Introduction

As host to some of the world’s biggest emergencies, the Eastern Mediterranean Region carries the largest burden of people in need of aid, with more than 76 million people directly or indirectly affected by conflict, environmental threats and natural disasters.

In 2017, the Syrian Arab Republic entered its seventh year of conflict, with the humanitarian situation of people living in besieged areas becoming increasingly dire. More than two years of conflict in Yemen led to the world’s largest food crisis, the world’s largest cholera epidemic, a rapidly expanding diphtheria outbreak and the near collapse of the health system. In Iraq, a military offensive aiming at liberating Mosul led to the displacement of almost one million people. Somalia faced a triple threat of drought, impending famine and disease outbreaks. Afghanistan, Libya and Palestine struggled to provide health care services in insecure and under-resourced settings.

WHO responded to 10 graded emergencies in the Region during 2017, including four Grade 3 major emergencies in Iraq, Somalia, Syrian Arab Republic and Yemen. Somalia was classified by WHO as a Grade 3 emergency in May 2017, requiring a scaled-up Organization-wide response. As part of WHO’s Whole-of-Syria response, the Gaziantep hub in Turkey was assigned to work within the Grade 3 Syria crisis to expedite the provision of health care cross-border from Turkey to people in northern Syria. The dengue fever outbreak in Pakistan was assigned a Grade 1 emergency from July 2017 to January 2018. Other graded emergency countries included Afghanistan, Libya, Pakistan and Palestine.

Health security threats in the Region continued to place populations at increased risk. In 2017, outbreaks of cholera were reported from Somalia and Yemen, while dengue and other epidemic arboviruses such as chikungunya were reported from Pakistan, Somalia and Sudan. Oman, Qatar and the United Arab Emirates continued to report transmission of Middle East respiratory syndrome (MERS) coronavirus sporadically, while Lebanon reported one imported MERS case and Saudi Arabia reported eight small hospital outbreaks of MERS. Avian influenza among humans was reported in Egypt, although the numbers were low compared to numbers reported in 2014–2015. Crimean–Congo haemorrhagic fever was reported in Afghanistan and Pakistan, and the United Arab Emirates reported travel-associated Legionnaire’s disease during the first quarter of 2017. A number of countries, notably Afghanistan, Pakistan, Palestine and Tunisia, also reported a high number of seasonal influenza cases. At least eight countries in the Region (Djibouti, Egypt, Oman, Pakistan, Saudi Arabia, Somalia, Sudan and Yemen) fall within Category 4 of WHO’s new country classification for Zika virus, meaning that these countries have established competent vectors without any documented past or current transmission.
WHO’s response

The constraints on the health sector response in major emergencies in the Region included insecurity and limited humanitarian access to people in need, limited capacities of national health systems and partners, shortages of health personnel, bureaucratic constraints and insufficient funding. In a number of countries, the operating environment remained volatile with frequent attacks on health care. Out of a total of 212 attacks on health care recorded by WHO globally in the first three quarters of 2017, 170 (80%) occurred in the Eastern Mediterranean Region, with a significant majority of all attacks occurring in the Syrian Arab Republic. Despite the neutrality of health, political developments in a number of countries resulted in restrictions on access and increasing violence, impeding WHO’s ability to reach people in need. An escalation of clashes in Yemen in December 2017 forced WHO and many partners to scale back their operations in the country. The operational challenges faced by WHO in emergency countries included limited availability of skilled public health expertise for surge deployment. This highlighted gaps in the existing emergency rosters and the need for improved systems to identify, train and retain a larger pool of more skilled public health experts who are ready for immediate deployment when needed.

