



Briefing

FINAL UPDATE ON ACTIONS ARISING FROM THE RAPID STATUS ASSESSMENT ON CONTACT TRACING, CASE INVESTIGATION AND TESTING

To Hon Dr Ayesha Verrall Associate Minister of Health

Date	10/02/2022	Priority	Medium
Deadline	20/02/2022	Briefing Number	4485616

Purpose

This briefing provides a final update on the Ministry of Health's actions following the rapid status assessment into the current system capacity for contact tracing, including case investigation functions, and COVID-19 testing.

Recommendations

1. **Note** that the Ministry of Health (the Ministry) continues to make progress as agreed against the actions arising from the rapid assessment into contact tracing, case investigation and COVID-19 testing (Rapid Assessment).
2. **Note** that the arrival of the Omicron variant of COVID-19 in Aotearoa has necessitated a shift in prioritisation and approach for contact tracing and case investigation.
3. **Note** that the Ministry has provided two definitions for baseline capacity for this Update: baseline capacity with "BAU pooling"; and baseline capacity "1:1 (no pooling)".
4. **Note** that there is a significant difference in current and forecast capacity between the two definitions:
 - 4.1. *1:1 (no pooling)*: As at 2 February 2022, baseline PCR testing capacity 1:1 is 29,337 PCR tests in a 24-hour period. By the end of March 2022 this is forecast to increase to a baseline capacity of 40,485.

4.2. *BAU pooling*: As at 2 February 2022, baseline PCR testing capacity with “BAU pooling” was 57,039 PCR tests in a 24-hour period, with a maximum surge capacity of 75,114. By the end of March 2022 this is forecast to increase to a baseline capacity of 85,075, with a maximum surge capacity of 104,100.

5. **Note** that while consistent gains continue to be made by the Ministry in increasing PCR testing capacity, given the likelihood that there will soon be a high prevalence of COVID-19 in the community, BAU pooling is less likely to be able to be used by all laboratories, and capacity will likely be reduced to baseline capacity “1:1 (no pooling)”. ✓



Katrine Casey
Executive Director, Implementation
Unit, Department of the Prime Minister
and Cabinet

10/02/2022



Dr Hon Ayesha Verrall
Associate Minister of Health.

18.2.2022

2

Contact for telephone discussion if required:

Name	Position	Telephone		1st contact
Katrina Casey	Executive Director, Implementation Unit, Department of the Prime Minister and Cabinet		Mobile s 9(2)(a)	✓

Minister's office comments:

- ☐ Noted
- ☐ Seen
- ☐ Approved
- ☐ Needs change
- ☐ Withdrawn
- ☐ Not seen by Minister
- ☐ Overtaken by events
- ☐ Referred to

SECOND UPDATE ON ACTIONS ARISING FROM THE RAPID STATUS ASSESSMENT ON CONTACT TRACING, CASE INVESTIGATION AND TESTING

Purpose

1. This briefing provides a final update on the Ministry of Health's (the Ministry) actions following the rapid status assessment into the current system capacity for contact tracing, case investigation functions, and COVID-19 testing.

Background

2. In late November I undertook a rapid status assessment into the current system capacity for contact tracing, case investigation functions, and COVID-19 testing. This included the work being undertaken to increase the operational readiness of these functions prior to New Zealand's transition to the COVID-19 Protection Framework (CPF) (the Rapid Assessment).
3. The Secretary of DPMC and the Director-General of Health reported the findings of the Rapid Assessment and their proposed next steps to you on 2 December 2021. A brief update on progress by the Ministry against the recommendations from the Rapid Assessment was reported to you on 20 December 2021 (the First Update).
4. On 29 December 2021 the Omicron variant of COVID-19 was detected in the community in Aotearoa. The presence of Omicron in the community has again changed the nature of New Zealand's response to COVID-19. The new three-phased *Operational changes to respond to Omicron* plan (the Omicron Plan) reflect this shift.
5. This Briefing provides you with a final update on progress by the Ministry against the recommendations of the Rapid Assessment and includes as relevant context where there have been changes as a result of the new Omicron Plan.

Contact tracing capacity

Rapid Assessment findings and action: Baseline and surge capacity to call over 11,000 contacts within 24 hours (by late December); workforce increased to 270FTE (by late December); e-survey introduced; digital pathway for contacts and cases.

