

“We have been warned”— preparing now to prevent the next pandemic

David R Murdoch, Sue Crengle, Bob Frame,
Nigel P French, Patricia C Priest

‘COVID-19: Make it the Last Pandemic’ is the aspirational title of the recently released report by the Independent Panel for Pandemic Preparedness and Response.¹ This panel, co-chaired by Helen Clark and Ellen Johnson Sirleaf, was convened in mid-2020 by the World Health Organization (WHO) to assess the global handling of COVID-19.

The report is predictably grim reading. The panel found weak links at every point in the chain of preparedness and response. Preparation was inconsistent and underfunded, alert systems were too slow and meek, WHO was under-powered, responses exacerbated inequities and global leadership was absent.

Although giving the world a clear ‘fail’ for its handling of COVID-19, the report highlights strengths upon which to build. Of particular note, successful national responses to COVID-19 were often built on lessons from previous outbreaks. Those countries listened to the science, changed course when necessary, engaged communities and communicated transparently and consistently. In Aotearoa New Zealand, responses to lessons from the past were most evident among Māori, who were prompted to look after their own communities with knowledge of experiences during previous outbreaks, such as the smallpox epidemic of 1913 and the influenza pandemic in 1918-9.^{2,3}

The report of the Independent Panel for Pandemic Preparedness and Response makes two sets of recommendations.

The first set includes immediate actions aimed at ending the COVID-19 pandemic, with a particular emphasis on addressing global inequities. Unsurprisingly, a major

focus is a push for greater commitment from high-income countries to increase global access to vaccines, diagnostics and therapeutics, and to help strengthen health systems.

The second set of recommendations comprise seven actions directed at preparedness to ensure that a future outbreak does not become a pandemic:

1. Pandemic preparedness and response must be elevated to the highest level of political leadership in all countries and globally, with the establishment of a Global Health Threats Council.
2. WHO should have more independence, authority and funding.
3. Pandemic preparedness needs investment from now to prevent the next crisis by creating fully functional capabilities at national, regional and global levels.
4. A new agile and rapid surveillance information and alert system is needed.
5. A global platform should be built for equitable development and distribution of vaccines, therapeutics, diagnostics and essential supplies.
6. A new mechanism for international financing for pandemic preparedness and response should be created.
7. Finally, national pandemic coordinators with a direct line to heads of state or government should be established.

These are good recommendations. However, they have already been criticised for not going far enough, particularly with respect to strengthening international agreements and country commitments.⁴

Aotearoa New Zealand certainly must play its part in strengthening and ensuring global commitment to both ending the current COVID-19 pandemic and preparedness for the future. We can build on our good international standing to strengthen global solidarity and help resist counterproductive activities, such as hoarding COVID-19 vaccines by rich countries, including through continued support to Pacific countries with vaccine supply.

But we must also look to our own planning and future response. What can we take from the report to inform our own planning for the future?

We need to act now with national preparedness planning, not wait until after the current pandemic or for the next crisis. The history of pandemics reminds us that we have failed to learn from past experiences.⁵ We need to reverse this trend and start preparing for the future, informed by the lessons and impacts from COVID-19 while fresh in our minds.

Māori and other groups who experience inequities must be involved in all pandemic preparedness activities and in planned responses to ensure these are equity-positive and prevent the development or exacerbation of existing inequities.

We need to develop and invest in good leadership at all levels, forward-looking rather than reactive, and in the critical partnership of science, policy and leadership.

Aotearoa New Zealand has done relatively well so far in its response to COVID-19, but this does not guarantee continued success as this pandemic plays out, or similar success in future pandemics. We cannot be complacent and must do better in preparing for future infectious diseases risks. We must do better at joining up our expertise and systems and break down unhelpful silos.

Existing networks between infectious disease researchers, both nationally and internationally, helped to bring multidisciplinary groups together during the COVID-19 response and allowed us to learn from other countries' experiences in real time. However, when networks are dependent on individuals and goodwill rather than established structures, they are vulnerable and can't be relied on for

the future. Our whole genome sequencing capacity was rapidly ramped up and made important contributions to surveillance and response. This capacity needs to be firmly embedded in the public health system and sustained in the long term. Decisions on public health response were made with broad political and public support. The international experience shows how important it will be in future to ensure multipartisan political commitment to planning and public health, while continuing to maintain the political independence of disease control experts.

