

Briefing

Ministry of Health Response Shifts to Respond to the Risks of the Delta Variant

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Security level: IN CONFIDENCE **Health Report number:** HR20211793

To: Hon Chris Hipkins, Minister for COVID-19 Response

Contact for telephone discussion

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Minister's office to complete:

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|---|------------------------------------|--|
| <input type="checkbox"/> Approved | <input type="checkbox"/> Decline | <input type="checkbox"/> Noted |
| <input type="checkbox"/> Needs change | <input type="checkbox"/> Seen | <input type="checkbox"/> Overtaken by events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn | |

Comment:

Ministry of Health Response Shifts to Respond to the Risks of Delta Variant

Security level: IN CONFIDENCE **Date:** 6 August 2021

To: Hon Chris Hipkins, Minister for COVID-19 Response

Purpose of report

1. This report responds to your request for a briefing on the current position of the Ministry of Health (the Ministry) in light of the emerging Delta variant of COVID-19, and details shifts in operational practice to response to the increased threat. This report discloses all relevant information.

Summary

2. The emergence of the Delta variant of COVID-19 globally is not an unexpected shift in viral evolution, however, does pose a higher level of risk to New Zealand, illustrated by the outbreaks of this variant in Australia.
3. The currently employed Elimination Strategy remains appropriate in light of the increased risk, however our approach to responding to the increased risk will need to shift.
4. Emerging science around the Delta variant shows that there is a higher viral load earlier on in infection, and it is generally more transmissible than the 'original' virus and other variants of concern.
5. The impact of this is that, in order to maintain elimination, our response will need to be faster, possibly last for longer, employ more stringent public health measures than may have been previously used, and possibly use these more widely, including the use of Alert Level 4 restrictions if necessary.
6. An internal working group at the Ministry has been established to drive a programme of work as part of our continuous review process, reviewing each of the response areas and updating them to ensure they are fit for purpose to respond to the threat posed by the Delta variant. This programme of work is intended to be completed largely by the end of August.
7. This work links to the Reconnecting New Zealand work programme, particularly focusing on the readiness of the health system and wider system readiness for any shift in the border settings.

Recommendations

We recommend you:

- a) **Note** that the shift in our response strategy in light of the increased risk due to the Delta variant can be summarised as “faster, longer, harder, wider.”
- b) **Note** that the Ministry of Health has undertaken a rapid review of each response area to ensure they are fit-for-purpose in light of the increased threat posed by the Delta variant.
- c) **Note** the outcomes of the rapid review have fed into the continuous improvement cycles the Ministry has operating routinely, with a new ‘Delta’ lens
- c) **Note** this work links to the Reconnecting New Zealand work programme, particularly focusing on the readiness of the health system and wider system readiness for any shift in the border settings. The Ministry will continue to work with DPMC on the wider programme.
- d) **Note** that the Ministry has asked DHBs to review their preparedness plans in light of the Delta variant, and has been actively working with the 12 PHUs over the last 8 weeks to develop and test their enhanced readiness.
- e) **Note** that the Ministry will provide you an update by 21 August 2021, including an update on the continuous improvement work, key messages for public communication of a response that may need to be more aggressive: “faster, longer, harder, wider,” and any updates in global scientific knowledge regarding the behaviour and impact of the Delta variant.



Bridget White
Deputy-Chief Executive

COVID-19 Response

Date: 6/8/21



Hon Chris Hipkins

Minister for COVID-19 Response

Date: 12/8/2021

Ministry of Health Response Shifts to Respond to the Risks of Delta Variant

Context

1. The emergence of the Delta variant of COVID-19 globally is not an unexpected shift in viral evolution. However recent scientific evidence shows that this variant poses a higher level of risk to New Zealand, as demonstrated by outbreaks of this variant in Australia.
2. Given this higher level of risk, it is prudent that the Ministry re-considers our response frameworks and health system settings.
3. This briefing provides the first update, outlining how the Ministry is revising the COVID-19 public health and health system response in light of the risks posed by the Delta variant.

What we know about the Delta variant to date

4. The Delta variant is swiftly becoming the dominant global variant of COVID-19.¹ There may be an increased risk of people who have previously been infected with COVID-19 being re-infected by the Delta variant.² Emerging evidence suggests that Delta variant infections have worse clinical outcomes compared to previous variants of COVID-19, and wild type COVID-19.³ Recent global evidence suggests that the Delta variant has 1000 times the viral load of previously circulating variants. The incubation period (time from exposure to first positive PCR test) seems to be shorter with the Delta variant.⁴
5. Based on current evidence, the Pfizer vaccine seems to still be effective against the Delta variant with the vaccine effectiveness after two doses at 88%.⁵ However, we know that vaccination may not prevent infection or reduce transmission as effectively, as it did with earlier variants.

What this will mean for the Ministry's response to cases

6. Given the current scientific knowledge about the personal and community impact of the Delta variant, our approach to response needs to assume that every case coming into

¹ All sequenced cases in New Zealand from 19 July 2021 to 26 July 2021 reported by ESR were the Delta variant, an increase of 48 Delta sequences from the previous VOC update.

