Memorandum

COVID-19 Community Testing Rates by Ethnicity

Date due to MO:	1 April 2021	**Action required by:**	N/A
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To:	Hon Chris Hipkins, Minister for COVID-19 Response		
Cc:	Hon Andrew Little, Minister of Health		
Cc	Hon Peeni Henare, Associate Minister of Health		
Cc	Hon Aupito William Sio, Minister for Pacific Peoples		

Contact for telephone discussion

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Action for Private Secretaries

N/A

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COVID-19 Community Testing Rates by Ethnicity

Purpose

1. This memo responds to a request for further information about community testing rates and equity. It examines trends in COVID-19 community testing rates by ethnicity, describes routine review processes and canvasses current activities and collaborations across the Ministry of Health, district health boards (DHBs) and the wider health sector. These ongoing processes and activities are aimed at ensuring adequate community testing is occurring, for all, so that we can be confident that any cases of COVID-19 in the community will be rapidly identified.

Context

2. Rapid identification of cases of COVID-19, effective public health management and response to prevent further transmission of COVID-19 within the community in New Zealand is key to achieving the goal of elimination. A robust testing plan to detect cases early forms a key pillar of surveillance.

3. The purpose of the Testing Plan is to provide clear and flexible guidance for a sensitive detection system for COVID-19 under different scenarios. The Testing Plan takes a systematic risk-based approach and identifies three settings for testing:

   a. At the border (ongoing);

   b. In the community (ongoing); and

   c. For contact tracing and cluster management (when required).

4. The overall aim of testing in the community is to identify and test those people who are most likely to have COVID-19 should it be present. To this end we recommend testing all those who present with clinical symptoms consistent with COVID-19. This approach will be a key pillar of the Testing Plan over the longer term.

5. The overall approach of the Testing Plan is to identify the high-risk groups and provide systematic guidance on the frequency of testing (where appropriate). It is essential the approach acknowledges that Māori disproportionately experience poorer health outcomes. Meeting our obligations under Te Tiriti o Waitangi is necessary to realise our overall aim of equitable outcomes.

6. New Zealand's Māori Health Strategy, He Korowai Oranga sets the overarching framework that guides the Government and the health and disability sector to achieve the best health outcomes for Māori. While He Korowai Oranga is a Government strategy, it recognises that Māori, as individuals and as part of whānau, hapū or iwi, have their own aspirations for health. Achieving these aspirations is a critical part of improving outcomes for Māori.

7. To help to address the persistent disparities in health access for Māori, and to contribute to a better quality of life and well-being, we must ensure that COVID-19 testing services for Māori are delivered in the right way, at the right time, to the right people and respond to user needs and preferences. Testing must also contribute to the overall health aspirations and outcomes of Māori.

8. The importance for testing must also be clearly messaged to Māori communities across Aotearoa New Zealand.

Trends in COVID-19 Community Testing Rates by Ethnicity

9. Information about the data is available in Appendix 1.

Key findings summarised

10. Overall, the community testing rate increases in response to each detection of cases in the community with this increase occurring across all ethnic groups.

11. The community testing rate decreased sharply across all ethnic groups in late September 2020.

12. Pacific peoples have consistently had a higher community testing rate per 1000 people than Māori and non-Māori/non-Pacific.

13. Māori had a higher community testing rate per 1000 people than non-Māori/non-Pacific except during the period late-September 2020 to mid-February 2021 when it was slightly lower.

14. However, overall testing rates for Māori are higher than non-Māori/non-Pacific since June 2020 (the period data was available).

15. Between late-September 2020 and mid-February 2021 the community testing rate for Māori was slightly lower than the rate for non-Māori/non-Pacific:

    a. Geographic analysis shows the rate for Māori was lower in all DHBs, except Counties Manukau and South Canterbury; and

    b. Demographic analysis shows the rate for Māori was lower in people aged under 50 years.

