

Strengthening pandemic preparedness planning for respiratory pathogens

Policy brief

27 April 2022



Introduction

Corresponding with resolutions WHA58.5 [1] and WHA74.7 [2], WHO is committed to supporting Member States with pandemic preparedness planning through the provision of guidance and technical assistance. This policy brief responds to national and regional requests for an integrated approach to pandemic preparedness for respiratory pathogens in alignment with the *International Health Regulations 2005* (IHR) and the *WHO Guidance on Preparing for National Response to Health Emergencies and Disaster* [3] [4].

This policy brief outlines core elements that Member States are encouraged to a) develop an integrated approach to respiratory pathogen pandemic preparedness planning and b) enhance national and sub-national functional capacities for preparedness. In addition, this policy brief highlights suggested actions for Member States as they initiate or update national and sub-national pandemic preparedness planning process. It serves to inform and guide Member States and partners of these core elements and suggested actions while WHO works with Member States and partners to develop a Respiratory Pathogens Pandemic Resource Pack (R-PRP), a virtual repository of preparedness planning materials for national, regional, and global stakeholders.

A. An integrated approach to pandemic preparedness planning

Noting the high likelihood that future pandemics will be caused by respiratory pathogens [5], harmonizing pandemic preparedness planning across multiple respiratory pathogens offers Member States an opportunity to maximize available resources, increase coordination, and reduce duplication of efforts. Respiratory pathogen pandemic preparedness planning allows Member States to plan for commonalities of known and novel pathogens that follow a respiratory mode of transmission. In line with the Strategic Preparedness, Readiness and Response Plan to End the Global COVID-19 Emergency in 2022, **WHO encourages Member States to consider an integrated approach to respiratory pathogen preparedness planning that fits within their existing national planning processes and budget cycles [6].**

The development, implementation, and testing of respiratory pathogen preparedness plans and systems contributes to all-hazards readiness and contributes to implementation of IHR core capacities, such as Indicator C7.1 “Planning for Health Emergencies”. **Member States are encouraged to build from their existing hazard-specific plans and all-hazards plans (e.g., national health policies, strategies & plans [7], National Action Plans for Health Security, and National Health Emergency Operations Plans [8]) to develop an integrated approach to respiratory pathogen pandemic preparedness planning.** While the expected pathogens with pandemic potential tend to be viral, Member States can use the plans more broadly including for bacterial respiratory disease pathogens. As the actions needed to prepare for respiratory pathogens are similar, using an integrated respiratory pathogen preparedness approach offers Member States flexibility to include the range of pathogens that may be of concern in their country.

B. Immediate actions to strengthen national and sub-national respiratory pathogen pandemic preparedness

This policy brief outlines three actions that Member States can take to initiate or advance their respiratory pathogen pandemic preparedness process. Noting that Member States are at varying stages of considering and revising their approach to pandemic preparedness, these actions provide flexibility to ensure Member States can adapt them to their national context.

1. Conduct an intra-action review (IAR), after action review (AAR), and/or simulation exercise to identify areas for improvement at the national and sub-national level

To learn from national experiences and avoid similar constraints and challenges in the future, Member States are encouraged to conduct national and sub-national reviews (e.g., IARs, AARs, COVID-19 vaccine post-introduction evaluations) of how their systems functioned during the COVID-19 pandemic. These reviews help Member States to better understand what worked well, what did not work well, and where they may have opportunities for improvement. In addition, simulation exercises can be used to guide development of national and sub-national respiratory pathogen pandemic preparedness plans. Findings from these reviews and exercises can help Member States to prioritize where and how to invest resources to prepare for future pandemics. These priorities should be included in national strategies and budgets to enable investment and action.

2. Ensure legal provisions and sustainable financing sources for pandemic preparedness are available

National governance and leadership mechanisms are essential for governments to initiate or update national respiratory pathogen pandemic preparedness plans. Legal provisions can serve as a powerful tool to promote action and investment for pandemic preparedness, particularly when complemented with sustainable sources of funding. Governments are encouraged to review their legal mandate(s) as well as available and potential funding source(s) to enable successful national and sub-national respiratory pathogen pandemic preparedness activities.

3. Define the process for updating/reconsidering pandemic preparedness planning for response

Effective respiratory pathogen pandemic preparedness planning is an iterative process that requires high level political commitment and designated focal points to advance this work. A core element of this process is the development and update of a national respiratory pathogen pandemic preparedness plan. The process of developing, testing, and updating the respiratory pathogen pandemic preparedness plans bring together key stakeholders to identify and refine national priorities. Within their plan, Member States are recommended to focus on how they will strengthen the functional capacities needed during a respiratory pathogen pandemic. The national plan should be tested and updated routinely as preparedness is a dynamic, evolving process.

C. Enhancing national and sub-national capacities to strengthen respiratory pathogen pandemic preparedness planning

As Member States develop or update their respiratory pathogen pandemic preparedness plans, WHO would like to draw their attention to four core areas: 1) planning and coordination, 2) risk communications and community engagement, 3) health intelligence, and 4) health interventions. Analyses of the influenza A(H1N1) and COVID-19 pandemics have documented the importance of strong functional national and sub-national capacities in each of these four areas to effectively prepare for and respond to respiratory pathogen pandemics [9-13].

