the original research papers from the conference.

97. An external evaluation of WHO support to countries during the COVID-19 pandemic observed that, "WHO successfully provided an appropriately tailored response to each Member States' needs and that WHO support frequently strengthened Member State's own response efforts while contributing towards long-term capacity building". Key areas where capacities were built included laboratories, clinical care, infection prevention and control, RCCE, emergency operations centres and oxygen generation. The Regional Office is undertaking a study to map the expanded capacities and develop guidance on how they can be rationalized and sustained.

98. As noted in paragraph 42, rapid response teams are central to the overall control of disease outbreaks and all 22 countries and territories have functioning teams at national and subnational levels, following technical assistance and training from WHO.

99. Efforts are ongoing in countries to implement the One Health approach. In 2022, the 69th session of the Regional Committee adopted resolution EM/RC69/R.5, which endorsed the One Health operational



framework for the Eastern Mediterranean Region. The framework identifies objectives for governance and leadership, multisectoral coordination, data and information sharing, and building the capacity of a multidisciplinary workforce for One Health. The regional operational framework and its alignment with the global One Health joint plan of action (2022–2026) were discussed with countries at a Quadripartite regional meeting in May 2023 with agreement on the way forward in supporting countries in the adoption and implementation of the framework.

100. The Universal Health and Preparedness Review (UHDR), launched by the WHO Director-General in 2020 to assess preparedness for health security through the lens of health systems strengthening, is still in its pilot phase. Iraq is the only country in the Region to have conducted a review, although discussions are ongoing with other countries to pilot the UHDR. Representatives of countries in the Region have been engaged with the global working groups set up by WHO to review and update tools and procedures for preparedness assessment and to develop guidance, tools and procedures to facilitate preparedness assessments and reviews. Furthermore, countries in the Region are engaged in the WHO consultation process on operationalizing the global architecture for health emergency preparedness, response and resilience.

### **Challenges**

101. Existing structures for health emergency and disaster risk management are fragmented in most countries of the Region, which may impede efforts to strengthen governance and leadership for managing health emergencies. Efforts are ongoing to build the health workforce capacity and surge capacities to respond to emergencies; however, strategies to generate and sustain a skilled multidisciplinary health workforce are still lacking in the majority of countries. Most countries allocated resources for the COVID-19 response and fast-tracked mobilization to the various administrative levels; however, allocation of domestic resources for health emergency preparedness continues to be insufficient.

102. Despite the recommendations of several international reviews to empower IHR national focal points, the target to establish a IHR national focal point centre – equipped with the needed resources and with clear roles, responsibilities and reporting lines to cabinet level – has been implemented in only five countries (Egypt, Pakistan, Saudi Arabia, Sudan and United Arab Emirates), while progress is ongoing in Jordan.

103. Achieving the WHO target of COVID-19 vaccination coverage of 70% continues to be a challenge in countries of the Region. Several factors have contributed to reduced uptake of COVID-19 vaccines, including: misinformation and disinformation on the safety and efficacy of vaccines; lower risk perception of the population (less than 5% by the end of 2022, based on a regional survey conducted by WHO and UNICEF); competing priorities; and COVID-19 vaccine certification no longer being a requirement for international travel.

104. The Regional Office is working with emergency-affected countries to deliver essential health services and ensure that vulnerable populations have access to critical health care. However, sustaining provision of these services is challenging, particularly in conflict-affected areas, and logistics and supply systems are difficult to maintain. Ensuring access to medical countermeasures has also been a major challenge during the COVID-19 pandemic.

105. Fragmented structures exist at the country level with regards to health education and promotion, RCCE and emergency communication, resulting in duplication of efforts and a lack of well-established RCCE systems to serve health programmes and health emergency management.

106. Risk assessment continues to be performed to inform travel advice and travel-related measures; however, limited progress has been made in systematic training and capacity-building of staff on IHR implementation at points of entry. Despite efforts to enhance public health collaboration across borders, uncontrolled population movements and limited IHR capacities at ground crossings remain a challenge.

107. One Health threats continue to be on the rise in countries and territories of the Region. Although efforts are ongoing to manage such threats, better integration is required to maximise resources and make greater impact. Country-level coordination mechanisms are poorly developed and not well functioning.

## Way forward

108. Countries should intensify their efforts to promote and guide health sector negotiations with ministries of finance to increase fiscal space for health emergency preparedness and to prioritize investment in common goods for health.

109. Countries should assess the capacities that they developed during the COVID-19 pandemic (such as surveillance, laboratories, oxygen-generating plants, critical care units, emergency operations centres), undertake a rationalization process to “right-size” the gains process, and develop a plan to resource and sustain the gains.

