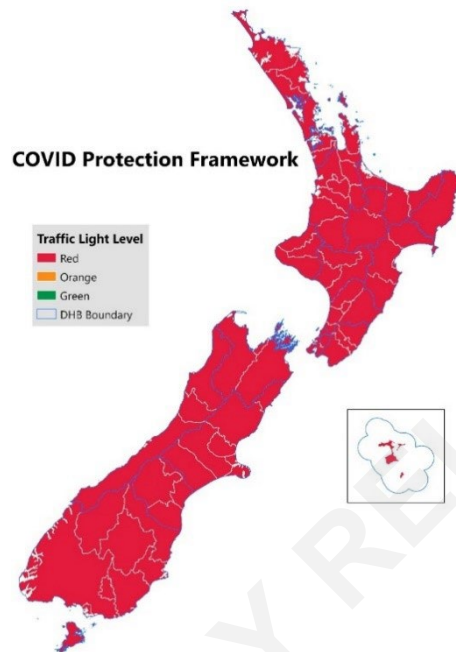


## Trends and Insights Report

Updated 03 February 2022

### Current State of Aotearoa



### Snapshot of the past 7 days

- Overall, the weekly incidence of new cases has doubled in the week ending Sunday 23 January 2022 to in the week ending Sunday 30 January 2022.
- Counties Manukau has had the highest number of incident community cases since January 26 (267 cases) compared to the previous week (22 cases).
- Auckland, Waikato and Northland DHBs are experiencing the most cases.
- Asians are now the ethnicity most represented in cases making up 52% of all cases.
- Cases are rising for all age groups under age 66+. The highest number of cases are in 26-45 year-olds, then 13-25 year-olds. The lowest number of cases are in those aged 66+.
- There is no difference in case numbers by sex.
- Overall, cases are still concentrated in areas of high housing deprivation. However, since the previous week there has been a decrease in the proportion of new cases in most deprived among the unvaccinated; the change in trend was less notable among the vaccinated cases.
- Despite increasing cases, the protective effect of vaccination is still apparent when considered in relation to the proportion of the population who are vaccinated.

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## Recent cases

These tables show the new cases reported in the previous week between 26 January 2022 and 2 February 2022, classified by DHB, age band and ethnicity. Most cases are in Auckland, Waikato, and the Bay of Plenty.

The most common ages of cases are in 26- 45-year-olds, a change from the pattern observed last two weeks which showed the most common age to be 0-12. Just over half of the cases have been in people recorded as Asian ethnicity, consistent with the outbreak initially affecting Indian communities.

**Table 1: New community cases**

DHB	New community cases since 26 Jan
Northland	22
Waitemata	67
Auckland	95
Counties Manukau	267
Waikato	79
Bay of Plenty	42
Taranaki	5
Lakes	28
Tairāwhiti	8
Whanganui	0
MidCentral	2
Hawke's Bay	13
Capital and Coast	2
Hutt Valley	2
Wairarapa	0
Nelson Marlborough	6
West Coast	0
Canterbury	7
South Canterbury	0
Southern	0
<b>National</b>	<b>645</b>

Ethnicity	New community cases since 26 Jan
Asian	333
European or Other	133
Pacific Peoples	86
Maori	56
Unknown	37
<b>Total</b>	<b>645</b>

Sex	New community cases since 26 Jan
Female	352
Male	350
Unknown	5
<b>Total</b>	<b>707</b>

Age	New community cases since 26 Jan
0 - 12	93
13 - 25	183
26 - 45	206
46 - 65	130
66+	27
Unknown	6
<b>Total</b>	

## Epidemic Curves

The figures in this section show the number of new cases reported in the six weeks from Tuesday 21 December 2021 to Saturday 29 January 2022.

The number of cases this week (415) is significantly higher than the number of cases reported in the previous week (210). Case numbers have been relatively stable since the beginning of 2022, but in the past week cases across NZ (Fig 3) rose rapidly in the North Island regions, with the Auckland Metro region (Fig 4) making up the majority of cases across the nation. Case numbers in Auckland Metro, Lakes and Bay of Plenty are all increasing after previously declining in the week prior.

