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Response to the COVID-19 pandemic: lessons learned to date from the WHO European Region

The COVID-19 pandemic will be remembered for generations as an event that impacted significantly on human lives and livelihoods. Health systems were forced to adapt to the far-reaching needs of the people they serve. Health, society and the economy were shown to be inextricably linked. We were reminded that health is the foundation of a functioning society and that all other forms of human progress hinge on its resilience. As our collective health quickly became a global concern, values such as equity, solidarity and collaboration rose to the forefront. The concept that “no one is safe until everyone is safe” has been rooted in this response.

Building on the independent reviews established by the WHO Secretariat related to COVID-19 – which are led by the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 Response, the Independent Panel for Pandemic Preparedness and Response, and the WHO Health Emergencies Programme Independent Oversight and Advisory Committee – this paper seeks to operationalize the lessons learned by European Member States, basing it on WHO’s European Programme of Work, 2020–2025 – “United Action for Better Health in Europe” (EPW). Under EPW core priority 2 (protecting against health emergencies), a triple agenda (documenting lessons learned, providing tailored support to countries, and reinforcing regional preparedness and capacity to respond to emergencies) is proposed.

The lessons learned that are presented in this document were developed in consultation with Member States in the WHO European Region and partners to enhance approaches for improving national and community resilience against health emergencies and for safeguarding regional and global health security. This document is based on the idea that we are at risk from multiple hazards (the “all-hazards approach”), and it is therefore impossible to predict with certainty which hazard will appear next and what its impacts will be. Resilience against emergencies is considered central to the United Nations Sustainable Development Goals and is integrated into each of the EPW flagship initiatives, all of which have been at the forefront during COVID-19: the Mental Health Coalition; Empowerment through Digital Health; the European Immunization Agenda 2030; and Healthier behaviours: incorporating behavioural and cultural insights.

Future public health emergencies of international concern might not follow the same paths as the current one. Comprehensive and holistic systems-based learning from the COVID-19 pandemic would allow Member States and WHO to better prepare their systems, with greater intersectoral collaboration, and build the capacity of their societies to better absorb the shocks that future emergencies may bring.

This document is submitted to the WHO Regional Committee for Europe for consideration at its 71st session.

Contents

Purpose and development of this document: building resilience and readiness for the future	3
The human toll of the COVID-19 pandemic.....	3
Where we stand now: 10 lessons drawn from the COVID-19 pandemic so far	5
Framing the way forward: rebooting emergency preparedness and readiness.....	7
Conclusions	13

Purpose and development of this document: building resilience and readiness for the future

1. This document outlines the lessons learned by Member States and incorporates the recommendations made by the global review committees in the WHO European Region, obtained through the WHO Regional Director for Europe's meetings with health ministries, and an online consultation with Member States, held in June 2021. The recommendations from the Pan-European Commission on Health and Sustainable Development¹ and lessons learned from the intra-action and after-action reviews undertaken at country level are included, as is the advice of experts, networks and WHO staff. This document is anchored in decisions of the governing bodies, including the global review committees, as well as those of previous regional committees, and is guided by the European Programme of Work, 2020–2025 (EPW) in the following ways:

- (a) Guiding the overall work of the WHO Regional Office for Europe (WHO/Europe) on emergencies is resolution EUR/RC68/R7, the Action Plan to Improve Public Health Preparedness and Response in the WHO European Region, 2018–2023, adopted at RC68 in 2018.
- (b) Evidence has been collected through reviews and commissions on the COVID-19 response. This includes global initiatives such as the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 Response, the Independent Panel for Pandemic Preparedness and Response, and the WHO Health Emergencies Programme Independent Oversight and Advisory Committee, as well as regional initiatives.
- (c) At the European level, the Pan-European Commission on Health and Sustainable Development was established to draw lessons from how different countries' health systems have responded to the COVID-19 pandemic and to make recommendations on investments and reforms to improve the resilience of health and social care systems.

2. The remainder of this document has been developed using the findings of these independent bodies, supplemented with data from several other sources: (i) lessons identified directly by Member States during policy-level round tables on COVID-19 and during nationally led intra-action reviews; (ii) input from meetings of the Standing Committee of the Regional Committee for Europe; (iii) a virtual consultation process involving all Member States in the European Region; and (iv) review by an external technical advisory group.

