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Accelerating health emergency preparedness and response – a plan of action

Executive summary

The COVID-19 pandemic continues to present a major global threat and collective efforts to bring the pandemic to an end need to be accelerated. To achieve this, and prepare for other new pathogens with pandemic potential, the lessons of COVID-19, including those identified by three independent reviews of the global response to the pandemic, the 2020 report of the Global Preparedness Monitoring Board and a range of other documents, must be heeded. Moreover, the pandemic has highlighted the need to reconceptualize current thinking around health systems and their resilience, and to revise approaches to health emergency preparedness.

To bring the current pandemic to an end there is a need to accelerate the manufacturing and equitable distribution of effective vaccines, promote and ensure the consistent application of public health and social measures, ensure that the relevant resources are available, maintain the trust and engagement of communities, and share information in a timely and transparent manner. Furthermore, to prevent or effectively control the pandemics and other health emergencies of the future, a broad range of commitments will be required from all sectors of society. This includes political leadership and sustained investment in health emergency preparedness, key health systems functions (such as surveillance, laboratory testing and clinical care) and national and regional production of vaccines, diagnostics, therapeutics and medical oxygen. Epidemiological and laboratory data and information must be shared with WHO in a timely manner, compliance with the International Health Regulations (2005) assured, multisectoral collaboration expanded, including for One Health, and communities empowered and fully engaged in preparedness and response efforts.

A plan of action on health emergency preparedness for the Eastern Mediterranean Region is proposed that includes both short-term and medium- to longer-term priorities to streamline and accelerate efforts to end the COVID-19 pandemic, enhance health security preparedness as an integral part of health system strengthening to build a resilient health system capable of predicting and preventing future health emergencies, and align and accelerate the achievement of the Sustainable Development Goals to build a better, safer and healthier Region. A monitoring and evaluation mechanism for the proposed plan of action is also included. The Regional Committee for the Eastern Mediterranean is invited to note the paper and endorse the proposed plan of action and associated resolution.

Background

1. To date, the COVID-19 pandemic has been the defining event of the 21st century. Nothing else has demanded so much from our citizens, communities, governments, global institutions, and public and private sectors. Eighteen months into the response, SARS-CoV-2 continues to present a major global threat, and collective efforts to bring the pandemic to an end must be accelerated. Other new pathogens with pandemic potential will emerge in the future – hence, we must heed the lessons of COVID-19 to "make it the last pandemic" *(1)*.

2. The devastating public health impact of the pandemic has been well documented. As of 21 July 2021, WHO had reported 191.1 million confirmed cases of COVID-19 and 4.1 million deaths worldwide – though these figures represent a significant undercount *(2, 3)*. In the WHO Eastern Mediterranean Region there have been 12 million confirmed cases and 228 668 deaths. Millions who

have recovered are left with long-term symptoms and other clinical sequelae. The pandemic has overwhelmed health systems, killed tens of thousands of health workers and disrupted other life-saving health programmes. In addition, the mental health and psychosocial consequences will remain for years to come. The pandemic has also highlighted the need for a reconsideration and "reset" of global and national social, economic and political systems to catalyse "a new approach to how our societies are run" *(4, 5)*.

3. The socioeconomic consequences will also be enormous. The pandemic has exacerbated inequalities, destroyed livelihoods and pushed up to 124 million people into extreme poverty *(6)*. COVID-19 is projected to cost the world economy US$ 10 trillion by the end of 2021 *(7)*. Across the Region, gross domestic product is projected to decline by 4.7%; including by 13% in conflict-affected countries *(8)*. The education of countless children has been interrupted. Progress towards meeting the Sustainable Development Goals (SDGs) has been halted and even reversed. As with almost all crises, the poorest and most disadvantaged have suffered disproportionately.

4. Much of the current devastation could have been averted. Repeated calls over many years for investments in health emergency preparedness were not sufficiently heeded, leaving the world with health systems largely unprepared for the outbreak of a pathogen with pandemic potential *(9, 10)*. Failures to apply the lessons learnt from previous outbreaks have left almost all countries severely exposed and unprepared to respond to the devastating impacts of COVID-19. Equally, the pandemic has highlighted the need to reconceptualize current thinking around health systems and their resilience, and to revise the approaches to and assessment of health emergency preparedness.

5. In spite of all the challenges, a broad array of new tools and strategies offer hope that SARS-CoV-2 can be effectively controlled. As of 21 June 2021: (a) WHO had issued emergency use listing for eight vaccines; (b) medical oxygen and dexamethasone had been demonstrated to reduce mortality *(11)*; (c) rapid diagnostic tests were being introduced into national testing strategies; (d) genomic sequencing was helping to track the virus; (e) financing and service delivery arrangements were being reconfigured to allow for the mobilization of greater and more flexible financial resources for the global response; (f) political commitment to whole-of-government whole-of-society approaches had facilitated more integrated responses; and (g) the evidence base for public health and social measures (PHSMs) was growing.

6. During the second quarter of 2021, global and regional trends indicated a progressive decline in case numbers, albeit with significant variations both among and within WHO regions. However, at the start of the third quarter cases began to rise again in five of the six WHO regions, with the African Region recording its highest weekly case numbers during the first week of July. In the Eastern Mediterranean Region, several countries recorded a sharp increase in cases. These and other developments indicate that the world is entering another challenging phase of the pandemic, including the emergence of more-transmissible variants (especially Delta), variable application of PHSMs, inequities and delays in vaccine deliveries, and widespread vaccine hesitancy in many communities. Given these trends, herd immunity will be very difficult to achieve in most countries in the near to medium term – and may never be achieved.

7. In light of these considerations the current paper aims to:

- document the key lessons learnt from the COVID-19 pandemic, with an emphasis on those most relevant to the Region;
- provide an overview of priority areas and measures for both ending the current pandemic and preventing future pandemics; and
- introduce a prioritized plan of action.

Lessons learnt from the COVID-19 pandemic

8. Three independent reviews[1] of the global response to the pandemic have been undertaken, with each reporting their findings and recommendations to the Seventy-fourth World Health Assembly in May 2021 *(1, 9, 12)*. Moreover, the Global Preparedness Monitoring Board (GPMB) addressed many of the challenges of the response to the COVID-19 pandemic in its 2020 report *(10)*. These reviews have been complemented by a rich array of intra-action reviews, peer-reviewed papers and commentaries that have further advanced our understanding of the COVID-19 pandemic and provided lessons on advancing collective health security. The remainder of this section sets out some of the most salient of these lessons.

9. Responsible political leadership is indispensable for pandemic prevention and control. Responsible and decisive leadership matters *(13)* and is a better predictor of effective response than objective measures of preparedness, including scores from Joint External Evaluations (JEE) *(14)*. Tools such as the JEE and State Parties Self-Assessment Annual Report (SPAR) do not – and cannot – measure the contributions of leadership and decision-making during a crisis. Leaders who acted based on the best available science, made course corrections as the evidence evolved, communicated honestly and transparently with their citizens and avoided politicization were the most effective. Such leaders also employed a whole-of-government and whole-of-society approach. Reviewers generally agree that responsibility and accountability for health emergency prevention, preparedness and response should be elevated to the highest levels of government.

10. Financial investment in pandemic and health emergency preparedness must be increased and sustained. While COVID-19 has cost the global economy trillions of dollars, there are estimates that investments of as little as US$ 5 per person per year in preparedness (between US$ 20 billion and US$ 50 billion globally) could substantially reduce the risks of future pandemics *(15)*. The business case for sustainable financing of pandemic and other health emergency preparedness is clear, but most governments, including in the Eastern Mediterranean Region, have not yet prioritized such investments. Evidence from other priority areas has also shown that integrated financing as part of overall health system strengthening is warranted to ensure the required impact *(16, 17)*.

11. Health security can only be built with the engagement and trust of communities. A citizenry that trusts its leaders and national institutions has been another hallmark of an effective COVID-19 response *(18)*. Timely, credible, culturally appropriate and practical communication is central to achieving the behaviour changes required to reduce disease transmission. By contrast, misinformation, disinformation and an associated "infodemic" have confused the public, led to poor compliance with PHSMs and contributed to vaccine hesitancy in many countries. Establishing trust requires a comprehensive approach to community engagement that integrates the social sciences, leverages social media and other channels, and involves community influencers. For too long, health system analysis frameworks have taken the community for granted and considered individuals as passive agents in health policy formulation and implementation. The newly developed WHO 3-Ds approach (data, dialogue and decision) places an emphasis on the role of individuals and communities in public health policy-making through effective social participation.

12. Strengthened surveillance, alertness and risk assessment are urgently required at national and global levels. Regional Office technical support missions to countries throughout the pandemic have consistently observed the fragmentation and weaknesses of disease surveillance and health information systems. Such deficiencies undermine national and global capacities to prevent, detect and respond to public health risks. These deficiencies also exist at regional and global levels and are exacerbated by the inconsistent sharing of national data. Effective surveillance and alert systems must be built from the bottom up. WHO is designing a strategy for Integrated Disease Surveillance and Response (IDSR) in the

[1] The Independent Panel for Pandemic Preparedness and Response (IPPPR); the Independent Oversight and Advisory Committee (IOAC) for the WHO Health Emergencies Programme; and the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 Response.

Region which will be integrated with regional and global systems, including the Epidemic Intelligence from Open Sources (EIOS) initiative and the new WHO Hub for Pandemic and Epidemic Intelligence.

13. Reliable supply chains must be established and capacitated at global, regional and national levels. The COVID-19 pandemic quickly overwhelmed the world's production and supply capacities, while also exposing severe weaknesses in national medical supply chains. Again, poorer countries were the most severely impacted. New mechanisms such as the ACT-Accelerator and COVAX were quickly established to advance the development, equitable allocation and scaled-up delivery of new vaccines, diagnostics and therapeutics. Similarly, the WHO-coordinated COVID-19 Supply Chain System provided an estimated 50% of the supply needs of low- and middle-income countries in 2020 *(19)* – with the WHO Dubai Logistics Hub playing a vital role – but still did not fill the gaps. The IPPPR has recommended that the ACT-Accelerator be developed into a global end-to-end platform. Nevertheless, whatever global mechanisms are put in place, countries will still need to prioritize and invest in their own supply chains.