**Figure 1: Daily community cases across New Zealand from 12 January to 02 February 2022**

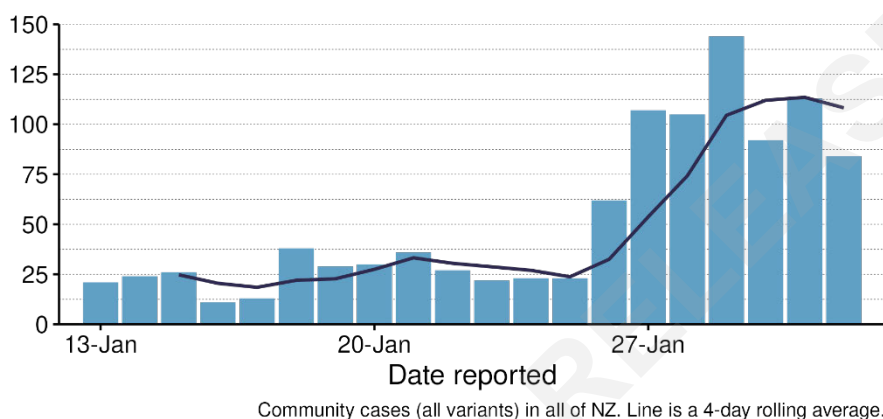
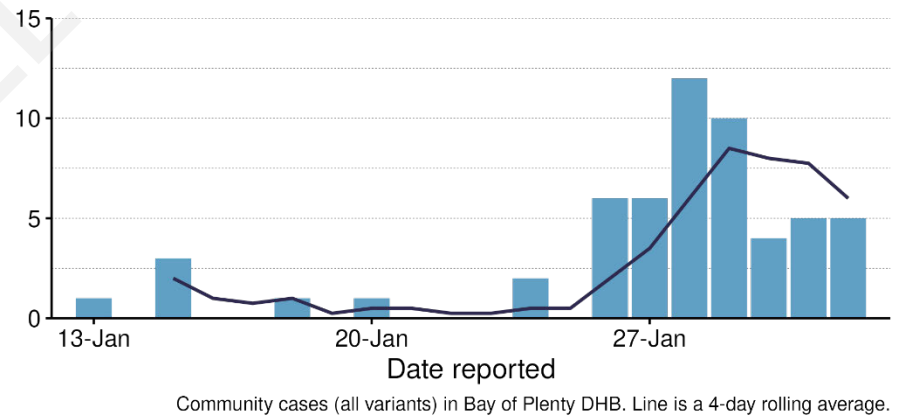
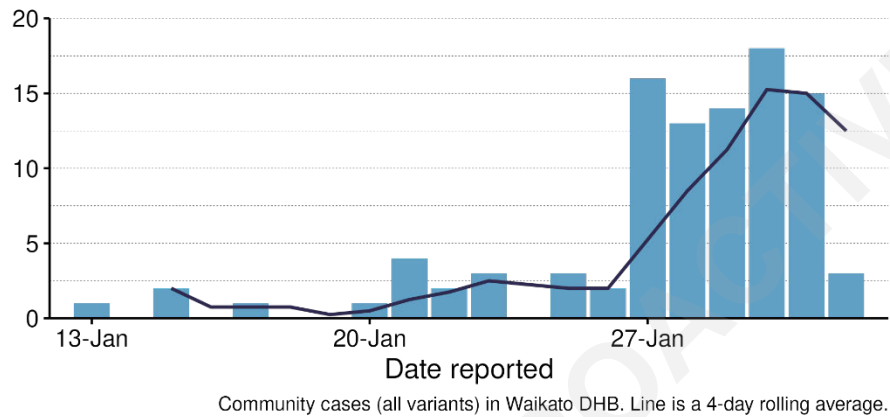
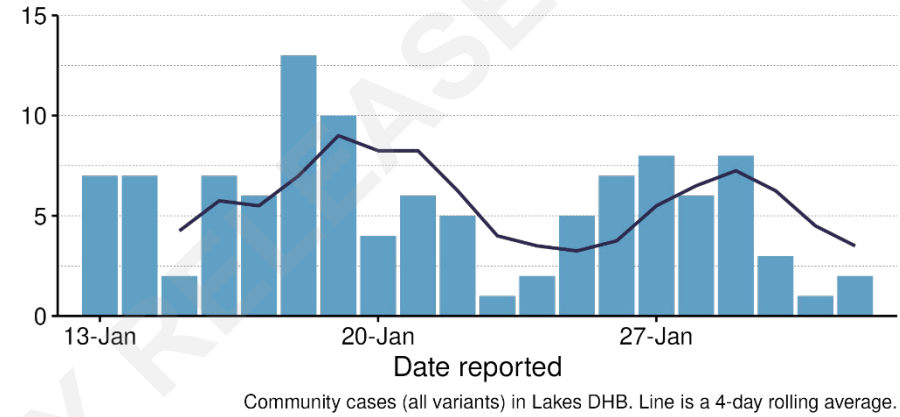
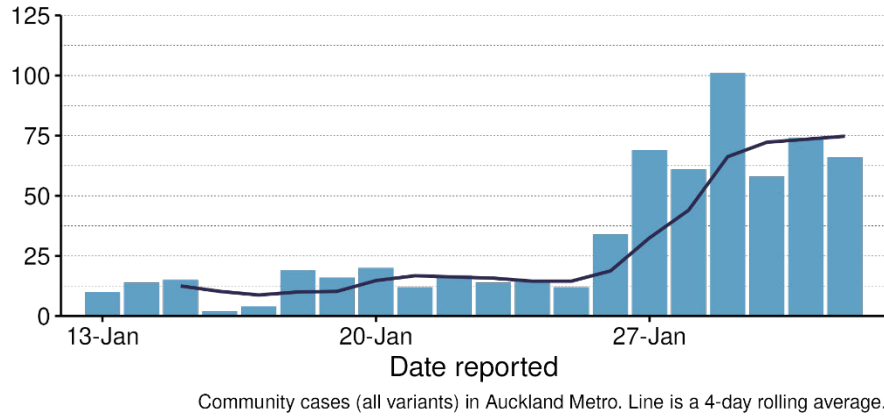
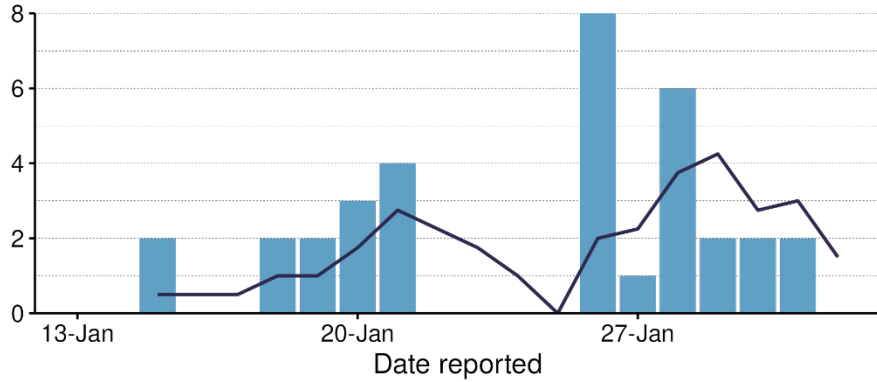


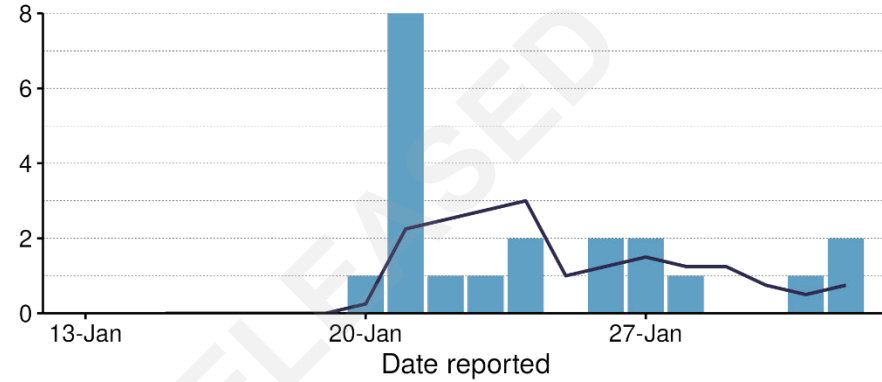
Figure 2: Daily community cases by DHB from 12 January to 02 February 2022



# COVID-19



Community cases (all variants) in Hawke's Bay DHB. Line is a 4-day rolling average.



Community cases (all variants) in Nelson Marlborough DHB. Line is a 4-day rolling average.

PROACTIVELY RELEASED

## Cases by Ethnicity

The figures below show the number of new cases reported in the six weeks from Monday 21 December 2021 to Sunday 29 January 2022.

In the past week, people of Asian ethnicity made up around half of all cases. All other ethnicities are proportional to new case numbers,

More than half of cases in the past week in the Auckland Metro and Bay of Plenty regions have been of Asian ethnicity, specifically Indian ethnicity, with European or Other being the next most reported ethnicity. Of the non-Māori/non-Pacific cases, 59 percent were Indian, and 22 percent were NZ European/Pākehā.