Despite these challenges, within 72 hours of both the deadly blasts in Somalia in October and the earthquake at the border between the Islamic Republic of Iran and Iraq in December, supplies were delivered from WHO’s hub in Dubai to national health authorities using regional funds. In 2017, WHO’s logistics hub in Dubai delivered a total of 85 shipments of medicines and medical supplies (weighing 791 tonnes) to 20 counties in the Region and beyond. In Iraq, Somalia, Syrian Arab Republic and Yemen, these supplies successfully reached more than 23.5 million beneficiaries. As needs for life-saving medicines and medical supplies in emergency countries increased, international suppliers were unable to keep up with growing demands by WHO. This highlighted the need to increase the number of regional wholesale suppliers. In line with this, WHO is expanding the role of its logistics hub in Dubai to an operational role that is better equipped to fill ongoing and increasing needs through a more streamlined and expedited process. A strategic assessment of estimated health supplies by all priority emergency countries will be conducted, and the supplies procured and pre-positioned in the hub for dispatching as needed. This will ensure that urgently needed health supplies reach their destination in a period of weeks rather than months.

In accordance with the principles of the revised Emergency Response Framework (ERF), WHO activated the Incident Management System in all Grade 3 countries in the Region to fulfil its six critical functions. This involved the deployment of an Incident Manager, a public health officer and an information management officer to support ongoing response activities on the ground and scale up WHO’s operational and technical support to address the immediate health needs and risks facing populations. Also in line with the implementation of the ERF, in November 2017 WHO began development of a regional roadmap, a strategic handbook and emergency
operation plans for the activation of a regional emergency operations centre (EOC). In November and December 2017, the EOC was activated to coordinate the response to acute watery diarrhoea/cholera outbreaks in Somalia, Sudan and Yemen, and the earthquake at the Iranian/Iraqi border.

WHO led or jointly led health sector coordination in eight countries in the Region where the health cluster has been activated. Health cluster achievements in 2017 included preventing the collapse of the health system and closure of 14 public hospitals and 18 nongovernmental organization hospitals in Gaza by providing essential fuel to run back-up generators during the 20-hour power cuts. In Iraq, the cluster operationalized the trauma referral pathway and was instrumental in saving the lives of 24 000 severely injured people, and health cluster partners immunized 99% of target children in newly accessible areas. In Yemen, health partners were able to reach 6 million people with life-saving health services and supported the collapsing health system through the provision of essential medicines, incentives to health workers, operational costs and rehabilitation to keep more than 2500 health facilities running. In Pakistan, health partners conducted a vulnerability assessment for the Federally Administered Tribal Areas (FATA), and the findings were used to develop a transition plan for 2018–2020 which serves as the basis for FATA transition from emergency to development. In the Syrian Arab Republic, health cluster partners supported 14.4 million medical procedures and provided 8.6 million treatment courses.

The Emergency Medical Team (EMT) initiative was launched in the Region in September 2017 with the goal of establishing a cadre of skilled national multidisciplinary medical teams to act as first responders when emergency strikes. The regional EMT strategy was created with a three-pronged approach: scaling up national EMT capacity in country; deploying national EMTs from one country in the Region to another as needed; and establishing a dedicated EMT coordination cell in national emergency operations centres. Each country decides how many teams and what types of teams they want. Countries also decide what teams to establish for deployment to other countries. Once these international teams comply with WHO standards they become part of the regional EMT system. From September to December 2017, trauma experts from the Regional Office worked with 15 countries to initiate the process, and conducted meetings with the ministries of health of Egypt, Islamic Republic of Iran, Jordan, Oman, Palestine and Qatar to provide an overview of the initiative. In the Islamic Republic of Iran, a two-day workshop on the EMT initiative was conducted with all stakeholders to create a national EMT taskforce to oversee the creation of a national multidisciplinary EMT.

In 2017, WHO’s work in the area of emergencies was 80% funded on average, through support from a number of key donors. These included the United States Agency for International Development (USAID), United States Department of State, European Commission’s Humanitarian Aid and Civil Protection Department (ECHO), Germany, United Nations Office for
the Coordination of Humanitarian Affairs (OCHA), Japan, Republic of Korea, United Nations Central Emergency Response Fund (CERF), United Kingdom, Norway, Qatar, Kuwait, World Bank, Saudi Arabia, United Arab Emirates, Oman, China, Italy, France, Canada, Algeria and Lithuania. However, while some countries received substantial support from donors in 2017, other countries facing forgotten emergencies, where health needs are just as critical, remained significantly underfunded, including Somalia, Sudan and refugee-hosting countries. The emergency in the Syrian Arab Republic was also underfunded in 2017. Since the activation of the Regional Solidarity Fund in January 2016, country donations to the Fund have been limited, and WHO still depends on internal funding for its immediate emergency response needs. In 2017, WHO allocated US$ 1.6 million of internal funding to support emergency response activities in Iraq, Somalia, Syrian Arab Republic and Yemen. Activities supported included cholera response, health services for internally displaced persons and immunization campaigns.

