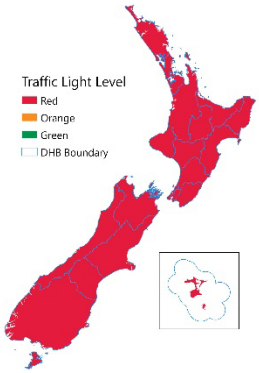
COVID-19

Trends and Insights Report

Updated 16 March 2022

Current State of Aotearoa

The whole of New Zealand is under the red traffic light, and the health sector response is in Phase 3.



Snapshot of the past 7 days

- Identified cases are showing signs that they are beginning to plateau, with a 9% increase in the last week (7-13 March) compared to the 62% increase in the week leading up to the last report (27 February-5 March). The weekly case rate was 2,739 new cases per 100,000, which is approximately 2.7% of the New Zealand population.
- Counties Manukau, Waitemata and Auckland account for 35% of all new cases.
- The case rate in those who had a booster vaccination was approximately 21% lower than those who were 'fully-vaccinated', compared to the 38% when last reported. It should be noted that this is not a full vaccine effectiveness estimate, as it does not account for differences in age and other factors that may affect the likelihood of becoming a case and/or being vaccinated.
- Those of European or other ethnicity account for nearly half of all cases, but continue to have the lowest case rate. Pacific peoples continue to have the highest case rate, at 4,690 per 100,000, with Māori now approaching similar levels, at 3,974 per 100,000.
- **Ethnicity of cases continue to vary markedly by region.** The Northern Region and Te Manawa Taki (Midlands) have the majority of cases who are Pacific Peoples or Māori, while Central and Southern regions account for most European and Other cases.
- 37% of cases live in areas of high housing deprivation and only 24% are from areas of low housing deprivation. Comparison of case rates of least deprived (2,135 per 100,000), mid-range deprived (3,496 per 100,000) and most deprived (2,739 per 100,000K) reveals that **mid-range deprived are now the most overrepresented in cases.**
- The median estimate of **effective R (R_{eff}) nationally is declining to 0.77** (90% Credible Interval [CI]: 0.3-1.6) for cases to 11 March, after adjusting for data lags.
- The number of active cases in hospital is approaching 900, this is nearly 20 times the peak level during the 2021 Delta outbreak.
- Reported cases have peaked in the three Auckland Metro DHBs and are **tracking down slightly above the modelled "high" scenario. Reported cases are also tracking to the "high" scenario of the Te Manawa Taki, Central and Southern regions**, and are now at about their predicted peak levels. **Hospitalisations** are still aligned with the "medium" scenario.

- **As at 14 March 2022, there have been 102 deaths since the beginning of the pandemic**. Mortality will be reported in more detail when it rises to a level where reporting by demographics can still protect privacy.

Contents

Exposure Events and Clusters of Concern

Please refer to daily SitReps for recent exposure events.

Future versions of this report may use National Contact Tracing System data to evaluate patterns and risks of contacts by location.

Recent cases

Table 1 to Table 4 show new cases reported in the past seven days to 13 March 2022 by DHB, age, sex and ethnicity.

Reported cases have begun to plateau overall, with almost 137,000 new cases reported in the week to 13 March. In the week prior to 7 March there was a 62% increase in new cases, amounting to almost 126,000, compared to a 9% increase in new cases in the week to 13 March.

- The DHBs with the highest number of new cases were Counties Manukau, Waitemata, Auckland and Canterbury (Table 1). Cases in the Counties Manukau, Waitemata and Auckland DHBs accounted for 35% of all cases reported in the week (14%, 11%, and 9% respectively), down from 53% in the week prior. Canterbury DHB accounted for 10% of all cases.
- Tairawhiti and Hutt Valley DHBs have the highest case rates (cases per population), with case rates of 4,569 per 100,000 and 4,342 per 100,000, respectively.
- Pacific Peoples continue to have the highest case rate at 4,690 per 100,000 however, this is only slightly above Māori case rates at 3,974 per 100,000 (Table 2).
- European & Other account for almost half of cases, but continue to have the lowest case rate, of 2,195 per 100,000.
- Case numbers in Māori and European and Other ethnicities have increased since the week prior however, case numbers in Asian and Pacific Peoples have begun to drop. Māori now represent 22% of new cases, while Asian and Pacific Peoples represent 15% and 13%, respectively.
- New cases are higher in females (53% of all cases) than in males (47%), though the case rates remain relatively similar (Table 3).
- Case numbers continue to be highest in 20–29-year-olds (20% of all cases), then 10–19-year-olds (19%), and 30-39-year-olds (18%) (Table 4).