Lakes DHB is an outlier, where Māori are most represented in cases.

**Figure 3: Daily community cases across New Zealand, by Ethnicity from 12 January to 02 February 2022**

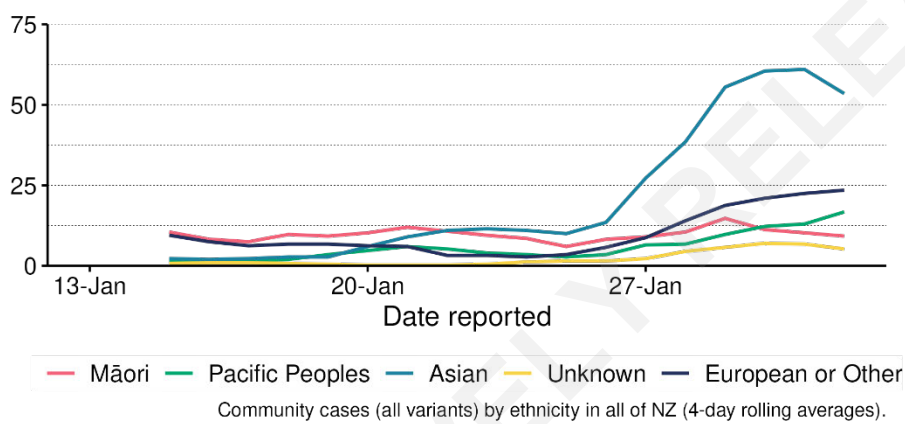
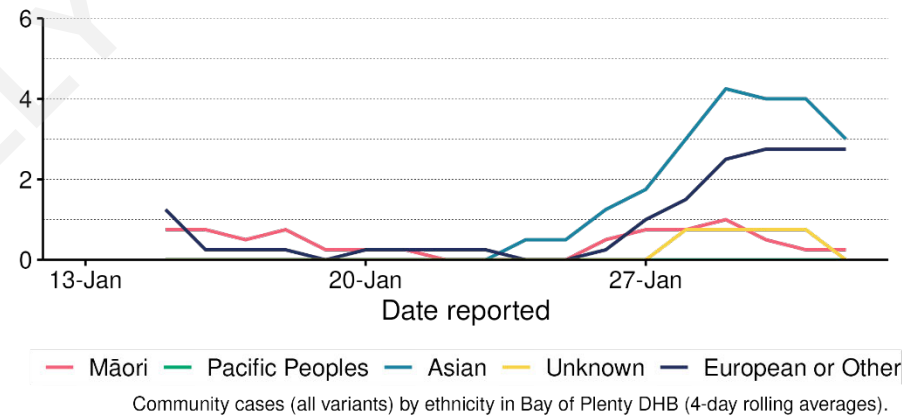
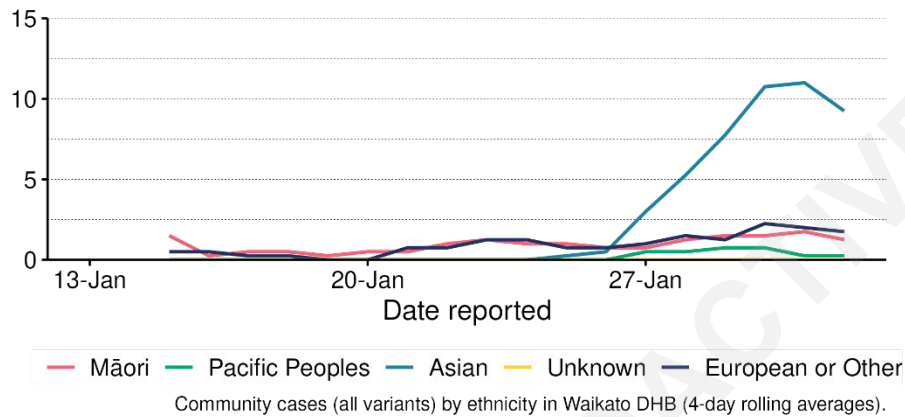
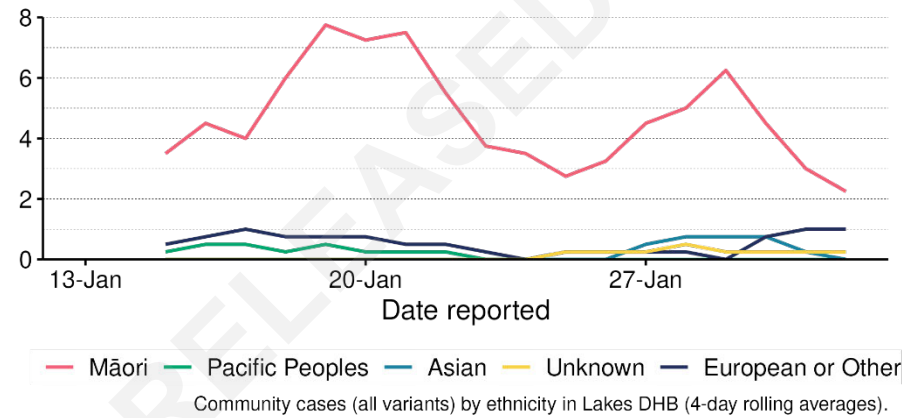
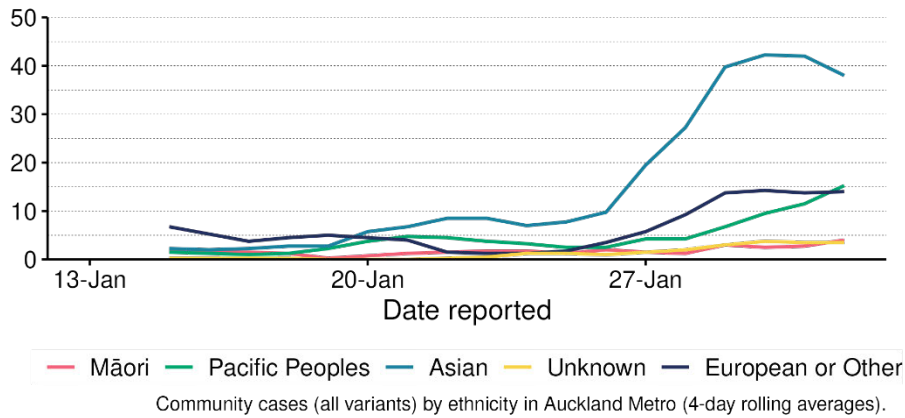




