



COVID-19

Summary of Aotearoa New Zealand's Strategic Framework for COVID-19 Variants of Concern – Summary for Cabinet

Context

There is a high likelihood that a new COVID-19 Variant of Concern will emerge within weeks or months. The timeframe and clinical impacts of these variants is not clear, but it is important that we prepare for new, more severe variants that could emerge.

On 30 March 2022, the World Health Organization (WHO) released its Strategic Preparedness, Readiness and Response Plan to End the Global COVID-19 Emergency in 2022. It sets out key strategic adjustments that, if implemented rapidly and consistently at national, regional, and global levels, will enable the world to end the acute phase of the pandemic. The capacity and adjustments necessary to end the acute phase of the COVID-19 pandemic can and should lay the foundations for a future in which the world is prepared to prevent, detect, and respond to pandemic threats.¹

Scope

To support Government preparedness and response efforts, the Ministry of Health (the Ministry) has developed Aotearoa New Zealand's Strategic Framework for COVID-19 Variants of Concern (the Strategic Framework), which builds on the plans and enabling systems that have held the Ministry in good stead over the last two years.² It identifies the contextual factors, range of indicators, and baseline and response measures required to ensure that we are prepared to respond to the emergence of a new variant of concern.

As we do not know the characteristics of potential new variants of concern or the context in which they will emerge, the Strategic Framework considers five plausible peer-reviewed scenarios that reflect the likely characteristics of new variants, and carefully considers the approaches for each scenario.

The intention is not to develop exact plans that can be implemented, but to ensure there is a clear understanding of:

¹ <https://www.who.int/publications/i/item/WHO-WHE-SPP-2022.1>

² <https://covid19.govt.nz/assets/Proactive-Releases/proactive-release/Public-health-modelling-and-scenarios-A3.pdf>
<https://covid19.govt.nz/assets/Proactive-Releases/proactive-release/Systems-architecture-Health-System-preparedness.pdf>

- the relevant decision-making processes, the likely level of information that we will have initially and the length of time it will take to have detailed information on a variant's characteristics
- principles and objectives that will inform the response, including how Te Tiriti o Waitangi and equity are embedded within planning for new variants, and how this information will support long term planning
- the contextual factors and disease characteristics that will inform the response
- the likely levels of response, and that the role of elimination is limited
- the suite of baseline measures that we will need in place ahead of the response
- assurance on baseline measures
- the social and economic impacts, and impacts on communities that would inform decisions
- how New Zealand's response sits within the global text.

Planning for new variants of concern needs to occur at all levels, from global and national level responses to local and community-based responses. The initial Strategic Framework is focussed on the national health response. Further regional and local responses will be developed.

Relation to other plans and strategies

Our ongoing COVID-19 response includes the development of our medium-to-long term COVID-19 strategy, and the refinement of the COVID-19 Protection Framework (CPF) as required. It also includes planning for new variants of concern, and ensuring we are prepared for winter and other Influenza-like Illnesses (ILIs) that may impact the health system. Should a new variant of concern emerge, the medium-to-long term strategy and CPF will be reviewed to determine the suite of measures required to effectively respond.

As such, the Strategic Framework sits within a wider strategic context which includes:

- the development of a strategy for the COVID-19 health response over the medium to long-term, focused on recovery and building resilience, which provides strategic guidance for the health system and wider All-of-Government response to COVID-19
- revising the current surveillance, contact tracing, and testing strategies to reflect the updated and more nuanced responses to different variant scenarios
- informing the development of the Public Health Border Strategy and detailed border responses to new variants
- refinement of the public health settings in the post-peak context and the COVID-19 Protection Framework
- ensuring that responding to new variants of concern is supported in consideration of the future legal framework
- advice and recommendations from the WHO, and other peak bodies and the potential impact of amendments to the International Health Regulations 2005 and proposals for a pandemic treaty
- development of a COVID-19 vaccine strategy that will consider measures to maintain vaccine effectiveness and preparedness for new variants of concern.

The Department of Prime Minister and Cabinet (DPMC) will work with the Ministry, Health New Zealand, Ministry of Business Innovation and Employment (MBIE), Ministry of Education, Ministry for Primary Industries, the New Zealand Customs Service, Treasury, and the Ministry of Foreign Affairs and Trade to provide a consistent basis for the All of Government response. The scenario planning will also be available to inform broader strategic planning, with potential uses including the ongoing consideration of National Quarantine Capability and Treasury's work on resilience planning.

Scenarios

Five scenarios have been developed to inform the potential range of responses that may be required. There may be particular viral characteristics that may change, and any decisions are likely to be made before a detailed evidence base is formed.

