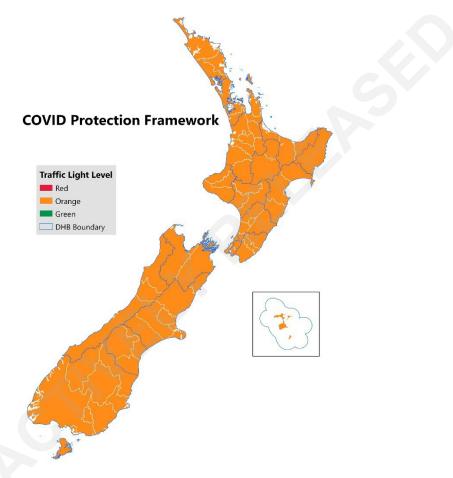
### **Trends and Insights Report**

For the week ending Sunday 16 January 2022 – Updated 21 January 2022

#### Current State of Aotearoa



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#### Snapshot of the past 7 days

- Lakes DHB experienced the largest increase in cases this week (164 percent increase). Bay of Plenty, Counties Manukau, Taranaki, Waikato and Waitemata all experienced decreases.
- Cases overall continue to decline as per the trend beginning towards the end of 2021.
- European and Māori continue to be the ethnicities with the highest case numbers and Māori are now more evenly represented with European/Other compared to previous reporting that outlined the overrepresentation of Māori in case numbers.
- The youngest age group (0-9) has the highest case count, but middle-aged cases (30-59) are most likely to be hospitalised.
- There continues to be a clear correlation seen between a higher number of cases reported in areas which are have a higher deprivation score in the Auckland region.
- As cases decrease overall, the correlation between deprivation score, vaccination status and cases were less apparent with there being more even representation of all housing deprivation groups in cases in proportion to each other regardless in both the vaccinated and unvaccinated groups. However, overall cases amongst those not vaccinated were still higher than those vaccinated.
- Europeans and Māori are represented the most in hospitalisations with Pacific People following behind, although overall hospitalisation numbers are low.

### Points of Interest

#### Rotorua Emergency Housing Cluster:

23 Cases with 128 direct contacts. Cluster now includes 4 hotels with links between facilities among cases. three of the most recent cases are children associated with the cluster.

#### Wellington region community cases:

Cases have undergone WGS and form two distinct clusters. Cluster 1 is made up of four cases that are genomically linked to the Lakes region. Cluster 2 is made up of three cases that are linked to Auckland and Bay of Plenty.

#### **BA.2 Omicron detected**

BA.2 a sub-lineage of Omicron was detected in a case that arrived from India on 08 January and tested positive on 10 January and is currently in Stamford Plaza MIQ with two other cases which are also BA.2 Omicron. BA.2 is still in the minority of Omicron cases detected at the border but is the dominant lineage in both India & Philippines and is increasing in frequency in UK & Denmark.

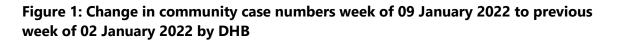
#### Demographic Trends

The below figures show the new 2,151 cases reported in the previous week between Monday 6 December 2021 to Sunday 16 January 2022 by DHB, age band and ethnicity. Cases overall have continued to decline since the most recent outbreak reached its peak in mid-late November 2021.

The ages of cases reported in the past week has reverted to predominance in the 0-12 age band after last week where the 26-45 age band dominated. Cases 66+ continue to be represented at the lowest rates.

Māori have had case numbers decrease significantly and continuing last week's trend are no longer the dominant ethnicity of cases with Europeans showing similar rates of cases and hospitalisations

to Māori. Case numbers for Pacific People has significantly decreased in the past week. This change in case demographic makeup could be indicative of the latest outbreak dynamics changing.