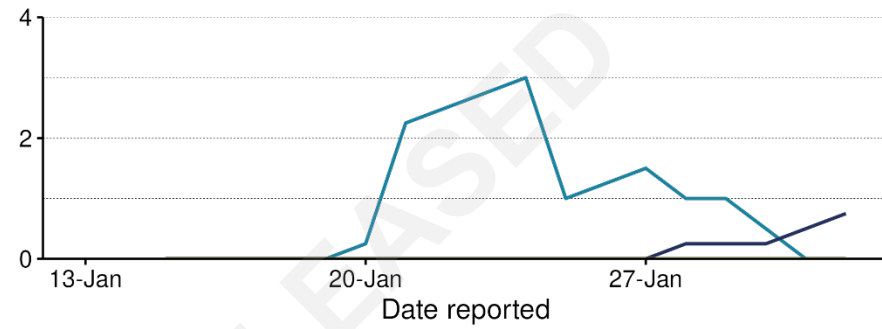
Figure 4: Daily cases broken down by Ethnicity by DHB from 12 January to 02 February 2022



# COVID-19



Community cases (all variants) by ethnicity in Hawke's Bay DHB (4-day rolling averages).



Community cases (all variants) by ethnicity in Nelson Marlborough DHB (4-day rolling averages).

PROACTIVELY RELEASED

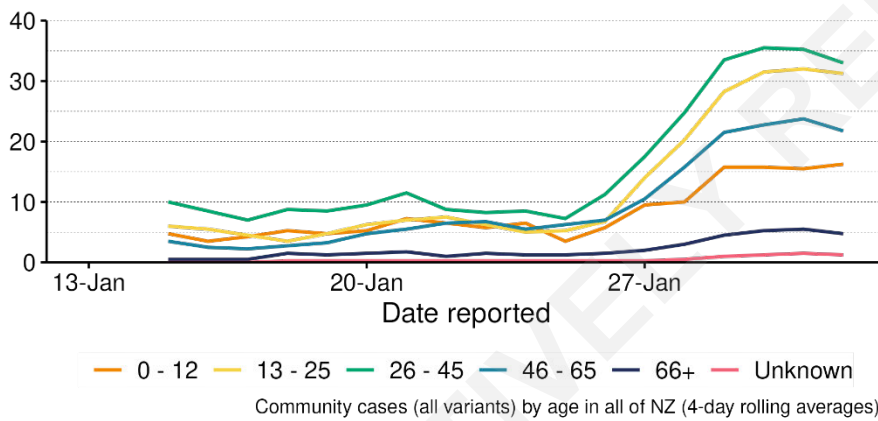
## Cases by Age

The figures below show the number of new cases reported in the six weeks from Tuesday 21 December 2021 to Saturday 29 January 2022.

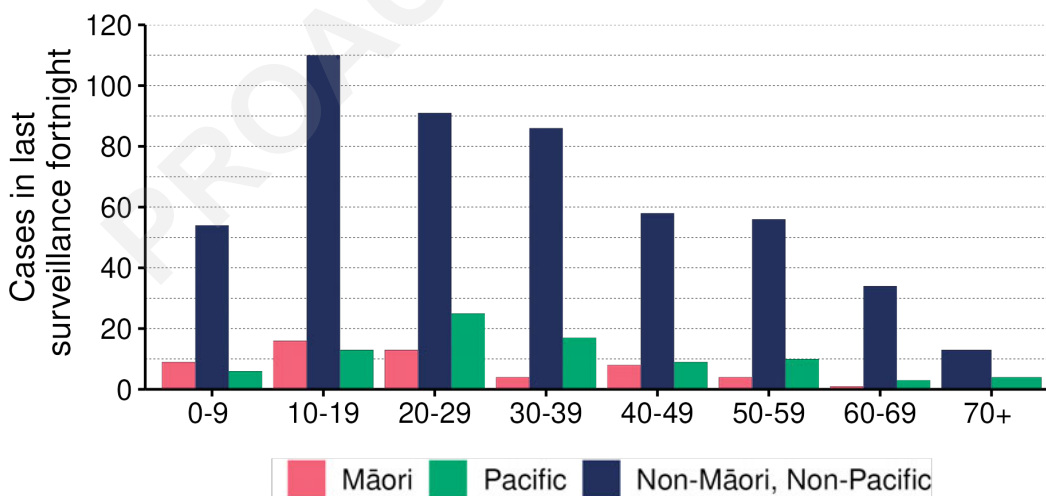
All age groups except the 66+ bracket have experienced an increase in cases in late January. In late December, the 0-12 and 26-45 age groups had the highest case numbers, which lowered to those of other age groups throughout January before the recent peak. Throughout this period, those 66+ have had the lowest case numbers and have not experienced the same surge that other age groups have in the last week. This is part of an overall pattern throughout this outbreak whereby the 66+ age group has been less affected than others.

Those aged 10-59 who are Non-Māori and Non-Pacific had the highest number of cases in the last surveillance fortnight. This is a change from the last surveillance fortnight where in the 0-9 age category, Māori have had higher case numbers than non-Māori and non-Pacific. Māori case numbers for all age groups compared to non-Māori, non-Pacific cases have significantly reduced since the last surveillance period where they were much closer to the numbers for non-Māori and non-Pacific. This shift is driven by the increase in Asian cases. Pacific cases have remained low comparatively in all age groups.

