



Urgently upgrading NZ's Covid-19 response

24 June 2021

Amanda Kvalsvig, Nick Wilson, Michael Baker

Aotearoa NZ's effective Covid-19 elimination strategy is now threatened by the global emergence of new variants with increasingly high transmissibility. We outline the upgrades that are now urgently needed to keep New Zealanders safe, particularly in the light of the current outbreak risk in Wellington. Immediate actions include upgrading the Alert Level system with a particular focus on mask use, making the Covid Tracer App compulsory for high risk indoor venues, rapidly vaccinating all remaining border and frontline health workers, ensuring that all New Zealanders are able to stay at home when required, and upgrading the Trans-Tasman Bubble settings.

The pandemic virus (SARS-CoV-2) continues to evolve and in several respects we are now experiencing a very different pandemic from that of 2020. The [Delta variant](#) now accounts for 99% of Covid-19 transmission in the UK¹ and is causing rapidly-expanding outbreaks in

NZ's near-neighbours Sydney and Fiji. This variant is highly infectious² and there have been several reported instances of transmission occurring during [very brief encounters](#) when one person moved into another person's airspace. Outbreaks due to this variant also appear to have very short doubling times that challenge the capacity of contact tracing systems. These concerning findings indicate that NZ's highly effective control measures, developed for the far less infectious variants of 2020, may no longer be sufficient to achieve and maintain elimination.

Wellington is currently at Alert Level 2 in response to potential widespread exposure to a positive case, a traveller from Sydney who visited a number of venues in the city, including several that had large indoor crowds. NZ's vulnerability to an extensive outbreak is vividly demonstrated by this event. Five areas in particular require urgent action:

- Upgrading the Alert Level system,
- Upgrading the contact tracing system,
- Accelerating the vaccine rollout (especially for border and frontline health workers),
- Ensuring that New Zealanders are able to stay at home when necessary, and
- Upgrading Trans-Tasman Bubble settings.

The risks of not taking action include prolonged periods under lockdown, extended closure of the Trans-Tasman bubble, and potentially many preventable illnesses and deaths.

Upgrading the Alert Level system

The Alert Level system was developed during March 2020 and its policy settings were shaped by the infrastructure and evidence base of the time. The system worked well in early 2020 but is now out-of-date in several aspects. Important barriers to effective outbreak control include limited opportunities to fine-tune control measures in situations when a lockdown is not indicated, in particular a lack of measures such as mask-wearing and improved ventilation to prevent airborne spread. We have previously advocated for adoption of masks as a 'nose and mouth' lockdown that can prevent a 'full body lockdown'.³ In a forthcoming paper⁴ we propose two levels of mask requirements that can be matched to the risk in the community:

- The '**travel and health settings**' where masks are required in public transport, domestic flights, healthcare settings (including waiting rooms), residential care facilities, and taxi and ride-share journeys. This level is appropriate for times when community transmission risk is low but non-zero, for example when Australia is experiencing outbreaks and the Trans-Tasman Bubble is open.
- The '**indoor settings**' where masks are required in transport and health settings as above, and also in indoor workplaces, secondary schools and higher education settings, shops, and social settings (but are voluntary in primary schools and homes). This level is required when there is a high risk of community transmission and particularly when a highly transmissible variant is implicated, as is happening currently in Wellington.

Upgrading the contact tracing system

Covid-19 presents a challenge to contact tracing capacity because of its relatively high reproduction number (now significantly higher than before) and because cases are frequently asymptomatic at the onset of the infectious period and hence, infectious individuals are likely to be circulating in public spaces.

The Covid Tracer App was designed to improve both the pace and completeness of contact identification. Uptake to date has not been sufficient for meaningful direct contact tracing via the app, but when appropriately used, the app identifies the places visited by a case and this list of 'locations of interest' can be published by the Ministry of Health to alert potential contacts.

- For the app to contribute to outbreak control, the Government should now make its use mandatory in settings that are at high risk of facilitating superspreading. These settings include cafés, restaurants, pubs/bars, nightclubs, gyms, singing groups/choirs and faith settings (eg, churches);
- In the event of a visitor not having a smartphone, a paper record should be kept.

