

Pacific Heads of Health

Réunion des directeurs de la santé du Pacifique

Strengthening health system resilience

At a glance

- Pacific island countries and areas (PICs) are among the most vulnerable to health security risks due to emerging and re-emerging infectious disease outbreaks compounded by increasing natural disasters in the face of climate change.
- Lessons learned from the COVID-19 pandemic emphasize that a resilient health system must include the ability to both maintain the provision of basic health care and respond to future health system shocks.
- Priority actions, aligned with health security action frameworks such as the *Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies* (APSED III), are focused on enhancing and sustaining essential health services and core public health functions. Strong and equitable health systems are key to the achievement of universal health coverage (UHC), and a fundamental component of UHC is that these strong and equitable health systems are resilient in the face potential threats and shocks, including but not limited to public health emergencies and disasters.
- Applying lessons from COVID-19 will be helpful in efforts to enhance health system resilience.

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Current situation

The coronavirus disease 2019 (COVID-19) pandemic highlighted the wide-ranging impacts of emerging disease threats and the fragility of health systems. Many health facilities faced critical challenges maintaining normal operations and even essential health services while responding to the pandemic, at times resulting in crippled systems, and important health needs being unmet. The pandemic exposed areas of weakness that continue to exist in the six essential health system building blocks: service delivery, the health workforce, health information systems, access to essential medicines, financing, and leadership/governance.

For Pacific Island countries and areas, the interplay of emerging diseases such as COVID-19, climate change, sea-level rise and other hazards compound vulnerabilities, not only in health systems, but for communities, other essential services, and for economies. During 2019-2023, the Pacific endured multiple cyclones (Solomon Islands, Vanuatu, Fiji, and Tonga), flash floods (Tuvalu, Kiribati, Solomon Islands), volcanic eruptions (Tonga), and drought (Kiribati, Tuvalu), and, most recently, the earthquakes and cyclones in close succession in Vanuatu. The health impacts of these natural disasters, including the spread of communicable diseases (i.e. dengue, cholera, leptospirosis), place additional burden on health systems strained by the response to a global pandemic. These experiences of multiple hazards and threats are far from uncommon in the disaster-prone countries of the Pacific. The literature on health system resilience stresses the need for efforts to not only absorb and recover from these shocks but ensure continuity in health improvement and sustained gains in health system functioning.

The *Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies* (APSED III) is the third generation of the common framework first established in 2005 guiding countries and partners to build the minimum capacities required to respond to outbreaks and public health emergencies. APSED III leverages technical insight from international frameworks including the *International Health Regulations* (2005), the Sustainable Development Goals, universal health coverage (UHC), and the One Health approach to prioritize the strengthening of public health functions to sustain and reinforce health systems as a whole. Building on these and other health security frameworks, resilient health systems encompass three interconnected priorities:

- (A) the infrastructure, financing, resources, personnel, and enabling policies to deliver essential health services including mental health;
- (B) the systems for early detection and early warning which allow PICs to assess and characterize potential risks; and,

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(C) the capabilities and readiness to respond to emerging threats and at the same time enable uninterrupted delivery of essential health services. Given the complex nature of existing health risks, a multi-sectoral and coordinated approach is essential.

Future vision

To further progress toward the Healthy Islands vision, it is imperative that PICs have resilient health systems that not only ensure ongoing access to quality primary care and mental health services for their populations, but are also prepared for, and appropriately respond to, emerging infectious disease threats and natural disasters, minimizing the risks to the population.

This future vision for resilient health systems depends on long-term commitments and investment in the following:

- Policies, operational plans, budgets, and legislation to enable uninterrupted delivery of quality essential services while maintaining emergency readiness and timely response based on a coordinated whole-of-government and multi-sectoral approach.
- Response structures and plans that consider all hazards (i.e. that are relevant for different kinds of disease outbreaks and disasters), with periodic testing and refinement
- Interoperable information systems and technologies to interconnect all clinical, public health sectors and non-health sectors to enable early detection, rapid risk assessments, and inform decision-making.
- Community engagement for a shared health system vision, ensuring buy in for whole-of-society responses to emergencies and disasters and countering distrust and misinformation.