**Figure 5 COVID-19 community case numbers by age group, 27 January to 02 February 2022**



**Figure 6 COVID-19 community case numbers by prioritised ethnic group and age group, 27 January to 02 February 2022**



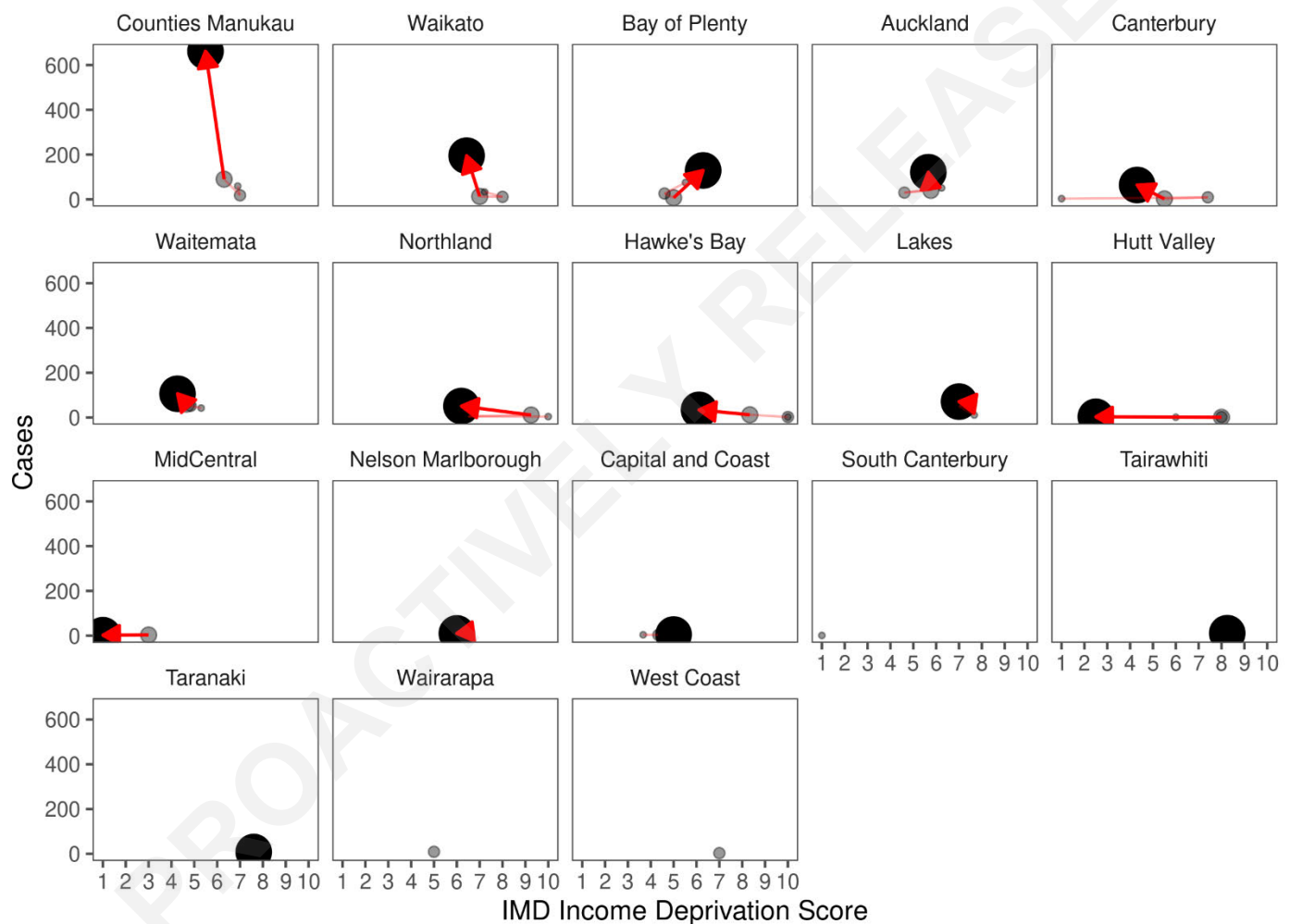
Source: EpiSurv 0900hrs 02 February 2022

## Cases by socio-economic indicators

The figures in this section show the number of new cases reported in the six weeks from Monday 4 January 2022 to Tuesday 1 February 2022.

Figure 7 highlights cases by income deprivation using the Index of Multiple Deprivation (IMD) Score<sup>1</sup>. The arrow shows the direction of travel from the previous week for the past four weeks. In general, all cases in DHBs are trending towards being less deprived (towards 1 in the IMD Score). Counties-Manukau has had a substantially large increase in case numbers; however, cases have remained around the same Income Deprivation Score of 6 to 8. Bay of Plenty has had an increase in cases who are more income deprived than the week prior.

**Figure 7 COVID-19 case trends from 27 January to 02 February 2022 for DHBs, weighted by income deprivation score**



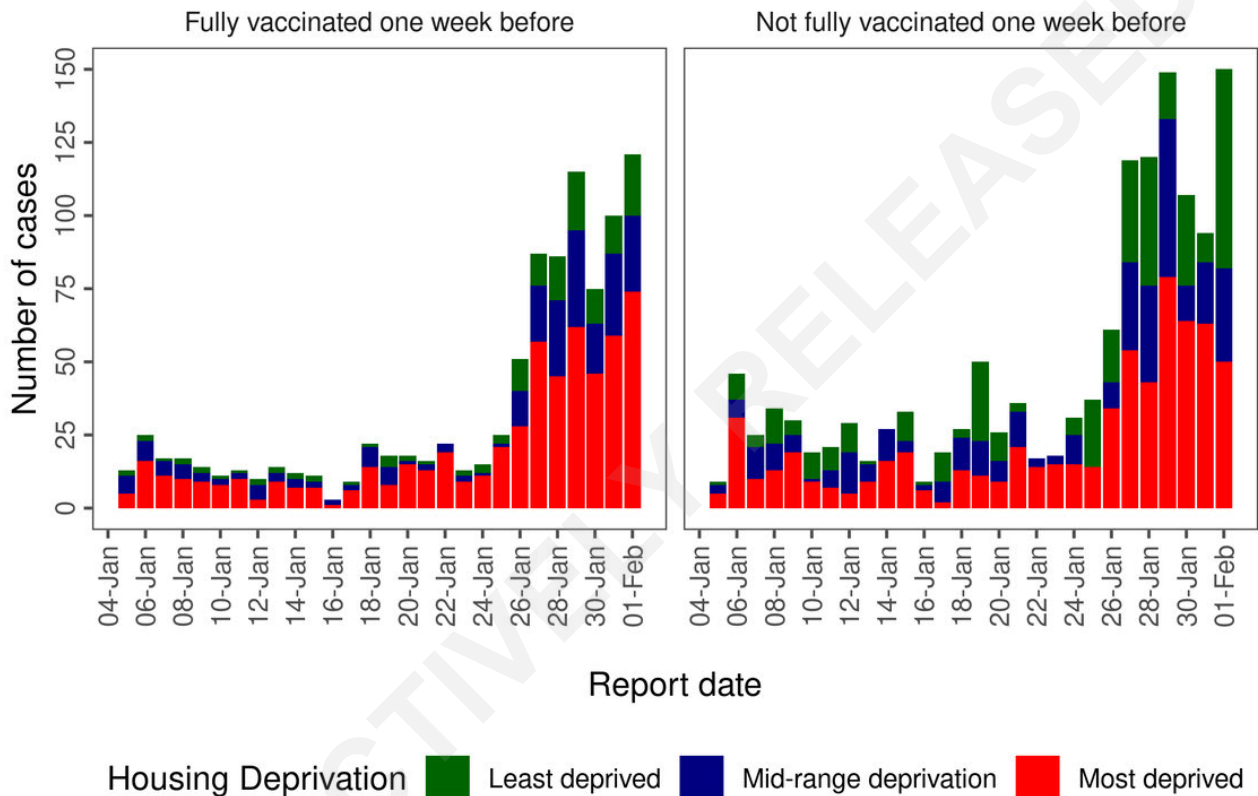
<sup>1</sup> The Index of Multiple Deprivation is a set of indices following a methodology developed in the United Kingdom. It measures relative disadvantage in New Zealand neighbourhoods based on employment, income, crime, housing, health, education and access to services. For more information, please refer to *The 2018 New Zealand Index of Multiple Deprivation (IMD18): Indicators for social and health research in New Zealand* (Brief-report-IMD18.pdf (auckland.ac.nz)).

