PUBLIC HEALTH COMMUNICATION CENTRE AOTEAROA

COVID-19, Christmas, the New Year and Summer Holidays: What the NZ Government and individuals can do to minimise the risks

16 December 2021

Jennifer Summers, Amanda Kvalsvig, Julie Bennett, Lucy Telfar Barnard, Michael Baker

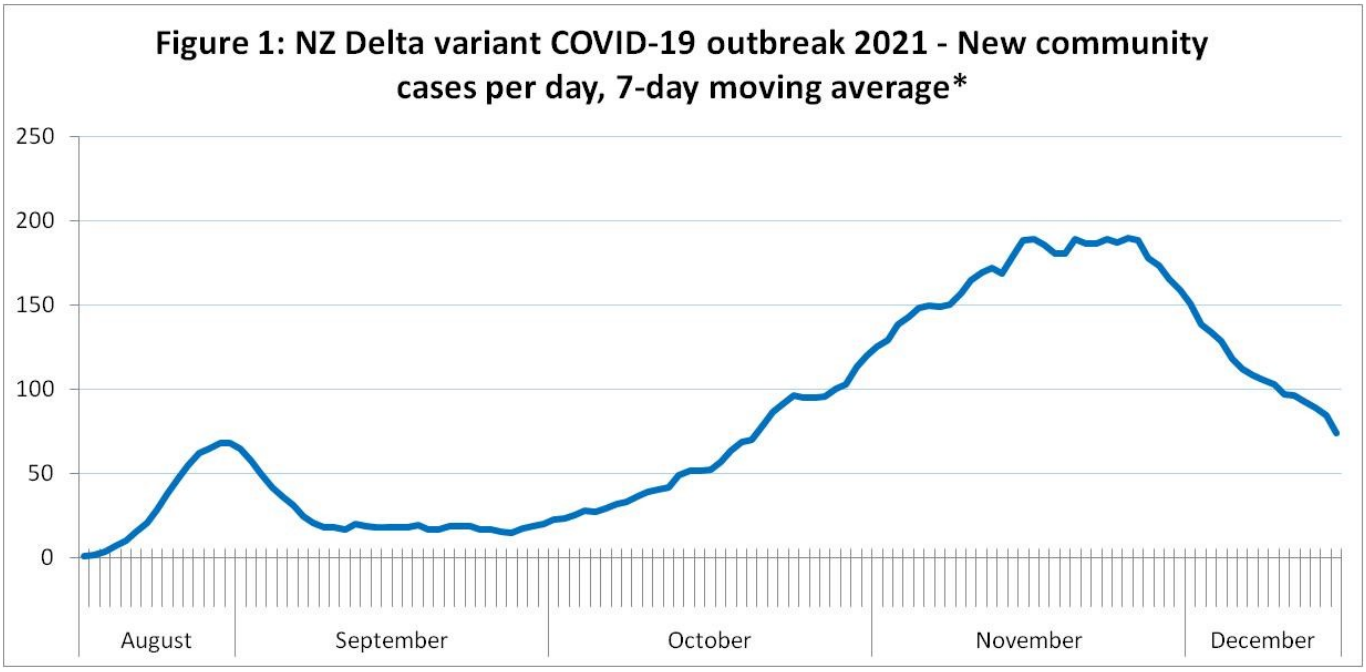
As Aotearoa New Zealand (NZ) prepares for the upcoming summer holidays and Christmas celebrations, the impact of COVID-19 will surely be felt by all. In this blog we briefly discuss the two major COVID-19 threats that NZ will need to manage between now and the end of January: New Zealand's domestic Delta variant outbreak and the growing international Omicron variant threat. Both require policy responses from Government and action from all New Zealanders.

The COVID-19 pandemic is again intensifying in Europe, with COVID-19 becoming the leading cause of death, and life expectancy declining in Europe and North America.[1] This worsening situation is being driven by the ongoing Delta variant outbreak and now the new Omicron variant. Combined with the impacts of health inequities, misinformation, and vaccine hesitancy, there is no room for complacency in managing COVID-19 in NZ.