The scenarios are based on evidence on the likely characteristics of new variants and their characteristics, including research into similar scenarios that other countries have used, and have been externally reviewed by the COVID-19 Technical Advisory Group and the Strategic Public Health Advisory Group. They have also been considered by the COVID-19 Independent Continuous Review, Improvement and Advice Group as part of engagement.

The scenarios range from high clinical severity and high immune escape to low clinical severity and low immune escape, and a scenario that includes co-circulating diseases. All scenarios *assume a variant that is able to out-compete Omicron BA2* because it is more transmissible.

The scenarios are:

1. High clinical severity, high immune evasion: similar to Omicron but with greater severity. Therapeutics, vaccines and/or prior infection may not work or protect well.
2. Low clinical severity high immune evasion: similar to Omicron. Therapeutics and vaccines may not be effective at controlling spread or symptoms, but hospitalisation rates remain manageable.
3. High clinical severity, low immune evasion: the virus is highly transmissible with high case numbers, but current effective immunity and vaccination is protective for most.
4. Low clinical severity, low immune evasion: the virus has enough transmissibility to create a high case load, but current effective immunity is protective and what disease there is, is milder than experienced in previous waves. Effective treatments are available for vulnerable populations.
5. Multiple co-circulating variants of concern with different levels of virulence and severity and different levels of cross-protection, as we see with influenza. This scenario potentially draws features from the other scenarios.

For reference, all the hypothetical scenarios are compared to the current Omicron planning scenario.

Determining the characteristics of a new variant

The Strategic Framework includes a two pronged process for rapid information gathering and management in the period before the scenario becomes clear:

- during the first two days, an immediate scan for information will be undertaken
- over the following weeks, a systematic scan of emerging evidence will continue.

For each new variant, it will take time to determine the features and epidemiological characteristics of the virus, and therefore the threat that the new variant poses.

Public health decision-making is strengthened when informed by real-time and accurate data and analysis including international insights. In our domestic context this requires data from surveillance, on ground intelligence on health system utilisation and capacity, and an understanding of underlying population

vulnerabilities and risk factors. Put simply, effective prevention and response to COVID-19 is dependent on our evolving understanding of what it is we are responding to (i.e., the characteristics of the variant and outbreak), where the response is required (the geographic locality), and what tools are required to proportionately maximise impact (in particular to ensure those most vulnerable are well protected).

This information needs to be considered in context and informed by behavioural insights, global information, and consideration of a range of local indicators. For this reason, there are not specific 'triggers or thresholds' for activating a response to a new variant.

Activating a response to a new variant

The Ministry will continue to actively monitor information on new variants and will regularly assess their potential public health impact on New Zealand communities and populations.

If the risk associated with a new variant is of sufficient concern and it has been detected in the community (including via international arrivals), the Ministry will undertake a collective Incident Management meeting with regional leads and Public health personnel, undertake a Public Health Risk Assessment (PHRA). The PHRA will draw on the scientific information available and past experience to provide recommendations on the public health response, and convene a COVID-19 Assessment Committee (CAC), if required.

The CAC will draw on the PHRA and quantitative and qualitative information to assess the current health and health system situation, identify potential health response objectives, and if required, identify an appropriate mix of response measures to meet the health objectives. In some instances, the recommendation may not be to trigger these immediately, especially as it is highly likely that we will have insufficient information on the variant characteristics initially. Options could include no additional actions but continue to monitor the international evidence through to changes to current measures. Ministers will be advised in advance of this occurring.

When a new variant of concern emerges, a PHRA and the CAC will remain integral parts of assessing the situation and providing considered public health and health system advice at key decision points for Ministers and agency partners. As outlined above, any response will vary depending on the contextual characteristics, information available and the nature of the new variant and these will be considered as part of the PHRA. As an indication of timeframes, in the two to four weeks following initial detection of the Omicron variant offshore, anecdotal findings and early data gave indications on the transmissibility, immune evasion and severity characteristics of Omicron. However, strong epidemiological and clinical data to support these findings only emerged in the one to two months following detection.

In the past, decision making has been supported by the use of Managed Isolation and Quarantine (MIQ) settings, allowing time to make considered and informed determinations at a local level. However, with open borders it will be more challenging to employ the same 'wait and see' approach. It is likely that a highly transmissible novel variant would rapidly enter and potentially become established within days. This means that compared to previous situations with tighter border measures, the time to review and assess the situation will be reduced.

The use of 'prepare', 'contain' and 'manage'

The strategic framework includes ongoing surveillance and three response stages:

- Ongoing Surveillance: Ongoing international and national monitoring of Variants of Concern to inform Public Health Risk Assessments.
- **Prepare:** First imported case – system readies to pivot if necessary.
- **Contain:** First community case - system pivots to reduce transmission.
- **Manage:** Widespread community transmission - system pivots to preserving critical infrastructure and protecting vulnerable and priority populations.