14. Poor compliance with the International Health Regulations (IHR) (2005) threatens both national and global health security. The IHR Review Committee for COVID-19 made the following sober assessment: *Lack of compliance of States Parties with certain obligations under the IHR, particularly on preparedness, contributed to the COVID-19 pandemic becoming a protracted global health emergency (9)*. Such poor compliance included under-investment in IHR (2005) core capacities prior to the pandemic, substantial gaps in notification to WHO of (and information sharing on) COVID-19 cases and deaths, and failure to alert WHO to the implementation of additional measures. Decisions regarding information sharing were often made at levels above the IHR National Focal Point (NFP) and the Minister of Health, including in the Eastern Mediterranean Region. The IHR Review Committee has called for the establishment of a senior-level and appropriately resourced IHR NFP centre in each country to strengthen the authority of the IHR NFP and allow for effective engagement with other ministries and sectors.

15. The health sector alone cannot effectively manage health emergency preparedness and response. COVID-19 has once again demonstrated that multisectoral coordination is vital to managing pandemics and other health emergency risks – including in the key areas of prevention, preparedness, response and recovery. Given the broad array of sectors involved (for example, the transport, agriculture, environment and telecommunications sectors) a strong coordination mechanism must be established at each level of government. National legislation, policies and plans that clearly delineate the roles and responsibilities of each sector should facilitate their more predictable and effective engagement in health emergency preparedness and response. In such an environment, the Ministry of Health should be empowered to play its role in promoting and actively coordinating multisectoral actions. This will require a transformation of ministries of health for the 21st century, including through the identification of relevant governance and coordination arrangements.

16. Vaccinations and other medical countermeasures require both urgent roll-out and longer-term investment. The development of efficacious vaccines in record time and the proven benefits of medical oxygen and dexamethasone for the management of severe and complicated cases offer hope for both the prevention and case management of COVID-19. But the roll-out of vaccines across the Eastern Mediterranean Region has been slow and grossly inequitable – as of 30 July 2021, only 17 vaccine doses per 100 population had been administered (range = 0.72–165.15). The scaling-up of vaccinations through the funding of COVAX, donations of vaccines from wealthy countries and the cessation of export bans is urgently needed. In addition, investments in vaccine production across the Region must be pursued over the medium- to longer-term to provide the Region with a degree of vaccine independence moving forwards. Similarly, the pandemic has revealed that supplies of medical oxygen and its safe management are grossly inadequate across the Region, and national medical oxygen production capacities must therefore also be taken to scale along with related safety measures.

17. Evidence-based application of PHSMs[1] can suppress disease transmission and mitigate socioeconomic impact *(20)*. The community transmission of COVID-19 overwhelmed health systems even in many of the most developed countries. PHSMs proved extremely important in controlling disease spread, especially in the early stages when there were no medical countermeasures. But such measures can have significant socioeconomic and political consequences. Their implementation, adjustment and lifting should therefore be evidence-based, phased, contextualized, monitored and informed by regular risk assessments *(21)* and consideration of broader societal well-being. Communication and consultation with communities is central to their success *(21)*. In this regard, WHO and the Organisation for Economic Cooperation and Development (OECD) have developed a decision framework based on five steps to help countries make trade-off decisions *(22)*.

18. As countries recover from COVID-19, there is a need to re-think health system design and develop rebuilding approaches. The COVID-19 pandemic, the Ebola virus disease outbreaks in Africa and other recent events have revealed a major misalignment between government steps to strengthen health systems and those to strengthen IHR (2005) core capacities and advance health security. Many countries with presumed strong health systems and good universal health coverage (UHC) did not respond effectively in the early months of the pandemic. Moreover, IHR (2005) core capacities and health security are insufficiently prioritized in the national health policies and plans of many countries. Such observations highlight the need to re-think and revise the goals and objectives of health systems to include health security as a specified outcome, and effective health emergency preparedness as a clear objective. Moreover, the components of health systems must be redefined to extend beyond the classic six health systems building blocks[2] and to include the IHR (2005) core capacities[3] and essential public health functions.[4] Integrating and resourcing these components will contribute towards the building of truly resilient health systems that are able to more effectively prevent, prepare for, detect, respond to and recover from pandemics and other public health emergencies, while also advancing the goal of UHC.

19. The world needs a stronger WHO. The three major review panels all affirmed the central role of WHO in health emergency preparedness and response. But they also acknowledged the limitations of WHO in terms of authority, resources and predictable financing. They called for a WHO that is empowered to proactively support individual countries in investigating and managing high-risk public health events, as well as play its full role as the custodian of IHR (2005). Fulfilling its mandated roles and meeting the expanding expectations of its Member States and the international community will require sustainable and flexible financing.

[1] These include: personal protective measures (for example, masks, hand hygiene and respiratory etiquette); social distancing measures (for example, school arrangements/closures, workplace arrangements/closures, curfews, lockdowns, avoiding crowds and cancellation of mass gatherings); travel-related measures (for example, travel advice, travel restrictions, border closures and entry/exit screenings); and environmental measures (for example, surface and object cleaning, and improved ventilation).

[2] The six health systems building blocks are: service delivery; health workforce; information; medical products, vaccines and technologies; financing; and leadership/governance.

[3] The 10 IHR (2005) core capacities are: national legislation, policy and financing; coordination and NFP communications; surveillance; response; preparedness; risk communication; human resources; laboratory; points of entry; and potential hazards including zoonotic events, food safety, chemical events and radiation emergencies.

[4] The eight essential public health functions are: surveillance and monitoring of health-related indicators; preparedness and public health response to disease outbreaks, natural disasters and other emergencies; health protection (including management of environmental, food, toxicological and occupational safety); health promotion and disease prevention through population-based interventions (including action to address social determinants and health inequity); assuring effective health governance, public health legislation, financing and institutional support; assuring a sufficient and competent workforce for effective public health delivery; communication and social mobilization for health; and advancing public health research to inform and influence policy and practice.

Context of the Eastern Mediterranean Region

20. The Eastern Mediterranean Region is a highly diverse, complex and inequitable region where country-level experiences of the pandemic have varied considerably. The 22 countries and territories are evenly distributed across the four World Bank income classifications – six are high-income economies, five upper middle-income, five lower middle-income and six low-income *(23)*. There are similar disparities related to population health outcomes, health systems performance and the ability of countries to detect and manage epidemic and pandemic threats.

21. The Region is profoundly impacted by emergencies resulting from a wide range of hazards. Ten countries and territories (45%) are experiencing large-scale, protracted humanitarian crises almost entirely driven by conflict. Approximately 101 million people require humanitarian assistance, representing 43% of the global humanitarian burden and 15% of the Region's total population *(24)*. Moreover, the Region is the source of 64% of the world's refugees *(25)* while 18.7 million people living in the Region are internally displaced *(26)*. Weaknesses in national health systems greatly diminish their resilience and capacity to effectively detect and respond to emergencies. Globally, WHO estimates that 70% of cases of epidemic-prone diseases occur in fragile, conflict-affected and vulnerable countries.

22. In addition to COVID-19, serious outbreaks of other emerging infectious diseases are also common across the Region, including respiratory diseases, waterborne diseases, and arboviral and zoonotic diseases. Middle East respiratory syndrome (case fatality ratio = 34.4%) was first identified in the Region and since 2012 the Region has accounted for 92% of all global cases. The world's largest cholera epidemic for over a century has been ongoing in Yemen since 2016, with 2.5 million cases and 3999 deaths having occurred as of 30 April 2021. Recurrent outbreaks of dengue fever, chikungunya, Congo-Crimean haemorrhagic fever and Rift Valley fever continue to take their toll on public health, communities and economies in many countries and territories across the Region. Repeated outbreaks of vaccine-preventable diseases (including measles and diphtheria) are considered as markers of weak health systems and continue to recur in several countries of the Region. The Region also has the only two countries in which wild poliovirus remains endemic (Afghanistan and Pakistan) while five countries are experiencing outbreaks of vaccine-derived polio. In recent years, significant outbreaks of malaria, HIV, hepatitis A, typhoid fever, leishmaniasis and other diseases have also occurred.

23. Natural and technological disasters also take a large and recurrent toll on the countries and territories of the Region. In addition, the effects of climate change are becoming increasingly evident, including more frequent severe weather events such as droughts (for example, in Afghanistan), floods (Sudan) and tropical storms (Yemen). These events are often associated with outbreaks of waterborne diseases, malaria and arboviral diseases. Droughts can lead to food insecurity, malnutrition and increased vulnerability to infectious diseases. In recent decades, devastating earthquakes have also impacted countries in the Region (for example, the Islamic Republic of Iran in 2003 and Pakistan in 2005). Technological emergencies have included chemical attacks in the Syrian Arab Republic and the 2020 port explosion in Beirut, Lebanon.

24. COVID-19 has revealed the enormous disparities in the capacities of countries and territories across the Region to respond to a pandemic. In addition to the wide variations in vaccination coverage noted above, major discrepancies also exist in relation to other aspects of the response – as of 15 July 2021, testing rates ranged from 0.2 to 193.4 per 1000 population (median = 5.4); cumulative positivity ratios from 1.1% to 32.4% (median = 9.7%); and case fatality ratios from 0.3% to 19.6% (median = 1.6%). In addition, although good quality disaggregated data are generally not available for the subnational level, there are numerous indications of wide-ranging disparities within many countries.

25. Low levels of investment in health in general – and in public health and essential public health functions in particular – have left national health systems in the Region vulnerable to emergencies from all hazards. While the Region is home to more than 9% of the world's population, it accounts for less than 2% of global health expenditures. In 2019, the regional Service Coverage Index was estimated at 58 (out of 100); below the global average of 66 and behind three other WHO regions *(27)*. Close to

77 million people in the Region faced financial hardship in 2015 by spending more than 10% of their resources as direct out-of-pocket health expenditure – 15 million more compared to 2010 *(28)*. These overall indices reflect difficulties in the provision of care to key subgroups, countries and geographical areas in the Region. Several vulnerable groups remain uncovered by financial protection arrangements or without access to needed quality health care – including communities impacted by conflict and state fragility, refugees, migrants and those living and working in the informal sector *(29)*. The COVID-19 pandemic has amplified all of these challenges *(30)*. Investing in essential public health functions, including IHR (2005) core capacities, and quality essential health services based on a primary health care approach is the best safeguard against future health emergencies.