Table 1: Community cases by DHB from 07 to 13 March 2022

DHB	Community cases reported 07 to 13 March	Rate per 100,000
Northland	4477	2314
Waitemata	15005	2385
Auckland	13415	2726
Counties Manukau	19726	3330
Bay of Plenty	9079	3503
Waikato	12829	2981
Tairawhiti	2350	4569
Lakes	3776	3300
Taranaki	3263	2651
Hawke's Bay	4978	2853
Whanganui	1174	1720
MidCentral	4284	2357
Hutt Valley	6750	4342
Capital and Coast	11184	3548
Wairarapa	1094	2250
Nelson Marlborough	2942	1868
West Coast	179	553
Canterbury	13690	2418
South Canterbury	834	1362
Southern	5875	1752
Unknown	55	297
Total	136959	2739

Source: NCTS/EpiSurv 2359hrs 13 March 2022

Table 2: Community cases by ethnicity from 07 to 13 March 2022

Ethnicity	New community cases from 07 to 13 March	Rate per 100,000
Māori	30465	3974
Pacific Peoples	17254	4690
Asian	20207	2750
European or Other	68220	2195
Unknown	813	-
Total	136959	2739

Source: NCTS/EpiSurv 2359hrs 13 March 2022

Table 3: Community cases by sex from 07 to 13 March 2022

Sex	New community cases from 07 to 13 March	Rate per 100,000
Female	71979	2823
Male	64833	2648
Indeterminate	1	-
Unknown	146	-
Total	136959	2739

Source: NCTS/EpiSurv 2359hrs 13 March 2022

Table 4: Community cases by age from 07 to 13 March 2022

Age	New community cases from 07 to 13 March	Rate per 100,000
0-9	15900	2434
10-19	25847	4035
20-29	27834	4128
30-39	24878	3610
40-49	19500	3108
50-59	12715	1987
60-69	6734	1259
70+	3551	656
Total	136959	2739

Source: NCTS/EpiSurv 2359hrs 13 March 2022

Epidemic Curves

Figure 1 and Figure 2 below show the number of new cases reported in the three weeks from 20 February 2022 to 13 March 2022 nationally and by DHB.

There has been a rapid rise in national case numbers since 09 February. Daily fluctuations may reflect changes in testing volumes, processing times and when cases are reported by laboratories through the National Contact Tracing System (NCTS) to EpiSurv. **The inclusion of positive Rapid Antigen Tests (RATs) in case counts started on 23 February 2022.**

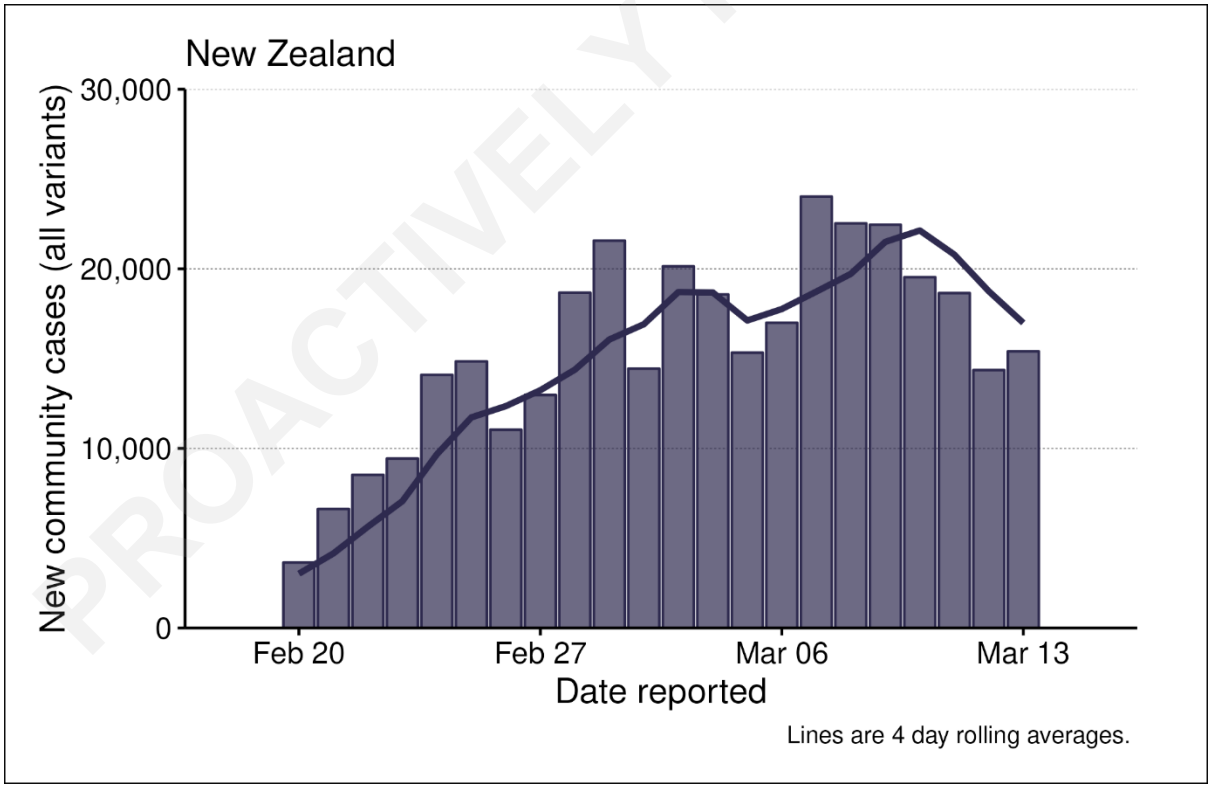
The 4-day rolling average of case counts is a more reliable measure of trends in diagnoses than the daily case counts. **The dip on the last day in the series is due to lags in reporting of results.**

