

# Memorandum

## Update on laboratory testing capacity

<b>Date due to MO:</b>	17 December 2021	<b>Action required by:</b>	N/A
<b>Security level:</b>	IN CONFIDENCE	<b>Health Report number:</b>	20212703
<b>To:</b>	Hon Dr Ayesha Verrall, Associate Minister of Health		
<b>Copy to:</b>	Hon Chris Hipkins, Minister for COVID-19 Response Hon Andrew Little, Minister of Health		

## Contact for telephone discussion

Name	Position	Telephone
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## Action for Private Secretaries

N/A

**Date dispatched to MO:**  
**17/12/2021**

# Update on laboratory testing capacity

## Purpose

1. This report is providing an update on laboratory testing capacity which has increased substantially following further information provided by the laboratory network.

## Background and context

2. The laboratory network is made up of DHB and private laboratories. Representatives of each of the laboratories meet twice weekly (and daily during a surge) with the Ministry co-ordinating the network, including discussing redistributing samples across the network to improve turnaround times.
3. Each of the laboratories provide baseline and surge capacity figures weekly. As noted in the testing strategy, there is ongoing work to build sufficient and sustainable testing capacity within each region of Aotearoa New Zealand.
4. A DPMC led review has focussed attention on this, setting a roadmap to increase baseline capacity to 40,000 tests per day in 2021 and 60,000 tests per day in early 2022. The DPMC report includes several actions that are now being implemented. These actions include increasing laboratory staff capacity through immigration and adjusting technical requirements, adding in additional specialist laboratory equipment, and securing additional laboratory capacity through contracting for testing services and new laboratories. To ensure visibility of progress towards this, a weekly PCR testing capacity dashboard has been developed.
5. As part of this work, the Ministry has clarified and confirmed the reported baseline capacity of each of the network's laboratories, to ensure consistency of reporting. This has improved accuracy of reporting and as a result, substantially increased the network's reported baseline capacity.

## Laboratory capacity for COVID-19 testing

6. The National Laboratory Testing Team reports baseline testing capacity as well as surge capacity numbers. Baseline capacity is the number of tests that can be performed as part of sustainable, business-as-usual operations.
7. Baseline capacity is higher than 'single test capacity', as it includes pooling of some samples, such as surveillance and symptomatic test samples. The level of pooling varies between laboratories based on their operational processes and the types of test samples they are working with at that time.
8. Surge capacity is the maximum capacity that can be achieved for a short period of time. This might include ceasing analysis of other samples (such as blood tests) and redeploying laboratory staff from other areas. Typically, surge capacity can be sustained for between a few days and a few weeks.
9. Based on information provided by the laboratories through the weekly request for updates, the National Laboratory Testing Team has been reporting baseline capacity as shown in the 'previous baseline capacity' column in the table below.

10. Following clarification of the definition of baseline testing capacity, updated information has now been provided by several laboratories, which is reported in the 'updated baseline capacity' column in the table below.
11. This increase also takes account of recent developments in laboratory infrastructure, including the introduction of additional laboratory equipment. Asia Pacific Healthcare Group (APHG), which operates several labs within the laboratory network, including in Canterbury and Wellington, is contracted by the Ministry to analyse saliva samples for the boundary crossing and border worker saliva testing programmes. The contracted capacity has been included separately in previous reporting but is now detailed by laboratory in the table below.
12. Hill laboratories has recently been contracted and has now indicated it has increased capacity for this work, up from 800 to 1,600 tests per day.
13. A previously reported total capacity of more than 42,868 was based on a capacity in Canterbury Health Laboratories of 15,360. However, CHL provided three figures for their capacity, which were initially believed to be three components of their total capacity. Following further discussion to clarify this with CHL, it was explained these were in fact three figures for three different scenarios. The correct total baseline capacity for CHL is 5,472 and 32,980 in total.

<i>Laboratory</i>	<i>Previous baseline capacity</i>	<i>Updated baseline capacity</i>
<b>Laboratory network</b>		
<i>Canterbury Health Laboratories</i>	4,000	5,472
<i>Canterbury SCL</i>	500	2,500
<i>Dunedin</i>	2,500	1,743
<i>ESR</i>	-	500
<i>Hawke's Bay</i>	260	750
<i>LabPlus</i>	1,800	2,000
<i>LabTests</i>	4,000	4,000
<i>Medlab Central</i>	620	2,500
<i>Middlemore</i>	600	2,500
<i>Nelson/Marlborough</i>	189	315
<i>Northland</i>	150	800
<i>Pathlab</i>	1,200	1,100
<i>Waikato</i>	1,000	2,500
<i>Waitemata</i>	1,200	1,200
<i>Wellington</i>	1,200	3,500
<b>Contracted labs</b>		
<i>APHG</i>	3,571	(Included above)
<i>Hill Labs</i>	800	1,600
<b>Total tests per day</b>	23,590	32,980

## Reporting additional capacity building

14. This Ministry is currently working with the laboratory network to project what the testing capacity will be at the end of quarter one 2022. The Ministry has been provided with some initial projections on what could be achieved, subject to further investment in additional equipment, developing laboratory facilities and recruiting additional staff. These projections are encouraging in that a substantial additional uplift in capacity can be achieved.
15. The actual capacity that further improvements to the network will achieve has not yet been finalised. The Ministry will continue to work closely with each of the individual laboratories in the network, the regional labs including NRHCC and through ongoing network meetings to confirm further improvements.
16. Future reporting of laboratory capacity will be delivered in the Ministry's weekly PCR testing capacity dashboard. The Ministry will validate information provided about further capacity improvements to ensure it is able to provide sufficient assurance about this reporting.

## Next steps

17. The Ministry will incorporate this updated information in the PCR testing capacity dashboard this week (17 December 2021).
18. We will work with the lab network to confirm any further significant changes in capacity and validate this information before reporting. This reporting will be delivered in the weekly PCR testing capacity dashboard.



Bridget White

**Deputy Chief Executive**

**COVID-19 Health System Response**

Date: 17 December 2021