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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 health emergencies in the Eastern Mediterranean Region, pursuant to resolution EBSS3.R1 of the WHO Executive Board (2015) and decision WHA68(10) of the Sixty-eighth World Health Assembly (2015).

2. Additionally, the report provides an update on progress in implementing the International Health Regulations (IHR) (2005) in the Region in the context of resolution EM/RC64/R.1 (2017), which deals with the 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. Finally, the report provides an update on progress in implementing resolution EM/RC68/R.2 on accelerating health emergency preparedness and response – a plan of action, which was endorsed by the Regional Committee at its 68th session in October 2021.

WHO's work in health emergencies in the Eastern Mediterranean Region

Introduction

4. The Eastern Mediterranean Region continues to face emergencies resulting from multiple hazards – outbreaks, conflict, natural disasters and technological hazards – on a massive scale, causing enormous health needs and risks. As of 30 June 2024, WHO was actively responding to 16 graded emergencies across the Region, including seven complex humanitarian crises, and monitoring over 55 other public health events. Ten emergencies were classified as grade 3 during 2023, including the conflicts in Palestine and Sudan, global cholera and dengue outbreaks, the COVID-19 pandemic, ongoing complex crises in Afghanistan, the Syrian Arab Republic, Somalia and Yemen, and the food security crisis in the Horn of Africa. These intersecting crises have had and continue to have a profound impact on people's health, livelihoods and lives. These emergencies transcend borders affecting multiple countries and regions simultaneously, amplifying the need for a coordinated and robust response.

5. In 2023, WHO responded to 73 disease outbreaks across the Region, a substantial increase from 2021 during which there were 31 outbreaks. As of 30 June 2024, there were 45 active outbreaks in the Region. As of mid-June 2024, conflicts and crises had left more than 107 million people in desperate need of assistance. Recent humanitarian challenges in Palestine and Sudan have pushed response capacities to their limits, underscoring the urgent need for collective action and support to alleviate the suffering of millions. The Region is also very prone to natural disasters. During 2022–2023, it witnessed five of the 10 most deadly natural disasters in the world. While the floods in Pakistan had devastating effects in 2022, during 2023 WHO supported the response to the earthquakes that struck the Syrian Arab Republic and Türkiye, the earthquake in Morocco, the tropical storm and floods in Libya, and three 6.3-magnitude earthquakes in Afghanistan.

6. In this complex environment, WHO has adopted a comprehensive, all-hazards approach to managing emergencies across the Region. Despite the multiple demands for emergency response, WHO has continued to build its own capacities and those of Member States to better prevent and mitigate, prepare for, detect, respond to and recover from health emergencies. WHO was able to document good health outcomes in its responses in the Region, in spite of the many operational constraints. WHO took a humanitarian-development nexus approach to respond to emergencies, while building long-term country-level capacities throughout the COVID-19 pandemic and advancing emergency management capacities across the Region.

7. The Contingency Fund for Emergencies has been instrumental in supporting the initial phase of the emergency responses in the Region. Fourteen awards from the Fund were issued in 2023 to provide assistance in response to natural disasters (such as the floods in Libya and the earthquake in Morocco), humanitarian emergencies (such as in Palestine and Sudan) and outbreaks (cholera, dengue). The Fund recorded an expenditure of US$ 20.5 million during the year, mostly for the procurement of life-saving medical equipment and supplies.

Preparing for health emergencies

8. Enhancing preparedness for all hazards is essential for an effective emergency response, and supporting national capacities to detect, prepare for and respond to emergencies has been a major priority for WHO across the Region. The COVID-19 pandemic highlighted the critical need to expand efforts for enhancing preparedness to all hazards and to ensure effective emergency response and resilience. The IHR (2005) continue to be the legal framework adopted by Member States in the Region for building country capacity to prevent, prepare for, detect, investigate and respond to public health events and emergencies. Much progress has been made on the implementation of the Regulations, as described in paragraphs 69–86 below.

9. Various plans are in place in countries to manage emergencies, including national action plans for health security, multi-hazard preparedness and response plans, disaster risk reduction strategies, hazard-specific plans and disease-specific plans such as those for influenza, cholera and COVID-19. However, these plans do not consistently and fully incorporate all relevant sectors. Additionally, most countries lack a clearly defined national structure for emergency management that involves all sectors (i.e. that is based on whole-of-government and whole-of-society approaches).

10. WHO consistently applies the Incident Management System, considered a best practice for emergency response; the system is being adopted by some Member States in the Region. WHO continues to support countries in assessing their emergency management structures and advancing preparedness to respond to emergencies caused by high-risk hazards, and particularly supports countries where health capacities are minimal.

11. Regularly updating the multi-hazard risk profiles is essential for effective planning, prioritization and resource allocation in health emergency and disaster management. For the last several years, WHO has been supporting countries in developing and updating their risk profiles and linking them with the development of national multi-hazard preparedness and response plans. During 2023, risk profiling workshops were facilitated in the United Arab Emirates and virtually for the Syrian Arab Republic. A virtual training on using the Strategic Tool for Assessing Risks (STAR) was also conducted in Sudan and Yemen. Preparations for updating risk profiles are underway in Iraq, Jordan, Libya, Morocco and Tunisia, with plans for implementation in 2024.

12. As the foundation for effective emergency management, the establishment and strengthening of public health emergency operations centres (PHEOCs) remains a priority for WHO in the Region. By the end of 2023, PHEOCs had been established in all 22 countries and territories, albeit at variable levels of functionality. A bi-regional strategic plan for PHEOCs (2023–2027) was launched with the Regional Office for Africa, with the aim to establish functional PHEOCs in 90% of Member States by 2027. To achieve this goal, action plans are set to be prepared for each country. WHO has developed the innovative electronic Public Health Emergency Management (ePHEM) software, which is a free, open-source, adaptable, scalable and evidence-based system to be used by national PHEOCs. The system has been introduced, piloted and implemented in 16 countries in the Eastern Mediterranean and African regions and is being expanded. The European and South-East Asia regions have also requested the introduction of ePHEM for future implementation.

13. To enhance preparedness and ensure minimal interruption to health services during public health emergencies, support has been provided for the capacity development of emergency, critical and operative care (ECO) services at the prehospital and facility levels. This process involves overall system assessments, training the health workforce on life-saving interventions during emergencies, and assessing hospital safety levels to withstand emergencies and disasters while maintaining functionality. As of December 2023, WHO has rolled out the ECO framework to ensure a continuum of care during emergency situations in 14 countries and territories of the Region.

14. Developing safe and disaster-resilient health facilities and hospitals remains a major focus of support in the Region. To strengthen hospital resilience in countries, WHO supports Member States in developing their capacity to identify and better understand the vulnerabilities that can potentially hinder hospital operations during emergencies. To support this area of work, through a collaborative effort between the WHO Health Emergencies Programme and Health Systems departments, a hospital resilience framework and operational guide were developed to enhance hospital resilience in the Region.

15. Training was provided to multidisciplinary teams of evaluators from Afghanistan, Egypt, Iraq, Jordan, Oman, Pakistan, Syrian Arab Republic and Yemen on the use of the Hospital Safety Index tool to grade hospital safety levels and develop capacities to manage emergencies and disasters, while continuing to provide health services to the affected population. To support research on health emergency and disaster management, WHO's team in the Eastern Mediterranean Region also conducted an interregional webinar with the Regional Office for Europe and the WHO Centre for Health Development in Kobe, Japan, on the WHO guidance on research methods for health emergency and disaster risk management, targeting participants from all countries in both regions.

16. Given the increasing health risks posed by zoonoses and environmental threats, several efforts are ongoing in countries to enhance the One Health approach. In 2022, the 69th Regional Committee adopted resolution EM/RC69/R.3 introducing an operational framework for One Health, which identifies elements for governance and leadership, multisectoral coordination, data and information sharing and the capacity-building of the One Health multidisciplinary workforce. The framework was introduced to countries in a regional Quadripartite[1] meeting in May 2023. A regional Quadripartite One Health coordination mechanism was developed with tailored terms of reference involving the regional and subregional offices of FAO, UNEP and WOAH. In addition, a One Health Eastern Mediterranean Region Taskforce was formed, comprising the relevant units and departments responsible for coordinating all One Health-related activities. One Health network meetings have taken place, involving One Health focal points from all WHO country offices across the 22 countries and territories of the Region, and a joint regional Quadripartite workplan has been developed. During the reporting period, five countries (Egypt, Iraq, Lebanon, Somalia and Tunisia) received support to develop their national One Health plans and roadmaps in line with the regional framework.

