

Briefing

Health system readiness for reopening: parameters in light of Delta

Date due to MO: 28 September 2021

Action required by: N/A

Security level: IN CONFIDENCE

Health Report number: 20212079

To: *Reconnecting New Zealanders* Ministerial Group

Contact for telephone discussion

Name	Position	Telephone
Dr Ashley Bloomfield	Director-General of Health	s 9(2)(a)
Robyn Shearer	Acting Chief Executive	s 9(2)(a)

Minister's office to complete:

☐ Approved

☐ Decline

☐ Noted

☐ Needs change

☐ Seen

☐ Overtaken by events

☐ See Minister's Notes

☐ Withdrawn

Comment:

Health system readiness for reopening update: parameters in light of Delta

Security level: IN CONFIDENCE **Date:** 28 September 2021

To: *Reconnecting New Zealanders* Ministerial Group

Purpose of report

1. The report outlines a high-level direction for health system readiness for reopening based on lessons from the Delta outbreak. The settings proposed in this paper are mapped out to ensure that future incursions through more open borders can be kept to manageable levels.

Summary

2. New Zealand has been recognised internationally for success in managing COVID-19. The Elimination Strategy has provided a reliable and adaptive framework for blocking the virus at the borders and managing the few incursions into the community. Throughout this time the health system has remained agile in responding to and planning for the changes in the virus, adjusting public health measures and to managing specific risks.
3. To protect the hard-won gains, there is significant work required in the next few months to prepare our health system for the reopening. The preparation for the next phase of our COVID-19 response needs to account for the learnings from our journey so far, particularly the lessons from the Delta outbreak.
4. Critical to our reopening and ongoing response in the short-term is maximising vaccination uptake which will reinforce protection for our population and health system by reducing serious illness and disease.
5. The other significant priority for the Ministry of Health (the Ministry) is to build health system readiness so it can manage COVID-19 in a sustained and sustainable manner. The key objective in reconfiguring the health system to manage COVID-19 cases in the community will be two-fold:
 - a. Keep the number of people who get COVID-19 as low as possible.
 - b. Manage people with COVID-19 with the lowest level of appropriate input to meet health and social needs.
6. A 'health system readiness' work programme (the programme) has been set up at the Ministry that intends to coordinate work across the New Zealand health system to make

sure that there are sustainable plans in place to manage any recurring community resurgences of COVID-19.

7. The key areas of the programme include workforce capacity and innovation, testing and surveillance, hospital readiness and capacity, facility and equipment supply, data and digital, equity challenges, and primary and community level models of care for the management of COVID-19, and equitable distribution of resources across communities and regions in New Zealand. In the long-run, the programme aims to create a COVID-19 response model that will align with and deliver on the aspirations for the 'health and disability system transformation'.
8. Based on international experience and modelling scenarios, it is likely that even with high levels of vaccination in New Zealand, any transition towards more open borders should be gradual, carefully balancing goals and risks, to ensure that an increase in cases and hospitalisations can be managed by the health system without compromising other care.
9. Therefore, intrinsic to New Zealand's ability to open its borders is the health system. This will allow us to reduce harm and protect the capability and capacity of our health system and the community well-being it serves.
10. This paper provides a high-level outline of how the health system might best be adapted based on what we know from the Delta outbreak. Further, more comprehensive advice will be provided in the November *Reconnecting New Zealanders* Cabinet paper.

Recommendations

We recommend you:

- a) **Note** that the health system has succeeded in responding system-wide to outbreaks and it must continue to remain agile, vigilant, and responsive to the ever-changing threat of COVID-19. **Yes/No**
- b) **Note** that further significant investment in the health system is required to ensure that future incursions through more-open borders can be kept to manageable levels without causing an unacceptable level of harm to health. **Yes/No**
- c) **Note** that high vaccination uptake among all population groups remains the best means of keeping virus infections to manageable levels. Therapeutics will also play an increasing role in supporting COVID-19 response. **Yes/No**
- d) **Note** that key areas of focus for health settings reconfiguration will include boosting workforce, testing and other surveillance; community level management of COVID-19 cases; and equitable distribution of health resources to diverse communities and regions of New Zealand. **Yes/No**
- e) **Note** that opening New Zealand's border, even with a highly vaccinated population, is likely to cause an escalation in cases, disease, and deaths **Yes/No**
- f) **Note** that the Ministry of Health is progressing a significant programme of work to prepare New Zealand's health system and readiness for reopening, including the National Health Resilience Plan. **Yes/No**