3. The lessons and identified pathways set out for WHO and its Member States will be used to review the current Action Plan to Improve Public Health Preparedness and Response in the WHO European Region and eventually develop a new action plan to reduce the human toll of future pandemics.

The human toll of the COVID-19 pandemic

4. The pandemic has shown that preparedness pays. Countries in the Region were quick to repurpose their influenza pandemic preparedness and response platforms into core pillars of the COVID-19 response. The same was true for scientific collaborations, where WHO and

¹ See <https://www.euro.who.int/en/health-topics/health-policy/pages/news/news/2020/10/roadmap-sets-direction-of-pan-european-commission-on-health-and-sustainable-development>.

partners leveraged existing networks early on, to research, develop and deploy new vaccines in record time. Operational partnerships that were established before the pandemic (e.g. the Global Outbreak Alert and Response Network, emergency medical teams, collaborating centres, and reference laboratories) brought expertise and know-how beyond borders and lines. Collaborations at all levels of society and among the health workforce have been remarkable. The Access to COVID-19 Tools (ACT) Accelerator, borne out of solidarity, has been established to make vaccines, diagnostics and medicines available.

5. Nevertheless, in September 2019, the Global Preparedness Monitoring Board had warned that the world was not yet prepared for a fast-moving, virulent respiratory pathogen pandemic.² Indeed, the COVID-19 pandemic has shown that health is interconnected with political, economic, and social and health systems and that all can deteriorate rapidly.

6. The SARS-CoV-2 virus has cut deeply into the fabric of our interconnectedness, to its own advantage, revealing the fragilities and vulnerabilities of our intertwined, complex social norms, values, systems and functions. It has strained health systems, as well as social safety and emergency management architecture, also strongly affecting mobility around the world.

7. Once again, we have learned that health is key for development, as a determinant of individual and collective growth, social cohesion and resilience. Health's central position in supporting the achievement of the United Nations Sustainable Development Goals, with its seven accelerator themes,³ especially during times of crisis, has proven that stronger intersectoral collaboration contributes to better health.

8. Front line health and essential social services workers have worked tirelessly and risked their lives in responding to the need for surge capacities. Health systems have been faced with ethical dilemmas on who can receive what type of care. Peer-to-peer, community-to-community and country-to-country support have helped manage patient care.

9. Our lives, with all their interlinkages and relationships, were severely disrupted as we were directed to stay physically apart to reduce infection. Billions of people were asked to stay at home; many lost their livelihoods and support networks. Children and young adults have been unable to continuously attend schools and universities, putting their well-being and future accomplishments at risk. Additionally, certain patients demonstrate post-COVID conditions for a prolonged period of time. The mental health consequences of these disruptions have been severe, and a longer-term impact is expected.⁴ The Mental Health Coalition flagship initiative under the EPW is more timely than ever.

10. In some countries, the pandemic has revealed and exacerbated inequities and gaps that existed for people at the margins even before the virus arrived. The requirement to pay out of pocket for diagnostics and care during pandemics, and the lack of financial support packages to ensure livelihoods, has enlarged the circle of vulnerability and put humanity at risk. Such inequities demonstrate the importance of leaving no one behind, as emphasized in the EPW. "Leaving no one behind" should apply from prevention, through testing, treatment, follow-up care and, where relevant, rehabilitation, and requires universal access to comprehensive health care.

² See https://apps.who.int/gpmb/assets/annual_report/GPMB_Annual_Report_English.pdf.

³ See <https://www.who.int/initiatives/sdg3-global-action-plan>.

⁴ See <https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/publications-and-technical-guidance/noncommunicable-diseases/mental-health-and-covid-19>.

11. The pandemic has laid bare the struggles that public health systems undergo in gaining access to and sharing real-time data on infection prevalence, health system performance, health workforce capacities, public health and social measures, procurement and supply chains of medical countermeasures, and other critical health metrics. Data, analytics and forecasting are key to informing evidence-based decisions for impact in the immediate and longer terms.⁵

12. WHO's COVID-19 Strategic Preparedness and Response Plan⁶ sets as its central goal to “end the COVID-19 pandemic and build resilience and readiness for the future”.⁷ It is time to take stock of the lessons learned so far, embrace new ways of thinking and act swiftly to improve resilience in all levels of society, for this and for upcoming health emergencies.