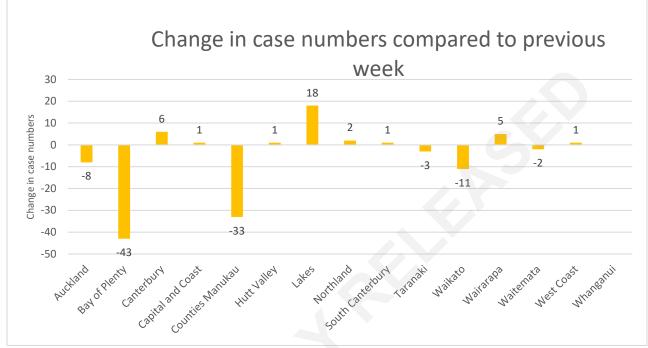
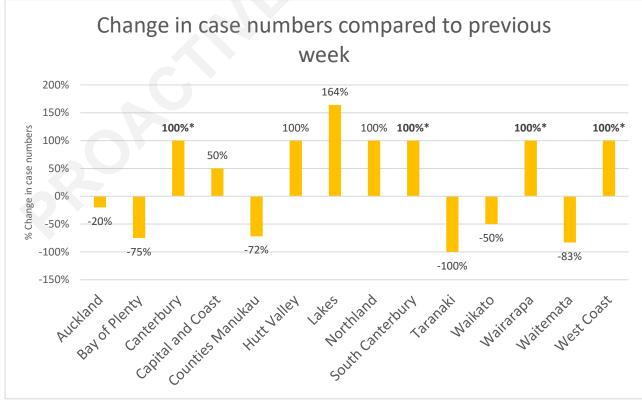


Figure 2: Percentage change in community case week of 09 January 2022 to previous week of 02 January 2022 by DHB



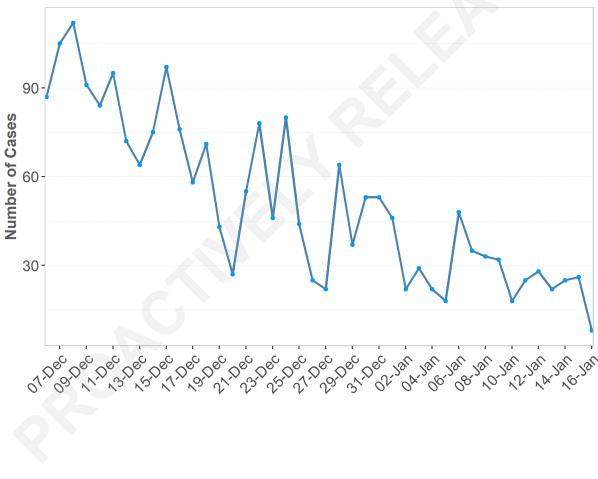
\*Increases of 100% represent any increase in case number above 0

### **Epidemiological Curves**

The figures below show the number of new cases reported in the previous six weeks from Monday 6 December 2021 to Sunday 16 January 2022.

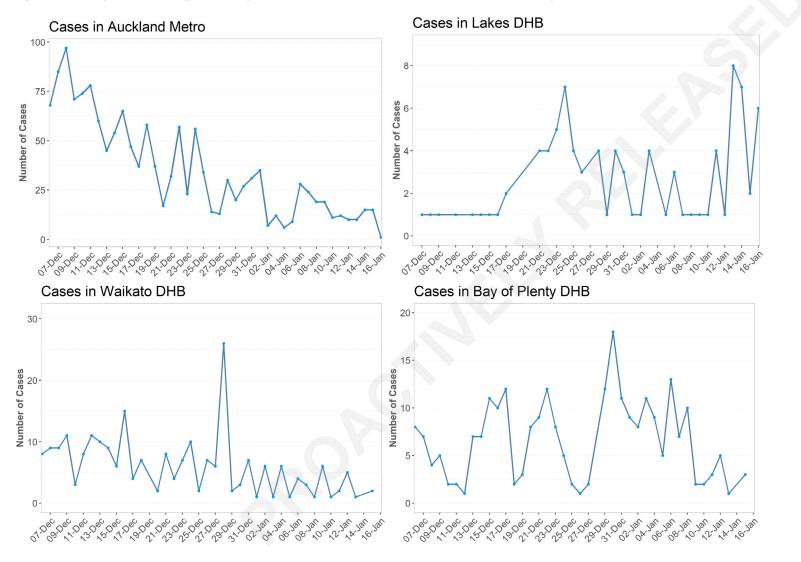
The number of cases this week (304) is slightly higher than the number of cases reported in the previous week (211). However, this is still part of an overall decrease in cases observed from the end of 2021 onwards. Case numbers in Auckland Metro continue to decline whereas Lakes, Waikato and Bay of Plenty DHB all experienced slight increases.