17. Institutionalizing national risk communication and community engagement (RCCE) capacities that enable countries to create a two-way trusted channel between health recommendations and people's risk perception and needs on the ground has been a vital part of preparing for and responding to emergencies. This aims to position RCCE as an essential cross-cutting pillar for health emergency management, preparedness and response. Activities have been focused in four main areas: supporting partner mapping and multisectoral planning in Iran (Islamic Republic of), Iraq, Sudan, Syrian Arab Republic and Yemen; establishing risk communication and infodemic management capacities to enable real-time, tested and multi-directional communication between authorities and populations at risk; customized infodemic training for Afghanistan, Bahrain, the Islamic Republic of Iran, Kuwait, Oman, Pakistan and Qatar; and bolstering community engagement through community health emergency workforce capacity-building in Afghanistan, Libya, Sudan, the Syrian Arab Republic and Yemen; and conducting systematic research that includes the collection of qualitative and quantitative data, and the triangulation of social and behavioural insights.

18. Coordination and collaboration between the public health and law enforcement sectors is especially important for the management of intentional and malicious events. In collaboration with security partners (both inside and outside the United Nations), WHO, through the health and security interface function, has provided ongoing support to Bahrain, Iraq, Jordan, Kuwait, Oman, Saudi Arabia and United Arab Emirates to enhance country capacities to prevent and manage events caused by chemical, biological and radio-nuclear agents.

19. WHO continues to encourage and support countries in conducting regular and event-specific risk assessments, contingency planning, simulation exercises and reviews of existing capacities in support of mass gatherings across the Region. The Eastern Mediterranean Region is home to some of the world's largest such gatherings, including the annual Hajj in Saudi Arabia and Arba'een in Iraq, as well as one-off events such as

[1] The Quadripartite comprises the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP), the World Health Organization (WHO) and the World Organisation for Animal Health (WOAH).

the 28th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP28) held in the United Arab Emirates in 2023. Ensuring the safety and well-being of participants is of the utmost importance. In 2023, the Regional Committee adopted resolution EM/RC70.R.3 endorsing a framework that provides a standardized approach to effectively managing potential health risks during mass gatherings.

20. The COVID-19 pandemic demonstrated the importance of developing core capacities at points of entry (PoE), in accordance with Annex 1B of the IHR (2005). A holistic PoE training package was developed, utilizing regional case-studies to demonstrate capacities and carry out practical exercises. A proposed five-year strategy on points of entry, safe transportation and border health for the Eastern Mediterranean (2023–2028) has been developed, based on extensive consultation with countries. WHO provides regular technical support to countries to assess risks and collect information on travel measures through a regional platform, established for this purpose, which is accessible to the IHR national focal points (IHR NFPs). Multi-hazard contingency plans and standard operating procedures have been developed at all main international airports and ports but remain limited at ground crossings. Cross-border dialogue has been facilitated and supported between Afghanistan, Iran (the Islamic Republic of), Iraq and Pakistan and between Egypt and Sudan. In 2023, WHO also conducted training on PoE core capacity assessments for Egypt, Oman, Sudan and Yemen, and supported a ground assessment in Egypt, Sudan and Yemen.

21. Work to establish and strengthen emergency medical teams (EMTs) continues across the Region. The EMT Initiative has played an increasing role in enhancing preparedness and response in the Region, catalysing a shift towards proactive emergency response strategies. Mentorship programmes supporting EMT classification are being conducted for Jordan, Pakistan, Saudi Arabia, Tunisia and the United Arab Emirates. International recognition of the regional contribution to global efforts is exemplified by the United Arab Emirates' hosting of the upcoming sixth EMT global meeting in November 2024. The establishment of a regional governance structure, the building of a skilled mentor pool and the first EMT Coordination Cell (EMTCC) training course in the Region signify a comprehensive approach towards standardizing emergency medical response systems. During 2023, EMTs were mobilized to support response efforts to crises including the floods in Libya, earthquakes in Morocco and the Syrian Arab Republic, and the conflict in Palestine. The EMTCC established in response to the conflict in Israel and Palestine is the most recent example of how WHO plays an active role in the facilitation of deployments of international EMTs during emergency response (see the section on responding to humanitarian emergencies, below).

22. WHO continued to make concerted efforts towards building the capacity of the IHR NFPs. A series of virtual meetings and webinars were held with IHR NFPs to strengthen and scale up preparedness, operational readiness and response capacities, including for COVID-19. During the reporting period, 16 sessions were delivered covering the Pandemic Fund, IHR amendments, the pandemic accord and other technical subjects. The tenth regional IHR stakeholders meeting brought the IHR NFPs together with members of the IHR multisectoral committees from all countries of the Region. The meeting served as an opportunity to discuss the proposed amendments to the IHR (2005), the pandemic accord, training on notification and information sharing under the IHR (2005) and resource mobilization for health security. It enabled consultation and discussion on guidance for drafting the structure, functions and responsibilities of IHR NFPs.

23. In 2020, the WHO Director-General launched the Universal Health and Preparedness Review to assess health security preparedness through the lens of health systems strengthening. It is currently in its pilot phase, with Iraq being the only country in the Region to have conducted the first two phases of the review (pre-review mission and the high-level review mission). Discussions remain ongoing with other countries to pilot the review to better inform its shaping and to finalize related documents. The report for Iraq was finalized and published online in April 2023 and is expected to be reviewed during the second global peer review (in the third and fourth quarter of 2024).

24. The Leadership in Emergencies training programme is an innovative emergency health workforce initiative building the leadership, technical, programme management and health diplomacy skills of health emergency staff from WHO, ministries of health and partners. Developed in collaboration with WHO headquarters, the Programme Management Centre of Excellence and Johns Hopkins University, the programme uses a blended learning approach that includes online, in-person and simulation methodologies. Since its inception, five cohorts from five regions comprising 546 health professionals (over 40% women)

have completed the training, as of June 2024. The programme is seen as an important element in building the Global Health Emergency Corps. In 2023, as part of the Leadership in Emergencies programme, WHO and the Harvard Humanitarian Initiative organized an interdisciplinary humanitarian response simulation exercise in Jordan to equip future emergency leaders with the skills needed to prepare for and respond effectively to complex humanitarian crises. The simulation exercise trained 65 humanitarian responders and future leaders from 52 countries across Africa and the Middle East – representing the WHO African and Eastern Mediterranean regions – and from international and local nongovernmental organizations.

Detecting public health events

25. The 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 Region and continues to provide technical support to countries to strengthen epidemiological surveillance and information management. WHO has developed and customized tools to collect, manage and analyse data on public health events and communicate the results of the analysis, while also providing support to countries for the strengthening of their information management capacities and guiding their emergency response.

26. A team of experts at the Regional Office for the Eastern Mediterranean actively gathers information 24 hours a day, seven days a week from a range of formal sources (e.g. ministry of health websites and IHR NFPs) and informal sources (e.g. online screening of open sources and social media). Through these efforts, between 1 January 2023 and 31 December 2023, a total of 2658 signals were captured and 41 new public health events monitored, and 22 rapid risk assessments and public health situation analyses were conducted. Public health situation analyses were carried out: for malaria in Djibouti; for earthquakes in the Islamic Republic of Iran, Morocco and Syrian Arab Republic; for the escalation of violence in Palestine and the neighbouring countries of Jordan and Lebanon; for Storm Daniel and flooding in Libya; for floods in Pakistan; for measles in Jordan; and for the escalation of the conflict in Sudan. Two rapid risk assessments were conducted in Sudan, for a biological hazard and for dengue. In addition, the Region has led the risk assessment for Middle East respiratory syndrome coronavirus (MERS-CoV) and contributed to seven global risk assessments, including three for cholera, two for mpox, one for COVID-19 and one for dengue. In 2023, six updates were posted on the IHR Event Information Site, six issues of Disease Outbreak News were published on the WHO global emergencies website, and 244 daily bulletins of signals and events and 35 weekly summaries of events were disseminated.

27. Substantial progress has been made in providing support to countries to establish and enhance their event-based surveillance systems. Key achievements include the development of national roadmaps, the integration of surveillance systems in eHealth strategies and the successful initiation of event-based surveillance in multiple countries. As part of integrated disease surveillance (IDS), 11 countries in the Region are now implementing event-based surveillance (Afghanistan, Egypt, Iraq, Jordan, Lebanon, Libya, Morocco, Oman, Qatar, Sudan and Tunisia) to strengthen capacity for the early detection of public health events. National guidelines and standard operating procedures for event-based surveillance have been developed in Afghanistan, Jordan, Libya, Morocco, Qatar and Sudan. This collaborative effort aligns with international standards, underscoring the commitment to proactive surveillance practices.

28. Public health event detection capacity has been further strengthened by deploying Epidemic Intelligence from Open Sources (EIOS) as a media scanning component of event-based surveillance in Afghanistan, Bahrain, Egypt, Iraq, Lebanon, Morocco, Oman, Qatar, Saudi Arabia, Sudan, northwest Syrian Arab Republic and Tunisia.