Cases are fluctuating consistently between 14,000 to 24,000 daily cases since 28 February 2022, peaking at 24,021 on 07 March 2022.

From late February, the reported cases have been primarily concentrated in the Northern and Midland Regions (Figure 2). However, cases in Southern and Central Regions also began to rise in late February and now are continuing to increase, whilst cases in the Northern Region appear to have peaked around 01 March 2022 and are declining.

Reported cases in the Central Region are highest in the Capital and Coast DHB and in the Southern Region, are highest in Canterbury DHB (Figure 3). This is not unexpected as they are the DHBs that serve the largest populations for these regions.

Figure 1: Daily community cases nationally from 20 February to 13 March 2022



Source: NCTS/EpiSurv as at 2359hrs 13 March 2022

Figure 2: Daily community cases by region from 20 February to 13 March 2022

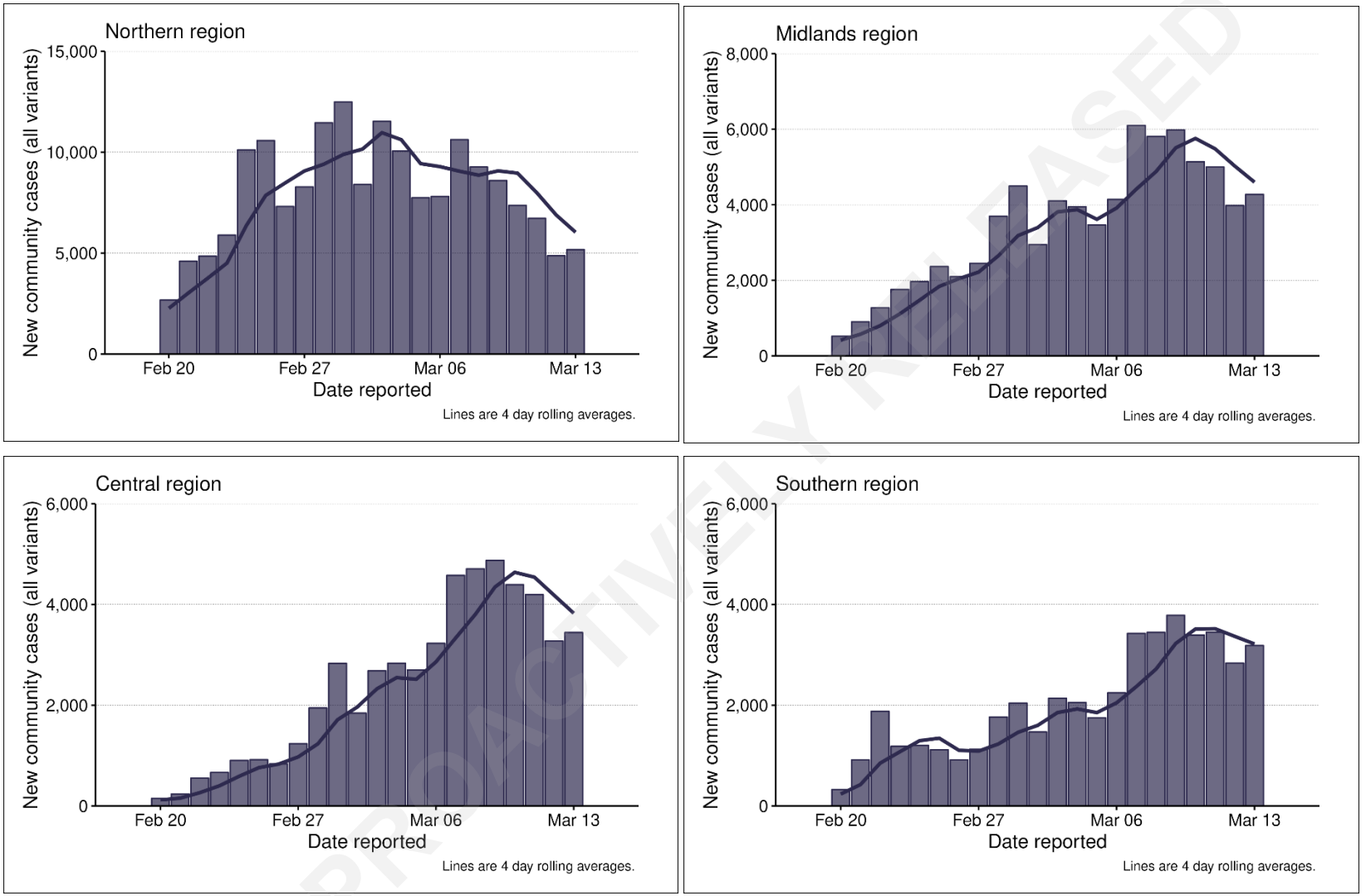
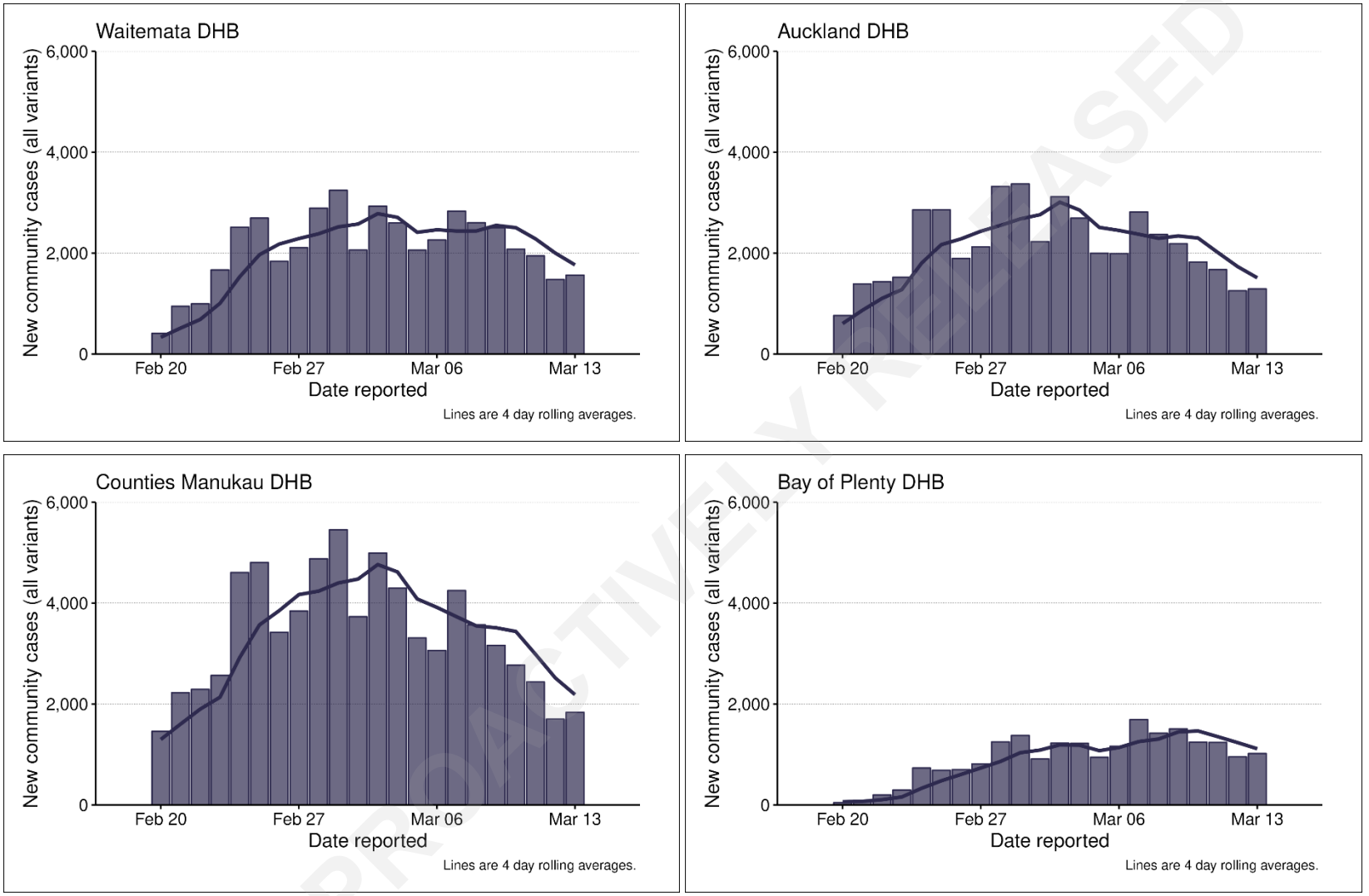
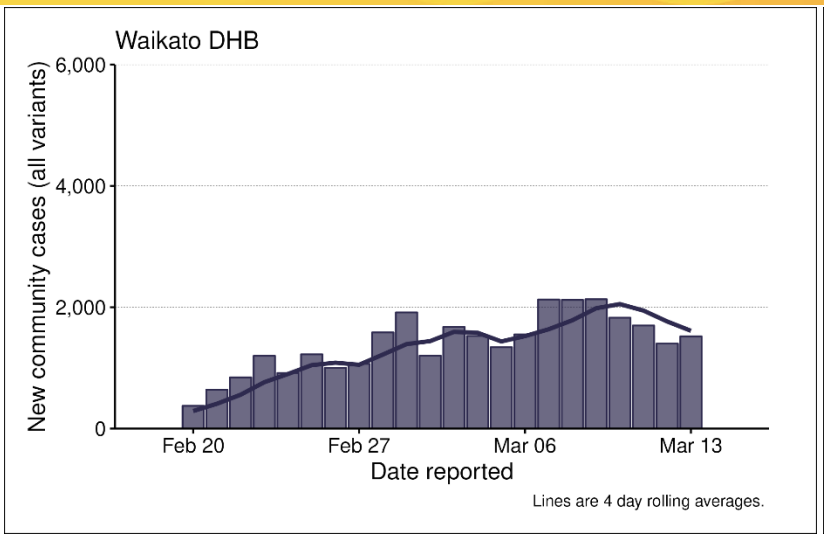
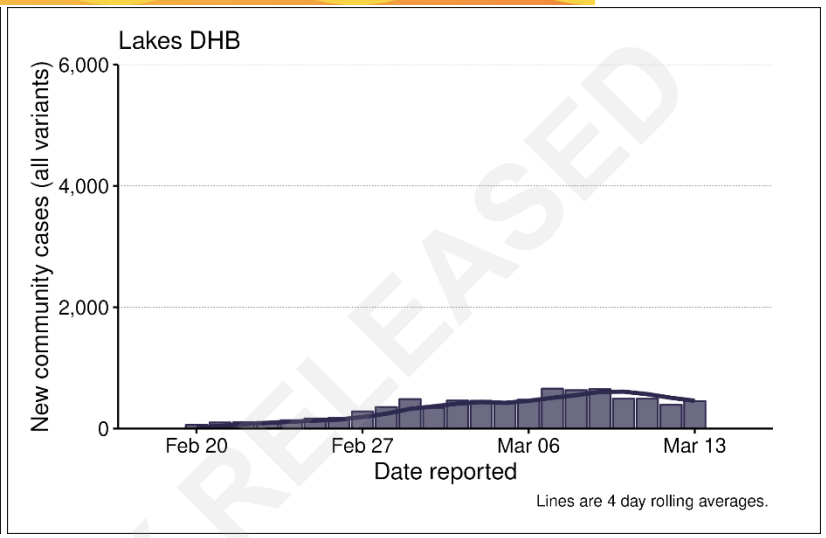
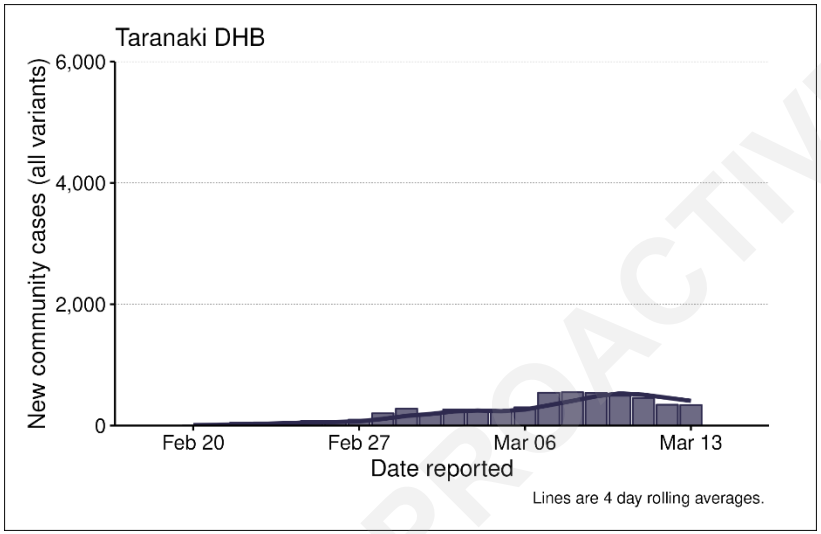