Where we stand now: 10 lessons drawn from the COVID-19 pandemic so far

13. As we begin to think about recovery and “building back better”, several key lessons to consider in moving forward have been identified. This list is not comprehensive and will continue to evolve with the changing nature of the pandemic.

- (a) Recognize that health emergencies impact the whole of society, including its socioeconomic systems. Investments in preparedness and mitigation measures for improving essential public health functions and primary and hospital services yield long-term dividends, directly saving lives and preventing human suffering, while protecting the economy and fostering trust in governments in times of vulnerability.
- (b) Prioritize known capacity gaps. While existing international frameworks are a powerful operational backbone, many Member States in the Region did not seek or utilize potential collaborations to the full.⁸ The pandemic has highlighted the strengths of many aspects of the International Health Regulations (IHR) (2005) and instruments such as the Cartagena Protocol on Biosafety,⁹ and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity.¹⁰ It has validated the importance of preparedness efforts towards combating pandemic influenza by implementing lessons learned from previous outbreaks (e.g. Ebola, SARS, MERS-CoV, and Zika). However, there is more work to be done. As countries seek to equip themselves with tools to withstand health emergencies at all levels of society, we must address the gaps identified in the IHR (2005) and in existing frameworks and pursue a diversified portfolio of whole-of-government and whole-of-society preparedness and response.
- (c) Ensure that response systems are functional long before emergencies strike. All-hazards emergency prevention and preparedness activities have proven to be critical for a swift, comprehensive response. Having functional response frameworks and systems prior to the pandemic enabled countries to achieve better organized and coordinated action.

⁵ See <https://www.who.int/about/structure/lyon-office>.

⁶ See <https://www.who.int/publications/m/item/covid-19-strategy-update>.

⁷ See <https://www.who.int/publications/i/item/WHO-WHE-2021.02>.

⁸ Individual country reports submitted via the electronic State Parties Self-Assessment Annual Reporting Tool can be accessed here: <https://extranet.who.int/e-spar>.

⁹ See <https://bch.cbd.int/protocol/>.

¹⁰ See <https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf>.

Individual technical public health and IHR (2005) core capacities (laboratory, surveillance, etc.), even when monitored and evaluated (including through simulation exercises, voluntary peer reviews, after-action reviews, and State Party Annual Reporting) did not fully represent the needed emergency preparedness and readiness. To improve preparedness and response, IHR (2005) core capacities need to be fortified by capabilities and competencies at all levels of governance, by services and by communities.^{11,12,13} In the context of COVID-19, the response early on in the pandemic was slower than the spread of the virus.

- (d) Transform scientific discoveries into accessible public health goods that are affordable. The expedience and collaboration demonstrated by the global scientific community in isolating and sequencing SARS-CoV-2 within the first 10 days of 2020, and delivering a vaccine from bench to bedside within the subsequent 12 months, while adhering to the highest quality standards, was unprecedented and exemplifies the rapidly evolving breakthroughs emerging in biotechnology, genetics and epidemiology in particular, and in health care and medicine in general. Going forward, further investment in early identification, diagnostics, new medicines development and the repurposing of existing ones, vaccination technologies, sharing know-how, and ensuring equitable and scalable access for all, are the necessary next steps in building on these historic achievements and turning them into a global public health good.
- (e) Leverage health information for immediate and robust action. The role that health and social data collection, analyses and distribution can play in driving decision-making has been long underestimated, and such data have therefore been underutilized. Data sets rapidly shared across health care and civic institutions, both within domestic borders and beyond, enabled practical and responsible COVID-related policy-making. However, the true life-saving potential of leveraging troves of data and common definitions and key indicators has yet to be uncovered. Building the resilience of health systems to future pandemics requires a paradigm shift in how health and health-related data are sourced, governed, accessed, certified, assessed, protected and shared. The “One Health” approach in collecting multisectoral data can serve as a model in this regard.
- (f) Recognize the interconnectedness of health systems and emergency preparedness. Health systems must be placed at the centre of national agendas, while emergency preparedness needs to be at the core of all health systems’ functions. The argument that the IHR (2005) requirements be embedded into each of the health system functions is, looking through the COVID-19 lens, now a case in point. The resilience and preparedness of health systems are necessary preconditions to building wider resilience against health emergencies, but neither is sufficient alone. In the future, to avoid crippling effects such as those that COVID-19 has had on our societies, this dual relationship must be reflected and implemented in national agendas.
- (g) Anchor all actions in a trusted social contract. Equity, solidarity and responsiveness must be the basis of actions to improve health, social and educational services with financial protection. Thus, a national health architecture anchored in all levels of government must encourage participation, be sensitive to cultural norms and be

¹¹ See

https://www.cdc.gov/cpr/readiness/00_docs/cdc_preparednesresponsecapabilities_october2018_final_508.pdf.