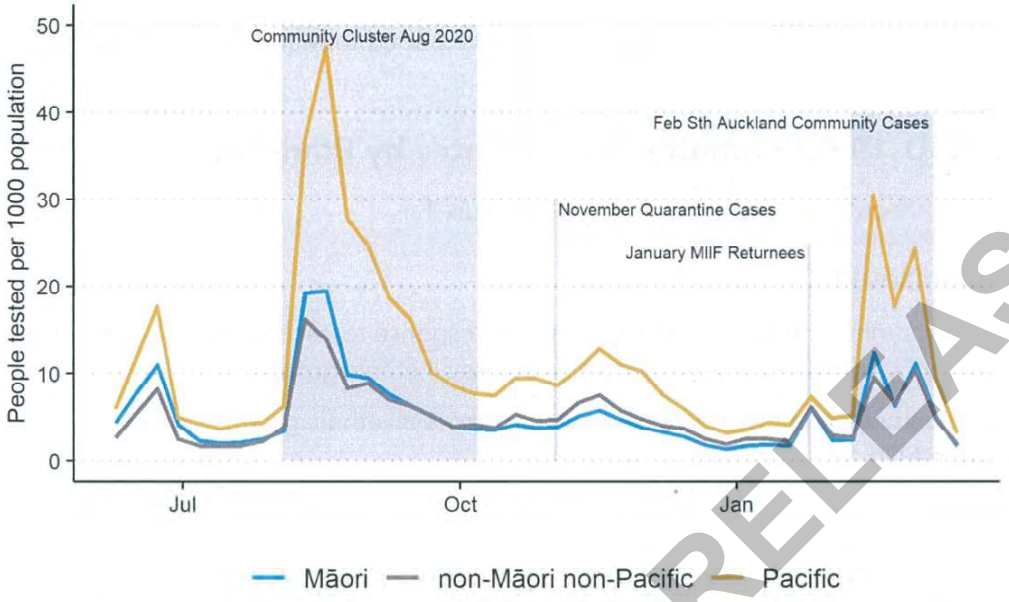
16. For Māori aged over 24, the rate has increased again to be slightly above the rate for non-Māori/non-Pacific since February 2021.

Overall trend

17. The data shows an overall trend where the community testing rate increases in response to each detection of cases in the community with this increase occurring across all ethnic groups. The largest peak in community testing rates was in mid-August and was associated with the Community Cluster August 2020 outbreak. Several other smaller outbreaks have been observed (Figure 1).

18. In September 2020, community testing rates for all ethnic groups dropped sharply.

Figure 1 Community testing rates per 1000 people by ethnic group and week, May 2020 to March 2021



19. Pacific peoples have consistently had a higher community testing rate per 1000 people than Māori and non-Māori/non-Pacific.

20. There have been three distinct time periods when comparing community testing rates for Māori and non-Māori/non-Pacific (Table 1):

    a. Period 1 (6 June 2020– 27 September 2020) when the rate for Māori was higher;

    b. Period 2 (28 September 2020–14 February 2021) when the rate for Māori dropped slightly below the rate for non-Māori/non-Pacific; and

    c. Period 3 (15 February 2021–21 March 2021) when the rate for Māori was higher.

Table 1 Community testing numbers and rates by ethnic group and time period, 6 June 2020 to 21 March 2021

Time period (number of weeks)	Variable	Māori	Pacific	Non-Māori/non-Pacific	Total
Total time period 6 Jun 2020–21 Mar 2021	Number of people tested	171,287	152,402	814,000	1,137,689
	Total rate	220.3	476.5	210.7	229.4
	Average rate per week	5.4	11.6	5.1	5.6
Period 1 6 Jun–27 Sep 2020 (16 weeks)	Number of people tested	90,704	78,424	369,596	538,724
	Total rate	116.7	245.2	95.7	108.6
	Average rate per week	7.3	15.3	6.0	6.8
Period 2 28 Sep 2020–14 Feb 2021 (19 weeks)	Number of people tested	52,335	46,760	316,811	415,906
	Total rate	67.3	142.6	82.0	83.9
	Average rate per week	3.7	7.3	4.1	4.2
Period 3 15 Feb–21 Mar 2021 (4 weeks)	Number of people tested	28,243	27,227	127,589	183,059
	Total rate	36.3	85.1	33.0	36.9
	Average rate per week	7.7	17.0	6.6	7.4

21. Below we provide more detailed demographic and geographic observations for Period 2 when the testing rate for Māori was slightly lower than the rate for non-Māori/non-Pacific.