1. Planning and coordination

Multi-level and multi-sectoral engagement are necessary to prepare for and mitigate the wide-ranging impacts of a respiratory pathogen pandemic [9-13]. This whole-of-society and whole-of-government approach is built on a foundation of agile leadership, partnership, collaboration, and coordination. Member States can prepare for a range of potential scenarios and their impacts on different population groups by involving stakeholders from diverse sectors (e.g., health, finance, education, transportation, animal health, military, disaster management, civil society, and industry). In addition, Member States are encouraged to include national bodies, sub-national stakeholders (e.g., community and faith-based leaders), donors, multilateral agencies, and other partners in their pandemic preparedness planning process. Two key areas of discussion for Member States as they convene relevant stakeholders are (1) the national and sub-national triggers for activating and de-activating their national respiratory pathogen pandemic preparedness plan and (2) mechanisms for calibrating and scaling response measures (e.g. public health and social measures as well as medical countermeasures) proportional to the risks and impacts on vulnerable populations, society, and the economy.

2. Risk communications and community engagement (RCCE)

Global analyses of the A(H1N1) and COVID-19 pandemics have documented that active engagement with communities were and are key to identifying and addressing myths, concerns, and disinformation [8-12]. Investment in routine RCCE trust-building, enabling governments to work closely with their populations before, during and after a pandemic. By maintaining and strengthening capacities for RCCE, Member States can empower and enable individuals, families and communities to engage in pandemic preparedness and response measures. Member States updating or developing their national respiratory pathogen pandemic preparedness plans are suggested to place a strong emphasis on the integration of health communications strategies and to leverage insights from social listening data.

3. Health intelligence

National systems for health intelligence synthesize multiple sources of information including event-based and sentinel surveillance systems, one health surveillance platforms, participatory surveillance systems, laboratory surveillance, RCCE, special studies such as for sero-epidemiology, hospital capacity monitoring, clinical networks, clinical supply chain networks, and humanitarian assistance monitoring systems. National systems for health intelligence support flexibility, evidence-informed decision making, and transparent sharing of information before and during respiratory pandemics. Through regular analysis, reporting, and use of their surveillance systems, Member States can monitor the circulation of known pathogens and their evolution, and pro-actively identify novel respiratory pathogens.

Strong national and sub-national surveillance, laboratory, and one health capacities enable evidence-informed decision making for preparedness and response. Member States that developed or enhanced their surveillance and laboratory capacities (e.g., molecular testing, serologic testing and genomic sequencing during the COVID-19 pandemic are strongly advised to sustain these gains). Moving forward, Member States should consider integrating their sentinel surveillance systems to include other respiratory pathogens, such as SARS-CoV-2, respiratory syncytial virus and other relevant pathogens (e.g., MERS-CoV), through the Global Influenza Surveillance and Response System [14].

4. Health interventions

Both the A(H1N1) and COVID-19 pandemics once again exposed the vulnerabilities of national health systems worldwide and the need for targeted preparedness planning and long-term investment in health systems' capacity [9-13]. In particular, COVID-19 demonstrated the significant indirect health consequences associated with the pandemic context, which continue to need to be addressed through careful planning and coordinated action to ensure ongoing delivery of essential health services for all conditions [6]. For future pandemics, advance planning and long-term investment in health systems strengthening is needed. Key areas that require investment for future surge capacity include expansion of the skilled health workforce, clinical management, infection prevention and control, and health facility infrastructure [6].

Similar types of health interventions are used for respiratory pathogens during health emergencies, including vaccines, therapeutics, and public health and social measures. Member States will benefit from planning for the introduction of these different types of health interventions, taking into account commonalities across respiratory pathogens and specificities unique to each of the considered pathogens. In particular, Member States are recommended to consider the bottlenecks and enablers for the introduction and deployment of pandemic vaccines and therapeutics to streamline these processes for future respiratory pathogen pandemics.

D. WHO's support to Member States

WHO will work with Member States and partners to develop the R-PRP that provides a coordinated approach to respiratory pathogen pandemic preparedness and to address thematic areas where global gaps have been identified [9-13]. While this R-PRP is under development, Member States and partners are advised to identify their priorities in collaboration with their WHO country and regional offices, where applicable. In addition, the R-PRP will incorporate lessons learned from the meta-analysis of aggregate themes and findings from COVID-19 IARs (anticipated publication in 2022), the updated State Parties Self-Assessment Annual Reporting (SPAR), and the COVID-19 Strategic Preparedness and Response Plan [6, 16]. By incorporating these learnings, WHO can tailor the R-PRP to correspond to national, regional, and global needs.

E. Methods for policy brief development and identification of immediate actions

The policy brief and considerations outlined were developed through a two-step approach including: a rapid scoping review of literature on pandemic response risk management including findings from national intra-action reviews and global reports [5, 12-13], and an expert consultation process with representatives from different countries on pandemic response experiences and key opportunities for future preparedness. Building on pre-existing normative guidance and reviews, the actions were identified by WHO headquarters, regional, and country office staff who have supported the COVID-19 and 2009 pandemic responses [9-11, 6, 16]. These actions are intended to provide countries with immediate steps that can be taken to address key issues and bottlenecks experienced during past respiratory pathogen pandemic responses. Within the upcoming guidance, tools, and trainings, WHO will provide Member States with specific measures of success within each of these four core areas. These measures are success are intended to support national understanding of their progress strengthening respiratory pathogen preparedness (in line with the IHR core capacities) as well as global learning on actions that support preparedness planning across diverse country contexts.

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WHO continues to monitor the situation closely for any changes that may affect this policy brief. Should any factors change, WHO will issue a further update. Otherwise, this policy brief will expire 1 year after the date of publication.

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