- g) **Note** that the required health system reconfiguration for reopening New Zealand will require significant investment and building greater community participation, both of which will take time. **Yes/No**
- h) **Note** that decisions around desired settings for New Zealand reconnection will be critical in mapping out the detailed health system requirements. **Yes/No**
- i) **Note** that the Ministry of Health will report back with a more detailed health system readiness plan in the November *Reconnecting New Zealanders* Cabinet paper. **Yes/No**



Dr Ashley Bloomfield
Te Tumu Whakarae mō te Hauora
Director-General of Health
Date:

Rt Hon Jacinda Ardern
Prime Minister
Date:

Hon Grant Robertson
Minister of Finance
Date:

Hon Chris Hipkins
Minister for COVID-19 Response
Date:

Hon Nanaia Mahuta
Minister of Foreign Affairs
Date:

Hon Kris Faafoi
Minister of Immigration
Date:

Hon Michael Wood
Minister of Transport
Date:

Hon Peeni Henare
Associate Minister of Health (Māori Health)
Date:

Hon Dr Ayesha Verrall
Associate Minister of Health
Date:

Hon Aupito William Sio
Associate Minister of Health (Pacific Peoples)
Date:

Hon Meka Whaitiri
Minister of Customs
Date:

Health system readiness for reopening update: parameters in light of Delta

Opening New Zealand's borders and reconnecting with the world poses a significant challenge to the health system

11. New Zealand has been recognised internationally for success in managing COVID-19. The health system has remained agile in responding to and planning for the changes in the virus, adjusting public health measures and managing specific risks.
12. Delta is highly transmissible, more so than the original COVID-19 and Alpha strains. It has required us to rethink the settings under the Elimination Strategy and to tighten our public health controls, particularly at lower Alert Levels wherein there are fewer restrictions on movement and socialising.
13. The outbreak has highlighted areas that require significant investment in our health system and has demonstrated that the existing system is not adequately equipped to respond sustainably to a lasting incidence of COVID-19 in the community and to increasing threats of incursions, particularly as we reopen the borders.
14. Once New Zealand starts to loosen border controls and reconnect with the world, it can be expected - based on the experiences of comparable countries such as Australia and Singapore - that even with high levels of vaccination, COVID-19 will enter our community steadily. However, the settings at the border will continue to maintain controls against the entry of COVID-19 into New Zealand, including risk-based entry pathways.
15. In a reconnected future, responding to individual cases as we do now will not be possible. Therefore, it is to be expected that even the anticipated low-level presence of COVID-19 in the New Zealand community would lead to an escalation in cases, disease, and deaths, and an increased pressure on our health and welfare systems.

Vaccination and therapeutics have the potential to provide significant protection

16. Overseas evidence has shown that vaccination results in a significant reduction in serious illness from COVID-19 infection. Minimising this serious illness is vital to lowering the burden on our healthcare system.
17. The COVID-19 Immunisation Programme has the potential to significantly reduce the risk and impact of COVID-19 for New Zealand. High uptake continues to be key to providing a level of personal protection and preventing severe outcomes from COVID-19, including associated hospitalisation and death.
18. The success of the Immunisation Programme will be measured by several key factors and not just achieving a vaccination target. This reflects both the uncertainty around COVID-19 and the evolving risk but also our developing understanding of the effectiveness of vaccines. Maintaining an efficient, equitable, safe, and positive vaccination experience for New Zealanders will ensure success not only in 2021 but also if COVID-19 vaccination needs were to change in the future, as expected.