Accelerating the vaccine rollout for key workers

Key requirements are to:

- Ensure that all border (including airline) and frontline health workers are vaccinated and regularly tested because of the risk to themselves and others (the original community case in the Sydney outbreak was an unvaccinated driver who transported international aircrew; and airline and airport workers have been implicated in the origins of major outbreaks in [Taiwan](#) and [Singapore](#));
- Establish and maintain stringent occupational health requirements (similar to those in use for other infections in healthcare settings) to require and verify that every person in a border-facing occupation is vaccinated. Those who choose not to be vaccinated must be redeployed away from their current role during the pandemic;
- In the event of a community outbreak, be prepared to redirect existing vaccine stock to a mass vaccination programme in the outbreak region.

The strategy will require constant review, in particular of the developing evidence around the need to vaccinate children and young people to achieve collective immunity.

Staying at home when required

Ultimately, Covid-19 transmission only ceases when people who are infectious are no longer mixing with people who are susceptible (ie, through isolation and quarantine). To enable these vital outbreak control measures to be effective:

- Thousands of contacts are now being asked to stay at home, as is any person experiencing respiratory symptoms, requiring systematic provision of adequate payment in the [Leave Support Scheme](#) and other initiatives such as the [COVID-19 Short-Term Absence Payment](#);
- The Ministry of Health will need to communicate to the public and the health workforce that the indications for Covid-19 testing include cold symptoms (sore throat, running nose, and headache), to match up to the Delta variant symptom profile;
- If a lockdown is required, a high level of support will be needed to protect the wellbeing of the population. Resources for population wellbeing include maintaining food security and sovereignty, access to healthcare, access to learning and other school-based support for children and young people, and much more. We note the leadership shown by Māori and Pasifika communities in providing this essential support during previous lockdowns. An upgraded Alert Level system needs to provide additional resources for this support and to uphold Te Tiriti o Waitangi, in particular

the principle of Mana motuhake (self-determination).

Upgrading Trans-Tasman Bubble settings

Given the new variants and the current Wellington experience, there is a case for tightening Trans-Tasman Bubble settings. The NZ Government needs to lower the threshold for early suspension of travel from a particular Australian State or Territory, if there is a risk of community spread in such a jurisdiction. The Government may also need to require earlier and longer adoption of pre-flight testing requirements for travellers from these Australian jurisdictions at times of heightened risk. A review around optimising mask type and mask use on Trans-Tasman flights could also be performed. Finally, mandatory use of the Covid Tracer App for arriving travellers for the first two weeks should be seriously considered. Requiring use of the app for entry into high-risk settings, as described above, would provide a strong incentive for travellers to use it.

In summary, Aotearoa NZ's effective Covid-19 elimination strategy is now threatened by the global emergence of new variants with increasingly high transmissibility. Urgent responses include upgrading the Alert Level system with a particular focus on mask use, making the Covid Tracer App compulsory for high risk indoor venues, rapidly vaccinating all remaining border and frontline health workers, ensuring that all New Zealanders are able to stay at home when required, and upgrading the Trans-Tasman Bubble settings to reflect the shared risk across both countries.

Lead image by Luke Pilkinton-Ching, University of Otago Wellington.

References

1. O'Dowd A. Covid-19: Cases of delta variant rise by 79%, but rate of growth slows. *BMJ* 2021; **373**: n1596.
2. Campbell F, Archer B, Laurenson-Schafer H, et al. Increased transmissibility and global spread of SARS-CoV-2 variants of concern as at June 2021. *Eurosurveillance* 2021; **26**(24): 2100509.
3. Kvalsvig A, Wilson N, Chan L, et al. Mass masking: an alternative to a second lockdown in Aotearoa. *N Z Med J* 2020; **133**(1517): 8-13.
4. Kvalsvig A, Wilson N, Davies C, Timu-Parata C, Signal V, Baker MG. Expansion of a national Covid-19 alert level system to improve population health and uphold the values of Indigenous peoples. *The Lancet Regional Health - Western Pacific* 2021; **In press**.

Public Health Expert Briefing (ISSN 2816-1203)

Source URL: <https://www.phcc.org.nz/briefing/urgently-upgrading-nzs-covid-19-response>