### Figure 3: Daily community cases across New Zealand from 06 December 2021 to 16 January 2022



#### Cases in all of New Zealand

Figure 4: Daily community cases by DHB from 06 December 2021 to 16 January 2022



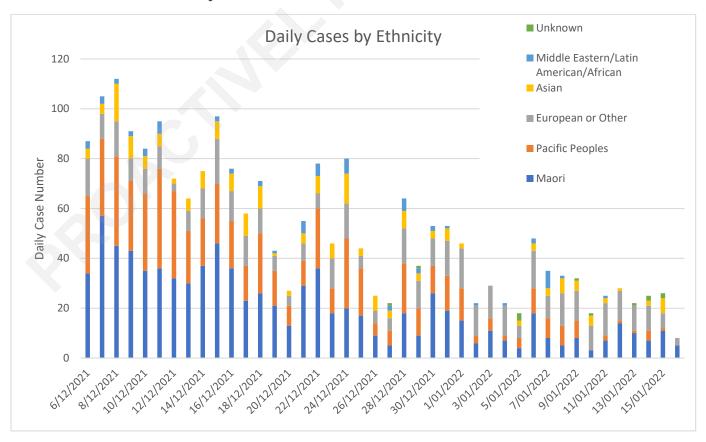
#### Cases by Ethnicity

The figures below show the number of new cases reported in the previous six weeks from Monday 6 December 2021 to Sunday 16 January 2022.

The ethnic proportion of cases continues to become more evenly distributed particularly when comparing Māori to European cases. In early to mid-December 2021, Māori and Pacific Peoples were overrepresented in cases whereas now Māori are represented at similar rates to European case numbers and Pacific cases have significantly declined. Cases amongst Asians have continued to be low throughout this period.

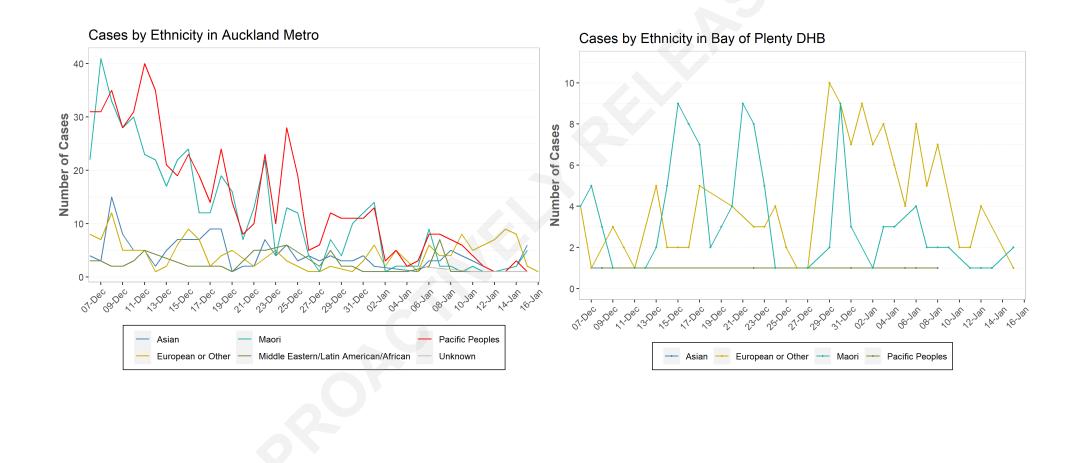
Cases in Auckland Metro have declined steadily for all ethnicities with Māori and Pacific Peoples experiencing both the highest case numbers at the beginning of this period and the largest decreases. Other ethnic groups have remained at low case numbers with a small increase for Europeans observed around 10 to 14 January 2022. This may represent the increased movement of Europeans in this area following restrictions being lifted before the Christmas/New Year period.