19. Even then, children under age 12 and some communities with vaccination rates lagging the national average will remain at risk, so the health system must improve other prevention, mitigation, treatment, and social support measures for those who become infected or are impacted by illness and related disruption.
20. Therapeutics have the potential to play a much bigger role in mitigating these consequences in future. To date, therapeutics have enabled better care for people with moderate to severe and critical COVID-19 in hospital and ICU care. Within the coming months to a year or so, they could provide substantial protection for those for whom vaccination is not fully effective or not able to be used.

COVID-19 will continue to impact on all aspects of our health system

21. The current priority for the Ministry of Health (the Ministry) is to ready the health system to make it more agile, better equipped, and more vigilant and responsive to the ever-changing threat of COVID-19. This readiness work will require significant investment, as well as building community participation and public buy-in, all of which will take time.

Learning from the Auckland outbreak: building health system resilience and readiness for reopening

22. Throughout 2020 and the first half of 2021 the health system adapted well to what it was learning from the early response here and lessons from other countries. The Elimination Strategy, with its four pillars of 'keep it out', 'prepare for it', 'stamp it out' and 'manage the impact' provided a reliable and adaptive framework for blocking the virus at the borders, containing the few incursions beyond MIQ and all the while building capability and capacity to manage larger incursions.
23. As the Delta outbreak in Australia demonstrated, this variant of concern changes the risk calculus. New Zealand's response to the August 2021 Delta outbreak has further highlighted system constraints that need to be addressed to build a more resilient and durable health system prepared to manage the increased cases in the community expected in a reconnected New Zealand in a sustained and sustainable manner.

Regional distribution of health resources will be key

24. Opened borders and increased travel will attract tourists to regions significantly less resourced than Auckland. Given what we have seen in Auckland, a similar outbreak in any other region could threaten both the system and communities there.
25. Currently, the health system is supporting Auckland in this outbreak. With a wider geographical spread of COVID-19 likely in the future, regional distribution of health resources will become more important to responding effectively, consistently, and equitably to an outbreak wherever it might occur.

Public health control measures will remain critical to protect against COVID-19

26. If we cannot keep the virus at a manageable level within the community the health system could become overwhelmed. Auckland's experience under the current Delta outbreak demonstrated this risk and has thrown light on how the system as a whole can prepare for future incursions of this or more harmful variants of concern.

27. For the health system to cope, it is likely a greater emphasis will be placed on control measures at lower alert levels. Ongoing mask wearing in wider contexts may be necessary, limitations on gathering sizes may need to continue in higher-risk settings, and the emphasis on scanning will need to continue. These will, however, support wider community activities with greater confidence the risk of virus spread is being minimised.

Workforce remains a key pressure point across all COVID-19 response settings

28. Responses to COVID-19 will place demands on different parts of our health workforce and at different times. In the early elimination approach, testing and tracing, along with MIQ facilities, required the most workforce resource. More recently the scaling up of the vaccination programme has required an augmentation of the capacity for the pre-Delta rollout, meaning staff performing non-COVID-19 health functions had to be redeployed.
29. Similarly, staff for testing and contact tracing have in many cases been redeployed from other activities. One result has been a demand surge for those pre-outbreak services when Alert Levels de-escalate, and patient access again became possible.
30. Once the current outbreak demands reduce, ongoing health impacts – including mental health - are likely to increase. This will place further pressure on an already stretched workforce, including hospitals outside of Auckland and primary care services that have been peripheral to, or spared by, the response. If a later outbreak were to cause sustained transmission in multiple regions, the impacts would be distributed across the entire health system; the capacity to shift staff from outside of Auckland to reinforce the workforce there would be limited.
31. The Ministry is considering strategies to address the ongoing challenges of workforce capacity and capability, and prepare for the influx of cases following border reopening. These strategies include:
- a. Maximising productive use of the existing workforce, including preparing people for working in different roles and specialities, to match evolving needs in different regions.
 - b. Reducing the demand on the workforce, especially as cases become endemic in the community. It will be important to ensure that people impacted by COVID-19 but who do not require acute, or specialist healthcare are supported to be treated and to recover in their homes and communities.