To strengthen the funding base for its activities, WHO will enhance engagement and dialogue with existing partners and new partners in order to mobilize resources for emergency response, aiming to increase by half the total contributions for health emergencies, including for under-resourced countries. To that end, it will strengthen institutional dialogue and presence across the Region and establish regional partnerships promoting multi-year funding, so that it is able to serve the longer-term needs for investment in under-funded countries and complex emergencies. This includes developing new partnerships and new models of funding.

Efforts will also continue to scale up response and early recovery by setting up incident management systems and emergency operating centres, promoting the use of country business models, expanding the Dubai logistics hub and strengthening coordination through health clusters.

**Emerging infectious diseases**

The likelihood of the emergence and rapid transmission of high-threat pathogen diseases has increased in the Region due to the acute, protracted humanitarian emergencies affecting many countries directly or indirectly, which have led to high numbers of internally displaced persons and refugees living in overcrowded, overburdened spaces, with little or no access to basic health care services and environmental infrastructure. Other risk factors include rapid urbanization, climate change, weak surveillance, limited laboratory diagnostic capacity and increased human–animal interaction. Meanwhile, challenges persist for efforts to prevent and control emerging and epidemic-prone diseases in the Region, including knowledge gaps regarding the risk factors for transmission and disease epidemiology for a number of emerging and epidemic-prone infections that are commonly prevalent in the Region, weakened or fragmented disease surveillance systems for early detection of health threats, and limited laboratory diagnostic capacities owing to fragile health systems in crisis-affected countries. These challenges arise as a result of insufficient investment in disease surveillance and
response activities, and the absence of a cohesive and inclusive country-focused strategy for the prevention, containment and control of emerging and epidemic-prone diseases.

In 2017, a number of outbreaks of emerging infectious disease were successfully contained, including cases of dengue fever in Pakistan, cholera in Somalia, travel-associated Legionnaire’s disease in the United Arab Emirates, acute watery diarrhoea in Sudan, and a small number of hospital outbreaks of MERS in Saudi Arabia. This was possible due to rapid field investigation and deployment of surge staff from the Regional Office, the involvement of Global Outbreak Alert and Response network (GOARN) partners to provide support to the operational response, and by guiding and advising the affected countries in implementing rapid public health containment measures.

The WHO Emerging and Dangerous Pathogens Laboratory Network was established in 2017 to develop high-security laboratories for the timely detection, management and containment of outbreaks from novel, emerging and dangerous pathogens. The Network has already conducted laboratory training in the detection and diagnosis of emerging diseases. Also in 2017, surveillance systems in the Islamic Republic of Iran, Palestine, Saudi Arabia, Somalia, Sudan, the Syrian Arab Republic and the United Arab Emirates were enhanced for emerging diseases, and early warning systems set up for detection of health threats. Additionally, in line with resolution EM/RC62/R.1, a sentinel surveillance system for severe acute respiratory infections (SARI) was established and operationalized in 19 out of 22 countries, enhancing their capacity for detection and mitigation of threats from MERS coronavirus, avian influenza A (H5N1) and other similar novel respiratory viruses. The Eastern Mediterranean Flu Network, a regional database for influenza data sharing, was expanded to receive SARI surveillance data from 13 of 19 countries in the Region with functioning influenza surveillance. In addition, a technical advisory group was established to identify priority research initiatives on MERS in the Region to address critical knowledge gaps and contribute to improving public health response to MERS. WHO also organized the first-ever scientific conference on acute respiratory infections to review progress in influenza surveillance and showcase new knowledge gained in surveillance for detection of influenza and other emerging respiratory viruses in the Region.