Ending the COVID-19 pandemic

26. As of 10 July 2021, the number of confirmed cases of COVID-19 at global and regional levels was increasing following several weeks of progressive declines. Currently, the situation remains unstable and unpredictable – most of the regional population remains susceptible to infection, the highly transmissible Delta variant is becoming dominant, implementation of PHSMs remains inconsistent, vaccine distribution is uneven and inequitable, and vaccine hesitancy is a major problem in many communities with access. Given that SARS-CoV-2 has infected more than a dozen animal species, it cannot be eradicated and COVID-19 is therefore likely to become a persistent endemic human respiratory disease. In the short to medium term, it will remain a major public health issue threatening individuals, health systems, communities, societies and economies. Urgent and scaled-up action continues to be required. The prioritized areas and measures outlined in this section offer countries and their partners the most effective means of bringing an end to the COVID-19 pandemic.

Maintain the engagement and ownership of senior government leadership

27. Given the current status of the pandemic, leaders at the highest levels of government and within health and other sectors must remain fully engaged and responsive to evolving needs. They must closely monitor epidemiological trends and the emergence of new variants, and be willing to make evidence-based course corrections as appropriate. This will be especially important in adjusting PHSMs in a manner that maximizes public health impact while minimizing the socioeconomic consequences. After 18 months of the pandemic, complacency and "COVID fatigue" remain clear concerns. Leaders should therefore convey and demonstrate commitment to vigilance, and should maintain responses to COVID-19 as a national, multisectoral priority. Regular, clear, transparent, actionable and hope-filled communications from respected government officials will help to generate and maintain community trust. A clear vision and set of priorities for ending the pandemic should be articulated, and a willingness shown to making and explaining course adjustments as needed. Heads of government and ministries of finance should ensure that the response is appropriately financed and that people continue to be financially protected.

Accelerate scale-up of COVID-19 vaccinations

28. Vaccines contribute to reducing mortality and morbidity, and to safeguarding the health system. In the short to medium term, vaccines can be acquired through the COVAX facility via bilateral agreements with manufacturers, and via donations from wealthier countries. Each country can pursue one or more of these options based on their own context. During the third and fourth quarters of 2021, the quantity of vaccines available through COVAX will increase substantially and may exceed national absorptive capacities, especially in Gavi-eligible countries with an advanced market commitment. It is therefore vital that countries take immediate steps to ensure their readiness to receive and effectively distribute the vaccines. Priority measures include updating national deployment and vaccination plans, ensuring the allocation of appropriate human and financial resources (for example, operational costs), strengthening the supply chain, developing micro-plans together with partners and scaling up risk communications to address vaccine hesitancy. WHO has proposed targets of 10% of the population of all countries to be vaccinated by September 2021, 40% by the end of 2021 and 70% by mid-2022. Over the medium to longer term, countries with the necessary capacities are encouraged to explore options for the local production of

vaccines and other products, including through technology transfer and licensing by established vaccine producers (see also the section below on preventing and controlling future health emergencies).

Promote and refine evidence-based public health and social measures

29. Adherence to evidence-based PHSMs at individual and community levels is effective in suppressing disease transmission and will complement vaccination and other medical countermeasures in controlling the pandemic. PHSMs have become a central component of all national control strategies for COVID-19 and their more strategic application should be pursued. Situational assessments should be conducted to determine the effectiveness, acceptability and feasibility of individual PHSMs (such as mask wearing, social distancing, travel restrictions, targeted business closures and temporary suspension of mass gatherings) and WHO guidance can be helpful in this regard *(21)*. The selection, implementation and monitoring of PHSMs is best informed through consideration of local epidemiology, health system capacity and potential socioeconomic impacts. A clear communications and community engagement approach will help to optimize compliance and successful scale-up. Where feasible, measures should be adjusted, relaxed or lifted in a controlled stepwise manner to allow for better understanding of the effects of each measure on disease transmission. Research into PHSMs and documentation of their successes and/or unintended consequences will help to guide subsequent control measures and future outbreak responses.

Empower communities and promote behaviour change

30. Vigilance with regard to risk communications and community engagement must be maintained, not only to address rumours, misinformation and disinformation, but to promote adoption of protective behaviours and to overcome both COVID-19 fatigue and vaccine hesitancy. Priority communities should be identified and a system established to gather, analyse and respond to relevant information from online and offline sources. A variety of quantitative and qualitative methods can be used, including surveys, focus group discussions and key informant interviews. Once analysed, this information can then be used to design messaging, as well as behaviour-change interventions and other related measures. Where possible, messaging and related interventions should be pre-tested with communities and adapted as needed prior to being taken to scale. Roll-out should be strategic, targeted and phased so as not to overwhelm communities with an "infodemic". Technical inputs from the social sciences (including from anthropologists) can be helpful at all steps of the process. National capacities to analyse community insights and practices, and to design appropriate community engagement and behaviour-change interventions, should be developed over the medium to longer term.

Strengthen surveillance and other data-management measures

31. The objectives of the COVID-19 surveillance strategy/plan should be reviewed and updated as the pandemic evolves to ensure the rapid detection of cases and characterization of the pandemic. Case definitions should also be revised as needed, including to resolve the undercounting and underreporting of COVID-19 cases and deaths. Where possible, any fragmentation of surveillance should be addressed so that a coherent system is established at national and subnational levels. This includes linking both epidemiological and laboratory data. Protocols and procedures for case investigation, implementation of initial control measures, and isolation and management of cases may also be updated as needed. Digital technologies for contact tracing (including QR codes and Go.Data software) have proved to be highly effective and can be considered if not already implemented. Procedures for the quarantining of contacts will need to evolve throughout the course of the pandemic. Population-based studies such as seroprevalence and mortality surveys are useful for complementing understanding of the COVID-19 epidemiological picture. Sharing epidemiological surveillance and genomic sequencing data through regional and global platforms is vital for monitoring trends at these levels. Member States should fulfil their obligations under IHR (2005) regarding data sharing. Routine syndromic surveillance for other infectious diseases should be maintained, especially for respiratory infections, through surveillance for influenza-like illness (ILI), severe acute respiratory infection (SARI), atypical pneumonia and unexplained fever to monitor trends in other diseases with similar presentations to COVID-19.

Expand testing and sequencing

32. National testing strategies should be regularly reviewed and updated based on the evolving epidemiology, available resources and tools, and country-specific context. Introduction of rapid antigen tests is an important option for scaling up testing, especially in remote and resource-poor settings. The emergence of new variants that may impact transmission, disease severity and vaccine effectiveness has highlighted the need to accelerate the establishment and expansion of genomic sequencing. As of 21 July 2021, 14 countries in the Region have established this capacity, with several others planning to do so. For those countries and territories without sequencing capacities, arrangements for the shipment of samples to regional reference laboratories have been made and WHO is currently assisting in the strengthening of sequencing capacities. Quality and safety must be maintained across all testing sites to ensure test accuracy and international acceptance of results. The emergence of new influenza strains with pandemic potential remains a possibility and countries must maintain and strengthen the seasonal influenza sentinel surveillance system. Trends in the circulation and co-circulation of SARS-CoV-2, influenza viruses and other emerging respiratory pathogens should be considered as part of differential diagnosis. Efforts should be made to integrate systems for the surveillance, testing and monitoring of respiratory viruses with epidemic and pandemic potential, including SARS-CoV-2, influenza viruses and MERS-CoV.

Points of entry and international travel

33. Points of entry (airports, seaports and ground crossings) serve as the key conduits for international travel, transport and trade, and as a result their capacities and resources have to be in place both for routine operations and to respond to the exigencies of public health emergencies. The COVID-19 pandemic continues to present challenges for points of entry and international travel operations in terms of balancing sound public health measures against global economic interests. The emergence of new variants of concern has increased stigma with regard to passenger origin and recent travel history, while also hampering progress in vaccination. Risk assessment approaches therefore need to be championed in order to adopt appropriate travel-related health measures, including quarantine and testing modalities. Until vaccination is globally equitable such measures should not be prohibitive of free movement. Strategies at points of entry need to be incorporated into larger national strategic efforts that ensure feedback and coordination with other national efforts. Countries also need to swiftly ensure confidence in the validity of associated travel documentation and in the digitalization of COVID-19 diagnostic and vaccination records, as such measures will continue to be requested and adopted for travel purposes in the foreseeable future. Additionally, countries need to coordinate information on the application of other health measures taken to facilitate travel and to exchange passenger information in real time. Efforts to ensure that travel is as safe as possible will include PHSMs throughout the journey and the assessment of points of entry premises to identify measures to reduce transmission risks.

Advance research and innovation

34. Depending on national capacities and context, research is encouraged into the epidemiological, clinical, vaccine-related and behavioural aspects of the pandemic. Allocation of sufficient funding and resources will be necessary to support such studies. Epidemiological research can help to identify risk factors and vulnerable groups, guide the introduction and adjustment of PHSMs and monitor the impact of new variants. Clinical trials are necessary for evaluating both new and repurposed therapeutics, and clinical studies can also be used to refine treatment regimens and protocols, including for the use of medical oxygen. Vaccine effectiveness studies are increasingly important in the context of new variants and can inform vaccination strategies in different contexts. As noted above, social science and behavioural research are necessary for the design and implementation of effective risk communications and community engagement strategies. Building regional and global partnerships will be invaluable in promoting research and innovation and facilitating the timely sharing of research findings.

Preventing and controlling future health emergencies

35. The COVID-19 pandemic has highlighted that misalignment between comprehensive emergency risk management and health system strengthening efforts has been an important contributory factor in poor pandemic preparedness and response. Strengthening IHR (2005) core capacities should not be done in isolation but should be fully integrated into broader health system strengthening efforts. The pandemic has also demonstrated that advancing UHC does not automatically guarantee health security, as reflected by the disease burden experienced by many countries with advanced health systems and high levels of UHC (as evaluated by the SDG indicators 3.8.1 and 3.8.2). A comprehensive health system strengthening approach must integrate health security as an explicit goal, hand in hand with the goal to advance UHC. Strategies and plans to achieve these twin goals will require strong leadership at the highest levels of government, must be built on community trust and ownership, and must engage all relevant sectors. Regular analysis and ranking of risks will inform public health priorities and resource allocation.