29. Five countries (Afghanistan, Iraq, Sudan, the Syrian Arab Republic and Yemen) have adopted the District Health Information System version 2 (DHIS2) as a centralized data solution to facilitate the integration of data from different systems.

30. Article 10 of the IHR (2005) on verification stipulates that States Parties acknowledge verification requests and provide information requested regarding potential public health events in a timely manner. Between 1 January and 31 December 2023, verification requests for 165 signals for public health threats, including for infectious, disaster, chemical and societal hazards were issued; these were all diligently addressed, although not always comprehensively, in the timely manner required by the Regulations.

31. Between 1 January 2023 and 31 December 2023, more than 1390 COVID-19-related signals and 13 mpox-related signals were captured, and over 50 weekly and monthly products to communicate the epidemiological situation were produced and released.

32. 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. An evaluation was conducted to explore the usage of social media screening tools for detecting public health events in the Region. The study found that social media was useful in the early detection of outbreaks and public health threats, monitoring public opinion and sentiment, tracking rumours and misinformation, and facilitating timely response to events. While traditional media monitoring remains the primary method, there is growing recognition of social media's value in supplementing and accelerating the detection of public health threats, and in providing valuable insights into public perspectives and behaviours. Citibeats and EIOS can potentially play a complementary role in a comprehensive event-based surveillance system.

33. Following the endorsement of a regional strategy for IDS by the Regional Committee in October 2021 and the adoption of the associated resolution (EM/RC68/R.3), WHO intensified its work with countries to improve national surveillance systems in the Region. Among the countries that requested support from WHO, Libya, Pakistan and Somalia have established, officially launched and are gradually expanding IDS systems. With support from WHO, Lebanon and the Syrian Arab Republic evaluated their surveillance and early warning, alert and response systems and recognized the effectiveness, efficiency and sustainability of an integrated approach to disease surveillance. Recently, Libya and Tunisia established national governing bodies for IDS and developed comprehensive roadmaps for integration. To enhance data access and accuracy and facilitate integration, Afghanistan, Iraq, the Syrian Arab Republic and Yemen received support in strengthening their digitalized surveillance systems using DHIS2.

34. Furthermore, in 2023, the WHO Health Emergencies Programme invested in the Field Epidemiology Training Program through a collaboration with the Eastern Mediterranean Public Health Network, resulting in the hosting of three fellows who were engaged in various public health intelligence processes for four months.

35. Building capacities for geographical information systems (GIS) among Member States and WHO country offices also remains a priority. The regional GIS roadmap was finalized to enhance capacities in countries and is being progressively implemented; seven countries have developed their own related plans, based on the roadmap. Somalia began its implementation by establishing a GIS Centre for Health in the WHO Somalia country office. In 2023, a GIS training workshop was conducted in Yemen for staff of the WHO country office and Ministry of Public Health and Population. Two additional workshops were conducted to support Yemen to develop their national GIS roadmap. The GIS team continues to support incident management support teams in the Region during health emergencies through the provision of maps and data to support ongoing response decisions. During 2023, more than 1000 maps were developed to support the WHO regional and country offices as well as Member States. The GIS portal for health emergencies was launched to act as a main gate to unified and updated geodatabases for countries and to host dashboards and StoryMaps for important events.

36. Several automated analysis tools were maintained and further developed to facilitate data analysis and reporting for different emergencies and events, including COVID-19, mpox, the earthquakes in the Syrian Arab Republic and the conflict in Palestine.

37. WHO initiated the first national excess mortality estimation project in Somalia. The project, undertaken in collaboration with United Nations, government and academic partners, produced prospective and retrospective estimates of crude and under-five 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 countries within the Region are under development.

38. Epidemiologists were deployed to lead the health information management functions for the drought and food security crises in the Horn of Africa, including providing support to Djibouti, Somalia and Sudan and surveillance support to Afghanistan, Iraq, Lebanon, Libya, Morocco, Pakistan, Somalia, Sudan and Yemen.

39. In collaboration with the Johns Hopkins Centre for Humanitarian Health, WHO continues to support the implementation of a response monitoring framework in five countries/territories: Libya, Palestine, Somalia, the Syrian Arab Republic and Yemen. The aim is to increase the effectiveness, efficiency and timeliness of the emergency response. The monitoring framework includes health status, health hazards, standardized indicators, efficient data-gathering techniques and improved analytics to inform strategic and operational decision-making. By using the framework, WHO can better monitor the effectiveness of the health sector response in humanitarian settings, including tracking the progress of key metrics over time, tracking progress towards meeting targets and comparing achievements with global standards. WHO intends to expand the framework to all fragile, conflict-affected and vulnerable countries in the Region, as well as to other regions. Meetings have taken place with the Global Health Cluster to facilitate global adoption of the framework and its integration into humanitarian response planning. Additionally, a comprehensive "lessons learned" project has been initiated with Johns Hopkins University to evaluate the achievements and challenges of the pilot phase to improve the next phase of expansion. Meanwhile, routine data review and interpretation are actively ongoing in priority countries.

40. To complement response monitoring at the national level, WHO has rolled out the Health Resources and Services Availability Monitoring System (HeRAMS) in seven countries, which is used to collect and analyse information on the functionality and capacities of health facilities and their gaps. More than 60% of the indicators required by the response monitoring framework and over 75% of the indicators used for health needs assessment for the Humanitarian Needs Overview are drawn from HeRAMS data. Data from HeRAMS are increasingly being used to identify gaps in service availability and to target operational priorities.

41. Challenges facing countries in detecting public health events include lack of strong governance related to surveillance activities, shortage of trained human resources and frequent turnover of personnel, high workload due to competing demands and shortage of staff, limited alignment of activities between different departments and political instability.

Preventing and controlling epidemics and pandemics

42. The Eastern Mediterranean Region continues to confront serious public health threats from emerging and re-emerging infectious disease outbreaks and other public health emergencies. The complex humanitarian emergencies and protracted conflicts in nine countries/territories of the Region further damage and degrade already fragile health systems, making the prevention and control of emerging infectious diseases extremely challenging. The vulnerability of all countries in the Region to emerging infectious diseases remains a pressing concern. The WHO Regional Office provides countries with strategic, technical and operational support to detect, investigate and respond to emerging and high-threat pathogens and to prevent their international spread.

43. In 2023, all 22 countries and territories of the Region continued to suffer from the negative health consequences of the ongoing COVID-19 pandemic. As of 31 December 2023, the Region had reported over 23 million cases of COVID-19, including more than 350 000 associated deaths, representing a case fatality rate of 1.5%. In 2023, WHO also assisted 21 countries/territories in the Region in investigating and responding to 73 outbreaks of infectious diseases. The leading conditions, other than COVID-19, were measles (13 countries/territories), mpox (11), acute watery diarrhoea/cholera (9), dengue (9), malaria (5), circulating vaccine-derived polioviruses (5), Crimean-Congo haemorrhagic fever (CCHF) (3), Middle East respiratory syndrome (3), Legionnaire's disease (3), shigellosis (3), poliomyelitis (2), diphtheria (2), HIV (1), influenza B (1), hepatitis A (1), West Nile fever (1) and tuberculosis (1). The drivers of these recurring disease outbreaks in the Region include climate change, natural disasters, deteriorating public health infrastructure, state fragility and conflict, weak health systems and population movement.

44. In addition to close monitoring, WHO continued to provide technical, management and logistic support to affected countries to prevent, prepare for, detect and confirm disease outbreaks and to limit their geographic spread and mitigate their impact through the application of appropriate public health interventions, including the use of evidence-based control measures. The *Strategic framework for the prevention and control of emerging and epidemic-prone infectious diseases in the Eastern Mediterranean Region 2020–2024* remains the guiding framework, offering guidance to enhance country capacities in preventing, preparing for, responding to and containing these outbreaks, thereby reducing their adverse public health, social and economic repercussions.

45. In fragile and conflict-affected countries, WHO executed a reinforcement strategy for the Early Warning Alert and Response Network (EWARN) that included expansion, maintenance, staff capacity-building and rapid response team (RRT) training. WHO led the development and pilot implementation of the regional electronic EWARN platform, aiming to reinforce the timely detection of outbreaks and streamline the reporting processes. As part of this initiative, a comprehensive user's guide was drafted for both the web-based and mobile applications of the platform. A three-day virtual training of trainers was organized in Libya and was attended by 20 participants from various reporting levels across the country. This training delved into the intricacies of the electronic platform, explaining its innovative features such as offline and online modules, user-friendly interfaces tailored for seamless reporting, robust data analysis capabilities and streamlined bulletin production processes. Two evaluations were conducted to assess the functionality of EWARN systems in the Syrian Arab Republic, revealing the need for improvements in operational efficiency, personnel training, coordination and resource allocation. As of December 2023, EWARN was operational in six countries/territories including Afghanistan, Iraq, Palestine, the Syrian Arab Republic, Sudan and Yemen. The effectiveness of its implementation is evident in the notably high rates of reporting completeness (e.g. 95% in Yemen, 88% in Afghanistan and 87% in the Syrian Arab Republic) and verification within 48 hours for the majority of received alerts (e.g. 95% in Afghanistan and 89% in Sudan).