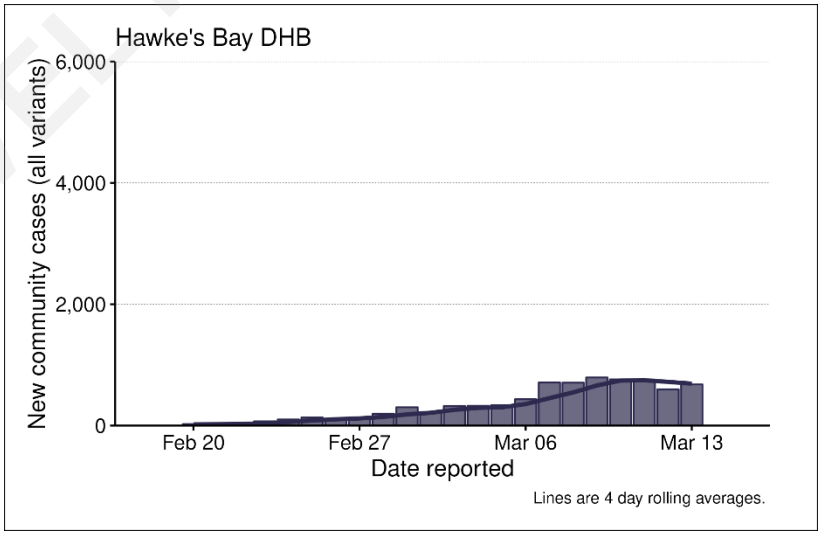
Figure 3: Daily community cases 20 February to 13 March 2022, selected DHBs