Detailed observations for Period 2 when the rate for Māori was slightly lower than the rate for non-Māori/non-Pacific (28 September 2020–14 February 2021)

22. The community testing rate for all ethnicities during this time period decreased from an average weekly rate of 6.8 to 4.2 people tested per 1000 population.

23. During the 19 weeks from 28 September 2020 to 14 February 2021, the average weekly community testing rate for Māori was 0.4 (range 0.0–1.7) people tested per 1000 population lower than the rate for non-Māori/non-Pacific.

24. Geographically the lower average weekly community testing rate for Māori were observed across all DHBs except Counties Manukau and South Canterbury.

25. Demographically the lower average weekly testing rate for Māori was observed for people aged under 50 years.

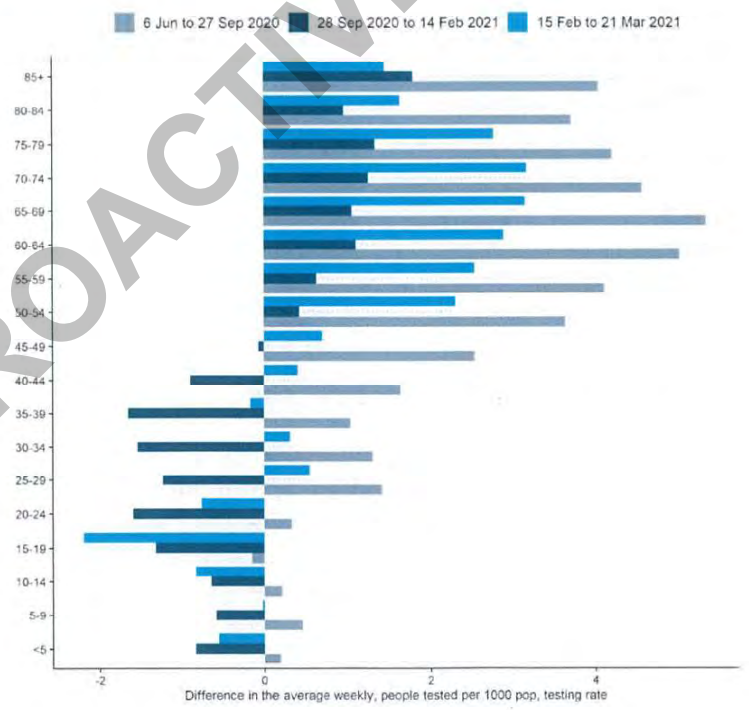
26. Figure 2 shows that the average weekly community testing rates for Māori compared to non-Māori/non-Pacific during:

    a. Period 1 were higher in all age groups except the 15–19 years age group;

    b. Period 2 were lower in those aged under 50 years; and

    c. Period 3 remained lower in those aged 0–24 years.

Figure 2 Difference in the average weekly testing rate per 1000 for Māori compared to non-Māori/non-Pacific by age group and time period