46. WHO also supported Libya and Somalia in incorporating the early warning capabilities of surveillance into their national surveillance systems, transitioning towards a more integrated and comprehensive framework to strengthen the monitoring functions of surveillance.

47. WHO continued to support countries in the Region to establish, sustain and enhance influenza and other emerging respiratory disease surveillance systems. Through this support, 19 of the 22 countries and territories have established functional sentinel surveillance systems for influenza-like illnesses and/or severe acute respiratory infections. These countries routinely collect, analyse and share influenza and other respiratory virus data with the regional or global data platforms (EMFLU or FluMart). Six countries (Iraq, Morocco, Oman, Saudi Arabia, Somalia and the Syrian Arab Republic) have successfully rolled out the EMFLU 2.0 platform after WHO provided the necessary training and technical backing. Ongoing support during 2023 included field missions, refresher training for sentinel site and laboratory staff on sample collection and testing, and developing/updating protocols, standard operating procedures, reporting tools and training packages for integrated respiratory disease surveillance.

48. WHO has also been assisting countries to integrate SARS-CoV-2 and other respiratory viruses, such as respiratory syncytial virus, into the existing influenza sentinel surveillance system. By the end of 2023, half of the countries in the Region had made progress towards this.

49. WHO and countries of the Region play an important role in the prevention and control of seasonal and pandemic influenzas. WHO has been working closely with all of the countries to strengthen, scale up or (re)establish sentinel surveillance for influenza and other emerging respiratory viruses. As of the end of 2023, 19 countries had 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.

50. Early warning and ongoing surveillance need to be complemented by reliable laboratory diagnoses 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. arboviral disease testing in Afghanistan and Somalia; CCHF in Iraq; cholera in Lebanon and the Syrian Arab Republic; and mpox in Egypt, Lebanon and Sudan). With WHO support, all 22 national reference laboratories and over 300 other laboratories have passed external quality control reviews.

51. At the time of the detection of the first COVID-19 case in the Region on 29 January 2020, only 11 of its 22 countries/territories had developed next-generation sequencing capacity, which is used for DNA and RNA sequencing and variant and mutation detection. By 2022, COVID-19 sequencing was functioning in 21 out of 22 countries of the Region, with varying throughput and capacity. Three regional reference laboratories have also been established for genomic sequencing in Morocco, Oman and the United Arab Emirates. In line

with the global genomic surveillance strategy,[1] WHO is developing a regional strategy to guide the expansion and strengthening of sequencing and bioinformatic capacities for the use of genomic data in the response to epidemics and pandemics. During 2023, WHO supported countries to expand genomic sequencing capacity to support surveillance and response for other priority pathogens with epidemic and pandemic potential including cholera, MERS-CoV, respiratory syncytial virus, CCHF and dengue.

52. RRTs are central to the overall control of disease outbreaks. With technical support and training from WHO, all 22 countries and territories in the Region have RRTs at national and subnational levels. These teams made essential contributions during several outbreaks, including the response to CCHF (e.g. in Afghanistan and Iraq), cholera (e.g. in Iraq, Lebanon, Somalia and the Syrian Arab Republic), dengue (e.g. in Pakistan, Somalia and Sudan), and measles (e.g. Pakistan and Somalia). To ensure the sustainability of RRT programmes, WHO, in collaboration with partners, established RRT management teams in Egypt, Iraq, Jordan and Saudi Arabia. Moreover, more than 200 RRT managers and members were trained on various domains of RRT response in Egypt, Saudi Arabia, Somalia and the Syrian Arab Republic. An RRT monitoring, evaluation and learning framework was developed and piloted to assess RRT capacities and outbreak response through a consultive 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, the United Arab Emirates and Yemen) and other regional experts participated and validated the content of the manual.

53. In 2023, WHO developed a regional approach for implementation of the Global Outbreak Alert and Response Network (GOARN) strategy (2022–2026), aiming to strengthen GOARN governance in the Region, ensure better engagement of regional partners during all phases of the emergency management cycle and improve collaboration and partnerships within the regional contexts. The implementation of this strategy is currently underway.

54. WHO continued to support countries to strengthen prevention and control capacities for emerging vector-borne and zoonotic diseases through technical missions, clinical and operational training and mentoring, integration with surveillance and laboratory services, and provision of medical supplies. An increasing number of countries in the Region have experienced outbreaks caused by vector-borne and zoonotic diseases during the reporting period and WHO has extended technical and financial support to minimize the impact of these outbreaks.

55. At the beginning of 2023, WHO was responding to 30 cholera outbreaks worldwide, representing a disturbing spread of the disease driven by state fragility, conflict, climate stress and declining public health infrastructure. In January 2023, WHO classified the global resurgence of cholera as a grade 3 emergency. Over the course of 2023 there were eight cholera outbreaks across the Region, with seven still ongoing at the end of the year. WHO collaborated with ministries of health and partners on a comprehensive approach – including improved surveillance and testing, water, sanitation and hygiene services (WASH), case management, community engagement and oral cholera vaccine campaigns – to contain outbreaks in Lebanon and the Syrian Arab Republic and demonstrate declining rates of disease in five countries. The case fatality rate was maintained within the international standards for seven out of eight outbreaks at less than 1% (with a median case fatality rate of 0.18% and a range of 0.01–2.78%).

56. Clinical management, infection prevention and control, and oxygen generating capacities have been strengthened. All low- and middle-income countries have been supported in building robust and sustainable case management capacities for outbreak response, including capacity to care for the critically ill, and operational preparedness measures such as access to medical oxygen for outbreaks and emergency events. Twelve countries, including Afghanistan, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Lebanon, Pakistan, Somalia, Sudan, Syrian Arab Republic and Yemen, have been supported in clinical training and developing/updating national case management guidelines for disease outbreaks and high-threat pathogens, including CCHF, dengue, chikungunya, meningitis, cholera, Ebola virus disease, Rift Valley fever, yellow fever, rabies, diphtheria, hepatitis A and E, mpox, measles and acute respiratory infections, as well as for the integration of country-specific priority respiratory diseases. Key support included the introduction of mobile clinics in Sudan from May 2023 to deliver multidisciplinary clinical services to 3.3 million patients, and the development and implementation of a syndromic treatment protocol for 10 priority diseases in the Gaza Strip

[1] Global genomic surveillance strategy for pathogens with pandemic and epidemic potential, 2022–2032. Geneva: World Health Organization; 2022 (https://www.who.int/publications/i/item/9789240046979).

since October 2023. Sixteen countries in the Region have been supported in oxygen scale-up activities, including data collection through the WHO regional Live Oxygen Platform and the implementation of country oxygen scale-up roadmaps. Six countries have established robust oxygen generation capacities.

57. A study by WHO documented impressive gains by all countries during the pandemic in areas such as sentinel surveillance, laboratory capacities, PHEOCs, RCCE, infection prevention and control, critical care capacities and oxygen generating capacities.[1] These were well documented, even in resource-constrained and fragile settings. However, in most countries, there were no clearly articulated plans or financing to sustain these gains. The study recommended several approaches to sustaining efforts, including integrating new capacities into existing systems (e.g. sentinel sites and laboratories), institutionalizing new units (e.g. for RCCE, infection prevention and control), rationalizing and right-sizing (e.g. intensive care beds), strengthening partnerships with the private sector and academia, and undertaking detailed costing analysis and exploring financing options. Sustaining COVID-19 gains was an important component of proposals to the second round of the Pandemic Fund in the Eastern Mediterranean Region.

58. Despite the efforts exerted by WHO, managing high-threat pathogens with epidemic and pandemic potential in the Region faces many challenges. These include the protracted emergency situations in nine countries/territories that continue to negatively impact routine service delivery and limit access to vulnerable populations. In addition, low governmental investment in infectious hazards preparedness plans has contributed to delays in responses to outbreaks of high-threat pathogens. Furthermore, delays in data sharing from countries and the inconsistency of shared data represent additional challenges.

Responding to humanitarian emergencies

59. In 2024, the number of people needing humanitarian assistance in the Eastern Mediterranean Region was 107 million, compared to 140 million in 2023 and 127 million in 2022. The Region is home to 9% of the world's population and carries 35% of its humanitarian burden. It is also the source of more than half (55%) of the world's refugees. The Region has seen a convergence of crises in many countries with protracted humanitarian needs. Political uncertainties and varying levels of economic development across the Region have hindered the timely and proper management of health emergencies. The WHO Regional Office continued to respond to the declining COVID-19 pandemic in 2023, while juggling other simultaneous emergencies brought on by multiple hazards, including societal, natural and technological risks.