¹² See <https://www.ecdc.europa.eu/sites/portal/files/documents/public-health-emergency-preparedness-core-competencies-eu-member-states.pdf>.

¹³ See https://gh.bmj.com/content/3/Suppl_1/e000656.

responsive to the individual's needs, with particular attention to vulnerable groups that can differ depending on the context and type of emergency crisis. Safeguarding such an intricate and interconnected health and social system requires strong governance structures, clear sets of national priorities, and plans for health emergency readiness that are included in all policies across different sectors.

- (h) Integrate emergency public health services and universal health coverage. Countries with universal health coverage based on strong public health and primary health care services were more agile, adaptable and ready to deliver a comprehensive response to the pandemic.¹⁴ The experience of these countries can serve as a model for how to provide continuous and quality dual-track (emergency-related and routine) services, help people avoid out-of-pocket payments, repurpose a digital health information system to implement basic response measures (such as testing, tracing, and isolating or quarantining), and integrate core health programmes such as those on mental health into emergency management.
- (i) Invest in health care infrastructure and workforce. Increased training for and material support to front line health workers must be provided alongside new mechanisms for activating required surge capacity, including countries' knowledge and their readiness to receive and send external support. Additional workforce for emergencies, including volunteers and those from civil society organizations (CSOs), should be trained in advance to support emerging needs in real time. Investing in the emergency and dual-service health care workforce would allow for the continuity of all health and social services during emergencies.
- (j) Prioritize resilience. Resilience is the ability of a system, community or society, when exposed to hazards, to resist, absorb, accommodate and recover in a timely and efficient manner, while retaining and restoring its essential basic structures and functions.¹⁵ Resilient infrastructures can shield societies by making systems more robust, keeping communities more connected, and keeping people healthier. Emergencies provide opportunities for deep systemic reviews and regular evaluations, followed by changes to build resilience, based on the lessons learned. The COVID-19 pandemic is therefore an opportunity to switch from bouncing back to bouncing forward, and from simply coping to anticipating and transforming, including through the introduction of digital tools where useful. Only when societies are well prepared and ready will responses become timelier and more effective, and will the adverse human, economic and societal consequences of emergencies be significantly reduced.

Framing the way forward: rebooting emergency preparedness and readiness

14. The basic steps to ensuring emergency preparedness and resilience in societies include having the legal and financial mechanisms ready with a pre-set command–control–coordination (CCC) architecture that is rooted at all levels of governance, and integrated and coordinated health systems. Other critical components for ensuring emergency preparedness and readiness include: (1) surveillance, early-warning systems, health information and intelligence at national

¹⁴ See <https://www.who.int/news-room/feature-stories/detail/governments-push-for-universal-health-coverage-as-covid-19-continues-to-devastate-communities-and-economies>.

¹⁵ See https://www.un.org/en/development/desa/policy/untaskteam_undf/thinkpieces/3_disaster_risk_resilience.pdf.

and international levels and across borders; (2) risk and situation assessments; (3) risk communication and community engagement; (4) health and social service provision; (5) access to essential packages (public health services, primary care, hospitals, home care, and long-term institutional care); (6) proportionate and targeted use of non-pharmaceutical interventions (including social distancing, hand washing and masks); (7) medical countermeasures including technology, supply chains, enhanced local production, and stockpiling; (8) points of entry; (9) expert teams and academic institutions; (10) innovation, research and development; (11) multisectoral collaboration; (12) One Health (zoonotic, environment, antimicrobial resistance, and food safety); (13) chemical, radiological, nuclear and explosive hazards; (14) laboratories; (15) safe infrastructures and settings; and (16) readiness to demonstrate global solidarity for the provision of international support.