In the Bay of Plenty, cases for Māori have experienced regular peaks and troughs over this period with cases declining and remaining low over the last fortnight. Europeans in Bay of Plenty have experienced lower case numbers than Māori but did have a dramatic increase around 27 December 2021 which has steadily declined since then to the low numbers observed most recently. This likely corresponds to travel for the Christmas period.



### Figure 5: Daily community cases across New Zealand broken down by Ethnicity from 06 December 2021 to 16 January 2022

Figure 6: Daily cases broken down by Ethnicity by DHB from 06 December 2021 to 16 January 2022

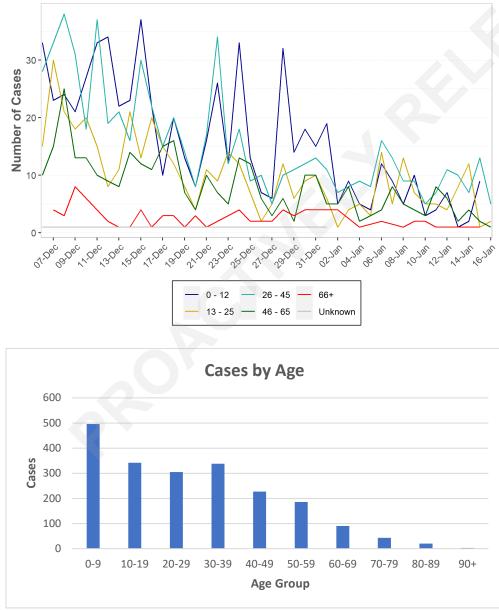


#### Cases by Age

The figures below show the number of new cases reported in the previous six weeks from Monday 6 December 2021 to Sunday 16 January 2022.

All age groups have experienced a steady decline following peaks in mid- to late-December 2021 except for the 66+ age group which has experienced low case numbers throughout this time. The 0-12 and 26-45 age groups had both the highest case numbers throughout most of this period as well as the most dramatic peaks. This may reflect the cases presence in day cares/holiday programmes (0-12) and being mobile/travelling throughout this period (26-45). These two age groups may also reflect young families where children may test positive in a cluster and pass the virus onto their guardians and vice versa.

### Figure 7: Community case breakdown by Age group from 06 December 2021 to 16 January 2022 with Age group case totals



Cases by Age Group in all of New Zealand

#### Cases by Deprivation

The figures below show the number of new cases reported in the previous six weeks from Monday 6 December 2021 to Sunday 16 January 2022.

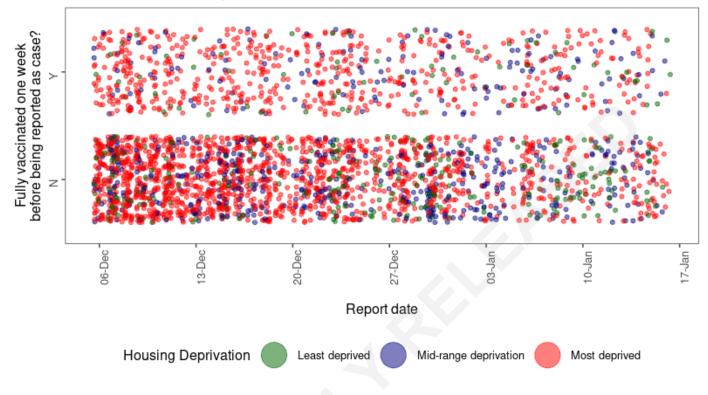
In the maps below we can see the distribution of cases reported in the past six weeks in Auckland Metro in relation to housing deprivation. A clear correlation can be seen between a higher number of cases reported in areas which are have a higher deprivation score or are close to areas with a higher deprivation score.