60. In Palestine, the major Israeli military operation in the Gaza Strip following the Hamas attacks inside Israel on 7 October 2023 has resulted in catastrophic humanitarian needs. By the end of June 2024, 37 925 people had died and 87 141 were injured – with women and children accounting for up to 70% of deaths. The dire situation is compounded by attacks on health care facilities, with 466 incidents resulting in 727 deaths reported in the Gaza Strip by 30 June 2024. Over 75% of Gaza's 2.2 million people were internally displaced, and acute food insecurity affected 96% of the population. On 30 June 2024, 20 out of 36 (55%) hospitals were non-functional; 16 (35%) were partially functional. Of these 16 hospitals, only 11 are (partially) accessible due to insecurity and the damage to surrounding roads. The lack of basic necessities such as food, water, shelter and medicines, along with damaged hospital infrastructure, is severely impacting the health of the population. In response, WHO has been supporting the delivery of essential supplies and has led multiple evacuation missions, relocating severely ill patients, including premature infants and health care workers, amid challenging circumstances. By the end of June, WHO had delivered US$ 18.5 million worth of medical supplies (818 tonnes) with another US$ 10 million in the pipeline. This assistance has provided crucial support amid ongoing hostilities and siege. WHO assistance has proven instrumental in maintaining critical health services at primary and secondary care levels, assisting thousands of patients. WHO has been coordinating with ministries of health, the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) and other partners to establish early warning systems to support disease surveillance and control measures. A key contribution has been the mobilization and coordination of EMTs. WHO had coordinated the deployment of 19 EMTs as of the end of June, including over 700 international health workers. These EMTs have helped to establish 446 critically needed inpatient beds and eight operating theatres.

[1] Haji-Jama S, Moen A, Khan W, Abubakar A, Brennan R. Turning crisis into opportunity: sustaining COVID-19 gains in resource-constrained and fragile settings. BMJ Glob Health; 2024:9:e015048 (https://doi.org/10.1136/bmjgh-2024-015048).

61. The escalating conflict in Sudan has triggered a massive displacement crisis, with over 8 million individuals seeking refuge within the country or across its borders, intensifying health risks in remote areas with limited health care access. By the end of June 2024, around 32 000 people were believed to have died due to the violence. Suspected cholera cases increased to 10 700, including 292 associated deaths, as of 17 February 2024. Over two thirds of hospitals in Sudan were non-operational in the conflict-affected states, exacerbating the dire health situation, and there were over 85 attacks on health facilities in 2023. Despite challenges facing humanitarian operations, WHO continues to provide critical life-saving assistance inside Sudan and was able to reach to over 2.47 million people in need of health assistance in 2023 through direct support to services, including delivery of 990 tonnes of emergency supplies. Collaborating closely with national health authorities, WHO is working to improve WASH, conduct vaccination campaigns, enhance infection prevention and control measures, and improve disease surveillance in areas strained by the influx of displaced individuals. As part of this ongoing effort, over 4.5 million people including children over the age of one have received oral cholera vaccine in six high-risk states and 5.7 million people in seven states have been vaccinated against measles and rubella. WHO is also prioritizing support for facility-based care for acute malnutrition and supporting 120 nutrition stabilization centres across the country. As part of its cross-border operation into areas not accessible from Port Sudan, WHO has actively participated in 19 cross-border United Nations inter-agency missions and conducted visits to over 25 health facilities in Central and West Darfur states. Around 433 000 Sudanese refugees received treatment in mobile clinics in eastern Chad, and 52 tonnes of medicines and medical supplies have been distributed to address the needs of 178 000 people across four states in Darfur. These supplies include trauma kits, renewable medical supplies for hospitals, basic medicines for primary health care centres, malaria kits, measles and cholera kits, and paediatric medicine kits for children with severe acute malnutrition (SAM) with medical complications. From South Sudan, WHO has transported 47.5 tonnes of medicines and supplies to Blue Nile, South Kordofan and Abyei states.

62. In the Syrian Arab Republic, at least 8.8 million people were affected by the earthquakes in 2023, with the majority needing some form of humanitarian assistance. Over 400 000 people were displaced from their homes, and many resided in emergency shelters that lacked basic health and sanitation facilities. Prior to the earthquakes, an estimated 15.3 million people were already in need of humanitarian assistance and this new emergency compounded suffering in a country already devastated by 12 years of crisis. In 2023, WHO maintained a swift and scalable response to meet the health needs of populations affected by conflict and earthquakes in all affected governorates of the Syrian Arab Republic. WHO supported nearly 2 million outpatient consultations, provided over 17 million treatment courses and distributed more than 3000 tonnes of medical supplies. WHO also supported mental health services for over 922 000 traumatized survivors of the disaster. WHO provided critical medical equipment and supplies to support the health system in the earthquake- and conflict-affected areas valued at US$ 17.5 million and completed the rehabilitation of health infrastructure valued at US$ 7.5 million. WHO also worked with communities to engage and inform them on how to reduce health risks and better protect themselves in the aftermath of natural disasters. WHO continues to strengthen local capacities in immunization and the treatment of mental health disorders and disabilities. For WHO, the Whole-of-Syria 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-line. Through strong intersectoral coordination between the Whole-of-Syria WASH and health sectors, the cholera case fatality rate has been maintained below the 1% threshold.

63. Afghanistan continues to grapple with an enduring humanitarian crisis characterized by a multitude of challenges, including an unstable health care system and food scarcity and malnutrition. The situation is compounded by the significant burden of communicable and noncommunicable diseases, frequent disease outbreaks, severe drought and frequent natural disasters (most commonly severe flooding and deadly earthquakes). Furthermore, the plight of Afghan women has worsened because of heightened barriers to health care access driven by restrictions on education and the ban on female employment. The need for humanitarian assistance in Afghanistan has surged dramatically, increasing from 18.4 million people in need before August 2021 to an estimated 29.2 million people in dire need in 2023. The most severe repercussions of this protracted health emergency are borne by women and children, who find themselves on the margins of society and increasingly vulnerable to adverse health outcomes, particularly concerning reproductive, maternal, newborn and child health. In addition, Afghanistan has one of the highest levels of food insecurity globally, affecting

15.8 million people. This situation has been exacerbated by three consecutive years of drought, leaving 30 out of 34 provinces with severe water scarcity or extremely poor water quality. In 2023, a staggering 21 million people urgently required access to clean water and sanitation – a stark contrast to the 2.4 million people in need a decade ago. While the operating environment remains challenging and very fluid, WHO continues to find ways to deliver critically needed assistance and services to affected people. Throughout 2023, WHO and 69 Health Cluster partners reached 29.8 million people with health services (104% of the targeted population). WHO scaled up surveillance, preparedness and response to outbreaks, health emergencies and natural hazards and continued to lead the Health Cluster and support 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 early warning, alert and response system detects and assists in the management of infectious disease outbreaks in all provinces. Severe underfunding led to the closure of some 262 static and mobile health facilities in June 2023, impacting 2 million people's access to primary health care. Mobile health teams were crucial for providing emergency health services and outbreak response. In October 2023, three major earthquakes, all with a magnitude of 6.3, hit Herat Province in western Afghanistan. These earthquakes caused partial damage to some United Nations premises, including the WHO office in Herat. By 15 October, WHO and Health Cluster partners had reached 28 831 individuals affected by the earthquakes across multiple districts.

64. Yemen continued to face a protracted humanitarian crisis, with approximately 22 million individuals requiring health assistance in 2023. Vulnerable groups bear the brunt of the crisis, including 4 million internally displaced persons, children, women, older persons, people with disabilities or mental health conditions, marginalized communities and those affected by conflict-related injuries. The economic crisis compounds the health crisis, jeopardizing the continuity of care for individuals with chronic health conditions. Only 55% of health facilities are fully operational, and there is an ongoing need for a reliable supply chain of medicines, equipment, fuel, water, oxygen and other medical supplies. Yemen faces a double burden of disease and armed conflict, and 16% of people with disabilities require rehabilitative assistance. In 2023, WHO rehabilitated 75 health facilities damaged by conflict, restoring services for 3 million people, and provided life-saving medical and health care services to 12.6 million Yemenis[1] through a sustained and integrated health response, with a focus on: treating acute malnutrition; supporting and improving maternal and newborn health care; strengthening disease surveillance to better respond to infectious disease outbreaks; fighting noncommunicable diseases including diabetes, renal diseases and cancer; maintaining WASH to strengthen infection prevention and control measures in hospitals; and responding to a neglected mental health crisis. Over 19 million people were estimated to be food insecure in 2023. An estimated 2.2 million children were acutely malnourished, of whom more than half a million suffered from SAM and many from SAM with medical complications, which greatly diminished their chances of survival. WHO supported over 100 nutrition stabilization centres in Yemen. Cure rates for SAM were consistently well over 95%, while death rates were 1%, meeting international standards. WHO also strengthened disease surveillance, identifying and responding to over 300 outbreak signals within 48 hours, and provided mental health and psychosocial support to 100 000 individuals, focusing on children and women affected by the conflict.