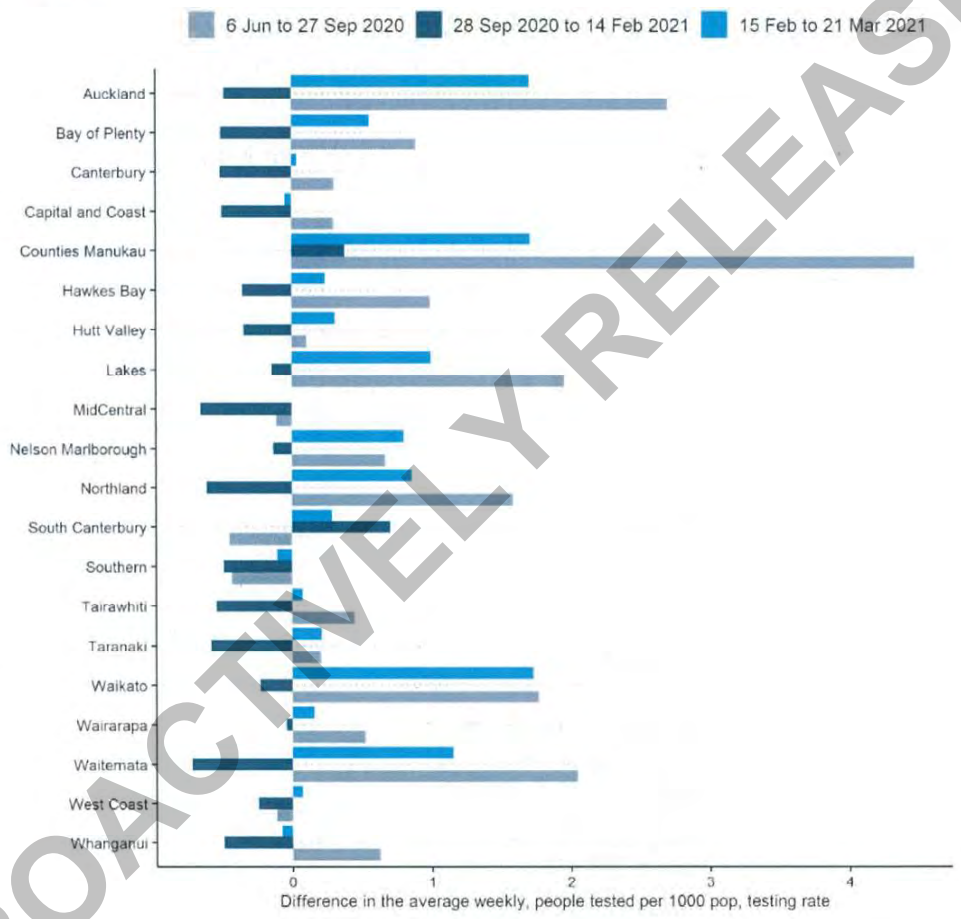
27. Figure 3 shows that the difference in average weekly community testing rates for Māori compared to non-Māori/non-Pacific, during:

a. Period 1 rates were higher in most DHBs;

b. Period 2 rates were lower in all DHBs except Counties Manukau and South Canterbury; and

c. Period 3 restored to similar or higher rates in all DHBs.

Figure 3 Difference in the average weekly testing rate per 1000 for Māori compared to non-Māori/non-Pacific by DHB and time period



The testing approach and routine review processes

28. The overall approach to the Testing Plan is to identify high-risk groups and provide systematic guidance on the frequency of testing (where appropriate). The approach acknowledges that Māori disproportionately experience poorer health outcomes. In order to improve equity within our surveillance approach, the Ministry of Health works with Māori and Pacific stakeholders to identify and address inequities and to improve the accuracy of ethnicity data where possible.

29. Ensuring accurate and timely data and information is available to decision makers throughout the health system is a core part of the surveillance strategy to enable timely

decision making. All routine surveillance monitoring products include breakdowns by ethnicity where the data is available. Interactive dashboards on cases, border testing, community testing, contact tracing and potential disease rank have been available to DHBs, public health units and to some primary health organisation staff since 23 December 2020.

30. The Ministry of Health's COVID-19 Surveillance team monitors community testing rates by Māori, Pacific, non-Māori/non-Pacific (and other ethnicities, as required) on a weekly basis to identify gaps in testing by DHB and age. Any areas of concern are communicated to the COVID-19 Testing Operations team, Māori Health Intelligence and Pacific Health Intelligence teams within the Ministry. This information is communicated to DHB testing leads and included in the regular testing guidance published on the Ministry website. The Māori Health Intelligence team also raises any gaps in community testing with the DHB GM's Māori Health and the Māori Monitoring Group. The DHBs, however, are responsible for delivering testing in their region.