COVID-19 Delta variant outbreak in NZ

Since the onset of the pandemic in NZ, there have been over 13,000 COVID-19 cases in the community, and 47 individuals have lost their life to COVID-19. NZ is now in day 121 of a sustained Delta variant outbreak (figure 1). While daily case numbers are declining, the outbreak is becoming more widespread across NZ and more concentrated in Māori and Pacific populations (who make up 75% of cases). Therefore, the loosening of the Auckland boundary on 15 December and the upcoming Christmas and summer holidays bring NZ's COVID-19 response to a pivotal moment.

Under the current COVID-19 Protection Framework or traffic light system, individuals wanting to leave Auckland must be fully vaccinated with a vaccine pass, or have evidence of a negative COVID-19 test prior to travel. However, even with the range of vaccination/testing requirements under this temporary border restriction, COVID-19 will very likely spread further throughout NZ over the following weeks and months, something the NZ Government itself acknowledges in released Cabinet papers. The current heavy dependence on vaccination and testing, with very few other public health protections, allows many opportunities for the virus to spread. For example, vaccination/testing requirements do not currently apply to children aged under 12 years and 3 months, therefore it is likely that children will contribute to the spread of COVID-19 across NZ. This risk may increase further from 18 January 2022, when all restrictions on travel out of Auckland are removed (i.e. no vaccination or testing requirements), although we note that vaccination/testing and mask wearing requirements for those aged over 12 year olds and 3 months will remain on domestic Air New Zealand flights and Interislander ferries until at least 31 March 2022.



*Data from Ministry of Health for the period 17 August to 15 December 2021

Threat of importing the Omicron variant

Throughout the COVID-19 pandemic, several variants of the original wild type virus have emerged. All viruses mutate and evolve over time, so the emergence of new SARS-CoV-2 variants is not unexpected. New SARS-CoV-2 variants are an ongoing concern because the genetic changes may reduce our ability to contain the virus, (through a mix of increased transmissibility and decreased vaccine efficacy), reduce our ability to diagnose and treat COVID-19 effectively, and also alter virulence, potentially making infection more serious and lethal. The World Health Organization designates new variants with these characteristics as variants of concern (VOC).

The Omicron VOC was first identified by South African scientists on 25 November 2021 and is reported to have at least 30 mutations related to the spike protein. These changes are a concern as COVID-19 vaccines, such as the Pfizer-BioNTech vaccine used in NZ, partly work by providing individuals with immune protection against the spike protein that limits its ability to attach to cells and cause illness. A recent press release by Pfizer-BioNTech using preliminary data suggests that the vaccine is still somewhat effective with two doses, but after three doses (two shots + a booster) the vaccine's effectiveness is similar to the levels of antibody response observed with two doses against the original SARS-CoV-2 strains. Similar findings have been observed for the AstraZeneca vaccine in response to Omicron in the UK.

NZ is closely monitoring the Omicron variant situation internationally to help guide our response. We continue to quarantine all arrivals in MIQ, which provides protection against importing Omicron. NZ has also followed the response of other nations by placing travel restrictions on several southern African countries. It sequences all cases of COVID-19 identified in MIQ or amongst border workers, which will identify an expected increase in Omicron cases arriving here.

In the event of a major outbreak from, for example, a new and more virulent SARS-CoV-2 variant (which Omicron may or may not be), the current traffic light system is not specifically designed to include implementation of localised or national lockdowns (unlike the original Alert Level system). COVID-19 Response Minister Chris Hipkins states that there is a possibility of returning to the original alert level system, if necessary, using the example of a vaccine-resistant variant circulating in NZ.

Current MIQ requirements mean that eligible travellers entering NZ generally must complete 7 days in MIQ followed by 3 days home quarantine. However, requirements are stricter for those arriving from countries deemed 'very high risk' of which there are currently ten nations (nine from southern Africa). Travellers coming from the 'very high-risk' nations to NZ, or who are not fully vaccinated, are still required to complete the full 14 days in MIQ (unless exempt).

Quarantine-free travel with Australia is currently scheduled to re-open on 17 January 2022 to NZ citizens and other eligible travellers (such as residence-class visa holders) who are fully vaccinated, although Cabinet will reassess this decision in early January. This reopening means eligible travellers will have no requirement to stay in MIQ but will instead have to undertake home quarantine. From 13 February, quarantine-free travel will also be further extended for NZ citizens and eligible travellers from other countries (but excluding countries on the 'very high-risk' list). The current plan is also to further open NZ's borders

to foreign nationals from April 2022.