15. Bringing these elements together in a manner that creates a system that is greater than the sum of its parts relies on the integration of two critical determinants of preparedness:

- broader governance capacities and capabilities that govern emergency response; and
- immediate accessibility of the surge capacities and resources (human, financial and material) that are needed for a comprehensive and quality response.

16. Moving away from approaches that focus on technical core capacities alone is critical to understanding how well a country is prepared and ready to respond to the known and unknown hazards it may face. As preparedness needs to be rooted in the whole of society, work must start at the community level.

17. Preparedness efforts for the very first responders mean listening to and engaging communities and civil society:

- (a) Responding to the pandemic requires actions beyond responding to the virus. Insights into human behaviour and cultural norms have been harnessed in unprecedented ways to address misinformation including the so-called infodemic, “COVID fatigue” and “COVID frustration”. Scientifically sound measures are only effective when communities are empowered and listened to and when the measures are culturally and socially acceptable. A strong communications programme is also important to help justify the rationale behind restrictions and improve compliance with necessary and sensible measures, such as non-pharmaceutical interventions.
- (b) Trust building cannot start with a crisis. Crises do not build trust; crises test trust. Trust building requires strategic and functional planning of long-term, steady and good governance measures with community engagement at all times, before, during and long after an emergency has ended. Crises can only be overcome with community engagement and good governance.
- (c) Special attention needs to be given to the vulnerable and marginalized to ensure that their voices are listened to, respectfully. During the pandemic, some groups have been overlooked, blamed and stigmatized. Basic core human values can serve as the compass for leaders, decision-makers and stakeholders.
- (d) Engagement with different stakeholders allows decision-makers to understand and internalize various cultural norms, values, concerns, stances and needs and to tailor actions accordingly. Ensuring that communities have access to information and inviting and empowering them to participate in such decision-making processes would help to adapt actions in safe, accessible and inclusive ways.

- (e) Gender is a key consideration for all actions. All assessments, planning and actions require disaggregated and/or stratified data on gender, age and other population groups. Such data would be needed, for example, for actions intended to prevent and respond to gender and child violence; ensure access to sexual and reproductive health within the essential package of health and social services; and shield and support health care workers – mainly women – in relation to their working conditions and work–home balance.
- (f) Engaging with non-State actors and CSOs is key to involving communities. Accelerating investment in volunteering infrastructure, including through digital tools, supports the health and social sectors, as well as communities, and contributes to solidarity and unity. It can also support skills development and employability in the post-COVID-19 era. It is necessary for volunteers to be trained, certified and active and to engage with non-State actors and CSOs during peaceful times. Furthermore, CSOs should be able to conduct their activities in a sustainable and effective manner. In addition, public–private partnerships should be encouraged.
- (g) Togetherness needs to be fostered through collaboration and partnerships with CSOs and the private sector, using the whole-of-society approach at all stages, from planning to monitoring and evaluation.
- (h) Outsourcing of the health services related to COVID-19 should be controlled and well regulated.

18. Investing in a fit-for-purpose workforce, medical countermeasures, and the safe, intelligent health facilities of tomorrow is crucial:

- (a) Forecasting tools should be used in strategic planning for future scenarios, enabling the prioritization of essential health services provision. The focus must remain on maintaining fully functional public health and primary health care services that are person and community centred and that continue across all other health and care services.
- (b) To be ready for emergencies, medical and non-medical countermeasures need to be in place and ready for activation. The systems that deploy medical and non-medical countermeasures need to be designed for emergency response but also remain part of routine, day-to-day health service delivery, and should include the following:
 - Unhindered access to diagnostics and care for all, including the marginalized and vulnerable.
 - Mechanisms to ensure accessibility, availability and affordability of medicines including vaccines and medical devices, among other essential medical countermeasures.
 - Safe, efficient and intelligent health care settings for all hazards (e.g. outbreaks, as well as natural and human-made threats).
 - Safe and effective patient triage and referral, at all levels, while following the norms of physical distancing, as well as infection prevention and control protocols, depending on the health emergency.
 - Strengthened public health services (encompassing their functions, operations, workforce, resources and structures) that are ready to marshal emergency preparedness and response, including for outbreak surveillance and response.