Ministry of Health and DHB activities to support community testing rates

Tumu Whakarae

31. On 23 February 2021, the Testing Operations team, the Māori Health team, and a representative from the DHB GM Māori group met to discuss the accessibility of testing in Māori communities. This meeting was a deep dive conversation following up from the testing agenda item at the Tumu Whakarae hui chaired by the Māori Health Directorate on 3 February 2021.

32. Insights regarding barriers and opportunities to accessible testing were canvassed including using the DHB iwi group channel as champions for accessing hard to reach communities through existing testing infrastructure. A subsequent report back to Tumu Whakarae with a plan for next steps is scheduled for April 2021.

Māori Pharmacists' Association

33. The Ministry is working with the Māori Pharmacists' Association to explore the development of a pro-equity COVID-19 testing model which would aim to improve access to testing for COVID-19 for Māori.

34. The Māori Pharmacists' Association is proposing to engage with community pharmacies and to develop a 'by Māori, for Māori' community outreach programme for delivery in areas with high Māori populations.

35. This work forms part of a wider workplan to explore the feasibility of swabbing for COVID-19 in community pharmacies. The Ministry will be providing you with an update shortly on the status of the wider Testing in Community Pharmacy project.

DHB activities throughout the pandemic

36. Throughout the COVID-19 pandemic, DHBs have implemented specific activities aimed at increasing access for testing for Māori. Activities differed according to alert levels. In January 2021, the Ministry asked DHBs for their specific plans related to ensuring equity in community testing rates, particularly for Māori. Activities highlighted in these plans included:

- Māori-led mobile and CBAC services, including CBACs situated on marae;
- ensuring community testing facilities are available in areas with a high Māori population;
- working with Māori health providers and other stakeholders to ensure access to testing, including resurgence planning;
- close monitoring of community testing rates for Māori to enable quick response if needed (e.g. by organising pop-up testing); and
- targeted messaging through Māori-specific channels (e.g. Māori health providers, iwi radio stations).

Conclusions

37. The community testing data shows that overall testing rates increase in response to each detection of cases in the community with this increase occurring across all ethnic groups. Pacific peoples have consistently had higher community testing rates than Māori and non-Māori/non-Pacific.

38. The community testing rate for Māori was slightly lower than the rate for non-Māori/non-Pacific across most DHBs but only in people aged under 50 years between late-September 2020 and mid-February 2021. Testing rates for all ethnic groups dropped sharply in late September 2022.

39. Before late-September 2020, the testing rate for Māori was higher than the rate for non-Māori/non-Pacific.

40. Since mid-February 2021, the community testing rate for Māori has increased again to be above the rate for non-Māori/non-Pacific.

41. The increases in testing rates for Māori cannot be attributed to any particular action. However, the Ministry observes that rates have increased since the Ministry began working with DHBs to encourage a focus on this area.

42. Since June 2020, the Ministry has had processes in place to routinely monitor community testing rates (by ethnicity, age and DHB) to provide advice that informs testing guidance to DHBs and DHB testing implementation planning.

43. The Ministry works closely with DHBs to ensure testing services meet wider requirements and contribute to the objectives of the COVID Elimination Strategy. DHBs in areas with high Māori and/or Pacific populations inform the development of community testing for their regions via their advisory groups.

44. The overarching goal is to ensure iwi, hapū, whānau and Māori communities can exercise their authority to respond directly to the health and wellbeing challenges across the COVID-19 response.

45. Without a detailed investigation of the factors driving community testing behaviour during this period it is not possible to identify primary drivers of the changes in testing rates for Māori compared to non-Māori.

46. However, it is likely that routine processes in place have helped restore Māori testing rates to similar levels to non-Māori non-Pacific rates.