65. Somalia continues to face serious climate-related crises, ranging from extreme droughts to extreme floods, alongside a protracted complex humanitarian emergency. This has led to a sharp increase in the number of people requiring urgent health, nutrition and humanitarian support. Climatic shocks have caused a dangerous upsurge in outbreaks of disease, including cholera and other waterborne and communicable diseases. There were 14 191 cases of suspected cholera and 38 deaths (representing a case fatality rate of 0.3%) reported from 29 drought-affected districts by mid-October 2023. An estimated 4.3 million people (25% of the population) were projected to experience high levels of acute food insecurity (Integrated Food Security Phase Classification (ICP) Phase 3+), which represented a 16% increase in October compared with August–September 2023. Of this population, more than 1 million people were projected to be in IPC Phase 4 between October and December 2023. The increase is due to a combination of factors, including the adverse impacts of heavy rains and flooding (related to the climate phenomenon El Niño) and an anticipated decline

[1] Yemen health emergency [website]. Geneva: World Health Organization; 2024 (https://www.who.int/emergencies/situations/yemen-crisis).

in the level of humanitarian assistance in the coming months because of funding constraints. In addition to a climate crisis, Somalia also faces an armed conflict that has lasted more than three decades. This has caused structural fragility in the health system. Although the country has made some progress on the road to stability, challenges persist due to the presence of armed non-State actors. As of the start of 2024, more than 3.8 million people have been internally displaced. The health system has not been able to cope with the increased need and demand for health care, as evidenced in low rates of childhood immunization coverage, low health workforce density and a low universal health coverage (UHC) service coverage index. In 2023, WHO collaborated with various partners and agencies, including the United Nations Children's Fund (UNICEF) and United Nations Population Fund (UNFPA), to yield more impact, scale and value for money in the response. As one of the main achievements in 2023, WHO sustained the operational capacity of 61 stabilization centres across target districts affected by the drought. Nearly 21 200 children (4.6% of the child population) who were suffering from SAM with medical complication were admitted to the stabilization programme between January and September 2023. Of the total number of children admitted to the therapeutic feeding programme, 96.7% were discharged cured, 2% defaulted and the death rate was less than 2%, all three rates being within international standards. In addition, WHO strengthened the network of community health workers to increase screening and referral capacities at the community level. These workers conducted 2 232 902 household visits (including repeat visits) and screened 378 882 children, which supported the identification of 46 493 children with moderate acute malnutrition and 25 868 children with SAM and their referral to health and nutrition facilities.

66. Climate change also had a humanitarian impact in Libya when Storm Daniel struck the country in September 2023, causing the collapse of two dams and resulting in massive floods. After the floods, WHO led vital efforts to restore health care access and combat infectious diseases in the impacted regions. Of the 240 health facilities assessed by WHO in the flood affected areas, only 13% were fully functioning, 73% were partially functioning and 14% were no longer functional. The assessment also revealed critical shortages in staff, medicines and equipment, prompting swift action. Collaborating with the Ministry of Health, WHO restored functionality in 10 facilities and supported the setup of six field hospitals, including a specialized 100-bed unit in Derna. Mental health support, noncommunicable disease medicines and health risk communication were prioritized, and staff were deployed to aid the response and recovery efforts.

67. The WHO health logistics hub in Dubai continues to prove an invaluable asset to the entire Organization. While its main role has been to support the response to acute and protracted emergencies within the Region, throughout 2023 the hub played a vital role in supporting emergency operations across all six WHO regions. The hub's efficiency in distributing life-saving medical supplies during the pandemic helped popularize its use across countries, leading to an exponential rise in requests for support for all types of emergencies. In 2023, the hub processed 510 orders worth US$ 27 million to 80 countries across the six WHO regions, including for the earthquakes in the Syrian Arab Republic and Türkiye, the complex emergency in Afghanistan, floods in Libya and the escalation of conflicts in Sudan and, more recently, Palestine.

68. WHO and partners face many operational constraints in the delivery of emergency response, especially in fragile and conflict-affected situations. These include insecurity and access constraints, bureaucratic impediments applied by national and local authorities, weak health systems, limited local capacities, lack of funding and attacks on health care. Such attacks are among the most concerning features of modern-day conflicts and are, unfortunately, very prevalent across the Region. According to WHO's Surveillance System for Attacks on Health Care (SSA), 929 instances of attacks on health care were recorded in 2023 in eight countries and territories in the Region (Afghanistan, Lebanon, Libya, Palestine, Somalia, Sudan, the Syrian Arab Republic and Yemen), a fourfold increase compared with 2022. These attacks led to 673 deaths and over 1000 injuries. Over 85% of health care attacks, deaths and injuries occurred in Palestine. The Region accounted for 63% of attacks, 90% of deaths and 85% of injuries documented worldwide by the SSA.[1]

[1] Surveillance System for Attacks on Health Care (SSA) [online database]. Geneva: World Health Organization; 2024 (https://extranet.who.int/ssa/LeftMenu/Index.aspx).

Progress of States Parties in implementing the IHR (2005), including the report of the Regional Assessment Commission

IHR monitoring and evaluation framework

69. 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 simulation exercises, continues to be widely accepted and used by countries in the Eastern Mediterranean Region.

70. The SPAR tool allows States Parties to report online and WHO to provide real-time monitoring of submitted reports and quality checks of the data provided. All the 22 countries and territories in the Region completed the 2023 SPAR on the achievement of IHR-related core capacities, in accordance with Article 54 of the IHR (2005).

71. During the reporting period, the Syrian Arab Republic and Yemen successfully completed the first round of JEE, Iraq and Pakistan completed the second round of JEE, and Bahrain and Qatar completed the self-assessment phase of the second round.

72. During the reporting period, a tabletop exercise was conducted for Somalia to test the functionality of the national PHEOC, and for Iraq to test the IHR NFPs terms of reference and the public health response at PoE. Additionally, a subregional tabletop exercise was conducted for Bahrain, Kuwait, Morocco, Palestine, Qatar, the Syrian Arab Republic, Tunisia, the United Arab Emirates and Yemen to test the functionality of their PHEOCs.

IHR core capacities

73. Analysis of the 2023 SPAR data indicates that the overall regional average score of IHR capacity is 66%, the same ranking as reported in 2022 (capacity scores are shown in Annex 1). SPAR data on capacity has remained essentially unchanged in the Region since 2018, ranging between 63% and 66%; this is largely due to inadequate investments in the national action plans for health security (NAPHS).

74. The highest average implementation scores were for capacities related to surveillance (84%), health service provision (73%) and laboratory (72%). Less well-performing areas included capacities related to food safety (59%), chemical events (59%), legal instruments (61%), human resources (61%) and RCCE (60%). The scores for the 13 IHR capacities in countries and territories of the Region are provided in Annex 1.

75. NAPHS have been developed in all countries and territories, except the Islamic Republic of Iran. These plans are being updated in a number of countries, building on the lessons learned from COVID-19 and revised JEEs. As of March 2024, six countries have finalized their NAPHS: two (Syrian Arab Republic and Yemen) as a first round following JEE, and four (Qatar, Pakistan, Sudan and Tunisia) as a second round.

76. Data from the JEE and NAPHS was used to develop proposals to 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/territories in the Region managed to submit proposals for the first round of the Call for Proposals, with Palestine and Yemen succeeding in securing funding. The second Call for Proposals was launched in December 2023. Thirteen countries/territories from the Region submitted single-country proposals, seven participated in two separate multi-country proposals and seven participated in the African regional proposal. These proposals have generated demands for JEEs and NAPHS updates and Bahrain, Egypt, Jordan and Qatar will be supported to meet these requests before the end of 2024.

Procedures under the Regulations

IHR committees and the Intergovernmental Negotiating Body

77. The IHR Emergency Committee concerning ongoing events involving transmission and international spread of poliovirus has met 38 times since its establishment in April 2014. The thirty-eighth meeting of the Emergency Committee was convened by the WHO Director-General on 20 March 2024. The Committee unanimously agreed that the risk of international spread of poliovirus remains a public health emergency of international concern and recommended the extension of temporary recommendations for a further three months.

78. 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 functions in accordance with the WHO Regulations for Expert Advisory Panels and Committees and provided its report to the WHO Director-General in January 2023. The sole purpose of this Review Committee was 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. In accordance with decision WHA75(9), the technical recommendations formulated by the Committee informed the work of the Member States Working Group on Amendments to the IHR (2005). This work culminated at the Seventy-seventh World Health Assembly in May 2024, where Member States adopted a package of amendments to the IHR that incorporated lessons from the COVID-19 pandemic and included, among other things: a definition of a pandemic emergency; a commitment to solidarity and equity on strengthening access to medical products, including the formation of a new coordinating financial mechanism; establishment of the States Parties Committee to facilitate the effective implementation of the IHR; and establishment of national IHR authorities to improve coordination related to the IHR within and among countries.