² Preliminary analysis of national surveillance data in the UK has found an increased risk of re-infection with Delta compared to Alpha.

³ Hospitalisation and deaths analyses now indicate that the severity of COVID-19 caused by Delta is at least as great as that of Alpha (low confidence).

⁴ Median incubation period is ~4 days for Delta, compared to ~6 days for previously circulating variants.

⁵ An article previously reported on in a VOC update as a pre-print has now been published in the New England Journal of Medicine. In a test-negative case-control analysis by Lopez Bernal et al (2021), the estimated vaccine effectiveness against symptomatic disease caused by the Delta variant was 35.6% (95% CI: 22.7-46.4%) after one dose of the Pfizer vaccine and 88.0% (95% CI: 85.3-90.1%) after two doses.

New Zealand or detected in the community is a Delta variant infection. This is supported by the last two weeks of whole genome sequencing, where every successful sequence was a Delta variant. While we have the capacity to do very quick genome sequencing (as fast as 7 hours), the response needs to be swift and assume the worst-case scenario right from the acutely positive test result.

7. The science shows us that Delta has a higher viral load overall, and this occurs earlier in the incubation period compared to the original virus. This means that cases are likely to be highly infectious, and possibly highly infectious **before** they are tested and isolated. This has been seen in the recent outbreak of Delta in New South Wales, with a large number of cases infectious while in the community. The risk of onward transmission is high, particularly to close household contacts. Early detection of cases, swift contact tracing, and containment will be key to a successful response.
8. It is important to note that with the shorter incubation period and high likelihood of transmission, contacts are likely to become acutely infectious quicker, which increases the likelihood of multiple cases at once, possibly with significant travel history given the lack of restrictions on regional travel in Alert Level 1.
9. Overall, it is our position that any future national COVID-19 response needs to assume the worst-case scenario, assume any cases are the Delta variant, and enable a response that is faster, more stringent, and wider reaching than previous responses, and which may need to be sustained for longer.

A 'Delta lens' has been applied as part of continuous improvement to revise and refresh the Ministry's frameworks and health system settings

10. The Ministry has established an internal working group to drive a rapid review and programme of work as part of our continuous improvement that will review each of the response areas and update them if necessary, to ensure they are fit for purpose to respond to the increased threat posed by the Delta variant.
11. The rapid review and continuous improvement response work to assess our readiness and response capacity and capability, as well as our currently existing standard operating procedures (SOPs) to ensure they are updated to reflect the increased risk.
12. Broadly the main areas of focus for the working group are as follows;
 - a. Assessing and revising the settings within our current Alert Levels and how we would use them in the event of community transmission in New Zealand,
 - b. Assessing our case management and contact tracing SOPs and systems to ensure they reflect the emerging science, including isolation protocols,
 - c. Assessing the response capacity and capability to support a sustained 'worst-case scenario' response including an end to end review of the testing system,
 - d. Assessing the impact of community cases on the vaccination program and vice versa, including workforce.
13. This programme of work is intended to be completed largely by the end of August, with larger pieces of work due for completion in mid-September. The work has been prioritised according to risk, with many pieces of work already completed or well underway.

14. There is also a similar process being undertaken by the DPMC COVID-19 Group testing and preparing the wider All of Government system for readiness in light of the Delta variant, with a report back to COVID-19 Chairs Board on 17 August 2021, which the Ministry are supporting.
15. We will inform you of any system-level changes that may need Cabinet approval and/or agreement. For example, updated public health orders, changes to the Alert Level system or policy options for consideration in addressing workforce challenges.

Ensuring equity in light of the Delta variant

16. Protecting the health and wellbeing of Māori, Pasifika and other priority populations is integral to the health system response to COVID-19.
17. Achieving equity continues to be a core Government and Ministry priority, as we know higher-risk populations face adverse health outcomes. This was seen with the 2020 August Auckland and Waikato Outbreak which disproportionately affected Māori and Pasifika communities.
18. Whilst we have internal and external expertise readily available to support the Ministry's response and to ensure equity is built into all our functions, actions and pathways, we are cognisant that the overall health response to COVID-19, and particularly the use of the Alert Level framework, have significant equity implications that must be taken into consideration.
19. The Ministry is aware that the Alert Level framework, as it currently stands, makes several assumptions that do not necessarily hold for Māori and other at-risk populations. In updating the Ministry's use of such frameworks, we will continue to ensure equity is a lens that is embedded throughout.
20. The Ministry will continue to ensure cultural understanding, practices and identities are supported across the updated response frameworks in light of the Delta variant, as well as across actions that impact the wider health system.

Next steps

21. The Ministry will continue to work with DPMC and the wider system on readiness and communications.
22. The Ministry will work through the outcomes of the rapid review outlined and will provide you an update by 21 August 2021, including an update on progress of the continuous improvement work, key messages for public communication of "faster, longer, harder, wider," and any updates in global scientific knowledge regarding the behaviour and impact of the Delta variant.

ENDS.