110. Countries should further engage in global discussions and efforts to address inequitable access to medical countermeasures. This will include intensifying their efforts to establish/strengthen national regulatory authorities, encourage technology transfer and share know-how for the local production of medical countermeasures, as well as enhancing and maintaining the supply chain during health emergencies.

111. Countries should identify and cost a package of primary and secondary essential health services, and identify modalities for service provision to ensure their continuity during emergencies. WHO will continue to provide the needed support to countries, building on the lessons learned and best examples from other countries.

112. Countries should develop standard operating procedures for inclusion in supply and procurement plans to ensure timely delivery of emergency medical supplies. WHO will continue to provide technical support for the development of national procurement plans.

113. Countries should continue their efforts to advance implementation of the IDS strategy, and to strengthen genomic sequencing capacity and commit to timely data-sharing through regional and global platforms.

114. Countries should continue to evaluate the effectiveness of public health and social measures to generate evidence to inform future decision-making. Existing structures for health education and promotion, RCCE and emergency communication should be reviewed and integrated, guided by behavioural insights and with the aim of putting communities at the centre of emergency management.

115. Countries should enhance IHR implementation at points of entry for international travel, develop workforce capacities and enhance collaboration across borders. WHO will provide support in: developing training packages for countries; facilitating dialogue between neighbouring countries for cross-border collaboration; and applying risk assessment to develop travel advice and travel-related measures.

116. Countries should expedite efforts to adapt the regional One Health operational framework at the country level, with an initial focus on establishing strong governance and coordination mechanisms. WHO will coordinate with the Quadripartite at the regional level and ensure that its recommendations are reflected at the country level.

117. WHO will undertake a comprehensive assessment of the health emergency and disaster risk management capacities in countries to guide their strengthening.

118. WHO will finalize guidance on the structure, responsibilities and functions of the IHR national focal point centres, and support countries in the establishment of these.

119. WHO will initiate discussion with universities to integrate health emergency preparedness into undergraduate and postgraduate curricula for all cadres of health professional to strengthen the health workforce.

## Annex 1

## International Health Regulations (2005) national capacity monitoring: capacity scores (%) for all reporting States Parties for 2022

Country/ territory	Legal instruments	IHR coordination	Financing	Laboratory	Surveillance	Human resources	Health emergency management	Health service provision	Infection prevention and control	Risk communication and community engagement	Points of entry	Zoonosis	Food safety	Chemical	Radiation
Afghanistan	20	60	40	44	80	30	53	60	47	40	27	60	20	20	0
Bahrain	100	73	100	96	100	70	87	100	87	80	100	80	80	40	60
Djibouti	30	40	40	52	70	40	27	53	33	40	33	40	60	20	20
Egypt	90	87	100	80	100	80	93	100	80	73	100	80	80	80	80
Iran (Islamic Republic of)	100	93	80	92	90	90	93	93	73	73	87	80	80	100	60
Iraq	80	80	70	76	80	50	73	67	47	80	47	80	60	60	40
Jordan	40	67	40	64	80	50	67	73	53	47	80	80	40	60	60
Kuwait	70	93	100	84	100	100	80	87	100	100	100	80	80	100	100
Lebanon	80	73	40	84	100	60	67	67	60	80	67	80	40	80	100
Libya	30	60	40	60	80	70	67	67	40	47	47	60	60	20	40
Morocco	50	53	80	84	80	80	80	67	47	80	73	80	80	80	80
Oman	40	73	70	92	100	50	87	100	93	93	87	80	60	80	80
Pakistan	30	33	60	60	80	30	53	53	40	33	40	60	40	40	100
Palestine	70	53	30	56	70	50	27	53	47	67	20	80	0	20	20
Qatar	70	87	100	100	100	100	100	100	87	100	87	100	100	80	100
Saudi Arabia	100	80	100	88	100	100	100	93	100	80	87	80	100	80	100
Somalia	30	53	20	30	24	30	33	47	40	33	20	20	20	20	20
Sudan	40	73	60	40	80	30	73	40	47	33	53	60	20	40	40
Syrian Arab Republic	60	53	60	52	50	40	53	60	53	60	87	60	60	60	60
Tunisia	50	80	70	92	100	50	73	93	53	33	73	100	80	80	80
United Arab Emirates	100	100	100	100	100	80	100	100	100	100	100	80	80	100	100
Yemen	50	33	60	52	60	40	40	60	40	33	27	40	20	20	20