6. The Ministry has advised that it still retains capacity to complete in excess of 11,000 initial calls per day nationally. However, as New Zealand moves through the stages of the Omicron Plan the Ministry predicts that there will not be the same requirement to complete as many outbound calls as there was when Aotearoa was responding to Delta. This is because contact tracing will shift to being more focussed on household members and priority populations. The Ministry anticipates that the demand for outbound calls will decrease, and call volumes will be much less than those experienced during the Delta peak in 2021.

How to make use of what we have built

OK

7. This shift reflects a pragmatic approach to the likelihood of dealing with much greater numbers of positive cases in the community than New Zealand has experienced so far throughout the pandemic.
8. As noted in the Rapid Assessment and the First Update, work has continued to cross-train the call workforce to allow for flexibility across services, enabling the Ministry to increase utilisation and to respond to changing demand for different types of calls. The Ministry believes that the shared workforce model will enable it to reprioritise resources quickly as required should the case load require it. At Appendix A is a graph that demonstrates the indicative call capacity per service (as at 25 January 2022).

Case investigation capacity

Rapid Assessment findings and action: Capacity for up to 1000 case investigations a day; additional people trained in case investigation; additional system enhancements

9. The system still retains the capacity for between 760 and 1,150 case investigations a day. As New Zealand moves to Phases 2 and 3 of the Omicron Plan there will be a shift to prioritise case investigation services for very high-risk settings, and cases will be supported to self-service case investigation, enabled by technology.
10. The operational changes to case investigation at Phases 2 and 3 will likely affect demand for outbound calls for case investigation. The Ministry advises that it is unable to estimate the number of case investigations that will require a phone call at this stage, but expects that its case investigation capacity should increase, as people will instead access the electronic portal and there will be less phone based case investigations occurring.
11. To facilitate this pivot, a critical component of the Omicron Plan at both Phase 2 and Phase 3 is that there will be an end-to-end electronic pathway for notifications of positive cases and self-investigation. The automated digital pathway within the National Contact Tracing System (NCTS) is made up of the Health Hub (a new online portal) and also the Contact Tracing Form. The Ministry advises that this end-to-end pathway will be a clear, itemised list of everything a positive case needs to do and what help they can access to enable them to self-manage their case and close contacts.
12. A part of this is the "Contact Tracing Form", also being piloted and due to launch in February. This will enable low risk COVID-19 cases isolating in the community to undertake their own case investigation process. It is intended to reduce time spent on phone calls with case investigators. The Ministry is also continuing to scope the development of an electronic outbreak detection tool, which will automate the detection of clusters and outbreaks. This is still being progressed.

Testing capacity and procurement processes

Rapid Assessment findings and action: Increase to processing 40,000 PCR tests a day and surge of 60,000 (by end of December); increase to 60,000 PCR tests a day and 72,000 surge (by end of March)

13. For this Update, the Ministry has provided figures for two definitions of "baseline capacity". These are "baseline capacity 1:1 (no pooling)" and "baseline capacity with BAU pooling". Baseline capacity including BAU pooling is the laboratory's standing capacity including their average pooling ratio (which is between 1:3 and 1:5). The Ministry advises that it is

this definition of “standard” or “baseline” capacity that was used in both the Rapid Assessment and the First Update.¹