Management of COVID-19 needs to be rebalanced in favour of community and primary care

32. While it is important to ensure there is sufficient capacity and capability at secondary and tertiary care level (e.g., sufficient ICU capacity, personal protective equipment), international evidence and the experience in Auckland have shown that whilst community cases will require management and monitoring of symptoms, most will not require admission to hospital.
33. However, communities must feel confident in managing COVID-19 locally in order to minimise that impact on the overall system. The most effective and efficient way to manage COVID-19 locally will be to:

- a. enable families and communities to manage mild illness
 - b. enable primary care to manage moderate illness
 - c. identify those who need hospital care early
 - d. facilitate access to hospital for those who need it
 - e. discharge as early as possible to appropriate community care.
34. Understanding the key risks faced by different communities, and the gaps in the overall government response to COVID-19, is a key part of managing COVID-19 and keeping communities engaged in the COVID-19 response. It is also integral to the government meeting its obligations under Te Tiriti o Waitangi, in particular the principles of active protection and equity.

Impacts on diverse communities of New Zealand need to be managed appropriately

35. COVID-19 impacts on the diverse communities of New Zealand in several ways:
- a. Some communities are more at risk than others of exposure to COVID-19, and therefore have been subject to greater restrictions and requirements. For example, the border workforce has many Māori and Pasifika staff, many of whom live close to border entry points where border outbreaks have begun.
 - b. Similarly, some communities, including Māori and Pasifika, are more at risk of developing severe illness should they contract the virus compared to the community as a whole.
 - c. Some communities are more negatively impacted by measures to contain spread when outbreaks occur, including people in less stable accommodation and employment and lower socioeconomic areas. Denser occupancy and poorer quality of housing are more common in these circumstances.
36. Individuals and communities can experience one or more of these impacts concurrently - particularly Māori and Pasifika, who are over-represented in many of these categories as evidenced during the Delta outbreak. The Ministry is actively working with Te Tiriti partners and key stakeholders from across the Māori and Pasifika health sector network to understand and address emerging challenges and opportunities related to the current COVID-19 outbreak.

Enhanced surveillance and testing will be a key feature of the future response

37. Testing has been critical in early detection of cases, managing the Delta outbreak and providing the evidence required to act in a targeted, decisive fashion. However, the outbreak has also exacerbated the strain on the testing workforce and laboratory capacity.
38. In the next phase of living and dealing with COVID-19 once borders reopen, we need a high level of surveillance that will support early identification of cases; targeted responses to potentially escalating case numbers will be key.

39. The Ministry's COVID-19 Surveillance Strategy has been refreshed and will act as a baseline for an iterative process of continuous improvement and adaptation to the changing context as New Zealand reopens.
40. It is expected that testing will move from a focus on travellers and the border to the community, entailing more testing in community settings (though border testing will remain an important control).
41. To support this transition, significant investment in new testing technologies as well as more testing capacity including testing workforce and laboratories will be needed.

Work is underway to prepare New Zealand's health system and readiness for reopening

The health system readiness plan is underpinned by two key objectives

42. The potentially endemic presence of COVID-19 in our community will shape our approach to managing cases, and it is likely our key objective within this context will be two-fold:
 - a. Keep the number of people who get COVID-19 as low as possible.
 - b. Manage people with COVID-19 with the lowest level of appropriate input to meet their needs.