It is essential in resource-limited settings to be efficient in emergency readiness while simultaneously building effective health systems that continue to provide quality health services for all.

Examples of recent progress

Ensuring the continuation of essential services during a pandemic

Even during a pandemic, other essential health services must continue – after all, diabetics need ongoing doses of insulin, mothers continue giving birth and children require the protection of routine vaccines. While there was a lot of disruption, some PICs implemented innovative approaches to maintain essential health services.

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The *Strategy for Essential Health Service Delivery* in the Federated States of Micronesia (FSM) was designed to guide members of the decentralized health system to adapt health service provision and ensure that essential health services remain available and accessible during the pandemic. Based on comprehensive consultation with the country's four states, the Strategy sets out three objectives:

1. Minimum package of essential health services is available at primary and secondary care facilities
2. Access to essential health services is maintained for all population sub-groups
3. Governance and coordination are strengthened to ensure better coverage of essential health services

Also in FSM, a telemedicine hub for live synchronous teleconsultations was set up to pilot the connection of Pohnpei State Hospital to a dispensary. The pilot demonstrated that patients – in this case, patients with chronic noncommunicable diseases (NCDs) – can visit a dispensary and be connected to more specialized care, reducing unnecessary domestic referrals and travel, saving money and time. Similarly, Nauru piloted the use of digital tools for the management of NCDs, using SMS messages to reach patients and provide ongoing support.

During the peak of the pandemic, the Fiji Emergency Medical Assistance Team (FEMAT) was used strategically to keep COVID-19 cases out of the Colonial War Memorial hospital (CWM) so that CWM could continue providing non-COVID health services, such as maternal and child health care. FEMAT established a field hospital for COVID-19 patients at the capital city's main arena.

And while routine immunization has been heavily disrupted during the pandemic, most countries followed WHO's interim guidance, "Preparing for COVID-19 in the PICs: Issues to consider for the delivery of immunization services" and made efforts to ensure that children continue to receive the life-saving protection of vaccines. Furthermore, Kiribati, Marshall Islands, Samoa and Vanuatu conducted catch-up vaccination campaigns to reach missed children, Fiji conducted a measles, mumps and rubella vaccination campaign and FSM conducted an integrated vaccination campaign in 2022. Tonga was a particular standout in maintaining immunization coverage, with meningococcal and polio vaccination levels kept at 99-100 percent during 2020 and 2021.

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Strengthening key components of the health system

As the COVID-19 pandemic has shown, access to local production capacity for medicinal oxygen is a key aspect of health system resilience. Having easy access to oxygen helps health workers treat COVID-19 but also many other respiratory illnesses. Recent progress has been made in increasing access to a reliable supply of quality medicinal oxygen through ongoing work to install pressure swing adsorption (PSA) oxygen generating plants in Cook Islands, Fiji, Kiribati, Federated States of Micronesia (FSM), Papua New Guinea, Samoa, Solomon Islands, Tonga, and Vanuatu.

Policies around infection prevention and control have also been reinforced during the pandemic through the updating of national IPC guidelines, development of three-year IPC plans, isolation guidelines, and health worker capacity building to reduce the spread of infections in healthcare settings. Similarly, investments are being made in water, sanitation and hygiene in healthcare facilities which will reduce the risk of healthcare-associated infections and prevent the spread of many diseases like cholera and typhoid fever in future.

Ensuring health facilities can continue serving patients in the face of climate change

In a Western Pacific first, Fiji completed a climate hazard and vulnerability assessment of 205 healthcare facilities to help determine which facilities are most at risk so that they can be prioritized for retrofitting, renovation, or relocation. Over 25 health care facilities have been identified as being particularly vulnerable, such as because of their proximity to shorelines and riverbanks, including at least one laboratory. This assessment is just part of Fiji's broader efforts to strengthen the resilience of their health system, guided by the country's *Guidelines for Climate-Resilient and Environmentally Sustainable Health Care Facilities*.