14. Attachment B sets out the current and forecasted lab capacity with the planned increases across both definitions.
15. The Ministry is on track to reach and exceed its target baseline capacity, including BAU pooling of 60,000 PCR tests processed in a 24-hour period by the end of March 2022. This reflects investments made to increase staffing and equipment. Testing capacity is managed regionally in the first instance, supported by arrangements to transfer samples to other regions should local capacity be reached. Current and forecasted national laboratory capacity numbers, using both definitions of “baseline capacity”, through Q1 2022 are:
 - a) As at **2 February 2022**, baseline PCR testing capacity with “BAU pooling” is 57,039 tests in a 24-hour period, with a surge capacity of 75,114 PCR tests per day. Baseline capacity 1:1 (no pooling) is 29,337.
 - b) Forecasts for the **end of February 2022** indicate that baseline PCR testing capacity with “BAU pooling” will be 68,575 tests in a 24-hour period, with a surge capacity of 84,400. Baseline capacity 1:1 (no pooling) will be 35,105.
 - c) Forecasts for the **end of March 2022** indicate that baseline PCR testing capacity with “BAU pooling” will be 85,075 tests in a 24-hour period, with a surge capacity of 104,100. Baseline capacity 1:1 (no pooling) will be 40,485.
16. Some of the planned increases for March are subject to ongoing procurement processes and are not confirmed.
17. Importantly, the Ministry advises that pooling is expected to not be used as frequently when the positivity rate increases. This will significantly reduce the 24-hour processing capacity. “Baseline capacity 1:1 (no pooling)” may therefore be a more accurate reflection of New Zealand’s baseline PCR testing capacity during the peak of the Omicron outbreak. By the end of March, this will represent around a 40,000 test difference in baseline daily PCR testing capacity.
18. The Ministry has advised that during the Delta outbreak there was a high level of asymptomatic surveillance testing in line with the Elimination Strategy. This asymptomatic surveillance testing has ceased under the CPF unless mandated. Therefore, the majority of swabs are currently more likely to be from symptomatic people, which means pooling of samples to manage demand is no longer a viable approach for Omicron, under a strategy of protection and minimisation.
19. Since the Rapid Assessment, the Ministry also advises that there have been improvements to the return time for tests. The average for the week of 22 November 2021 was 60% of tests reported in a 24-hour period (the week of the Rapid Assessment). The

¹ In the First Update, and as noted in the Ministry’s briefing to you on 17 December 2021 (Health Report number 20212703), the Ministry had clarified the definition of “baseline test capacity” with the laboratory network to clarify that it included some pooling of tests, which contributed to a refresh of the actual capacity figures. The updated baseline BAU capacity following clarification of definitions was 32,980. This has been increased further by addition of more staff and equipment.

Ministry advised that over the period 21-27 January 2022, 89% of tests were reported in 24 hours.

20. This Briefing does not cover rapid antigen supply, as the original Rapid Assessment did not examine this. We also understand that you are receiving daily reporting on rapid antigen supply and new rapid antigen device applications.

Rapid Assessment Action: The Ministry to undertake an assessment of the available modelling and impact of decisions made about testing requirements on the lab capacity needed for December onwards.

21. The Ministry has undertaken initial modelling of demand for testing as part of its response to Omicron and is continuing to do so as policy decisions are made. The Ministry has advised that the timing of the move to Phase 3 (where PCR testing will be focussed on priority populations, and most symptomatic people will be tested by a RAT) will be crucial to ensure that PCR testing demand is managed so as not to reach surge capacity levels for a period that is unsustainable. Currently, laboratories are still able to pool at a ratio between 1:3 and 1:5, aligning with the definition for baseline capacity with BAU pooling.
22. The Ministry has advised that its models indicate that average daily PCR testing demand could exceed 65,000 tests per day for a period of three to five weeks in February and March. The period that laboratories are able to sustain surge capacity varies from between five days to 30 days, and is dependent on full staffing capacity, reagent supply and pooling of tests. If there is increased prevalence of COVID-19 in the community through this time, it is likely that some laboratories will experience staff absences, and "BAU pooling" will be able to be less widely used. The Ministry is working with the Laboratory network to put contingency plans in place to ensure there will not be a shortfall in PCR testing capacity through this period. This is important because the Ministry estimates that there will be between 35,105 – 40,485 PCR tests able to be processed a day through this period using a the 1:1 (no pooling) "baseline capacity". Plans are in place to offset this through wider use of RAT testing. From Phase 2 there will be use of RATs in some situations, e.g. patient facing healthcare worker surveillance that will reduce pressure on PCR testing.

Rapid Assessment Action: Appoint an independent person to assess the viability of ongoing contract negotiations with Rako

23. The viability has been assessed and contract discussion and negotiations continue. Due to the removal of Reconnecting NZers requirements for medium risk returnees to undertake a PCR test at ports of arrival, negotiations with Rako Science to provide that service have stopped. The Ministry is continuing to work with Rako Science to conclude arrangements and activity undertaken as part of the Letter of Agreement for establishing the service.
24. In parallel with winding down the Reconnecting NZers work, the Ministry continues to progress potential contract arrangements with Rako Science for additional saliva testing services in anticipation of deployment to support and increase PCR testing capacity during the Omicron Plan Phases two and three.