The Ministry is continuing to map out the detailed health system requirements

43. Significant work is underway across the New Zealand health system to make sure that there are plans in place to manage any recurring community resurgences of COVID-19. The Ministry's health system readiness work programme (the programme) is coordinating activities required to manage responses in a sustainable way. **Appendix 1** contains a high-level overview of the programme plan.
44. The Auckland response has shown that the most immediate pressures are in resource capacity, primarily our health workforce, but also our physical capacity. While there needs to be some short-term solutions, it is imperative the health system readiness planning takes into consideration a long-term view to ensure that the system remains agile, equipped to manage ongoing risk of COVID-19.
45. Significant investment and funding, both in the short and long-term will be critical in enabling this readiness programme. The programme will:
 - a. consider capacity and capability across care settings, including public health, primary and community care, hospital, and critical care services.
 - b. take a functional view to make sure dependencies across care settings are identified and factored into planning. This includes aspects across workforce training, models of care and physical environment (facilities and supplies).
 - c. engage with Māori and Pasifika to ensure our measures for priority populations are planned for, and equity of access to services is a central consideration when planning activity.

Short-term priorities (next 6 months)

46. The next six months will focus on tactical strategies to expand core health system capacity, including targeted investment for facilities and equipment, initiatives for growth and training development of the health workforce, and further development of models of care to optimise our collective health system responses.
47. Alongside the immediate response efforts, work to develop a *National Health Resilience Plan* is underway starting with the Northern Region. This plan has a longer horizon and will make sure our health system can manage any community resurgences in a sustainable way. The plan will consider care settings broadly, including public health, primary and community care, and hospital care.

Long-term priorities (12-24 months)

48. A key element of building long-term resilience is strengthening the capability and capacity of the public health system. The public health system will be at the core of strengthening the overall readiness of the health system and evolve its settings (eg surveillance and testing) to respond to ongoing threat of COVID-19.
49. As part of the health and disability system reforms, the public health operating model is currently being developed. It sets out the key public health functions and how they will be carried out across the system. It will be in place by July 2022. At the same time, establishment of the interim Public Health Agency has commenced. Key elements of this work are how population health will be embedded across the system and bolstering the public health knowledge system to respond to health threats in a timely way.

Our approach to responding to COVID-19 in the community determines the health system capacity required

50. Decisions around our strategic approach to response will impact on both the scale of the health system capacity required, and also on the weighting of capacity across different elements of the health system.
51. There is a series of key inputs within the strategic approach that will feed into and shape the Ministry's ongoing work on preparing the health system to be as successful as possible. These key inputs include:
 - a. expectations around vaccination uptake generally and in vulnerable communities
 - b. evidence about the impact of vaccination on serious illness and transmission
 - c. clear intent and direction on the use of control measures in different contexts at lower Alert Levels
 - d. the ongoing approach to surveillance and testing, including resourcing levels – both residual and surge.
52. These and other inputs are needed to produce clear modelling to contribute to a baseline of understanding for determining the capacity and capability that may be needed to get our health system ready for a reconnected New Zealand.

Equity

53. The risk of negative health and non-health impacts of COVID-19 will disproportionately affect at-risk populations such as older people, disabled people, Māori, Pacific peoples, and those in low socioeconomic areas, who are likely to experience co-morbidities, and already face inequities in both access to health care, and overall health outcomes. These are likely to be exacerbated and need to be proactively managed through equitable distribution of our health system resources.
54. We must also take into consideration the downstream effects of health system capacity to address issues other than COVID-19, including cancer, diabetes, and cardio-vascular disease, immunisation, will have further significant impacts on Māori and Pacific people. Other broader impacts of COVID-19 include delays to seeking healthcare due to insufficient staffing, healthcare staff contracting COVID, resulting in staff shortages, high occupancy rates in hospitals that are already at capacity.

Next steps

55. The Ministry will further refine and finalise the advice on New Zealand's health system readiness plan for reopening, including the health system readiness plan and explore in more detail the interdependencies highlighted in the response, implications for easing the border, and options available to Ministers for investment in the health system. This advice will be provided for consideration as part of the Reconnecting New Zealanders Cabinet paper in November.

Appendix 1: Health System Readiness Programme overview

Vision: Ensuring safe and sustainable healthcare delivery as Aotearoa

Purpose: The health system is more agile, better equipped, more vigilant and increasingly responsive to the changing threat of COVID-19.