**Error! Not a valid bookmark self-reference.**, illustrating January 2022 cases by vaccination status and housing deprivation, shows that more than half of cases in the outbreak across New Zealand are unvaccinated. In general, there is also a correlation between cases and housing deprivation regardless of vaccination status with those most deprived being most represented in case numbers. As the outbreak has continued and overall case numbers have increased, cases for the least deprived have begun to rise in proportion to those most deprived, especially for those not vaccinated. Prior to this, case numbers of the least deprived were significantly lower in comparison.

**Figure 8 COVID-19 cases from 5 January 2022 to 1 February 2022 comparing vaccination and housing deprivation**

## COVID-19 cases by vaccination status and housing deprivation

Community cases, NZ wide

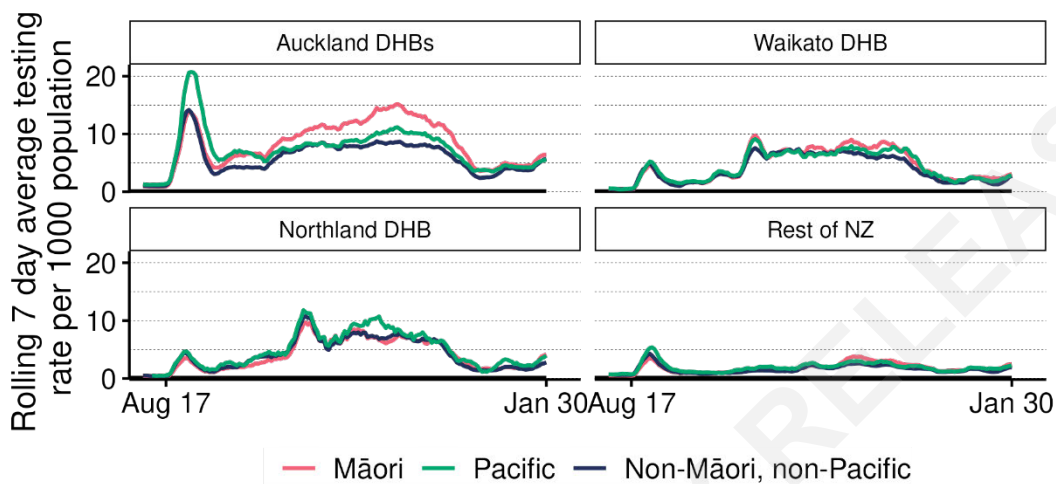


## Surveillance Tests

The figures in this section show the number of tests in the six weeks from Sunday 1 August 2021 to Saturday 29 January 2022.

Compared to the rest of New Zealand, the Auckland, Waikato and Northland DHBs continue to have the highest number of tests per 1000 population.

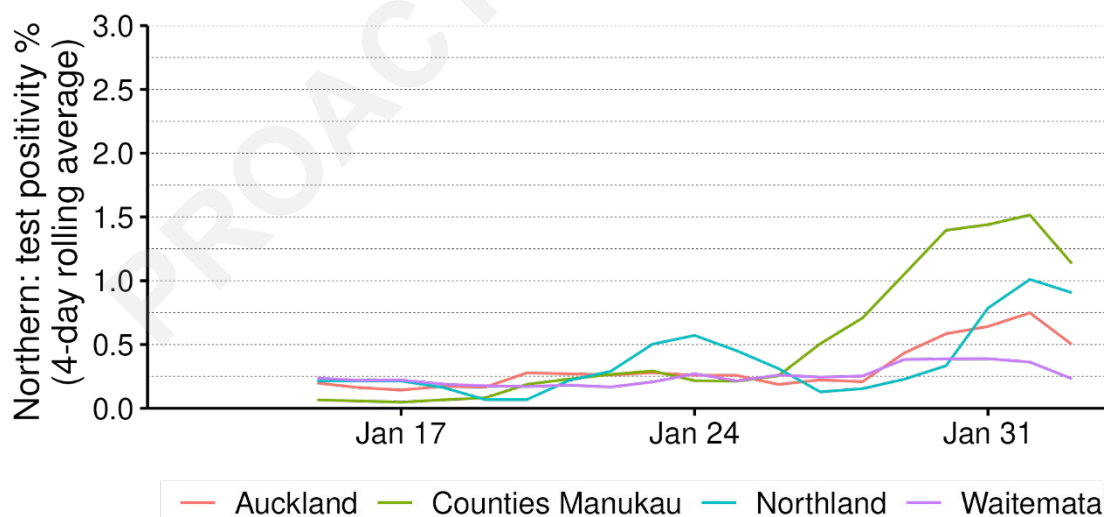
**Figure 9: Seven-day rolling average COVID-19 testing rate by prioritised ethnic group and region, 01 August 2021 to 02 February 2022**



Source: Éclair testing database 02 February 2022; Excludes tests in returnees and border workers.