36. Rebuilding health systems following the pandemic will also require action in the social, economic and environmental domains. Central to these actions will be strengthening essential public health functions and other common goods for health (for example, policy, legislation, regulation, coordination, taxes and subsidies; information, analysis and communication; and population services) coupled with the rebuilding of "fit-for-purpose" institutions for achieving UHC and health security. This will require the integrating of health programme specificities (for example, communicable diseases, noncommunicable diseases, mental health, and reproductive, maternal, neonatal, child and adolescent health) into all health system strengthening endeavours. The UN framework for the immediate socio-economic response to COVID-19 *(31)* identifies five pillars for an effective response towards building back better: (1) health first; (2) protect people; (3) economic response and recovery; (4) macroeconomic response and multilateral collaboration; and (5) social cohesion and community resilience. Selected priority actions for effectively preventing and controlling future pandemics and other health emergencies are presented below.

Governance

37. The good governance of health emergency preparedness encompasses the structures, institutions, laws, mechanisms and rules required to ensure that appropriate decisions are taken at all levels. It also involves a whole-of-government and whole-of-society approach. Elevating the roles, authorities and accountabilities of those responsible for health emergency preparedness within governments is essential. They should also feature more prominently in broader national disaster/emergency management mechanisms and have strong links with the National Disaster Management Authority. IHR NFPs should be granted sufficient seniority and decision-making authority to perform their functions, and be appropriately organized, resourced and positioned within governments. The concept of the designated "NFP centre" proposed by the IHR Review Committee *(9)* should be seriously considered. Appointing national pandemic coordinators to drive the whole-of-government approach is also encouraged. The roles and responsibilities of heads of government and relevant ministries should be defined and unambiguous. Countries should periodically review their existing legislation and ensure its consistency with IHR (2005) and that appropriate legal frameworks are in place to prevent, prepare for, detect and respond to health risks and health emergencies. Platforms for national and subnational multisectoral coordination should be established, including with other governmental institutions, state and local governments, civil society, communities, traditional and religious leaders, the media, academia and the private sector.

Strategy and planning

38. Strategies and plans to ensure that future health emergencies do not lead to pandemics require a comprehensive risk-based approach that addresses prevention, preparedness, detection, response and recovery. They should be strongly linked to, be integrated with and re-enforce all-hazard emergency preparedness and response efforts – both within the health sector and as part of multisectoral emergency management arrangements. Across the Region, almost all countries and territories have diligently submitted an IHR SPAR to WHO since 2016. Similarly, 18 countries have undertaken JEEs, with 17

subsequently drafting a national action plan for health security (NAPHS). However, in most cases, these efforts did not translate into more-resilient health systems prepared to effectively manage pandemic risks. All countries and territories will need to undertake their own intra-action and after-action reviews of their response to the COVID-19 pandemic, in collaboration with WHO and other key partners. These reviews should also take into consideration the lessons learnt at the global and regional levels in order to inform a range of policy, planning and financing decisions. Key related activities will include, but are not limited to: (a) revising national health policies and plans in a way that prioritizes health security, health emergency preparedness and IHR (2005) core capacities along with UHC goals; (b) ensuring that initiatives to strengthen health systems integrate IHR (2005) core capacities and essential public health functions as well as strengthen classical health system functions; (c) revising and resourcing the NAPHS; and (d) ensuring that the "health in all policies" commitment also integrates health emergency preparedness. Strengthening comprehensive emergency management capacities within the health sector – including fully functioning emergency operations centres (EOCs) – should be a central goal of the planning process.

Sustained financing

39. Data from 18 of the 22 countries and territories in the Region[1] indicate that median government health expenditure is only 8.2% (range 1.7% to 22.6%) of general government expenditure *(32)*. While there are multiple competing demands on the health and general government budgets, the COVID-19 pandemic has underlined that recurrent financing for health systems and emergency preparedness must be established as clear government priorities. Investing in essential public health functions and common goods for health – as described above – needs to be Step 0 in health system recovery *(5, 33)*. Ministries of finance should therefore be consistently engaged in order to negotiate an appropriate resource envelope reflected in the national budget. Other extra-budgetary mechanisms (for example, off-budget development financing or other ministries' financing) may also be explored. External funding from bilateral and multilateral donors represents an important option for eligible countries. In addition, particular focus should be given to enhancing health system efficiency by ensuring alignment and focusing investments on high-impact interventions. Regardless of the funding source, investments in preparedness and IHR (2005) core capacities must also be sustained over time. A "culture of preparedness" must be developed and integrated into the health system, including its financing.

Surveillance, alert and information management

40. National surveillance systems should be strengthened through the integration of an all-hazard early alert mechanism capable of detecting and investigating emerging infectious diseases, including at Points of Entry. Event-based surveillance can detect new diseases through sources other than classical indictor-based surveillance systems (for example, through community informants and/or social media). Trained specialists and epidemiologists with the ability to detect and assess threats due to novel viruses are vital to such a system. The timely sharing of relevant public health information with WHO in order to promptly assess the public health risk of a notified or verified event, in line with IHR (2005), is also essential. The WHO strategy for IDSR in the Region offers a longer-term approach to overcoming the fragmentation of surveillance referred to above. The early detection and assessment of potential threats are only useful if there are adequate response capabilities that can prevent the amplification of such threats. Thus, investment in EOCs, rapid response teams, emergency management training, supply chains and other operational capacities should be pursued. Regular assessments of disease burden, hot-spot analysis, risk profiling/ranking, modelling and forecasting of epidemic- and pandemic-prone diseases can also inform preparedness measures.

[1] Data not available for Libya, Somalia, the Syrian Arab Republic and Yemen.

Laboratory and sequencing capacities

41. Countries should continue to build national capacities for laboratory infrastructure, staff and equipment at national and subnational levels, and to improve diagnostic capacities for emerging infectious diseases (including molecular testing and sequencing capacities). As with surveillance data, the timely sharing of accurate and reliable laboratory data through regional and global platforms is crucially important in understanding the nature of the pathogen and initiating an appropriate public health response. Countries with strong laboratory diagnostic capacity are encouraged to extend technical assistance to countries with less capacity through the regional network and in coordination with WHO. Developing and implementing a regulatory framework to ensure the highest standards of laboratory biosafety and biosecurity is critical in preventing unintentional exposure to, and/or release of, pathogenic biological agents from biomedical laboratories, and in preventing unauthorized access to, loss, theft, misuse, diversion or deliberate release of such agents.

Vaccination

42. While the development of efficacious COVID-19 vaccines in record time was an unprecedented and astonishing scientific achievement, their large-scale roll-out and administration continue to pose multiple challenges. These include limited production capacity, inequities in global distribution, supply chain constraints, lack of country capacities for timely vaccine administration, and hesitancy among the public. Most of these issues disproportionately affect low-income and lower middle-income countries, including in the Region. As a result, many countries are failing to meet demand and to achieve vaccination coverage targets. To avoid such problems in future, investment in regional vaccine production is an important and viable option. Although only a small number of countries in the Region currently have the capacities needed to produce vaccines, diagnostics and therapeutics, the COVID-19 pandemic is beginning to catalyse expanded regional efforts in these areas and several countries are currently exploring opportunities in this area. Moreover, in June 2021 WHO launched a consultation process on establishing a vaccine production strategy for the Region, with a focus on COVID-19 vaccines. Factors that will need to be considered in such a strategy include, but are not limited to, knowledge and technology transfer, waivers of intellectual property rights, licensing, regulatory issues, enhanced manufacturing capacities, stock management and supply chains.

Points of entry and international travel

43. The COVID-19 pandemic has unquestionably highlighted and exacerbated the capacity and resource gaps that have long characterized points of entry operations. Efforts to bolster points of entry to mitigate future pandemics will need to focus on the foundational building blocks of IHR (2005) capacities. Points of entry present complex environments with many stakeholders operational at the physical premises. As a result, coordination and communication mechanisms across diverse sectors represent key strategic approaches to ensuring IHR (2005) implementation. Investment in adequate and appropriate human resources to deal with travel volumes and risks is a primary requirement, and should be mapped in a capacity framework. Technical investment and professional training programmes are equally needed to support growth and ensure capacity. In addition, emergency contingency planning at points of entry based on an all-hazards approach has been continually highlighted as a pressing need, especially so during the pandemic, while ensuring the availability of operational plans, guidelines and universal standard operating procedures (SOPs) has been consistently identified as a challenge. Encouraging the systematic use of surveillance information obtained at points of entry to inform national response efforts, strategies and risk assessments will also be key to ensuring appropriate and calibrated responses. Finally, all opportunities to harness cross-border collaboration, harmonize resources and foster joint surveillance and response to public health threats of mutual concern need to be taken if future pandemics are to be mitigated.

One Health

44. The COVID-19 pandemic is a stark reminder that unknown pathogens can emerge from an animal source at any time, in any place and without warning. It is estimated that 70% of new emerging infectious diseases of humans originate in animals, especially wild animals. Preventing future pandemics will only be possible through an integrated One Health approach that links public health, animal health and the environment we share. To effectively detect, respond to and prevent outbreaks of zoonoses, mechanisms need to be established to share epidemiological data and laboratory information efficiently across sectors. Moreover, such intersectoral collaboration must extend to: (a) pathogen discovery; (b) development and distribution of new diagnostics, preventive interventions and therapeutics; (c) communication strategies; (d) predictive modelling; and (e) joint research. WHO works closely with the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (OIE) to promote multisectoral responses to the risk of zoonoses and other public health threats at the human-animal-ecosystem interface. The partnership also produces guidance on how to reduce these risks, and such collaboration now needs to be taken increasingly to country level to support national efforts.

Essential and critical services

45. To avoid the interruption of essential health services during future emergencies, countries should define essential and minimum service packages, and establish mechanisms to guarantee their delivery. The role of primary health care in service delivery during emergencies should be promoted, strengthened and linked to a strong referral system. Stark gaps in emergency and critical care services in many countries have been very evident during the pandemic. Countries are therefore encouraged to undertake an assessment of their emergency and critical care systems and to develop a roadmap for their improvement that covers the continuum of care from pre-hospital to emergency department, operating room, critical care, hospital ward and rehabilitation. Building the capacity of the health workforce across the continuum, including through the development of trained specialties in emergency medicine and critical care, should also be prioritized. Scaled-up investment in the production of medical oxygen should also be pursued at national and subnational levels. Not only can medical oxygen save lives during a pandemic, it also has proven and underappreciated benefits in the management of a broad range of medical emergencies, including childhood pneumonia.