Testing innovation

Rapid Assessment Action: Chief Testing Advisor to chair an external workshop on informing priorities for testing innovation, and improvements to the processes for doing this

25. The Ministry is planning to hold the first workshop at the end of February. A proposal for the agenda and structure of what will be a series of workshops on testing has been put together by the Chief Testing Advisor and approved by the Director-General of Health. Attendees at these workshops will include the Strategic Covid-19 Public Health Advisory Group; the COVID-19 Technical Advisory Group; Surveillance Strategy and Testing Plan Steering Group; equity/ Māori representation; COVID-19 Testing Technical Advisory; and various Ministry stakeholders.
26. The Chief Testing Advisor, who commenced in her role at the end of December, has also indicated that significant work has been undertaken in the testing space since the Rapid Assessment was completed. This has included reviewing and streamlining the process for initial and full assessment and sign-off for point-of-care diagnostic devices to address the backlog in applications. The Ministry has also been undertaking an assessment of loop-mediated isothermal amplification devices for use in the pre-departure context.

Equity

Rapid Assessment Action: Documentation of practices used by Auckland and Waikato PHUs to reach hard to access/reach populations for contact tracing

27. This is now complete. The “Manaaki first: Case and contact management in the COVID-19 outbreaks in Auckland and Waikato – lessons for the delivery of healthcare to marginalised communities” was delivered to the Director-General of Health on 15 December 2021. It was updated on 19 January in response to feedback from Auckland DHB CEOs and the COVID-19 Health System Response Directorate and was circulated to Public Health Units on 19 January 2022 to assist them to prepare for the Omicron outbreak.

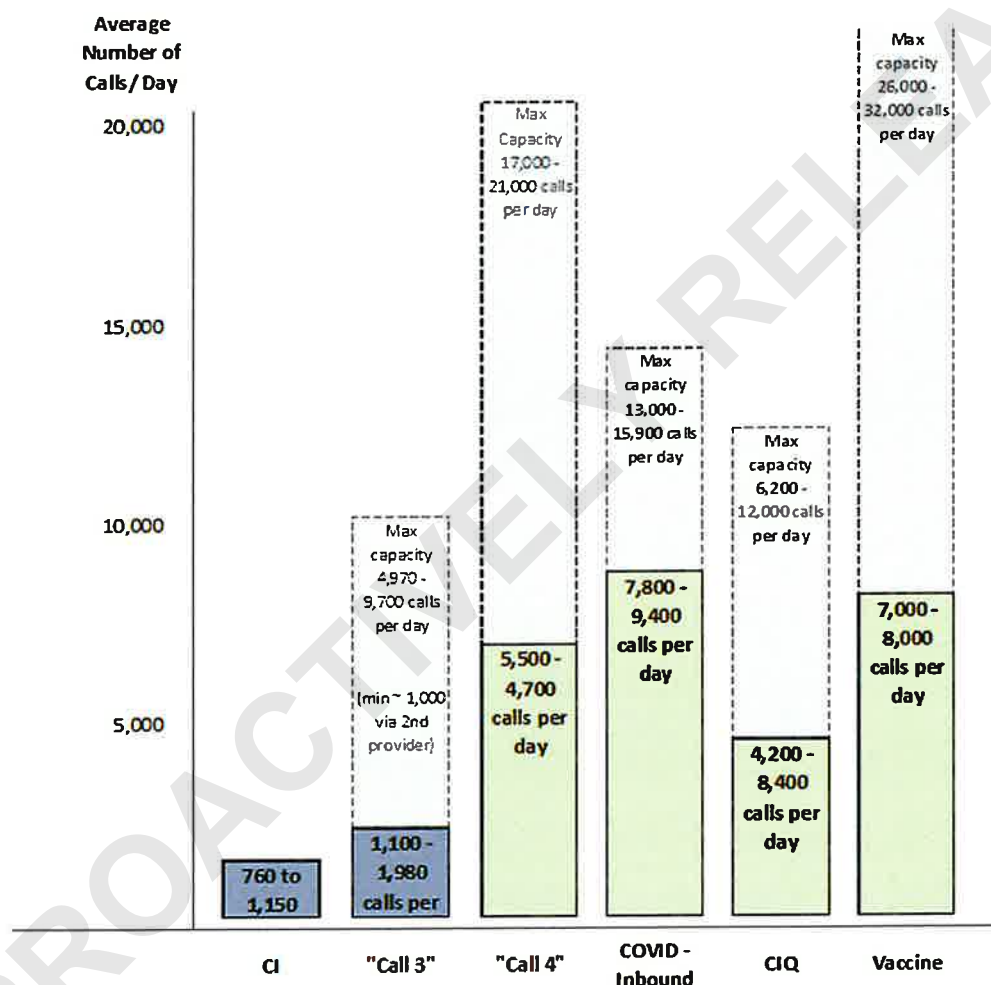
Rapid Assessment Action: The Ministry to arrange a workshop to discuss best practice in reaching marginalised and hard to reach populations and identify any actions the Ministry could take in Q1 of 2022