During 2017, WHO also oversaw the implementation of public health preparedness, readiness and mitigation measures in Saudi Arabia during the hajj 2017 (1438 H), as required by the IHR. Risk-mapping for current and future distribution of Aedes mosquito vectors was completed as part of the regional plan to identify potential Zika hotspots, and to enhance preparedness and readiness measures for prevention, detection and early response to Zika virus infections. Operational strategies for strengthening cholera preparedness and other control measures were harmonized for rapid implementation in affected countries and at-risk countries, following a consultative meeting held in mid-2017 in Beirut, Lebanon.

Currently, evidence on burden and risk factors for emerging disease health threats, and on best practices for control interventions, is being accumulated through a systematic review.
Going forward, WHO will strengthen the prevention and control of emerging and epidemic-prone diseases by helping countries forecast, detect and assess the risk of health events and mount rapid responses to outbreaks, mapping hotspots and building effective surveillance systems, and conducting risk assessments in high-risk countries as a basis for plans for preparedness and response.

**Preparedness**

In 2017, support was provided to Egypt, Iraq, Jordan and Pakistan to conduct risk assessments and develop their all-hazards preparedness and response plans. The regional roster of experts was augmented in conducting a regional public health emergency pre-deployment course for national counterparts and WHO country office staff. In addition, supporting the International Committee of the Red Cross to conduct a regional course on health emergencies for large populations provided an additional opportunity to effectively train more staff from the Region. A hospital emergency course was conducted in Bahrain, Libya and Sudan as part of series to be repeated across the Region. In addition, the Regional Office participated in the first global face-to-face meeting of the WHO operational readiness task force.

An expert two-day consultation was held with the purpose of bringing international and national stakeholders together to discuss the health of migrants and displaced populations. An analysis of health impacts on internally displaced persons, refugees, migrants and returnees in the Region was presented, and a proposed regional plan of action was discussed.

As part of implementation of Regional Committee resolutions EM/RC62/R.3 of 2015 and EM/RC63/R.1 of 2016, the Regional Office continued to support additional voluntary JEEs. In 2017, support was given to Kuwait, Oman, Saudi Arabia and United Arab Emirates. WHO has consistently liaised with the remaining countries and provided training for several of them to commence self-assessment in order to undergo JEE. Regional guidance on conducting JEEs in crisis countries was developed and training workshops were additionally provided for Libya, Iraq, Syrian Arab Republic and Yemen. The training was a unique opportunity for participants to share experiences and return to their countries as advocates for the process.

As JEE completion is only the first step, the focus has shifted towards assisting countries in developing and costing their national action plans for health security post-JEE. Utilizing JEE results, as well as other assessments and results from the IHR monitoring and evaluation framework, the plans incorporate a multisectoral approach to strengthening national health security under IHR. In 2017, national workshops were convened in Jordan and Saudi Arabia involving all relevant IHR-bound sectors. The workshops identified priority actions across the 19 technical areas of the JEE. WHO also provided technical support to Afghanistan and Sudan to
develop their national action plans for health security.

Under the IHR monitoring and evaluation framework, WHO has provided technical support to countries in implementing their IHR capacities. Egypt, Iraq and Pakistan held diverse exercises from “table-top” to full-scale simulations in order to test and improve implementation of their national capacities. An after-action review to critically review outbreak response for systematic gaps was held in Morocco (brucellosis), with additional reviews planned for outbreaks in Pakistan (dengue) and Sudan (acute watery diarrhoea). The Region convened its sixth stakeholder meeting to review IHR implementation in December 2017, bringing together diverse national sectors and technical partners. This year the scope was expanded to global participation in light of the IHR’s tenth anniversary. Two national bridging workshops, effectively bringing together the JEE process and World Organisation for Animal Health (OIE) tool for evaluating the performance of veterinary services, were held in Jordan and Morocco to improve collaboration between the human and animal health sectors and identify and plan joint activities for inclusion within national action plans for health security.

WHO will continue to support countries to meet the requirements of the IHR by building and sustaining their capacities in all-hazards surveillance and response and providing support in monitoring their compliance with IHR, developing national action plans for health security, building capacity of their IHR focal points, mobilizing resources, fostering coordination and dialogue with partners, and getting support from other countries.