Bolstering early detection and early warning

Building on existing solid surveillance networks such as the Pacific Public Health Surveillance and Lab network, multisource public health surveillance has proven to be essential in detecting and assessing potential shocks as early as possible. In French Polynesia, the routine weekly monitoring of syndromic, laboratory, and hospital surveillance for various priority syndromes and pathogens including acute respiratory infections, influenza, COVID-19, dengue, and leptospirosis provides leaders, as well as neighbouring PICs, with a comprehensive summary of disease risks in the territory and region.

During the peak of the pandemic, the integration of independently developed, disease and source-specific surveillance for COVID-19 was a critical element in timely analysis of risks, development of appropriate public health response measures, and assessment of these measures in reducing the shock.

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Scaling up access to mental health and psychosocial support

The COVID-19 pandemic increased understanding of the importance of mental health, overcoming stigma. Countries across the Pacific used a number of methodologies to rapidly expand the availability of mental health and psychosocial support, meet increased needs during the pandemic, provide support closer to where people live and preserve limited specialist mental health capacity for those who really need it. While these approaches were used to rapidly scale up support during the pandemic, they will have continued relevance in the Pacific post-pandemic, especially given the rising mental health impacts of climate change.

Kiribati, for example, hosted a series of talanoa sessions at the community level, working with community-members to tailor the key interventions in WHO's *Mental Health Gap Action Programme* (mhGAP) for the local context. The sessions looked at how to prevent mental illness, how to look after your own and others' well-being, and what community leaders can do to identify and refer people who need support to the mental health team on the main island of South Tarawa. The i-Kiribati primary health care workers who led these community talanoa sessions also hosted discussions with nearly 200 nurses, nurse aides, police officers, village security personnel, church members and others working in schools in mental health identification and management, both on the main island and three outer islands.

Meanwhile, around 300 health workers across Fiji were reached virtually during lockdowns with online training in psychosocial first aid. Fijian healthcare staff and emergency medical team personnel from across the Pacific were also provided training in self-care to limit burnout and help retain precious health worker capacity.

Building the readiness to respond to emerging threats

Fiji, Marshall Islands, FSM, Solomon Islands, Tonga, and Vanuatu have all conducted intra-action reviews (IARs) to capture lessons identified during the COVID-19 response and are now using the findings to strengthen their health systems and their response plans to future crises. IARs provide an opportunity to review the functional capacity of existing response systems at national and subnational level as well as develop key actionable findings to enhance future readiness. Key findings from the intra-action review in Vanuatu, for example, highlighted that the COVID-19 response has built significant capability in planning, preparedness and response which can be adapted to meet future needs. The IAR also emphasized "strong multi-sectoral collaboration is essential for a well-coordinated and effective response to a public health emergency."

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Why urgent action is needed now

Shocks to the health system can happen at any time, with little to no warning. Extreme weather events, especially cyclones, floods, and droughts, are displacing populations, causing injuries and psychological trauma, and are increasing the risks of infection and malnutrition in the Pacific. Disasters related to climate change are continuing to rise, increasing the risk of disease and death, especially among vulnerable populations.

The threat of emerging diseases, such as the COVID-19 pandemic, along with natural disasters demonstrate that such shocks can severely interrupt basic health services. Lack of action will allow vulnerabilities to remain, and the resulting health service interruptions will place additional stress on limited health workforce personnel and, in turn, disrupt economies and livelihoods. Importantly, this will also lead to further poor health outcomes including increases in disease vulnerability, exacerbation of chronic conditions, and decreased mental health. Importantly, incidence of vaccine hesitancy and resistance to public health and social measures highlight the need for both risk communication and community participation to encourage whole-of-society responses to health emergencies.