In early December, graphs showing cases by vaccination status and housing deprivation showed that the majority of cases in the outbreak across New Zealand are unvaccinated. There is also a correlation between cases and housing deprivation regardless of vaccination status with those most deprived being most represented in case numbers. Within the most deprived group, those who had not been fully vaccinated were significantly more likely to test positive for covid. However, by mid-December onwards as case numbers declined overall, this pattern was less apparent with cases appearing more evenly among all deprivation scores regardless of vaccination status. Deprivation status aside, at this more recent stage with lower case numbers, the higher case rate amongst those not fully vaccinated is still clear.

COVID-19 community cases in the Auckland metropolitan region

Please note that a small proportion of cases (usually between 1% and 2% of the total) do not have a valid geolocation code and are not included in this map

COVID-19 cases by vaccination status and housing deprivation Delta Outbreak community cases, NZ wide



#### Hospitalisations

The figures below show the 48 hospitalised cases who have been reported in the previous six weeks between Monday 6 December to Sunday 16 January (rolling four-day average) age band, ethnicity, and vaccination status at the time of being reported as a case.

Hospitalisations have declined alongside declining cases, as expected. Apart from brief periods (21-23 December 2021 and 4-6 January 2022), hospitalisation four-day rolling averages have remained below cases. These short periods where hospitalisations were higher than cases may reflect restrictions easing in Auckland and the New Years period respectively.

Middle-aged people (30-59 year olds) have been more represented in hospitalisations compared to those 0-29 and 60-89 years old. This may be due to higher case numbers in young children passing the virus onto caregivers (parents, grandparents etc.) who don't fare as well when infected.

As with case numbers, hospitalisations are highest in both Europeans and Māori with Pacific Peoples being the third most represented. All other ethnicities in New Zealand have had low hospitalisation rates.

Figure 8: Four-day rolling average of community cases and hospitalisations from 06 December 2021 to 16 January 2022

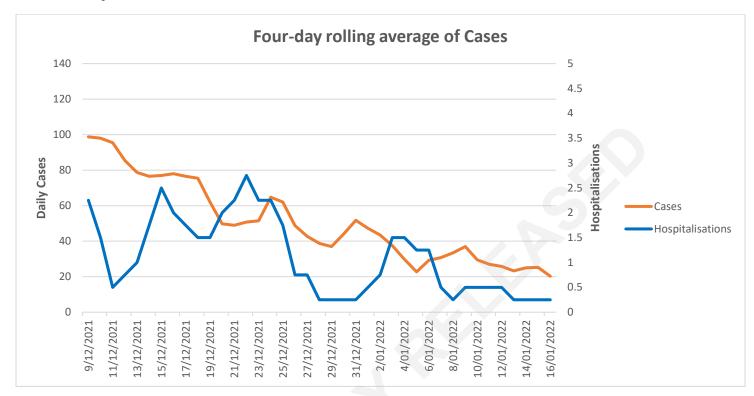


Figure 9: Hospitalised case breakdown by Age group from 06 December 2021 to 16 January 2022

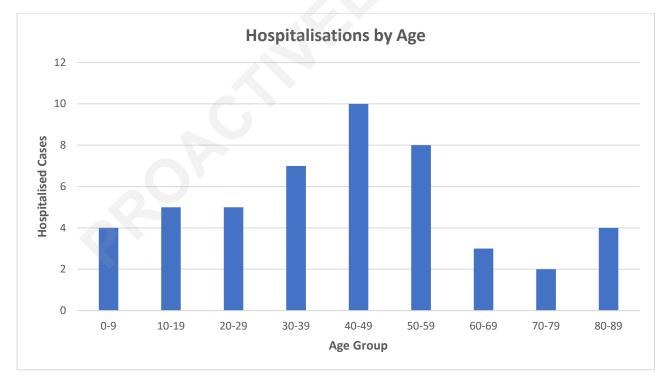


Figure 10: Hospitalised case breakdown by Ethnicity from 06 December 2021 to 16 January 2022