Supply chain

46. Almost all countries and territories of the Region have encountered significant problems with end-to-end supply chain management during the pandemic, including in forecasting demand, procurement, warehousing, inventory management, distribution and monitoring. Common problems include global market failures, over-reliance on single sources, absent or inadequate national stockpiles, poor logistics infrastructure, and lack of SOPs for ensuring reliable and equitable access and distribution. Most countries will need to undertake a comprehensive review of their supply chain system and prioritize improvements to the weakest links, including the capacity to scale/surge during emergencies. Important elements of an upgraded supply chain system will include mechanisms to forecast demand, solid logistical infrastructure, information technology, real-time inventory management, distribution planning, streamlined financial management and clear key performance indicators.

Community trust and engagement

47. The COVID-19 pandemic has highlighted that all emergencies, pandemics and outbreaks start and end in communities. In many countries, citizens are not sufficiently empowered, with civil society organizations (CSOs) having only limited influence in social sectors, including health. However, leveraging the capacities of citizens, CSOs and other community structures has proven to be vital in ending outbreaks such as Ebola virus disease, and in generating a more-effective response to COVID-19. Governments at all levels must prioritize community involvement in preparedness and response efforts and engage multiple stakeholders in that process – this will be vitally important in building the

trust required for disease prevention and control. In essence, communities should be at the centre of preparedness and response. Beyond engagement, individuals and communities should also be empowered to make the best decisions and to take action to protect themselves. Similarly, CSOs should be assigned clear roles in preparedness and be empowered to act in support of national health agendas. Collaboration with other sectors beyond public health – especially the social sciences – will be invaluable in understanding community perspectives and achieving the behaviours required to prevent and limit disease transmission and promote health. Leadership and governance structures for preparedness must therefore be transformed so that they are accessible to communities and CSOs, responsive to their needs, promote trust and respect human rights – such approaches have been demonstrated to avert the backlash sometimes associated with PHSMs. In the context of health security, countries must also find specific ways to empower women and address the needs of vulnerable groups.

Accountability and compliance

48. Roles and responsibilities for the implementation of the revised NAPHS and related health security measures should be clarified across all levels of government and sectors. A clear monitoring and evaluation framework will need to be integrated into the plan, including milestones, targets and accountabilities. Sharing the NAPHS and other relevant plans with WHO will also be important, together with updates on progress of implementation and annual submission of the IHR SPAR. Compliance with international commitments on preparedness and response, including IHR (2005), is essential for both national and global health security. Countries should inform WHO of any new governance structures and arrangements for national health security, including decisions on IHR NFP empowerment, such as the establishment of an IHR NFP centre. Compliance with IHR (2005) provisions, particularly those related to notification, verification, travel and trade also needs to be improved to minimize consequent social and economic losses.

Additional assessment procedures

49. The IHR Monitoring and Evaluation Framework (IHR MEF) for assessing health emergency preparedness does not adequately consider or weigh the importance of all national capacities relevant to health security, and may have given countries a false sense of security. Current measures of preparedness have not been predictive of the effectiveness of national responses to the COVID-19 pandemic and are unlikely to be so for future health emergencies. Relevant factors beyond the health sector, such as social protection, are not considered by the IHR MEF. Adoption of the Universal Health and Preparedness Review announced by the WHO Director-General at the resumed Seventy-third World Health Assembly in November 2020 is therefore encouraged to complement the existing IHR MEF tools and processes.

Conclusion

50. The COVID-19 pandemic has had a dramatic, and often devastating, impact on the lives and livelihoods of people in every country across the globe, including in the Eastern Mediterranean Region. At the start of the third quarter of 2021 it seems evident that we may yet be entering another concerning new phase. The pandemic has laid bare inequities and injustices both among and within countries, while also highlighting the fundamental interdependence of nations and people worldwide – “No one is safe until everyone is safe”. It has also become clear that the answers to preventing and controlling pandemics do not lie within the health sector alone – the policies and actions of leaders and the engagement, trust and behaviours of communities are perhaps even more important.

51. An extraordinary range of effective new tools and strategies to tackle COVID-19 has been developed. However, to bring this pandemic to an end we will need to greatly accelerate the manufacturing and equitable distribution of effective vaccines, promote and ensure the consistent application of PHSMs, ensure that the relevant resources are available, and maintain the trust and engagement of communities. In addition, sharing information on a timely and transparent basis will underlie all of the actions required.

52. To prevent or effectively control the pandemics and other health emergencies of the future, a broad range of commitments will be required from all sectors of society. Political leadership at the highest levels of government must own and take responsibility for the necessary preparedness measures. Sustained investments in health emergency preparedness must also be guaranteed, including investments in key health systems functions (such as surveillance, laboratory testing and clinical care) as well as investments in national and regional production of vaccines, diagnostics, therapeutics and medical oxygen. Epidemiological and laboratory data and information must be shared with WHO in a timely manner and compliance with IHR (2005) assured, while multisectoral collaboration must be expanded, including in the spirit of One Health. In addition, communities must be empowered and fully engaged in preparedness and response efforts.

53. None of this will be easy. Political commitment varies; rumours, misinformation and the infodemic undermine community trust; resources can be hard to generate and sustain; numerous other priorities compete for attention; and too often there is a failure to learn and apply lessons from previous pandemics. However, prioritized, sequential and well-resourced plans offer a way forward in ending the COVID-19 pandemic and effectively managing the pandemic risks of the future. Such plans must not become perfunctory documents sitting on a shelf and soon forgotten. They must become living documents that are owned by leaders, communities and health officials alike, and that are resourced properly, monitored regularly, reported on transparently, exercised and tested frequently and reviewed and updated as required.

54. The proposed plan of action on health emergency preparedness for the Eastern Mediterranean Region (Annex 1) includes both short-term and medium- to longer-term priorities to end the COVID-19 pandemic, prevent and control future health emergencies, and build a safer, healthier and fairer Region. The endorsement, implementation and follow-up of the plan of action by Member States of the Eastern Mediterranean Region will directly contribute to health security and improved health outcomes across the Region and worldwide. The plan of action is structured around the following three strategic directions:

- Streamline and accelerate efforts to end the COVID-19 pandemic.
- Enhance health security preparedness as an integral part of health system strengthening to build a resilient health system capable of predicting and preventing future health emergencies.
- Engage, align and accelerate the achievement of the SDGs necessary to build a better, safer and healthier Region.

55. A monitoring and evaluation mechanism for the proposed plan of action is presented in Annex 2.

Action by the Regional Committee

56. The Regional Committee for the Eastern Mediterranean is invited to note the paper and endorse the proposed plan of action and associated resolution to end the pandemic, prevent future health emergencies and build a better, safer and fairer Region.

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Annex 1. Plan of action for ending the COVID-19 pandemic and preventing and controlling future health emergencies in the Eastern Mediterranean Region

No	Area of work	Actions	Timeframe	Responsible party	Deliverables
Ending the COVID-19 pandemic					
1	**Maintain the engagement and ownership of senior government leadership**	• Closely monitor disease trends and the emergence of new variants, and make evidence-based course corrections as appropriate	Continuous	22 countries/territories	• Evidence-based interventions are implemented to end the pandemic
		• Ensure that the executive-level committee overseeing the national response includes senior representatives of all relevant ministries (i.e. health, transport, interior, finance, education, etc.)	Continuous	22 countries/territories	• All relevant ministries have clear roles and responsibilities in the national response
		• Communicate regularly and transparently with the public, including clear explanations of the situation, priorities, plans and adjustments	Continuous	22 countries/territories	• Trust of government and leaders is gained among communities
		• Engage with the executive leadership and the Ministry of Finance to secure adequate financing for the national response	Continuous	22 countries/territories	• National response is appropriately financed
2	**Accelerate scale-up of COVID-19 vaccinations**	• Update the national deployment and vaccination plan (NDVP) with costing	2021–2022	22 countries/territories	• Updated and costed NDVP with clear targets and milestones for vaccination coverage
		• Ensure all elements are in place for effective vaccine roll-out (i.e. trained human resources, cold chain, micro-plans, monitoring mechanism, community engagement, operational costs, etc.)	2021–2022	22 countries/territories	• Effective vaccine roll-out contributing to attainment of vaccination targets
		• Monitor progress in vaccine supply, use and coverage, making course corrections as needed, with data disaggregated for vulnerable populations	Continuous	22 countries/territories	• National monitoring system and dashboard functioning, and vaccine roll-out informed
		• Undertake vaccine effectiveness studies as needed, with the support of WHO	2021–2022	22 countries/territories	• Effectiveness of vaccines documented, and vaccine roll-out informed
		• Contribute to global solidarity efforts to increase equitable access to COVID-19 vaccines and ancillary supplies by supporting the COVAX facility and engaging in technology transfer	Continuous	6 countries/territories	• More equitable allocation of vaccines
		• Provide strategic/policy, technical and operational support to accelerate COVID-19 vaccine roll-out	Continuous	WHO Regional Office	• Effective vaccine roll-out contributing to attainment of vaccination targets
		• Advocate for dose-sharing and support countries in accessing more doses of EUL/EUA COVID-19 vaccines	Continuous	WHO Regional Office	• Sufficient vaccines allocated to countries in a timely manner to facilitate the meeting of coverage targets
3	**Promote and refine evidence-based public health and social measures**	• Undertake regular situational assessment to inform, implement and adjust public health and social measures (PHSMs), considering the special needs of vulnerable populations	Continuous	22 countries/territories	• Acceptable, feasible and effective PHSMs are implemented and adjusted over time
		• Intensify efforts to promote mask wearing, physical distancing and access to well-ventilated places, including among vaccinated individuals	Continuous	22 countries/territories	• Minimized risk of COVID-19 transmission and reduced risk of generation of new variants
		• Establish a monitoring system to track implementation and effectiveness of PHSMs	Continuous	22 countries/territories	• Acceptable, feasible and effective PHSMs are implemented and adjusted over time