With the numerous changes to borders both domestically and internationally, there are multiple time points where the COVID-19 response will be substantially altered, thereby changing the risk profile of COVID-19 spread in NZ (figure 2).

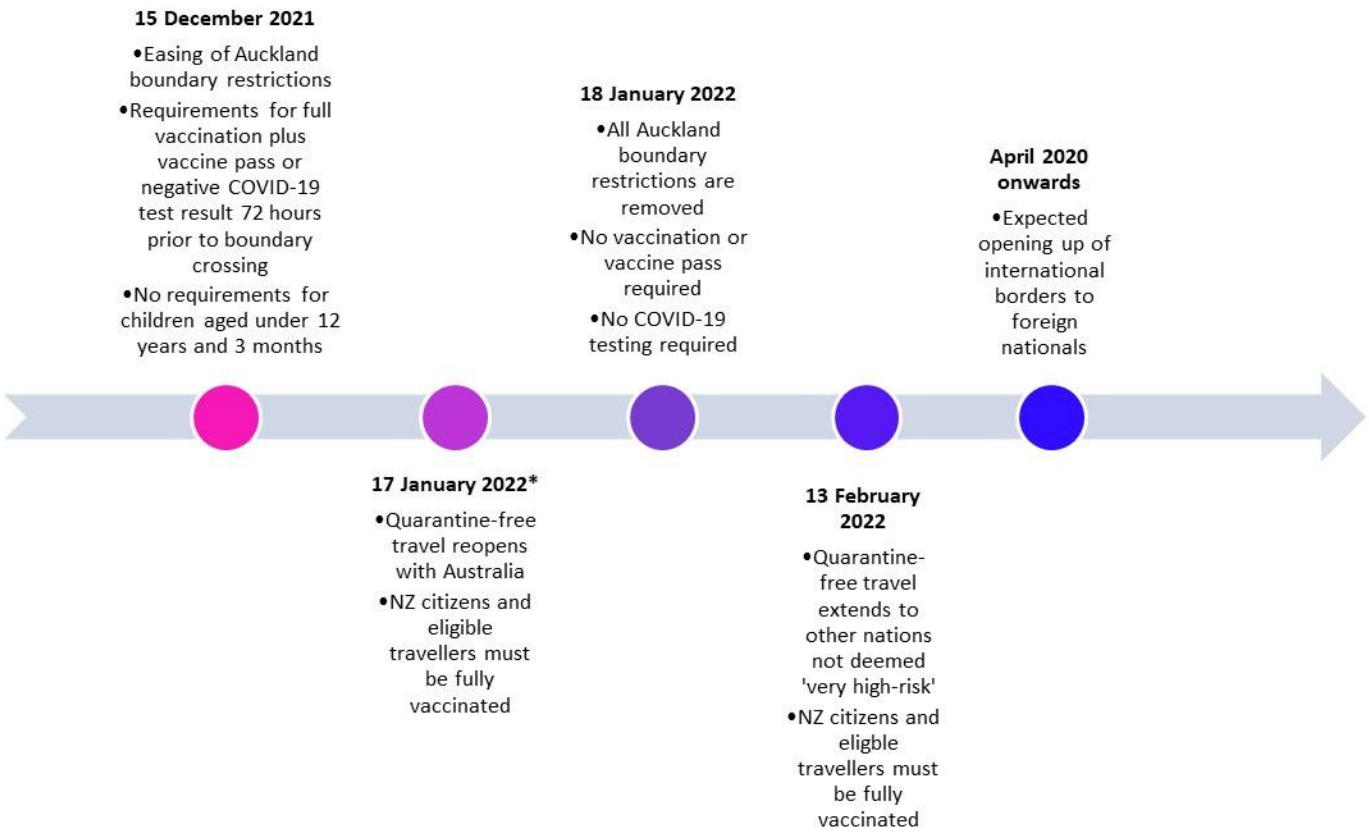


Figure 2: Current timeline of significant dates in relation to the COVID-19 response in NZ and domestic/international borders

*The scheduled reopening of quarantine-free travel to Australia is set to be reviewed in early January 2022 by Cabinet.