79. The Intergovernmental Negotiating Body (INB) was established in 2021 by decision WHASS2(5) to draft and negotiate a convention, agreement or other international instrument on pandemic preparedness and response (known as the pandemic accord). After two years of negotiation, it has not been possible to achieve consensus on all articles of the accord. Therefore, at the Seventy-seventh World Health Assembly in May 2024, Member States agreed to extend the work of the INB for another 12 months and to present its final outcomes to the Seventy-eighth World Health Assembly in May 2025.

IHR NFPs and event-related information

80. Support continued to be provided to IHR NFPs to enhance their knowledge and capacities in the implementation of the IHR (2005), as described in paragraph 22.

81. IHR NFPs in the Region accessed the Event Information Site 1588 times during the period 1 January 2023 to 31 December 2023, with the IHR NFPs of Kuwait (446), Egypt (250), Iraq (182) and Jordan (122) being the most frequent users of the site.

Travel and additional health measures

82. According to the 2023 SPAR, the countries of the Eastern Mediterranean Region have designated 104 ports, 90 airports and 53 ground crossings for IHR (2005) implementation. Nineteen 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 (2005) implementation at PoE has decreased from 68% in 2022 to 62% in 2023 (slightly below the global average of 63% for 2023). It is important to note that PoE capacity had increased from 60% in 2021 to 68% in 2022, having been developed as part of the response to the COVID-19 pandemic. However, the gains made were not sustained when COVID-19 was declared to no longer be a public health emergency of international concern.

83. Countries relaxed entry restrictions and COVID-19 travel measures in 2023, based on ongoing risk assessments and the country context. Travel advice and recommendations in relation to COVID-19, emerging variants of concern and other public health threats, including mpox, cholera, dengue and other haemorrhagic fevers have been consistently provided to countries, including the recommendations of the IHR Emergency Committee for performing risk assessment to inform travel-related mitigation measures.

84. After the widescale resumption of international commercial traffic and the relaxation of public health and social measures, countries in the Region have continued to adjust their measures in response to evolving public health concerns throughout the course of the pandemic, including the application of testing, isolation, quarantine and vaccination requirements. As of March 2024, no countries in the Region have any restrictive measures in response to public health threats and have resumed mass gathering events, schools and work.

85. The situation for maritime traffic has followed a similar course, with many countries in the Region having resumed all movement of seafarers, given previous consequences for the global supply chain and the health of seafarers operating vessels.

Yellow fever

86. As of December 2023, all 22 countries and territories of the Region had responded to the annual questionnaire on requirements for yellow fever vaccination for international travellers. Of the 22 countries/territories, 10 countries, including Bahrain, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Saudi Arabia, Oman, Pakistan, Qatar and the United Arab Emirates, request a vaccination certificate against yellow fever for incoming travellers from all countries and territories at risk of yellow fever transmission as determined by WHO. The countries 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).

Accelerating health emergency preparedness and response – a plan of action

Introduction

87. During the 68th session of the Regional Committee in 2021, Member States adopted resolution EM/RC68/R.2, which endorsed a plan of action for strengthening efforts towards ending the COVID-19 pandemic and preventing and controlling future health emergencies in the Eastern Mediterranean Region. The resolution requested WHO to provide the needed support to Member States to implement the plan of action and report on progress annually to the Regional Committee.

88. Progress made by WHO and countries in many of the activities outlined in the action plan have been described in previous sections of this report, including: institutionalizing RCCE capacities; building capacities for outbreak detection and response; establishing/strengthening PHEOCs; the EMT initiative; developing/updating risk profiles; strengthening travel-related measures and public health and social measures; building IHR NFP capacities; updating NAPHS; advancing research and innovation; enhancing the One Health approach; and strengthening ECO services at prehospital and facility levels. An update on progress made at the country and regional level with regard to ending the COVID-19 pandemic and preventing and controlling future pandemics is provided below.

Progress made by countries and the Secretariat on ending the COVID-19 pandemic and preventing and controlling future pandemics and health emergencies

89. COVID-19 situation updates and control measures continue to be communicated by governments to the public in all countries and territories of the Region. In most countries, public health interventions have been coordinated through the COVID-19 high-level coordination structures. Countries are phasing these structures out, especially since WHO declared an end to the status of COVID-19 as a public health emergency of international concern in May 2023. A transition towards standing committees on emergency preparedness has taken place in several instances.

90. Efforts to strengthen the governance of essential public health functions as a basis for health systems transformation and resilience remains ongoing, as well as enhancing the capacity of legislators to strengthen health systems governance for UHC and health security. Examples include the revision of the regional list of essential public health functions, in collaboration with the UK Health Security Agency. The results of the review were published in *BMJ Global Health* in 2024.[1] WHO has also conducted a survey on national public health institutes in the Region to better understand their capacities and strengthen them at country level. Furthermore, WHO health systems missions have incorporated a special focus on essential public health functions. At the regional level, the promotion of strong leadership and emergency management continues,

[1] Mohamed-Ahmed O, Aboutaleb H, Latif S, Watson HL, Handley R, Humphreys E et al. Reviewing essential public health functions in the Eastern Mediterranean Region post COVID-19 pandemic: a foundation for system resilience. BMJ Glob Health. 2024;9(3):e013782. doi:10.1136/bmjgh-2023-013782.

including for epidemic and pandemic response. The Leadership in Emergencies training programme (described in paragraph 24 above) is an important example of these efforts.

91. WHO and partners have led and coordinated efforts to prioritize access to COVID-19 vaccines and reduce vaccine inequity, while the monitoring of vaccine supply, use and coverage remains ongoing. As of February 2024, the average regional coverage was 50.9% fully vaccinated, 19.6% boosted and 8.2% partially vaccinated. The vaccination coverage target of 70% was achieved in Bahrain, the Islamic Republic of Iran, Kuwait, Qatar, Saudi Arabia and the United Arab Emirates. Systems for vaccine safety surveillance and pharmacovigilance have been strengthened at various levels in countries to detect, investigate and analyse adverse events following immunization. Efforts are ongoing in seven countries to strengthen the capacity to produce safe and effective vaccines and enhance national regulatory authorities. Nonetheless, uptake of COVID-19 vaccines has declined significantly across the globe, including in the Region, placing vulnerable populations at risk.

92. The target of decentralizing laboratory testing capacity has been met, while further progress has been made in strengthening the links between national public health laboratories and regional reference laboratories. Regional genomic reference laboratories are being maintained in Morocco, Oman and the United Arab Emirates, while laboratories in Qatar and the United Arab Emirates have received additional accreditation as regional reference laboratories for arboviral disease research and surveillance activities. These laboratories are actively contributing to the decentralization and expansion of regional capacity, conducting several regional/subregional training on vector-borne, respiratory and bacterial pathogens with national public health laboratories over the past 12 months. Genome sequencing capacity has been expanded to all countries in the Region, initially for COVID-19 and influenza (with 21 of 22 countries/territories actively sharing data by the end of 2022) and is now being used in eight countries for surveillance and variant analysis of acute watery diarrhoea and bacterial, respiratory and arboviral pathogens. Relevant data are being shared through platforms such as EMFLU, the Global Initiative on Sharing All Influenza Data (GISAID) and the Sequence Read Archive at the National Center for Biotechnology Information (NCBI). Countries are working with WHO to develop and implement national policies for genomic surveillance, and a regional network for genomic surveillance has been established; the number of countries with genomic sequencing capacity more than doubled during the COVID-19 pandemic, from 10 to 21 countries/territories. Molecular diagnostic capacity peaked during the pandemic with well over 700 laboratories in the Region, and although countries are winding down activities related to COVID-19 surveillance, a significant proportion of national laboratories are being maintained in readiness for the emergence or re-emergence of pathogens with pandemic or epidemic potential. At national public health laboratory and national influenza centre levels, all countries continue to participate in WHO external quality assurance programmes, and a number of subnational laboratories are also participating, with all laboratories passing WHO assessments in the Region. Progress has also been made in increasing and maintaining capacities, both at the infrastructure and personnel levels, for molecular testing and for developing and implementing national frameworks and policies to maintain the highest standards of laboratory biosafety and biosecurity beyond COVID-19. WHO continues to provide operational and logistical support through constant monitoring and improvements to laboratory supply chains both for routine (culture and rapid testing) and complex (molecular and genomic) reagents across the Region.