		• Undertake studies of the effectiveness of PHSMs in suppressing transmission	Continuous	22 countries/territories and WHO Regional Office	• Evidence-based interventions are identified and promoted
		• Study the socioeconomic impact of PHSMs to inform the design and implementation of balanced measures	Continuous	22 countries/territories and WHO Regional Office	• Minimized impact of PHSMs on the socioeconomic situation
		• Support the documentation of the PHSMs implemented in countries using the Regional Office tracking dashboard	Continuous	WHO Regional Office	• Improved research and evidence generation
4	**Empower communities and promote behaviour change**	• Review and update the COVID-19 risk communication and community engagement (RCCE) strategy and action plan to integrate COVID-19-related scientific updates	Continuous	22 countries/territories	• Improved response to COVID-19
		• Map social listening and community feedback platforms and enhance capacities to streamline, analyse and address community insights, including from vulnerable populations	Continuous	22 countries/territories	• Rumours, misinformation and disinformation addressed
		• Conduct studies (such as surveys and focus groups) to collect behavioural insights to inform RCCE interventions, including from vulnerable populations	Continuous	22 countries/territories	• RCCE interventions are evidence based
		• Strengthen and institutionalize engagement with community leaders/influencers (such as nongovernmental, community-based, faith-based and youth-based organizations) to maintain two-way communication at grassroots level and sustain long-term behaviour change	Continuous	22 countries/territories	• Community engagement driven initiatives are established and two-way communication improved
		• Expand and build the capacity of the health workforce for RCCE to support the implementation of RCCE strategies	Continuous	22 countries/territories	• Health workers able to communicate more effectively and accurately regarding COVID-19 control measures
		• Develop targeted and tested materials and messages on the evolution of the COVID-19 pandemic, and on how to reduce virus transmission and save lives	Continuous	22 countries/territories	• Elevated levels of COVID-19 awareness among communities
		• Enhance coordination among RCCE stakeholders	Continuous	22 countries/territories	• National interagency RCCE working group established with terms of reference (TORs) and SOPs • Streamlined efforts made to address RCCE needs
		• Ensure that the most vulnerable groups (migrants, refugees and IDPs) have access to crucial, practical and accurate information in a language and format they can access and understand	Continuous	22 countries/territories	• RCCE messages and materials customized according to the needs of vulnerable populations
		• Document RCCE best practices and lessons learnt and share with decision-makers, key stakeholders and the donor community	Continuous	Regional	• A series of thematic case studies is developed to enhance knowledge management and resource mobilization
		• Enhance partnership and collaboration with RCCE key partners/media/private sector	Continuous	Regional	• Regional interagency RCCE working group established to ensure consistency of strategies and messages, and optimized allocation and use of resources
5	**Strengthen surveillance and related data-**	• Review and update the surveillance strategy/plan as needed, including through the revision of case definitions	Continuous	22 countries/territories	• Early detection of COVID-19 cases and improved characterization of pandemic at national and subnational levels
		• Train and equip rapid response teams to investigate cases and clusters early in the outbreak, and conduct contact tracing	Continuous	22 countries/territories	• Cases rapidly isolated, contacts identified and quarantined, and clusters controlled

	management measures	• Overcome fragmentation of surveillance and data systems, including by linking epidemiological and laboratory data, and integration with other disease surveillance where possible	Continuous	22 countries/territories	• COVID-19 surveillance becomes part of integrated disease surveillance
		• Integrate COVID-19 surveillance into influenza sentinel surveillance	2021–2022	22 countries/territories	• EMFLU updated with COVID-19 data
		• Update the regional COVID-19 District Health Information Software 2 (DHIS2) data management platform	Continuous	Regional	• Updated regional DHIS2 platform
		• Analyse the regional COVID-19 surveillance data and identify lessons learnt	2021	Regional	• Priorities identified for enhanced COVID-19 surveillance and response
		• Improve the WHO Regional Office mathematical model to respond to the evolution of the COVID-19 pandemic	Continuous	Regional	• National COVID-19 epidemiological situation forecasted and response plans adjusted accordingly
6	**Expand testing and sequencing**	• Review and update the national testing strategy informed by the evolving epidemiology and country context, including the possible introduction of rapid antigen tests	Continuous	22 countries/territories	• Refined testing strategy to optimize detection, diagnosis and the use of resources
		• Continue to decentralize testing capacity within the framework of national laboratory networks to local and district levels	December 2021	22 countries/territories	• Equitable access to PCR testing services by vulnerable populations
		• Establish/expand SARS-CoV-2 genomic sequencing capacity	June 2022	22 countries/territories	• Genomic sequencing capacity available
		• Share genomic sequencing data (including from national public health laboratories, academia and the private sector) on a timely basis through regional and global platforms, in accordance with the provisions of the IHR (2005) and Nagoya Protocol	December 2021	22 countries/territories	• Regularly shared genomic sequencing data by countries with genomic sequencing capacity or arrangements via regional and global platforms
		• Provide operational and logistical support to laboratory supply chains, and establish supply chain plans for procurement and distribution	Continuous	Regional	• Timely and sustained access to testing kits and other laboratory supplies
		• Expand country participation in the WHO External Quality Assessment Project for SARS-CoV-2 testing	December 2021	Regional	• improved performance in SARS-CoV-2 testing achieved in all national reference laboratories
		• Improve access to genomic sequencing capacity by countries	December 2021	Regional	• All countries able to access genomic sequencing capacity – either nationally or regionally
7	**Points of Entry and international travel**	• Adopt a risk assessment approach to calibrate mitigation measures, such as quarantine, testing for international travel and vaccination requirements	Continuous	22 countries/territories	• Appropriate public health measures for international passengers put in place to contain the pandemic
		• Facilitate information exchange and coordination among countries concerning health measures, passenger information and epidemiological surveillance.	Continuous	22 countries/territories	• Contacts of COVID-19 cases detected at points of entry (PoE) are rapidly traced to minimize domestic transmission
		• Encourage the digitization of heath information on COVID-19 tests and vaccination status to ensure robust metrics on passengers	December 2022	22 countries/territories	• Validated testing and vaccination status by different countries to facilitate international travel
		• Adopt a risk assessment approach to inform travel-related measures (such as closure, refusal of entry and visa denial) and continue to report these measures to WHO	Continuous	22 countries/territories	• Avoidance of unnecessary interference with international travel
		• Produce advice for travellers (including on self-monitoring for signs and symptoms) and disseminate widely	Continuous	22 countries/territories	• Minimized risk of COVID-19 exposure and transmission at PoE and domestically

		• Continue to strengthen capacity at PoE to manage potential risks of cross-border transmission and facilitate international contact tracing	Continuous	22 countries/territories	• COVID-19 cases are promptly detected at PoE and rapidly investigated and managed
		• Provide technical support and guidance to reopen and operationalize PoE	Continuous	Regional	• Safe reopening, and facilitation of international travel
		• Review and update evidence-based guidance on international travel consistent with IHR (2005) provisions	Continuous	Regional	• Evidence-based recommendations implemented
8	**Advance research and innovation**	• Conduct at least one sero-epidemiological investigation using WHO Unity Studies protocols (for general population, health care workers, pregnant women, etc.) to generate evidence to guide public health decision-making	December 2022	22 countries/territories	• Seroprevalence data available for defined group(s) and used to adjust response actions as appropriate
		• Participate in and contribute to the global Solidarity clinical trials for COVID-19 therapeutics	December 2022	5 countries/territories	• Evidence base on the use of various therapeutics expanded
		• Conduct vaccine effectiveness studies to inform vaccination strategies	December 2022	6 countries/territories	• Informed vaccine strategies based on vaccine effectiveness data
		• Build local capacities for clinical research	December 2022	22 countries/territories	• Enhanced national and regional clinical research capacities
		• Promote and support specific research addressing knowledge gaps regarding One Health and zoonotic diseases	December 2022	22 countries/ territories	• Specific research on One Health and zoonotic diseases conducted
Preventing and controlling future health emergencies					
9	**Governance**	• Consider appointing a high-level National Pandemic/Health Security Coordinator and establishing an IHR National Focal Point Centre within government with a clear reporting line to cabinet level	December 2022	22 countries/territories	• Elevated authorities and accountabilities of those responsible for health emergency preparedness
		• Establish a cabinet-level structure/mechanism for the oversight of health emergency preparedness, with clear roles and responsibilities for each line ministry	June 2023	22 countries/territories	• Elevated political support and accountability for health emergency preparedness
		• Fully integrate health emergency preparedness into national emergency management arrangements (policies, plans, structures), including clear operational linkages between the Ministry of Health and National Disaster Management Agency	June 2023	22 countries/territories	• Health emergency preparedness fully integrated into national multisectoral emergency management arrangements
		• Strengthen essential public health functions (EPHF) capacities and governance prerequisites as a basis for health systems transformation, resilience and recovery	Continuous	22 countries/territories	• Increased investment in strengthening EPHF as a basis for health systems transformation, development and implementation of relevant national and subnational policies and plans
		• Establish national platforms to promote participatory governance in health decision-making (e.g. for UHC, health security and transformation plans) including civil society, the private sector, parliamentarians, academics and political party representatives	Continuous	22 countries/territories	• Customized technical support based on different country contexts, priorities and opportunities
		• Support the reshaping of the stewardship functions, structures and capacities of the Ministry of Health and health authorities at national and subnational levels	Continuous	22 countries/territories	• Customized technical support based on different country contexts
		• Enhance the capacities of legislators to strengthen health systems governance for UHC and health security	Continuous	22 countries/territories	• Enhanced regional and national capacities to effectively propose, review and implement supportive legal tools for UHC and health security