Actions to improve the COVID-19 response in NZ

Strong and effective leadership from the NZ Government and relevant agencies is needed to reduce the impact of COVID-19 in NZ over the next few months and further into the future. Therefore, we strongly recommend the following actions to aid the management of the ongoing Delta outbreak in NZ and other variants in the future:

- **Keep all areas of NZ in Orange or Red** at least until the effects of moving from the Alert system to the traffic light system are clear. The Green light level largely offers additional freedoms for unvaccinated people so it should not be considered until NZ achieves very high vaccine coverage.
- **Continue targeted measures to raise vaccine coverage for disadvantaged groups**, notably Māori and Pacific communities, those with disabilities, and those with alcohol and other drugs (AOD) dependency.
- **Take action to prevent airborne spread** and strengthen public health messaging about this vital protection (including ventilation, staying outdoors, and mask use as per below).

- **Extend the mask wearing requirements to 6-11 year olds** for domestic flights and Interislander ferries (unless exempt). These rules should align with the World Health Organization (WHO) mask wearing recommendations for children.
- **Ensure effective enforcement of testing and vaccination requirements** for travelling through the Auckland boundary using sufficiently high levels of routine inspections and deterrent fines.
- **Upgrade and further develop the current COVID-19 testing policies** to improve detection of infected people, in particular those leaving Auckland. The recently introduced Rapid Antigen Testing (RATs) rules for public use should be adapted, as the current plan to use RATs (provided in approved pharmacies) has many flaws. RATs have lower sensitivity than PCR tests and are therefore less likely to pick up COVID-19 cases, particularly among asymptomatic individuals (sensitivity in this group varies, but international studies have reported between <40% and <60% sensitivity in asymptomatic individuals).[2, 3] This limitation means individuals using a RAT and then travelling across the Auckland boundaries may be falsely assured that they do not have COVID-19, when in fact they do – thus spreading COVID-19 amongst *whānau*/friends.
    - **Make the public more aware of the possibility of false negatives and false positives**, along with the potential implications of incorrect results in terms of spreading the virus.
    - **Extend the PCR testing capabilities nationally** to more adequately allow for effective screening of vaccinated and asymptomatic people where RATs have low sensitivity.[4, 5]
    - **Develop a national testing strategy designed from systematic assessment and modelling of risk.** Such a strategy could determine the optimal timing of tests relative to travel, type of tests (PCR and/or RAT), when to repeat tests, and how to interpret a negative test. This strategy would enable the public to have the best possible advice to reduce the spread of the virus, but also to avoid overloading the PCR system.
- **Communicate key COVID-19 safety messages to the public – see Appendix** for some key messages that the Government could disseminate as part of its COVID-19 response.

Actions to protect New Zealand from the Omicron variant threat

We are very concerned about the loosening of the international borders at a time where we are aware of a new VOC that is rapidly emerging across the globe. However, there are actions that NZ can take to protect the country from the threat of the Omicron variant.

- **Delay loosening of international borders until a full risk assessment can be conducted on the Omicron variant**. NZ Government plans to loosen travel restrictions in January-February 2022 could be delayed to assess how this new strain is behaving overseas.
- **Accelerate the 'booster' 3rd dose** of the vaccine in NZ through targeted media campaigns and potentially reduce the 6 month gap between the 2nd and 3rd doses. NZ could follow the approach adopted overseas where the time gap has been reduced to 5 months in Australia and 3 months in the UK. In particular, the gap should be reduced promptly for older and other at-risk populations. It may be useful to plan for combined COVID-19 and influenza vaccination given the likelihood of a severe influenza season in 2022.
- **Expedite vaccination of 5-11 year-olds**, prioritising at-risk groups to protect

children from the effects of COVID-19 infection, and increase population immunity.
- **Introduce an upgraded Alert Level system** to respond more effectively to emerging threats such as Omicron, and to avoid having to 'revert' to the original alert system which is now out of date. In the meantime the traffic light system's scope should be extended to include more indoor environments, notably travel accommodation such as campsites and motorcamps that provide shared facilities at Red and Orange levels (such as shared dining areas where masks need to be removed to eat/drink).
- **Develop an Aotearoa NZ mask strategy** as a basis for increasing the effective use of high-quality masks. Masks are effective against all COVID-19 VOCs. A strategy is needed to ensure high uptake, particularly indoors, and suitable quality standards.