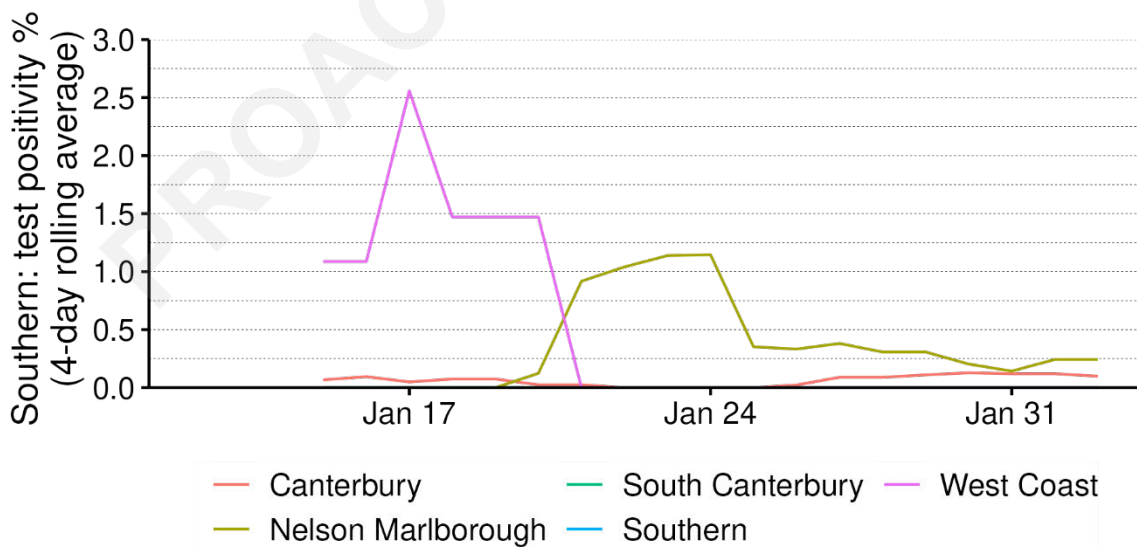
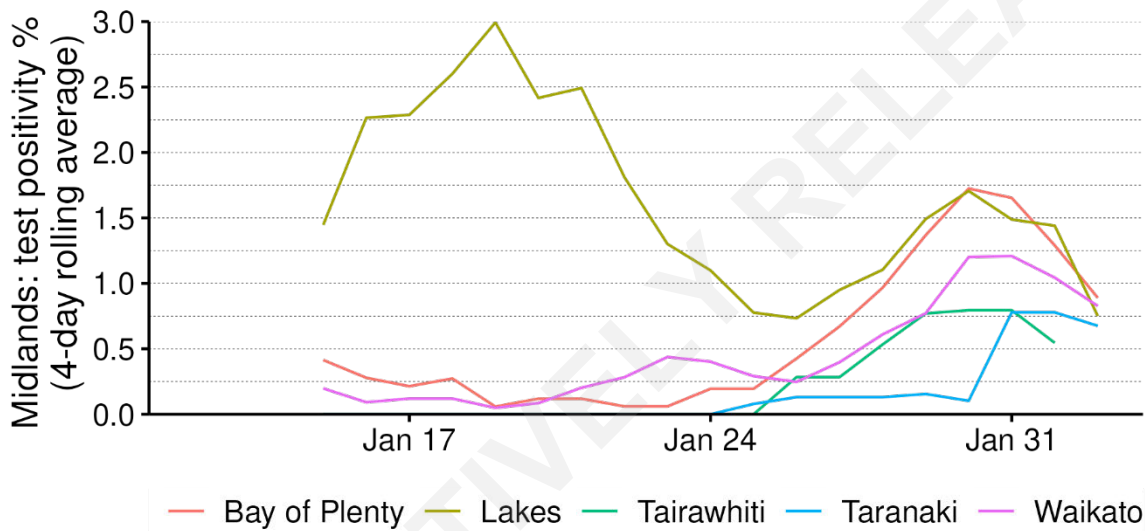
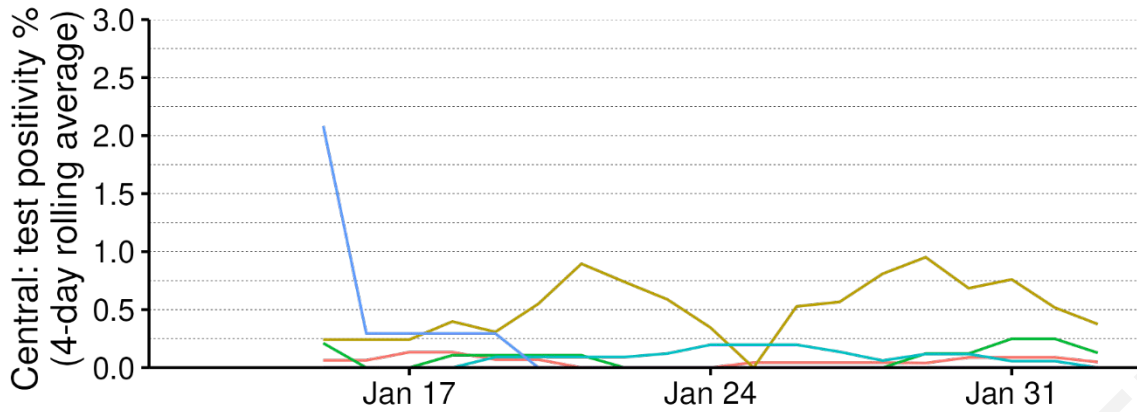
Test positivity remains low. However, all regions have been trending upwards since the last week of January 2022. The Midlands region currently has the highest test positivity. Within the Midlands region, Lakes DHB and Bay of Plenty DHB have the highest test positivity. **Error! Reference source not found..**