The effective responses of Māori and other communities to protect and support their own communities during lockdowns must be fully acknowledged.² In addition, holistic models of health and response that incorporate mātauranga Māori will help emphasise the interconnectivity between humans, animals and the environment. This increases awareness of conditions that allow outbreaks to emerge. It also reminds us that imported infectious diseases affecting livestock can also have substantial economic impact on our important primary industries, and potentially lead to the emergence of zoonotic pathogens that affect both animal and human health.

Transdisciplinary partnerships across animal, human and environmental health and with communities are essential approaches to combat infectious diseases and other health risks.⁶ Understandably, we are currently focused on the fast pandemics that are the consequence of new, easily transmitted pathogens entering a susceptible human population. However, the impending pandemic of antimicrobial resistance will likely be slower to gain momentum but more progressive, sustained and harder to control. These challenges are further complicated by the currently weak response to the impacts of the climate crisis and ongoing ecosystem degradation. New Zealand does not have a good record for supporting transdisciplinary partnerships. Only last year a proposal for a collaborative Centre of Research Excellence focused on better preparing Aotearoa New Zealand for future infectious diseases risks was not funded.

The New Zealand Health and Disability System Review⁷ and the New Zealand

Health Research Strategy 2017–2027⁸ provide opportunities for better integration of science and research into the health system. A culture change is required to ensure research is central to the new health system, providing the science needed to inform policy, preparedness and best practice—critical for effective and agile responsiveness to future infectious diseases risks. The new Public Health Agency may provide a better platform for collaboration than the current arrangement. The latter has district health board-based public health practitioners and ESR-based surveillance experts, with a small communicable disease team and the Office of the Director of Public Health providing expertise in the Ministry of Health for both policymaking and some operational activities.

Research culture also needs to better accommodate applied research carried out in partnership with healthcare providers, communities, policymakers and government. A new generation of scientists and professionals is needed, driven by systems thinkers, who understand the policy- and decision-making processes, and are comfortable working with communities and multiple disciplines and across the science–policy interface. Valued for their breadth of knowledge and experience as much as their in-depth expertise, and working with humility across multiple stake-

holder groups, these are the people who will help ensure past mistakes are not repeated.

Aotearoa New Zealand needs to build the capability and relationships that would comprise a transdisciplinary collaborative institution that includes the community, particularly Māori, and infectious disease experts including researchers, policymakers and disease control practitioners. This does not have to mean a ‘bricks and mortar’ institute but a structure that facilitates working together, with all partners deliberately learning from and informing each other’s work (while maintaining political independence as appropriate). Some funding and staffing would be required to make this work. However, if we leave it to competitive research funding and the individual relationships of different groups and individuals, we will not have learned from this pandemic, and will not be doing the best for Aotearoa New Zealand.

As much as any other nation, we need to reflect on the report by the Independent Panel for Pandemic Preparedness and Response. We have done relatively well by global standards in our response to COVID-19, but the baseline is very low. We need to act now in order to learn from the current crisis and better prepare for the next one. Otherwise time, knowledge and momentum will be lost. As the report’s summary states: “we have been warned.”

Competing interests:

Nil.

Author information:

David R Murdoch: Dean and Head of Campus, University of Otago, Christchurch.

Sue Crengle: Professor, Department of Preventive and Social Medicine,
University of Otago, Dunedin.

Bob Frame: Adjunct Associate Professor, Gateway Antarctica,
University of Canterbury, Christchurch.

Nigel P French: Professor of Food Safety and Veterinary Public Health,
School of Veterinary Science, Massey University, Palmerston North.

Patricia C Priest: Professor, Department of Preventive and Social Medicine,
University of Otago, Dunedin

Corresponding author:

Prof David Murdoch, University of Otago, Christchurch,
P.O. Box 4345, Christchurch 8140, New Zealand
david.murdoch@otago.ac.nz

URL:

www.nzma.org.nz/journal-articles/we-have-been-warned-preparing-now-to-prevent-the-next-pandemic-open-access

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