10	**Strategy and planning**	• Adopt the incident management system as the national approach to structuring and managing the response to emergencies	December 2022	22 countries/territories	• Predictable and effective management of emergencies
		• Establish and fully resource national and subnational public health emergency operations centres (PHEOCs) according to international standards	December 2022	22 countries/territories	• Improved strategic management and coordination of emergency responses
		• Conduct intra- and after-action reviews in accordance with IHR (2005) as required to identify gaps and challenges in the response to COVID-19 (including health system response) taking into account disaggregated data (including on vulnerable populations)	Continuous	22 countries/territories	• Improved response to emergencies
		• Review and update national action plans for health security based on lessons learnt from the COVID-19 response to inform future preparedness and response activities integral to the health system, integrating a comprehensive emergency risk management approach	December 2022	22 countries/territories	• Countries are better prepared for future emergencies
		• Redesign and develop more adaptable and agile hospitals as part of building hospital resilience	Continuous	22 countries/territories	• Hospitals are more adaptable and agile in responding to emergencies
		• Develop all-hazard preparedness plans for hospitals (including preparedness for outbreaks), especially in LMIC, countries facing complex emergencies and/or countries with fragile health systems, and conduct regular training and simulation exercises based on the hospital preparedness plan	Continuous	22 countries/territories	• Hospitals are more prepared for all hazards • Increased hospital simulation exercises based on the hospital preparedness plan
		• Provide support and guidance for the reviewing and updating of national action plans for health security and facilitate their implementation	Continuous	Regional	• Countries better prepared for future emergencies
11	**Sustained financing**	• Negotiate with the Ministry of Finance to increase fiscal space for health and flexible spending for emergencies	Continuous	22 countries/territories	• Increased dedicated budget and flexible spending for emergencies
		• Invest in increasing the adaptability of hospitals for emergency preparedness	Continuous	22 countries/territories	• Increased investment in increasing the adaptability of hospitals for emergency preparedness
		• Promote policy responses and fiscal instruments that can improve the macroeconomic situation and impact on health (such as health taxes, health investment in fiscal stimulus packages and inclusion of health in debt relief packages	Continuous	22 countries/territories	• Increased public spending on health
		• Prioritize public investment in common goods for health	Continuous	22 countries/territories	• Common goods for health are implemented and serve as a catalyst for UHC and health security objectives
12	**Surveillance, alert and information management**	• Strengthen data management/analysis capacity at regional and country levels	2021–2024	22 countries/territories	• Epidemiologists/data analysts trained
		• Maintain and strengthen the seasonal influenza sentinel surveillance system to support the surveillance of other respiratory diseases	December 2022	22 countries/territories	• Stronger influenza and other respiratory disease surveillance systems
		• Integrate SARS-CoV-2 surveillance, testing and monitoring into the existing platforms for influenza and other respiratory diseases, for increased sustainability	December 2022	22 countries/territories	• Enhanced surveillance for early detection of cases
		• Extend the use of the WHO Regional Office mathematical model to other diseases	2021–2024	WHO Regional Office	• Enhanced prevention of and early response efforts to signals and public health events

		• Extend the use of the DHIS2 management platform to the management of all public health events	2021–2024	WHO Regional Office + at least 5 countries/ territories	• DHIS2 management platform updated and deployed in selected countries
		• Consolidate the use of social media scanning tools (Sprinklr and Epitweetr) for the detection of all public health events and deploy in countries	2021–2023	WHO Regional Office + at least 5 countries/ territories	• Social media scanning tools regularly used at WHO Regional Office and in selected countries; and the Epidemic Intelligence from Open Sources tool updated
		• Define requirements for dashboards reporting data on public health events	2022	Regional	• Dashboard requirement document developed
		• Increase the use of the Geographic Information System (GIS) for the monitoring of public health events and the dissemination of information	2022–2023	Regional + countries/ territories	• GIS utilized for monitoring of events
		• Develop remote sensing to complement the collection of field data	2022–2023	Regional + at least 5 countries/territories	• Additional information collected through remote sensing
13	**Strengthened health workforce**	• Build surge capacities to respond to emergencies and develop policies/plans for rapid mobilization of surge capacities during emergencies	Continuous	22 countries/territories	• Reliable surge of qualified staff in response to emergencies
		• Integrate health emergency preparedness into undergraduate and postgraduate curricula for all cadres of health professionals	2022–2024	22 countries/territories	• Health professionals better trained in health emergency prevention, preparedness, detection and response
14	**Laboratory and sequencing capacities**	• Continue to build laboratory infrastructure, workforce and equipment capacities at national and subnational levels	Continuous	22 countries/territories	• Improved laboratory capacities for detection, diagnosis and response during health emergencies
		• Further increase and maintain capacities for molecular testing and genomic sequencing	December 2022	22 countries/territories	• Adequate and reliable laboratory capacity to detect and monitor new variants
		• Develop and implement a regulatory framework for the highest standards of laboratory biosafety and biosecurity	December 2022	22 countries/territories	• High standards of biosafety and biosecurity established and maintained
		• Continue to enhance the transparency and rapid sharing of genomic sequencing data and information through publicly accessible data platforms (e.g. GISAID) in collaboration with the medical and scientific community, and laboratory and surveillance networks	December 2022	22 countries/territories	• Genomic sequencing data and information transparently and routinely shared and used to inform responses to disease outbreaks
		• Participate in external quality assurance programmes for molecular testing	December 2022	22 countries/territories	• Highly performing national reference laboratories for molecular testing
		• Build local capacity through training and mentoring in genomic sequencing, bioinformatics, and diagnostic strategies and procedures (including the use of Ag-RDT kits, specimen collection, packaging and transportation)	December 2022	22 countries/territories	• Trained personnel in genomic sequencing and bioinformatics to implement different diagnostic strategies and procedures (including specimen collection, packaging and transportation)
		• Ensure the rigorous implementation of biosafety and biosecurity measures, especially in the context of genomic sequencing	December 2022	22 countries/territories	• Rigorous biosafety and biosecurity measures for all reference laboratories
		• Support and enhance the genomic sequencing capacity of the two regional reference laboratories to better support countries that currently lack this capacity	December 2022	22 countries/territories	• Support provided to all countries in the Region by the two regional reference laboratories in the advanced laboratory diagnosis of high-threat pathogens
15	**Vaccination**	• Strengthen vaccine safety surveillance and pharmacovigilance systems to detect, investigate and analyse adverse events following immunization	December 2022	22 countries/territories	• Sharing of information on adverse events to improve vaccine safety

		(AEFIs) and adverse events of special interest (AESIs), to validate safety signals and to recommend appropriate public health or other interventions			
		• Build capacity for the production of safe and effective vaccines	December 2023	Egypt, Islamic Republic of Iran, Pakistan, Tunisia and United Arab Emirates	• Locally produced vaccines to meet an increasing proportion of national and regional demand
		• Enhance and expand the capacity of national regulatory authorities	December 2023	22 countries/territories	• Enhanced local capacity for regulatory approval and vaccine deployment
		• Provide support and guidance to countries to improve vaccine production, regulatory approval, deployment and monitoring of safety	Continuous	Regional	• Improved availability of safe and effective vaccines for SARS-CoV-2 and other pathogens
16	**Points of Entry and international travel**	• Map human resources for PoE applying a needs-based approach, and founded on a capacity framework for both health and non-health staffing	June 2022	22 countries/territories	• Human resources capacities and gaps identified, with sufficient capacities in place to implement IHR (2005) at PoE
		• Establish a professionalized training programme for PoE staff, complete with systematic refreshers and opportunities for continued professional development	December 2022	22 countries/territories	• Public health threats at PoE are promptly detected, and rapidly investigated and managed
		• Harmonize and enhance information systems at PoE to allow for the capturing of real-time health information on suspected cases, inclusive of cross-notification and feedback loops for all stakeholders, and able to feed into national surveillance	June 2023	22 countries/territories	• Rapid tracing of contacts across borders
		• Develop contingency planning for all-hazard public health threats and operationalization of SOPs at PoE-level to ensure standardized approaches and emergency management	June 2022	22 countries/territories	• SOPs are in place for the management of public health emergencies at PoE as an integral part of national emergency management plans
		• Facilitate cross-border dialogue among neighbouring countries, identify mutual public health concerns (as well as opportunities for information and resource exchange), undertake stakeholder analysis, generate memorandum of understanding/SOPs and conduct joint training events	Continuous	22 countries/territories	• Shared and agreed-upon responsibilities to manage public health events and emergencies across borders
		• Modify and restructure PoE premises to mitigate transmission risks during travel and to facilitate social distancing, crowd control, and proper health etiquette	December 2023	22 countries/territories	• Minimized risk of COVID-19 exposure and transmission at PoE
		• Coordinate PoE activities related to international travel with relevant partners at all levels	Continuous	Regional	• Partnership and coordination fostered with international partners (e.g. WHO, ICAO, IOM and IMO)
		• Provide support and guidance to develop IHR (2005) capacities at PoE and facilitate international travel	Continuous	Regional	• Enhanced preparedness and response at PoE
17	**One Health**	• Establish a national multisectoral One Health committee/hub/team comprising governmental and nongovernmental members with clear TORs	December 2022	22 countries/territories	• Functional One Health Team established with clear TORs to manage and oversee all One-Health-related activities
		• Undertake a joint multisectoral assessment of zoonotic risks, zoonotic control capacities and gaps	December 2022	22 countries/territories	• Priority zoonotic risks identified and systems capacities documented to inform planning
		• Develop and implement a coordinated national strategy and action plan for One Health that prioritizes the zoonoses of greatest concern, engaging all relevant sectors	December 2022	22 countries/territories	• Joint action plan developed and implemented involving all One Health national stakeholders