28. This work continues to be progressed. The Ministry advises that engagement with different advisory groups that work with priority populations and at risk whānau, to capture their whakaaro to guide priorities and next steps, was carried out between 19 January – 8 February 2022. The Ministry advises that well over 100 attendees, representing a wide range of community groups and health services, attended these hui.
29. An equity impact assessment based on Te Tiriti o Waitangi principles and the impact of Omicron strategy and policy on saving lives is currently being written up from the insights and feedback gathered at these hui. The Ministry advises that a separate report will be provided to Ministers on the findings of the Equity Impact Assessment, and the Ministry's approach to addressing any issues identified, once complete.

ATTACHMENT A: INDICATIVE DAILY CALL CAPACITY PER SERVICE

- Figure 1 shows workforce daily capacity across the services (green) as at 25 January 2022 and indicates potential maximum daily call capacity (grey) that can be achieved through the cross-trained workforce.
- Capacity should not be treated as absolute, as the call capacity will depend on the call complexity and the specifics of the response needed, which may be tailored to the needs of the population served at any one time. The Ministry advises that maximising capacity in one service will inevitably reduce capacity in another.

Figure 1. indicative daily call capacity per service (as at 25 January 2022)



Key: CI = Case investigation. "Call 3:" a first contact call to a Close Contact. "Call 4:" a daily follow-up call to a Close Contact

ATTACHMENT B: ANTICIPATED PCR PROCESSING LABORATORY CAPACITY TO END OF Q1 2022

Laboratory Name	Baseline Capacity 1:1 (NO POOLING)			Baseline Capacity with BAU pooling			Typical average pooling ratio			Max surge capacity			Surge Capacity
	2-Feb-22	End of February	End of March	2-Feb-22	End of February	End of March	2/02/2022	End of February	End of March	2/02/2022	End of February	End of March	(Number of Unlimited (c 2 weeks? Too r
Canterbury Health Laboratories	4500	4500	4600	4500	4500	4600	1:05	1:03	1:03	6000	6000	10000	Unlimited (c
Canterbury SCL	1000	1000	1800	2500	2500	5000	1:05	?	?	5000	5000	6000	2 weeks? Too r
Mediab Timaru	0	0	0	0	0	0	0	0	0	0	0	0	
Dunedin SCL	1080	2600	2600	2700	6500	6500	1:05	1:05	1:05	8250	10000	10000	
ESR	282			564			1:03			564			
Hawkes Bay	330	330	330	800	1200	1200	1:05	1:05	1:05	1200	1200	1200	Unlimited (c
Hill Laboratories	3000	4500	6000	3500	4800	9000	1:04	Dependent on positivity rate	Dependent on positivity rate	3500	4800	9000	
Labplus	1800	2500	2500	2000	2800	2800	1:05	1:02	1:02	3500	4500	4500	
LabTests	6000	7000	7000	10500	12500	12500	3	3	3	12500	14500	14500	
Mediab Central	2350	2300	2300	4000	4000	4000	1:03	1:03	1:03	4000	4000	4000	Unlimited (c
Middlemore	1700	1980	3260	3500	3500	6500	1:4 (eOrder triage 5) and 1:8 (eOrder triage 1)	1:2, 1:3, 1:4 and 1:8	1:2, 1:3, 1:4 and 1:8	3500	3500	6500	
Nelson/Marlborough	575	575	575	2875	2875	2875	1:05	1:05	1:05	5000	5000	5000	
Northland	370	370	370	2100	2100	2100	1:08	1:08	1:08	2100	2100	2100	
Pathlab	1150	1150	1550	2000	2000	2500	3	3	3	3000	3000	4000	