In summary, the upcoming Christmas, New Year and summer holidays overlapping with the loosening of internal and external borders, the ongoing Delta outbreak in NZ, and the threat of a new VOC, will be a significant period in our COVID-19 response. Furthermore, NZ has now moved away from a national COVID-19 elimination strategy with the introduction of the new COVID-19 Protection Framework.[6] We have recommended a range of Government initiatives that could further strengthen the ongoing pandemic response, thereby reducing cases and deaths, protecting populations at risk, and preventing the health system from being overwhelmed. Lack of measures to prevent airborne spread is a major gap in NZ's pandemic response. Without this protection we should all be prepared for extensive spread of COVID-19 in our communities in the near future as eradication of COVID-19 becomes an unlikely scenario. We need to use this time wisely to prepare before the winter season; to vaccinate; and to protect our nation.

*** Author details:** All authors are with the Department of Public Health, University of Otago, Wellington.

Appendix: Actions which individuals and whānau can take to reduce their COVID-19 risk

There are steps that all New Zealanders can take as individuals and families to minimise the risk of becoming infected with SARS-CoV-2 and passing this virus on to others.

- **Make sure you have had both vaccines, and if eligible, get a booster dose** (prepare for Omicron). Get vaccinated before travelling – ideally completing your vaccination at least two weeks before travelling – to reduce your risk of contracting COVID-19 and also of infecting others. Furthermore, as vaccination reduces the chance of COVID-19 infection, it also reduces the risk of long-term health implications such as neurological impacts,[7] psychological effects and long COVID.
- **Use a well-fitted mask when indoors with others who are not part of your family group.** In general, everyone (over 6 years of age as per WHO guidance) should wear a well-fitted mask with good filtration – whether shopping, on public transport, in education/health facilities and in high-risk settings, such as gyms. Wear a mask if you are vaccinated or not and wear it well (cover both the mouth and nose).
- **Arrange to have events outdoors and in well ventilated places.** When at home or holiday accommodation open as many windows as possible, especially if socialising with other groups, and stay outdoors when you can.
- **Avoid contact with unvaccinated people when indoors,** which is the main requirement when following the traffic light system. Remember that you are safer if, when indoors, you associate only with vaccinated people.
- **Avoid non-essential travel outside your home region** over the coming months

when there is local community transmission.

If you are travelling, consider the following (along with the above guidance):

- **If travelling from Auckland, or anywhere which has local transmission,** consider the following specific precautions before travelling:
- **If staying with others and socialising with them, talk with them in advance about their vaccination status**. This conversation could help you to take steps to avoid infecting them, as well as nudge unvaccinated people into getting vaccinated.
- **Avoid visiting whānau and friends who are not vaccinated, or are considered high risk**, as they are particularly vulnerable to infection (e.g. immunocompromised). Furthermore, a fully vaccinated person can still infect others with COVID-19.
- **Consider pre-travel COVID-19 testing to further protect vulnerable whanau and friends** you may be visiting over the holidays. This precaution may be particularly important for children who are currently too young to be vaccinated (although we anticipate this to change in the next few months).
- **Familiarise yourself with requirements that will apply if you get exposed or infected while away from home**. It is likely that many individuals travelling over the Christmas and summer holidays will be exposed to COVID-19, and potentially test positive. If this happens, isolation requirements will differ depending on where individuals are; facilities available in the local area; and how far from home individuals are in the country. An individual who tests positive for COVID-19 can return home to isolate in certain circumstances. Alternative forms of community isolation may be used where an individual who is required to isolate cannot return home and has no suitable local alternative.[8] In these cases, 'mini-MIQ' facilities may be used; however, it is still unclear what procedures and protocols will be in place to manage isolating cases. There is also no current guidance on how to deal with superspreading events in NZ, where there may be a deluge of COVID-19 cases (or potential cases) in a certain location which may be away from the larger established MIQs in the main cities.

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Public Health Expert Briefing (ISSN 2816-1203)