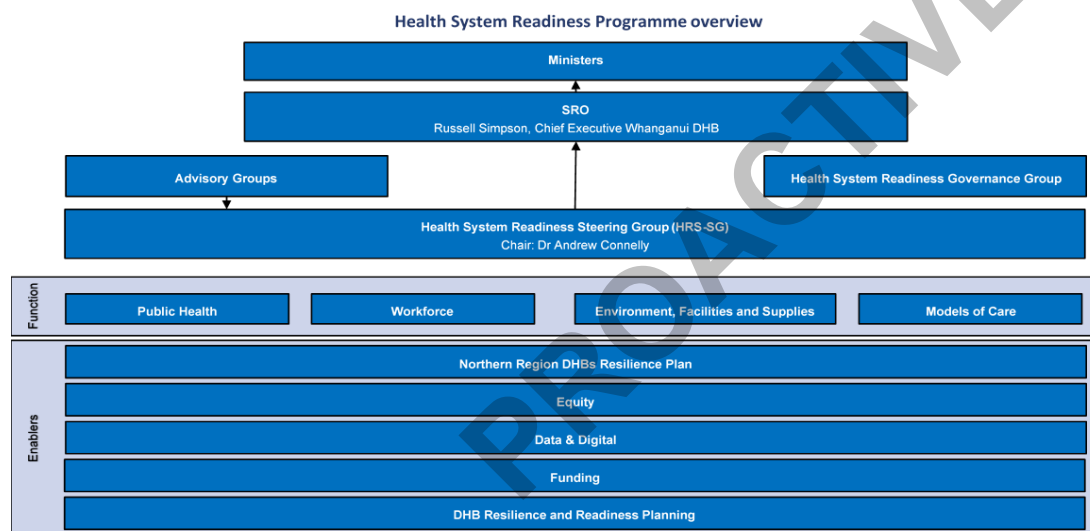
Desired outcomes

- Future pandemic response is geared towards actively protecting, preventing and mitigating the impacts on Tangata Whenua and Tangata Tiriti.
- Tangata Whenua partnership and capability to support the expression of tino rangatiratanga is embedded into ways of working.
- Collaboration and coordination continues across government and sectors to maximise wellbeing and achieve equitable outcomes.
- Health continues to be a key partner across strategic, policy, and operational activities across wellbeing domains.
- Systems maintain institutional knowledge, infrastructure and resources gained through our response.
- Learnings from COVID-19 are integrated into building a stronger health system.
- Health system readiness is delivered in a culturally appropriate way that recognises and supports the expression of hauora.

Objectives:

The key objectives in reconfiguring the health system to manage COVID-19 in the community is twofold:

- Keep the number of people who get COVID-19 as low as possible
- Manage people with COVID-19 with the lowest level of appropriate input to meet their needs.



Scope

The key areas of scope within the HSRP include:

- workforce capability and capacity
- innovation opportunities
- testing and surveillance
- hospital readiness and capacity
- facility equipment and supply
- data and digital solutions
- equity challenges
- primary and community models of care for the management of COVID
- equitable distribution of resources across communities and regions in New Zealand

Out of scope

Rest of system support and advice, for example:

- Reconnecting New Zealanders Strategy
- MIQF and Border settings

Key messages

- The Reconnecting New Zealanders Strategy acknowledges that as community vaccination rates increase there are more options for managing COVID-19.
- The public health options change from a reliance on lockdowns and strong border restrictions to include more relaxed border controls targeted to high-risk passengers; broader surveillance programmes; self-isolation models; and more targeted public health interventions at a local and regional level.
- The reconnection pathway is unlikely to be linear or one way and there is no set timeline for the shift to the management of COVID-19 as an endemic disease, however it should be assumed that most future requirements need to be in place for the 2022 winter season.
- The HSRP is in two parts; the Ministry-led “top down” approach will be informed and complemented by the “bottom-up” approach through the development of a Northern Region Resilience Plan. This work is supported by the DHB Chief Executives. The immediate focus is to identify future requirements and lessons learnt in the current outbreak.

Shift required: reduce system effort required to respond to COVID-19