Recommendations to be considered by the Heads of Health

Recommendations for heads of health

Progress toward resilient health systems requires long-term commitment and action by governments to protect human capital and ensure no one is left behind. With the long-term vision of having health systems that appropriately respond to emerging infectious disease threats and natural disasters in order to minimize shock to the population, economy, and overall society, feasible short-term steps include the following:

1. Develop country-specific definitions of the minimum health service delivery package identifying which types of services must remain uninterrupted even in the event of health system shocks. Having developed this list of essential services to maintain, guide the health system (including all health facilities) to develop implementation plans for how they will switch to a focus on these services during an emergency or other shock.
2. Ensure that an enabling environment is in place for this minimum health service delivery package including the relevant legislation and policies, standard operating procedures, infrastructure (including power generation), financing, staffing and workforce development, and resources (including supply chain).

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3. Further work to ensure the climate resilience and environmental sustainability of the healthcare system.
4. Strengthen technical capacity to generate and use timely and integrated health information to predict and manage emerging health threats and to inform response efforts to minimize health system shock. This would include:
 - Digitalization of primary health care health information systems to identify and manage disruptions in essential health services,
 - Developing interoperable information systems between health (e.g. health facility, epidemiological and laboratory data systems) and non-health sectors (e.g. animal health, climate change, and meteorological and geologic hazards) to generate integrated health information that could predict and inform management of emerging threats.
 - Coordinating multi-team capacity-building efforts, such as between those working on the surveillance system and lab capacity strengthening, to promote a culture of information sharing and break down (or preventing the building of) information siloes to allow for the timely sharing of information for decision-making in peacetime and, critically, during crises.
 - Empowering decision makers from local to national level to translate the generated information into effective and appropriate response actions that would mitigate risk and impact on the healthcare system
5. Understand key national gaps in capacity, both in health threat identification and response, and in health system resilience. This includes working with WHO and partners to complete assessments such as Joint External Evaluations and State Party Self-Assessment Annual Reporting, as well as performing risk assessments for priority pathogens and natural disaster threats. Importantly, care should be taken that these are not performed for their own sake, but alongside results from tabletop exercises and response plan reviews to result in concrete and achievable next steps for health system strengthening. During this process, transparency and engagement with the community is encouraged to provide visibility that the government is taking action to protect their interests and to encourage whole-of-society responses to emergencies.

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Recommendations for health ministers

1. Work with colleagues in other sectors to ensure that an enabling environment is in place for the implementation of a national minimum health service delivery package, the delivery of which is ensured even during disasters, epidemics and other shocks (e.g. relevant policies and legislation, standard operating procedures, infrastructure, financing).
2. Advocate for the cross-sectoral climate action that will benefit health while leading teams to ensure the climate resilience of the healthcare system.
3. Guide teams to fully utilize opportunities such as Joint External Evaluations, State Party Self-Assessment Annual Reporting, exercises and intra- or after-action reviews to identify best practices and areas for improvement. Ensure that recommendations result in concrete action.
4. Lead collaborations with non-health ministries to strengthen technical capacity to collect and analyse data on animal health, climate change, and meteorological and geologic hazards, and to develop cross-sector technical standards to facilitate interoperable information systems.

Recommendations for development partners

1. Support PICs in their development of minimum health service delivery packages and follow their guidance on which areas need specific external support.
2. Support the development and strengthening of information systems that integrate data from across different areas of the health system (i.e. clinical, epidemiology and laboratory), and avoid providing support for new surveillance or information systems (such as new surveillance systems for specific diseases) that are separate to and do not link with broader national health information systems.
3. Support country efforts to boost the climate resilience and environmental sustainability of their health systems and to advocate for the multi-sectoral climate action that will benefit health.
4. Ensure that efforts aimed at laboratory strengthening through increasing use of molecular technologies include an implementation timeframe of at least 2-3 years to allow countries to slowly absorb costs into the routine laboratory budget.

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5. Ensure that support provided for increased readiness to address emerging disease threats should focus on both the minimum health service delivery package as well as supporting the ability to respond to emergencies and disasters. There will be common elements to both that require support, such as the augmentation of health care supply chains and assurance of adequate WASH in healthcare facilities.