47. It is important to ensure that testing of symptomatic people is encouraged and to also be aware the testing fatigue may occur if populations are over tested. We also need to be careful that we do not create perverse incentives for DHBs to seek to lift Māori testing rates via nonvalue adding testing.

48. In conclusion, whilst Māori testing rates may have been low at times in the past, these are not currently considered to be an issue of concern, and that overall testing rates for Māori are higher than non-Māori/non-Pacific since June 2020 (the period data was available).

Next steps

49. The Ministry will continue working with DHBs, who are responsible for funding and providing services in their regions, to ensure services are equitable. Testing rates are monitored on a regular basis so that any downward trend can be identified. We are working alongside the Māori Health Directorate and the DHB GM's Māori to ensure that there is equitable community testing for all and to ensure that clear messaging about the importance of getting tested if symptomatic is reaching Māori communities across Aotearoa New Zealand.

50. The Ministry has asked the DHBs to ensure that the following actions take place by 31 March 2021:

- To consider whether current testing locations are accessible for the Māori community; and to promote testing locations via culturally relatable streams such as Māori TV, radio and social media;
- To consider mobile swabbing for communities in rural areas; and ensure this is communicated appropriately via culturally relatable streams noted above;
- To consider availability of nursing staff who are strongly connected into the communities they serve and are trained and available in 'fixed' locations (GPs/CBACs); and
- To ensure the DHBs work alongside iwi leaders to support educating and encouraging communities to go for testing with community support mechanisms put in place.

51. The Ministry and DHBs are working towards ensuring testing is available in the community, and multiple collaborations and initiatives are occurring across the health sector. You will receive updates shortly on:

- Progress on collaborations with DHB iwi teams and Tumu Whakarae to provide targeted accessibility to testing for Māori; and
- Testing in Community Pharmacies, including Māori-led pharmacy swabbing.

52. The Ministry can provide further information about this topic at your request.

Sue Gordon
Deputy Chief Executive
COVID-19 Health System Response

Date:

Appendix 1 About the data

Data sources

1. Data in this paper is for the period 6 June 2020 to 21 March 2021 and was extracted on 22 March 2021. "Reason for testing" to identify community tests was less reliable before this time period.

2. Data in this paper was sourced from the Éclair national repository for laboratory testing information and the NHI register for demographic information. Éclair is reliant on input by individual laboratories. Both data sources are living data collections that continue to be revised and updated as data reporting processes are improved. Factors such as data corrections, back-loading and adjustments can affect any trends.

3. Demographic data about each person is based on the most current information held in the NHI Register. This includes the person's age, gender, ethnic group and DHB of residence. The person's age is calculated at the date the test specimen was received at the laboratory. Ethnicity of each person is based on prioritised ethnicity. Prioritisation involves each person being allocated to a single ethnic group based on the ethnic groups they have identified with, prioritised in the following order: Māori, Pacific peoples and European/Other.

4. Population data is population projections as at 30 June 2019. The data was source from Statistics New Zealand and supplied as a custom file to the Ministry of Health in December 2018.

Interpreting the data

5. This paper presents community testing rates. These are derived by taking the total number of tests and removing tests associated with:

   a. returning travellers in managed isolation or quarantine facilities and

   b. border workers surveillance.

6. Community testing rates presented are crude rates calculated by counting the number of unique people in a particular demographic group, divided by the population count for that demographic group and multiplied by 1000.

7. The number of people tested is the count of the number of people in a given demographic who were tested in a given week.

8. Community testing rates enable us to monitor the background level of symptomatic testing within our communities. To date, community testing rates include those tested due to contact tracing (i.e. likely asymptomatic testing). The number of people tested as part of contact tracing is concentrated to periods of outbreak response and makes up a small proportion of overall community testing therefore is unlikely to have an impact on the trends observed in testing rates by ethnicity.

9. A very small number of tests will not have an NHI number attached, so the demographic information for those tests will not be available and will not be counted when looking at data by ethnicity.