93. An external review of the support WHO provided 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 States' own response efforts while contributing towards long-term capacity building".[1] A WHO study to map the capacity gains during the pandemic (described in more detail in paragraph 57) found the key areas that had been strengthened included sentinel surveillance, laboratories, clinical care, infection prevention and control, RCCE, emergency operations centres and oxygen generation. If the capacities gained during the COVID-19 pandemic could be sustained, rationalized and integrated into public health systems, it would represent an important step forward towards health security and UHC.

[1] Dalberg Advisors. WHO's response to COVID-19 in the Eastern Mediterranean Region. Geneva: World Health Organization; 2023 (https://www.who.int/publications/m/item/independent-review-of-who-s-response-to-covid-19-in-the-eastern-mediterranean-region).

Challenges

94. Existing structures for health emergency management are fragmented in most countries of the Region, which impedes efforts to strengthen governance and leadership for managing health emergencies. Several capacity-building efforts for the workforce and surge capacity-building for emergency response are underway. However, strategies to generate and sustain a skilled multidisciplinary health workforce are still lacking in most countries of the Region. During the COVID-19 response, most countries managed to allocate resources and fast-track mobilization to different administrative levels, and domestic resources were allocated for preparedness. However, a lack of resources continues to limit efforts to enhance health emergency preparedness, especially in lower-middle-income and low-income countries.

95. Despite the recommendations of several international reviews to empower the IHR NFPs, only Egypt, Pakistan, Saudi Arabia, Sudan and the United Arab Emirates have established an IHR NFP centre. These centres have been equipped with the needed resources, roles and responsibilities have been articulated, and reporting lines to the cabinet level have been laid out. Jordan is currently progressing in this process.

96. WHO is working with countries undergoing emergencies to ensure the continuity of essential health services. However, maintaining the provision of these services during emergencies has been challenging, particularly in areas experiencing armed conflict and in regard to logistics and the supply system. Similarly, access to medical countermeasures proved to be a major challenge during the COVID-19 pandemic, especially during the first two years.

97. A fragmented public health education and promotion structure, including RCCE and emergency communication, exists at the country level, resulting in the duplication of efforts as well as inadequately established RCCE. While RCCE capacities were strengthened in most countries during the COVID-19 pandemic – with several ministries of health establishing new RCCE technical units or teams – more work is required in this increasingly important area.

98. Efforts towards developing risk-informed travel advice and measures remain ongoing, as limited progress has been made in establishing a professionalized training programme for staff at PoE. Despite efforts to enhance cross-border public health collaboration, poorly controlled population movements between some countries – often associated with humanitarian emergencies – and limited IHR capacities at ground crossings persist.

99. The prevalence of One Health-related threats in the Region continues to rise. Although numerous efforts have been made to address health threats through the application of the One Health approach, its practical implementation in multiple countries has encountered several challenges. These include the absence of a well-defined organizational and coordination framework, inadequate financial resources, sectors working in silos and weak surveillance systems.

The way forward

100. Countries should intensify efforts to promote and guide the health sector's negotiation with the ministries of finance to increase the financing of health emergency preparedness and to prioritize public investment in common goods for health.

101. Countries should engage further in global discussions and efforts to address the inequitable access to medical countermeasures. They should intensify efforts to establish or strengthen national regulatory authorities, seek opportunities to advance national and regional production of medicines, vaccines and medical equipment, and strengthen national supply chains. Countries should also continue to support the INB process, especially in relation to the transfer of technology and know-how for the production of countermeasures, and the processes for pathogen access and benefit sharing.

102. Countries should identify and cost the primary and secondary essential services package and determine modalities for service provision to ensure their continuity during emergencies. The Regional Office will continue to provide needed support to Member States, building on lessons learned in other countries.

103. Standard operating procedures for supply and procurement plans should be developed by countries to ensure the timely delivery of emergency health supplies, and the Regional Office will continue to provide technical support for the development of procurement and distribution plans.

104. Efforts towards advancing the implementation of the IDS strategy should continue in countries, and genomic sequencing capacity should be strengthened. A commitment to timely data sharing through regional and global platforms should also be made.

105. Countries should continue to evaluate the effectiveness of public health and social measures and generate evidence to inform future decisions. Units and/or structures for health education and promotion, RCCE and emergency communication should be reviewed and integrated, guided by behavioural insights and community-centred emergency management.

106. Countries should enhance IHR (2005) implementation at PoE and in the context of international travel, develop workforce capacity and enhance cross-border collaboration. The Regional Office will provide needed support in developing training packages for countries and facilitating dialogue with neighbouring countries for cross-border collaboration and for the application of risk assessments to develop travel advice and measures.

107. Countries should expedite their efforts to operationalize One Health at the national level by integrating the regional framework and aligning it with the global One Health joint plan of action, strengthening governance and advocating for multisectoral coordination. The Regional Office will maintain coordination with the Quadripartite at the regional level and ensure that its recommendations are reflected at the country level.

108. The Regional Office will finalize guidance on the structure, responsibilities and functions of the IHR NFPs and support countries in its implementation.

109. Discussions with universities will be initiated by the Regional Office to integrate health emergency preparedness into undergraduate and postgraduate curricula for health professionals to generate and sustain the health workforce.

Conclusion

110. The Eastern Mediterranean Region continues to contend with a heavy burden from emergencies due to multiple hazards. In this complex environment, WHO consistently applies a comprehensive, all-hazards approach to managing emergencies whether they be due to disease outbreaks, conflicts, natural disasters or technological hazards. WHO is working with countries to further professionalize the approach to health emergency management, including for prevention, preparedness, detection, response and recovery. WHO has consistently demonstrated that, when provided with access to populations affected by emergencies, good health outcomes can be achieved and international standards can be met. However, the increasing needs and risks across the Region come at a time of decreasing funding from international donors. Hence, it is vital that health emergency management efforts are better prioritized, targeted and monitored. Moreover, countries should seek to sustain the capacities built during the COVID-19 pandemic and apply the lessons from other recent emergencies. Emergency risks continue to increase across the Region due to state fragility, climate change and emerging and re-emerging infectious diseases, among other risks, and therefore, additional and sustained investments in comprehensive health emergency management are vital. In 2023, challenges persisted in the implementation of the IHR (2005), with no improvements in the overall regional score, largely owing to inadequate investments in NAPHS. Concerted efforts are needed to ensure NAPHS are adequately financed, implemented and monitored, including through financing mechanisms such as the Pandemic Fund and through domestic funding.

Action by the Regional Committee

111. The Regional Committee is invited to note this report and encourage investment in preparedness and response systems in view of the persistent threat posed by emergencies from all hazards.

Annex 1

Table 1. IHR (2005) national capacity monitoring: capacity scores (%) for all reporting States Parties for 2023

Country/ territory	Legal instruments	IHR coordination	Financing	Laboratory	Surveillance	Human resources	Health emergency management	Health service provision	Infection prevention and control	RCCE	Points of entry	Zoonosis	Food safety	Chemical	Radiation
Afghanistan	20	33	30	44	80	30	53	60	47	27	27	60	20	20	20
Bahrain	100	67	100	100	100	90	87	100	80	87	100	80	100	40	60
Djibouti	50	20	20	36	70	50	33	33	27	20	27	40	40	20	20
Egypt	90	87	100	84	100	100	100	100	80	80	100	80	80	100	80
Iran (Islamic Republic of)	80	93	70	96	100	80	87	93	80	80	80	80	80	60	60
Iraq	50	60	40	60	50	30	33	80	53	33	27	20	40	60	60
Jordan	50	73	50	72	80	50	73	73	53	47	80	80	40	60	80
Kuwait	90	93	100	80	100	100	100	87	100	100	100	80	80	100	100
Lebanon	80	73	20	84	100	60	67	67	60	80	60	80	40	80	100
Libya	30	60	70	56	80	60	73	67	40	53	33	60	60	20	40
Morocco	50	53	80	84	80	70	80	80	53	80	73	80	80	80	80
Oman	40	73	70	92	100	50	87	100	93	93	87	80	80	100	80
Pakistan	40	40	60	60	80	40	53	60	40	40	27	60	20	40	100
Palestine	70	53	30	56	70	50	26	53	46	66	20	80	40	20	20
Qatar	100	87	100	100	100	80	87	100	93	87	87	100	100	100	100
Saudi Arabia	100	87	100	92	100	100	100	93	100	100	87	80	100	80	100
Somalia	20	47	20	48	70	40	40	40	40	33	27	40	20	20	20
Sudan	40	67	60	60	80	50	80	40	47	33	60	80	20	20	20
Syrian Arab Republic	60	20	30	36	50	40	53	40	40	33	33	40	60	40	40
Tunisia	60	80	80	92	100	50	73	93	53	33	73	100	80	80	80
United Arab Emirates	100	100	100	100	100	80	100	100	87	100	100	100	80	100	100
Yemen	30	20	30	36	40	30	27	27	27	27	20	40	20	20	20