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Essential public health functions: the key to resilient health systems

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On 5 May 2023, the WHO declared an end to the designation of COVID-19 as a public health emergency of international concern.¹ While COVID-19 remains a threat to health, the world is ready to move forward from a disease that has dominated life for the past three years. Now is the time to assess whether the commitments made to ‘build back better’² will incorporate learning from diverse country experiences of responding to COVID-19 and its wider system consequences, and increase the resilience of all countries to future public health challenges.

Health expenditures and life expectancy in most of the world rose between 2000 and 2019; however, the onset of the pandemic resulted in significant and prolonged disruption to essential health services, delaying progress and even reversing gains in life expectancy. This lack of resilience stems from chronic underfunding of public health capacities, even in relatively advanced economies.³ It is these preventive and promotive public health capacities both within and beyond the health system that are essential if we wish to reduce health risks and the impact of shock events like COVID-19, and thus reduce the burden on secondary and tertiary care that occurs when public health systems fail. Increased mortality and morbidity from non-COVID-related causes were seen in many countries,⁴ with an estimated 15 million excess deaths associated with the COVID-19 pandemic in 2020 and 2021 alone.^{5,6} The impact on livelihoods and society has also exacerbated social inequities and negatively impacted on mental health,⁷ while misinformation has undermined trust in health services.⁸

Throughout the pandemic, national structures with responsibility for the delivery of public health, including national public

health institutions (NPHIs), were key for the rapid development of diagnostics, strengthening of surveillance systems, and the synthesis and generation of evidence to inform policy and practice.⁹ However, NPHIs in many countries have a broad range of responsibilities in addition to communicable disease control, including health promotion and tackling inequality, and there is a risk that these functions will be neglected if political priorities in the recovery phase focus exclusively on health protection. It has become increasingly important that we develop greater global consensus on the definition and scope of public health services if system strengthening post-pandemic is to meet the full range of public health challenges. To this end, there has been renewed attention and focus on essential public health functions (EPHFs), with the WHO proposing a unified list of 12 fundamental activities in 2021 (box 1).¹⁰

The first list of EPHFs was published in 1998 and adapted by regions, organisations and countries to support the benchmarking of their public health capacities. The EPHFs contain the set of minimum requirements for the orientation of health systems and have been proposed as an approach to enhancing systems resilience.¹⁰ The EPHFs provide a bridge between health and allied sectors and set out responsibilities to improve and protect health, to reinforce the role of primary care and for the provision of public health services such as surveillance, community engagement and contact tracing—functions which help build resilience of front-line health services.¹¹

Partnerships and collaborations are essential for operationalising the EPHFs. At the World Health Summit in Berlin in October 2022, WHO established a memorandum of



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Box 1 Unified list of essential public health functions

- ⇒ **Public health surveillance and monitoring:** monitoring and surveillance of population health status, risk, protective and promotive factors, threats to health, and health system performance and service use.
- ⇒ **Public health emergency management:** managing public health emergencies.
- ⇒ **Public health stewardship:** establishing effective public health institutional structures, leadership, coordination, accountability, and regulations and legislations.
- ⇒ **Multisectoral planning and financing for public health:** supporting effective and efficient health systems and multisectoral planning, financing and management for public health.
- ⇒ **Health protection:** protecting populations against health threats, including environment and occupational hazards, communicable and non-communicable diseases including mental health conditions, food insecurity, chemical and radiation hazards.
- ⇒ **Disease prevention:** prevention and early detection of communicable and non-communicable diseases including mental health conditions, and injuries.
- ⇒ **Health promotion:** promoting health and well-being as well as actions to address the wider determinants of health and inequity.
- ⇒ **Community engagement and social participation:** strengthening community engagement, participation and social mobilisation for health and well-being.
- ⇒ **Public health workforce development:** developing and maintaining an adequate and competent public health workforce.
- ⇒ **Health service quality and equity:** improving the appropriateness, quality, equity in provision and access of health services.
- ⇒ **Public health research and knowledge:** advancing public health research and knowledge development.
- ⇒ **Access to and use of health products, supplies, equipment and technologies:** promoting the equitable access to and rational use of safe, effective and quality assured health products, supplies, equipment and technologies.

understanding with the International Association of National Public Health Institutes (IANPHI), a network of over 110 institutions in 98 countries to collaborate in support of public health capacity development.¹² As part of this collaboration, at a meeting held in Paris, 10–12 May 2023, WHO's Health Systems Resilience and EPHF Team¹³ consulted experts from IANPHI's members from Bangladesh, Brazil, Canada, China, Japan, France, Germany, Norway, Pakistan, Sweden, UK and USA on how to operationalise the EPHFs. We, the participants of the Paris meeting, critically reviewed WHO technical guidance on the EPHFs including the unified list of 12 EPHFs (box 1) and an expanded list of subfunctions, public health services and enabling system inputs intended to support operationalisation.¹⁰ The roles of the EPHFs as a tool for defining the scope of NPHIs as well as the role of NPHIs in supporting their implementation were considered.

The meeting agreed on a set of next steps which includes further collaboration between IANPHI and WHO to produce a guide to operationalising the EPHFs, the development of briefing papers and technical notes

for policy makers and implementers, and a commitment to work jointly to support peer-to-peer collaboration between NPHIs that build on lessons learnt during the pandemic.

However, the ability of countries to prevent and better manage future pandemics will, inevitably, be linked to whether their public health institutions are appropriately funded and systems are sufficiently flexible to expand capacity and reach rapidly to intervene at scale. In a plenary speech at the World Congress of Public Health in Rome (May 2023), Professor Duncan Selbie, president of IANPHI, commented that it is more important to see an institution's budget than its strategy. During COVID-19, emergency funding for the health response was substantial, and subsequent commitments to strengthen preparedness have eclipsed anything previously available (eg, pandemic fund initiative; the Independent Panel for Pandemic Preparedness and Response; the global accord on pandemic prevention, preparedness and response).^{14 15} However, the question remains whether the resolve demonstrated during the crisis to be better prepared for future pandemics will be translated into building more resilient health systems that are sustainably funded at levels which can accelerate progress towards universal health coverage and improved population health and well-being, as well as strengthening health security.

In order to build better public health systems, the political momentum and attention on pandemic preparedness need to be leveraged to support strengthening health systems which can deliver the full range of EPHFs. A comprehensive approach to public health must include preventive and promotive as well as protective capacities. As we learnt from the COVID-19 and previous public health events, the healthier a population is when faced with a pandemic, the healthier the population will be coming out of it. The role of public health and its stewardship from national to global levels are key to operationalising the EPHFs, enhancing multisectoral responsibility for health and building health systems resilience.

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