		• Establish/revise the system and mechanism for surveillance and information-sharing on zoonotic diseases and other threats at the human-animal-environment interface	December 2021	22 countries/territories	• Improved event and disease detection systems in place, and mechanisms established for sharing data, including between sectors
		• Coordinate One-Health-related activities with international partners at all levels	Continuous	Regional	• Partnership and coordination fostered with international partners (WHO, FAO, OIE and UNEP)
		• Contribute to the development and piloting of new tools, guidance documents and training materials in close collaboration with WHO (Regional Office and headquarters), FAO, OIE and UNEP	Continuous	Regional and at country level	• Improved capacity to implement One-Health-related activities to detect and respond to zoonotic diseases
18	**Essential and critical health services**	• Leverage primary health care for vaccine roll-out and other essential health services	Continuous	22 countries/territories	• Strengthened primary health care systems serving as the foundation for achieving UHC and health security objectives
		• Identify the essential health services necessary for continuity of operations, under the pressure of possible high staff absenteeism and limited supplies due to a pandemic	December 2021	22 countries/territories	• List of priority essential health services
		• Strengthen the delivery of essential health services and identify options for remote support	Continuous	22 countries/territories	• Interventions that can be remotely delivered identified
		• Optimize the capacity of health workers through the use of telemedicine (digital health) approaches	Continuous	22 countries/territories	• Improved capacity of health workers through the use of telemedicine (digital health) approaches
		• Ensure vulnerable populations have access to essential and critical health services	Continuous	22 countries/territories	• Improved access by vulnerable populations to essential and critical health services
19	**Supply chain**	• Develop/review a priority list of medicines, vaccines and health products consistent with national treatment guidelines	June 2022	22 countries/territories	• National essential medicines lists (including priority list of medicines, vaccines and health products) formulated, evaluated and revised
		• Strengthen national regulatory authorities, including to ensure that medicines and health products supplied during an emergency comply with national and international quality standards, and to guarantee good manufacturing practices in the local production of medicines and vaccines	December 2023	22 countries/territories	• Effective implementation and monitoring of medicines regulations and good manufacturing practices guaranteed
		• Comprehensively review the national supply chain system, and develop and implement a related corrective action plan, with a focus on the weakest links	June 2023	22 countries/territories	• Supply chain assessed and recommendations to strengthen system implemented
		• Ensure timely technical support for the development of procurement and distribution plans	Continuous	Regional and at country level	• Technical support in procurement and distribution planning provided as needed
		• Establish SOPs in supply and procurement plans, including distribution plans/schedules to ensure the timely delivery of emergency health supplies to countries	February 2022	Regional and at country level	• SOPs for supply and procurement developed and applied
20	**Community trust and engagement**	• Create space for community and civic engagement in governance structure	December 2021	22 countries/territories	• Legislation enacted to allow engagement of communities and civil societies in the governance structure
		• Review existing national strategies and plans for health emergency preparedness and response and ensure the role of communities and civil societies is identified and integrated	February 2021	22 countries/territories	• Defined role of communities and civil societies in preparedness for and response to emergencies

		• Design and implement capacity-building programmes to empower communities and civil societies	December 2022	22 countries/territories	• Engaged communities in needs assessment and decision-making on suitable interventions and their implementation
		• Establish and build the capacity of formal and informal front-line workers, including community health and social workers	Continuous	22 countries/territories	• Well-trained front-line community health and social workers engaged in preparedness and response
		• Enhance social mobilization of a wide range of civil society partners and stakeholders at national and local levels through social dialogue to secure their inputs into governance, health policies and strategies	June 2023	22 countries/territories	• Aligned and well-coordinated social mobilization efforts
		• Apply anthropology and other applied social sciences to listen to and understand communities, and collect community insights on the sociocultural and political context to inform tailored and localized health programmes and interventions	December 2022	22 countries/territories	• Health interventions are informed by community feedback
		• Support community-based participatory research approaches for collecting evidence on community and civic engagement to inform policy-making and strategic planning, and to track progress, ensuring that vulnerable populations are included	June 2023	22 countries/territories	• Evidence-based community and civic engagement interventions
		• Establish a mechanism for monitoring and evaluating the health outcomes of community-based interventions	December 2021	22 countries/territories	• Improved health outcomes in line with national health strategies and plans
		• Provide guidance on creating space for communities and civil societies in the governance structure at the national and subnational levels	Continuous	Regional	• Engaged communities and civil societies in the governance structure
		• Support documentation processes and establish a regional platform accessible to community and civic representatives for sharing knowledge and best practices	Continuous	Regional	• Shared knowledge and best practices and improved modalities for engaging communities in emergency prevention, preparedness, readiness and response
		• Support community-based participatory research approaches to assess and monitor community and civil society engagement	Continuous	Regional	• Policies and interventions supported by research
21	**Accountability and compliance**	• Undertake a review of the national action plan for health security, drawing on lessons learnt from the COVID-19 pandemic and other emergencies	December 2021	22 countries/territories	• Updated national action plan for health security
		• Identify the leading sector and support sectors for the implementation of the national action plan for health security and allocate resources for its implementation	December 2021	22 countries/territories	• Targeted and on-track implementation of the national action plan for health security
		• Review and update the TORs for the national IHR focal point, drawing on lessons learnt from the COVID-19 pandemic and other emergencies	February 2022	22 countries/territories	• Enhanced monitoring and evaluation of IHR (2005) implementation
		• Allocate resources to empower national IHR focal points in terms of organizational structure, space, personnel and authority to facilitate reporting to WHO	June 2022	22 countries/territories	• Improved IHR (2005) implementation, including notification to WHO
		• Enhance compliance with IHR (2005) and other international treaties	Continuous	22 countries/territories	• Enhanced preparedness for and response to health emergencies
		• Provide guidance on the TORs for national IHR focal points	December 2021	Regional	• Empowered national IHR focal points

		• Design and implement capacity-building interventions targeting national IHR focal points	Continuous	Regional	• Well-trained national IHR focal points with active engagement in IHR (2005) assessment, implementation, and monitoring,
22	**Additional assessment procedures**	• Engage in new efforts to review and assess preparedness in light of the lessons learnt from the COVID-19 pandemic and other emergencies	Continuous	22 countries/territories	• Improved understanding of actual emergency preparedness levels in countries
		• Engage with the global working groups set up by WHO to develop tools and procedures for preparedness assessment	Continuous	22 countries/territories	• Country-informed tools and procedures for assessing emergency preparedness
		• Develop guidance, tools and procedures to facilitate preparedness assessments and reviews	Continuous	Regional	• Efforts directed towards building resilient health systems

Annex 2. Monitoring and evaluation mechanism – Regional Oversight Committee for Health Security

Background

In an effort to accelerate and synergize both national and regional efforts in ending the COVID-19 pandemic and preventing future health emergencies, a 3-year plan of action harnessing diverse sectors and technical domains has been developed to deliver targeted solutions at the regional and national levels. The plan of action will need to be further tailored for specific country implementation based on national capacities, needs, resources and epidemiology – thus resulting in customized approaches sensitive to each setting and the possibility for numerous varied plans of action. In fragile settings, a prioritized plan of action will be needed to accommodate the changing situation. Promoting compliance, transparency and accountability in implementing and adhering to these plans is paramount; therefore, a dedicated regional oversight committee needs to be established.

Purpose

To drive implementation, oversee progress and ensure effective monitoring and evaluation of the regional and national plans for ending the COVID-19 pandemic and enhancing preparedness for future health emergencies.

Structure and composition

The Regional Oversight Committee for Health Security would be formed from a body of high-level officials at the level of Minster, Deputy Minster or Undersecretary from the health and finance sectors across the Eastern Mediterranean Region. The Committee would be co-chaired by the WHO Regional Office. The Director of the WHO Emergencies Programme in the Region and Director of Programme Management will chair on behalf of WHO and a country chair will be democratically selected from the proposed country representations. Partners, nongovernmental organizations and civil society, the private sector, the United Nations system and other institutional agencies relevant to health security at the regional level will also be represented;

A Technical Working Group will also be established comprising national experts with proven experience in senior technical positions and drawn from diverse backgrounds including public health, infectious diseases, health systems, public administration, humanitarian crises emergency management, community engagement, and partnerships and development. Representatives of relevant departments in the WHO Regional Office will also be included. The Working Group will report to the Committee;

All countries and territories of the Region are expected to be represented on the Committee and/or in the Working Group. During the selection processes due regard shall be given to geographical representation and gender balance;

Members shall serve in their personal capacity and cannot be represented by an alternative attendee. They shall neither seek nor accept instructions in regard to their performance on either the Committee or the Working Group from any government or other authority external to or within WHO, and will exercise their responsibilities with full regard to the paramount importance of independence;

Prior to joining the Committee or Working Group, members will be required to sign a Declaration of Interests and a Confidentiality Undertaking in accordance with WHO practice;

The term of office shall be 2 years. In order to ensure continuity, the term of office shall be renewable, and the chair of the Committee shall serve in that capacity for a term of 2 years, renewable for up to 1 year;

The Regional Office country health emergency preparedness and International Health Regulations unit will fulfil the function of Secretariat to facilitate the work of the Committee and Working Group.

Functions

Members of the Committee will be tasked with the following:

- Assess the performance of countries and the work of the Regional Office in health security.
- Monitor progress and advise on strategic directions for countries and WHO to enhance health security in the countries and territories of the Region.
- Monitor the application of lessons learnt from previous events.
- Review the adequacy of health security financing and resourcing at country level and provide advice on increasing financing for health security domestically, and on coordinating with partners in the mobilization of external resources.
- Prepare a report on the activities of the Committee, containing its conclusions and recommendations, for submission by the co-chairs to the Regional Committee for the Eastern Mediterranean.

Members of the Working Group will be tasked with the following:

- Coordinate and collaborate across various health security sectors on the development and adaptation of the regional plan into national plans of action.
- Provide guidance and technical expertise, and develop and disseminate materials, to facilitate the implementation of the regional and national plans.
- Collect baseline information on the progress of the regional plan at country level to facilitate the identification of countries for targeted support.
- Encourage national compliance with the national plan and set monitoring and evaluation indicators.
- Advocate for and raise awareness of health security cohesion in executing plan activities.
- Report periodically to the Committee on the progress of the plans.

Modality of work

Members shall not be compensated for their work on the Committee or in the Working Group.

Members shall be provided travel entitlement in accordance with WHO rules and the procedures applying to the Committee and Working Group.

The Committee is expected to convene quarterly throughout the calendar year to report and discuss implementation updates on national and regional progress using the monitoring and evaluation indicators set, convening virtually until further notice.

Members from the Working Group will report on their national progress against their plans, while WHO will report accordingly on regional efforts, in order to produce quarterly reports for further analysis. An annual Committee report will be produced and shared with the Regional Committee.

The Committee will furthermore use the information and metrics contained in these reports to advocate for strategic directions in improving and adjusting both the plans and regional efforts to support them, including through the mobilization of resources.

Advocacy for the advancement of health security activities will draw heavily from these metrics and efforts, and the work of the Committee and Working Group will feature prominently in the planning and support for many other related technical areas as a source of metrics-driven programmatic planning.

Instances of poor performance or noncompliance will be transparently discussed in the context of provision of further support to ensure that the Region advances as uniformly as possible. In cases of exceptional advancement of a plan’s activities, or shifting contextual factors, plans may be recalibrated to best reflect the needs and realities of individual countries and territories in the Region.

The Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme, subject to available resources as determined by the WHO Secretariat, shall have full access to all relevant WHO files, surveillance data and archives pertaining to the work of the Committee, which shall be treated on a confidential basis.