The Variant Scenarios Health System Operational Readiness and Response refers to '**prepare**', '**contain**' and '**manage**' for the three overarching phases of the response to new variants, as opposed to the previously used elimination, stamp it out and suppression phases. This reflects the different context that we are operating in from March 2020 and the introduction of the COVID Protection Framework (December 2021) where the likelihood of elimination and stamping it out is lower as transmission rates are likely to increase. Additionally, the levels of immunity in the population now are higher and the experience with domestic measures show that they can be effective.

The term 'elimination' has been removed from our strategic narrative, because, in the original strategy, 'elimination' was the first step/strategy to employ, but it is unlikely to be the case here. Prepare also reflects the work that is currently underway to ensure that we are aware of new variants, and that effective responses could be quickly stood up as required. Prepare, Contain and Manage better reflects our strategic approach at this time.

Pillars of New Zealand's COVID-19 Preparedness, Readiness and Response

Across key public health aspects of the response, certain measures will change through each phase of the response. These are known as the Pillars of COVID-19 Preparedness, Readiness and Response:

- Surveillance and outbreak investigation
- Laboratories, testing and diagnostics
- Infection prevention and control and protection of the health & disability workforce
- Case management, clinical operations and therapeutics
- Strengthening essential health services and systems
- Vaccination
- Risk communication, community engagement and infodemic management

Decisions around the appropriate measures reflect likely contextual factors, including the impact of a variant of concern on health outcomes, and broader socio-economic outcomes. Decisions also consider the current and expected pressure on the health system. We have also considered preparedness measures to enable a rapid response.

Table 1: Baseline resilience measures

Measure	Description
Complete workforce planning for new Variants of Concern	Strengthening workforce capability beyond responding to COVID-19, alongside planning and prioritising capacity to respond to new variants of concern, will be a central part of supporting the public health workforce over the coming months.
Maintain an appropriate legal framework	Work is underway to ensure that responses to variants of concern will continue to be supported by an appropriate legal framework.
Support ongoing vaccination efforts and prepare for future roll-out	Work continues on maximising vaccine coverage for key groups and developing a vaccine strategy that will support rapid supply and roll-out of any new vaccines.
Maintain testing infrastructure and supply	There is a need to ensure there are sufficient rapid antigen tests available to support widespread testing if required, and sufficient PCR and WGS capacity continues to be developed and maintained. The ongoing lab capacity required in the event of a new variant will require new contracting arrangements with laboratories, as their current testing volumes are lower than the capacity that has been built.
Prepare communication plans, including targeted communication for communities	Our approach to engaging with the public will be key in the success of responses to any future outbreaks or incursions. Implementing targeted campaigns, including for Māori, together with using research and evidence informed approaches to communications for specific audiences is also a way the Ministry can respond to its Te Tiriti o Waitangi and equity obligations. Communication plans will include infodemic management.
Improve data collection, reporting and analysis	We are working to improve our data collection, sequencing and analysis capabilities to immediately identify and detect new and emerging variants to strengthen our pandemic preparedness.
Leverage contact tracing	In the early stages Public Health Unit-led contact tracing with national source tracking and case management may be deployed to provide New Zealand with some local and regional areas for targeted focus. In a high clinically vulnerable and high immune escape setting the value of contact tracing after the first and second identified case and contacts will need to be clear.
Surge Response Plan	The Ministry, alongside hospitals, agency partners (MBIE and MSD) and industry, is developing an emergency response COVID-19 surge playbook to stand up mass vaccination and testing sites, expedite deployments of surge medical and emergency personnel, expand hospital and community capacity and emergency facilities, and provide emergency supplies including PPE and access to welfare supports (food and housing).
Maintain surveillance capacity	Surveillance testing will be used to identify when we have a new variant. We must ensure that we have sufficient capacity to undertake the surveillance required. The Surveillance Strategy provides information on the detailed response, including the relative importance of respective surveillance measures.

The Ministry is also in the process of engaging with other agencies to identify the wider range of enablers required.

Next steps and further planning

The Strategic Framework is focussed on the health measures in place to respond to the emergence of new variants of concern, with a particular focus on national level responses. Further detailed consideration of regional, local and community health responses is required with Health New Zealand, the Public Health Agency and Māori Health Authority.

The Ministry is working with DPMC to support an all of government planning process. This will consider the broader system-wide response that may be required for new variants, based around a consistent planning approach.

The intention of this work is to support a level of preparedness for government services, communities and organisations. It will be developed further, based on All-of-Government planning to understand the wider impacts of potential measures as well as how we can be more responsive to different communities.

The Ministry produces a bi-weekly monitoring document on variants of concern that will inform ongoing consideration of the Strategic Framework.

The Strategic Framework will be reviewed in six months, although aspects may be reviewed earlier if the Ministry's regular monitoring of the potential or nature of new variants identifies an issue that would need to be resolved.



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