- Agile public health services, primary health care, hospitals and laboratories that are equipped to handle extraordinary influxes of patients associated with all-hazards emergencies:
 - A health workforce optimized through redistribution, repurposing and recruitment.
 - A health workforce well trained on all hazards, including, infection prevention and control measures, equipped with the right personal protective equipment, and practising required safety measures to avoid infection in the workplace, household and community.
 - Enhanced surge capacity within a trained health and social care workforce that is ready to expand capacities to provide life-saving interventions and emergency and urgent care services while ensuring continued access to safe and quality essential health services for all (“dual-service provision”), using innovative and flexible delivery of services.
 - Well-regulated private health services incorporated to maximize the cost-effectiveness and efficiency of the response. A clear and transparent list of health services related to COVID-19 and cost of those services provided in private sector should be adopted by responsible health authorities.
 - Technical skills and knowledge built continuously through e-learning and other innovative platforms.
 - Research capacity of the health workforce enhanced to better facilitate clinical trials and share best practices.
 - Scalable emergency and critical care capacities (beds, medicines, equipment and technology, supplies, and logistics), including provisions for step-up and step-down facilities.
 - Well-equipped and modern diversified laboratories that follow international principles of quality and biosafety, with experts trained in modern technology, and that are connected to patient data and surveillance systems.
 - Population, personal and health care infection prevention and control measures including in long-term- and home-care settings.
 - Mechanisms for sending and receiving medical and non-medical countermeasures and deploying health care to areas of acute need, including across borders.
 - Strengthened comprehensive health information and digital solutions that are people centred, lifelong, and community based and that are aligned, linked and integrated across all services (e.g. clinical management, laboratory, surveillance, investigations, and contact tracing). Expertise to analyse and present the data to all is key for policy-making, risk communication and community engagement. The systems should be ready to adapt rapidly to demand challenges and should provide secure and ethical tools for remote patient care, surveillance, tracing and contacting.
 - National plans for management of mass human casualties. Mass casualty management systems must be prepared for handling and transporting human bodies resulting from all-hazards emergencies, with due consideration for

public safety as the first priority, but also for human dignity and respect for the dead.

- A well-resourced supply chain and operational support capability for emergency response critical supplies:
 - Up-to-date stockpiles for at least three months should be considered to allow for essential health service provision, while responding to hazard-specific needs.
 - Modernized procurement systems, supply chain mechanisms that reach people and medical facilities at local and community levels, and quality control for uninterrupted health logistics supply, including through increased local production, ensuring the continued provision of essential services.
 - Improved transparency and diversification of supply chains.
 - Improved distribution infrastructure for essential pharmaceutical, technology, personal protective equipment and other supplies, including for risk-specific interventions.
 - Investment in local industry for production of medical countermeasures, including personal protective equipment, vaccines, medicines and medical devices.
- Models of care that listen, learn and adapt to changes in perceptions, knowledge and evidence:
 - Strong risk communication and community engagement that is embedded in good governance.
 - Research and development including in the areas of medicine, epidemiology, and social sciences, and the accelerated development of diagnostics, treatments and vaccines.
 - Innovative approaches to develop, advance, share and assess research, that have a timely impact on people and communities.

19. Investing in identifying threats and harnessing information and intelligence for policy and prescient actions is important:

- (a) Timely and accurate data is important for predicting the emergence of future pandemics, along with real time modelling of current pandemics, including for the “One Health” approach. Policy- and decision-making, risk communication, and community engagement, driven by such data, would result in improved compliance with public health actions and measures.
- (b) The national health information infrastructure should meet the highest ethical and security standards, protecting privacy, gender rights and human rights.
- (c) Real-time, digitalized, comprehensive and appropriate use of information and data is vital to inform successful COVID-19 policies, decisions and measures. Countries with inclusive surveillance systems, including One Health, syndromic, sentinel and early warning systems with integrated laboratory diagnostics, were ready to respond earlier. Such systems must be well resourced and coordinated by an expert workforce mandated to implement recommendations, with up-to-date technology and finances.