**Figure 10: Test positivity by region or DHB**





# COVID-19

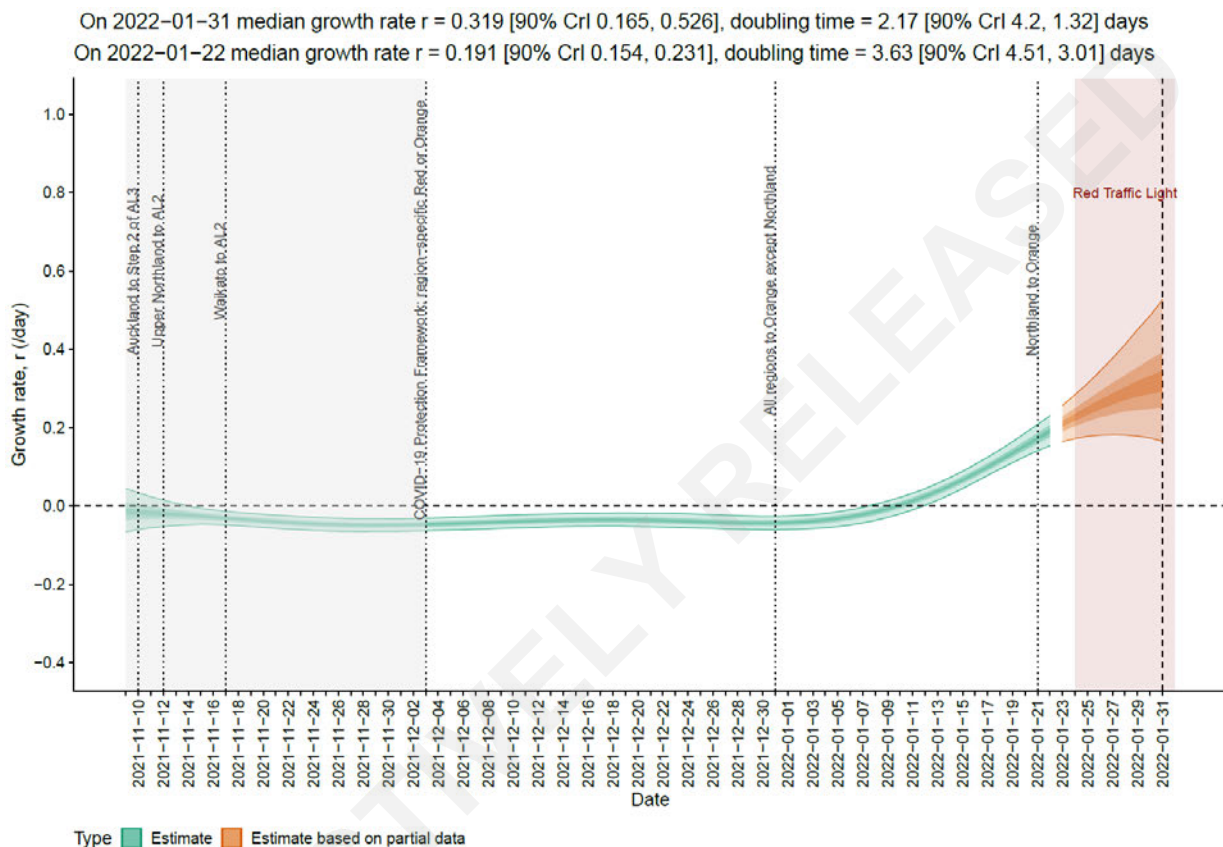


## Short-term forecasts

Te Pūnaha Matatini estimate short term projections of case numbers by calculating and then extrapolating the effective reproduction number,  $R_{eff}$ .

The results are presented as a growth rate, with credible intervals. The darkest colour is for a credible interval of 20%, then 50%, and 90%. An estimate of doubling time is also supplied.

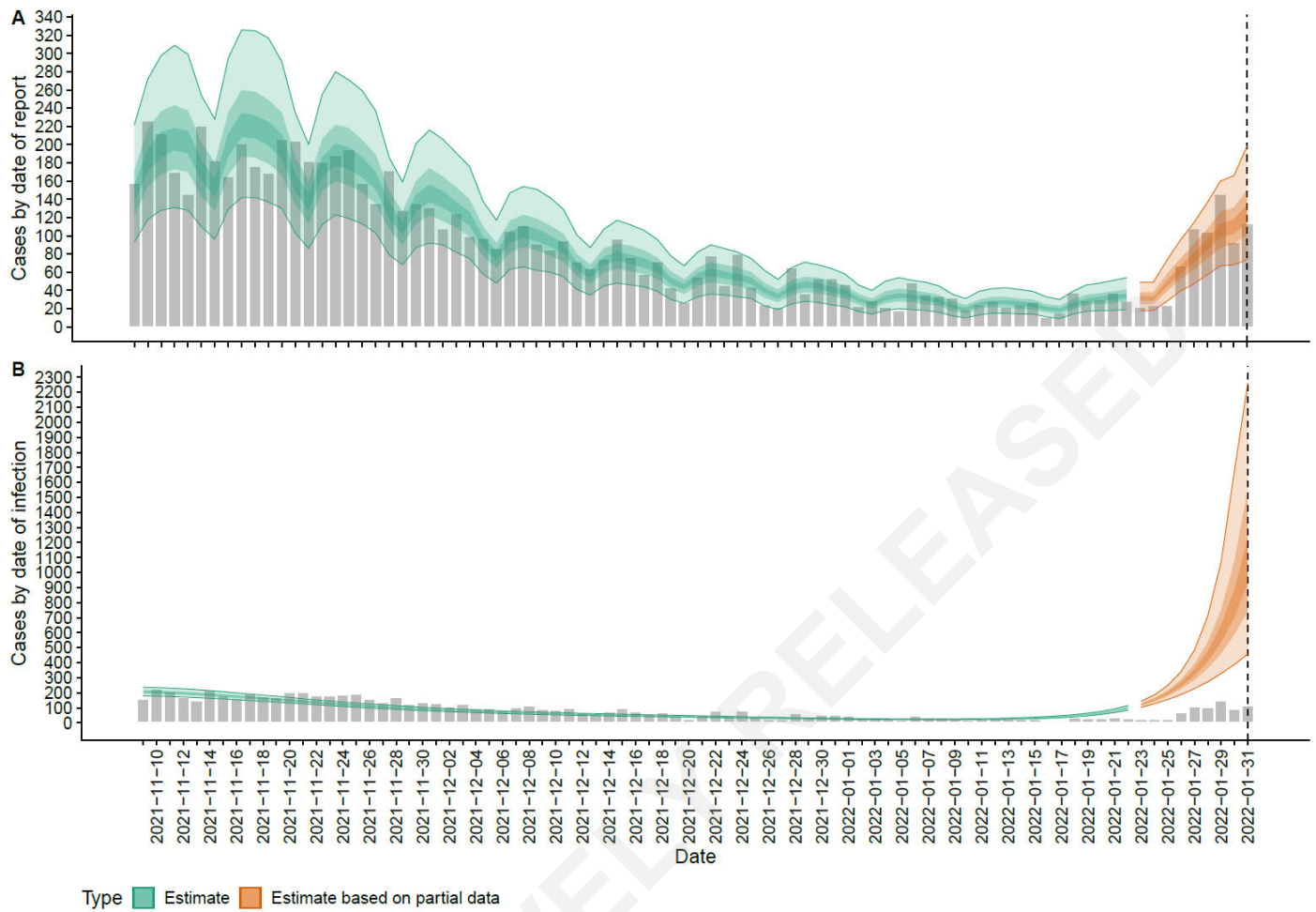
**Figure 10: Estimated and projected Effective R, all New Zealand**



Case numbers are then projected by report date (Figure 11, top) and infection date (bottom). The orange sections are estimates of infections that will be detected in the next few days.



Figure 11: Estimated and projected community case numbers, all New Zealand



These forecasts can be generated for individual DHBs when there are more reported case numbers.

## Points of Interest

### Clusters of Concern

- January 2022 Auckland Church Events
  - This cluster is associated with two exposure events at a s 9(2)(a) church which include two choir practices on 28 January and a church service on 29 January. A case who attended the church events while unknowingly infectious is noted to have worn a mask and practiced social distancing.
  - This is an evolving cluster. ARPHS noted in an Incident Management meeting the the development of this cluster may shift trends of case demographic in Auckland towards s 9(2)(a)
  - Probable index case Omicron BA.1
  - Work is underway to gather a full list of attendees which may result in more positive cases when testing is completed.
- Rotorua Transitional Housing Facility Cluster
  - On 2 February, Toi Te Ora reported 39 cases associated with the cluster
  - A case possibly linked to this cluster is a case of note s 9(2)(a) Rotorua Hospital's Incident Management Team reviewed the situation on 2 February.