- (d) Some of the contested and disputed areas in the Region can be seen as “blind spots”, as they are not fully integrated into the IHR (2005). Resilience against health emergencies cannot be achieved without solutions that allow for access, training and provision of tools for data and information sharing in these areas.
20. Financing mechanisms must be available throughout the emergency life cycle:
- (a) Funds are not only essential to the core public health actions associated with the response to health emergencies but, as demonstrated throughout this pandemic, are required to offset the losses incurred by communities and individuals if they are expected to adhere to the social measures put in place. Nowhere more clearly has this been seen than in the requirements for healthy persons potentially exposed to COVID-19 to quarantine for extended periods of time, often repeatedly and with immediate consequences for their livelihoods.
- (b) While the case for investment in preparedness has been made repeatedly, the case for investing in people during a response has not been made as forcefully. This lesson has immediate implications for the way we plan for emergencies, provide safety nets and incentivize participation in our responses.
21. Leadership and governance must be enhanced:
- (a) National programmes, policies, plans and legislation to support prevention, preparedness, response and recovery efforts: The pandemic calls for a harmonized approach to improve governance for multisectoral preparedness, including IHR (2005) implementation through whole-of-government and whole-of-society approaches. The development of national policies and action plans for health emergency preparedness and resilience that clearly define the relevant accountability framework and address roles, responsibilities, deliverables and timelines is key. When necessary, the revision of relevant legal and regulatory frameworks and the establishment of mechanisms to ensure coordination and sharing of information between sectors (such as food and agriculture, economy, finance, transport, tourism, education, defence, and health), which is in fact already called for under the IHR (2005), should take place.
- (b) CCC architecture: The IHR (2005) call for the institutionalization of a whole-of-government structure that directs and coordinates action across sectors, enabling those sectors to respond to any type of emergency. Experience has indicated that countries with agile, “ready-to-act” CCC architecture rooted in evidence and tailored to communities’ needs are better able to provide timely and comprehensive responses. Such systems are driven by the availability of timely and high-quality data, and function irrespective of the national political organization; they are also adaptable to the requirements of emergency response. The CCC architecture should lead all phases of the emergency management cycle, from prevention to planning and response to recovery. The role of public institutions includes the capacity to adapt and learn; to align public services with citizens’ needs; to govern resilient production systems; and to govern data and digital platforms.¹⁶ In line with the EPW on empowering health leadership, WHO/Europe can support cross-border, pan-European CCC coordination.
- (c) Governance of data and digital technology use: A key lesson learned from the pandemic is that it is necessary to establish and update digital health platforms. Having well-articulated

¹⁶ See <https://www.ucl.ac.uk/bartlett/public-purpose/wp2020-12>.

principles, standards and governance of data and digital technologies during pandemics and other health emergencies is vital to ensure that trust is established in their use and, in turn, for the delivery of an effective and proportionate public health response.

Accountability and oversight mechanisms need to be included as part of good governance, in addition to the monitoring and evaluation of the public health impact. The role of publicly owned digital platforms should be strengthened to ensure public trust in and security of public data.

- (d) International governing frameworks: In the spirit of collective solidarity, anchored in the principles of fairness, inclusivity and transparency, these would help strengthen global, regional, national, and local capacities and resilience against health emergencies.

Conclusions

22. Resilience against health emergencies requires applying the lessons described above. The changes should be built from the bottom up, and should be based on societal norms and values. A whole-of-government and whole-of-society multidisciplinary approach should invest in stronger health systems. A "whole-of-nature" approach should also be considered in the spirit of One Health. To achieve this resilience, adequate preparedness of the health sector, other systems and sectors, communities, and individuals is critical.

23. In line with the EPW, WHO/Europe is committed to working with full accountability on improving policy, platforms, resources, tools, processes and actions to support Member States and CSOs in improving their resilience to health emergencies.

24. The Regional Committee is requested to note this document and provide guidance on how to update, adjust or even replace the current Action Plan to Improve Public Health Preparedness and Response in the WHO European Region, 2018–2023, based on the lessons learned during the pandemic, the recommendations of the relevant review committees and the outcome of the scheduled World Health Assembly deliberations.

25. In line with the Paris Agreement, and taking into consideration the “all-hazards approach” and the “One Health approach”, measures taken to respond to lessons learned from the COVID-19 pandemic should keep in mind climate change adaptation and mitigation. The response to the COVID-19 pandemic can thereby be used synergistically for further crucial change.

26. Some of the aforementioned lessons are not new; they have already been learned from the analysis of previous health emergencies, yet corrective measures have not been taken. If global health security is to be guaranteed, these lessons must be translated into concrete actions at all levels.