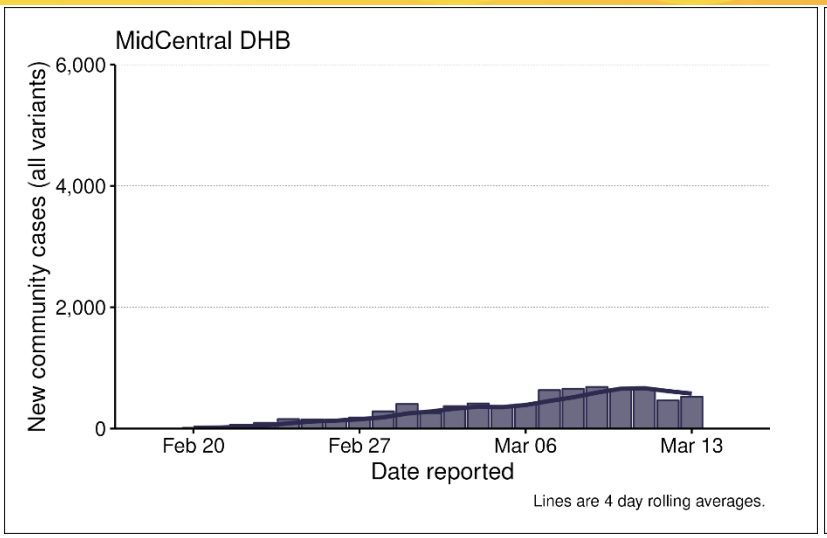


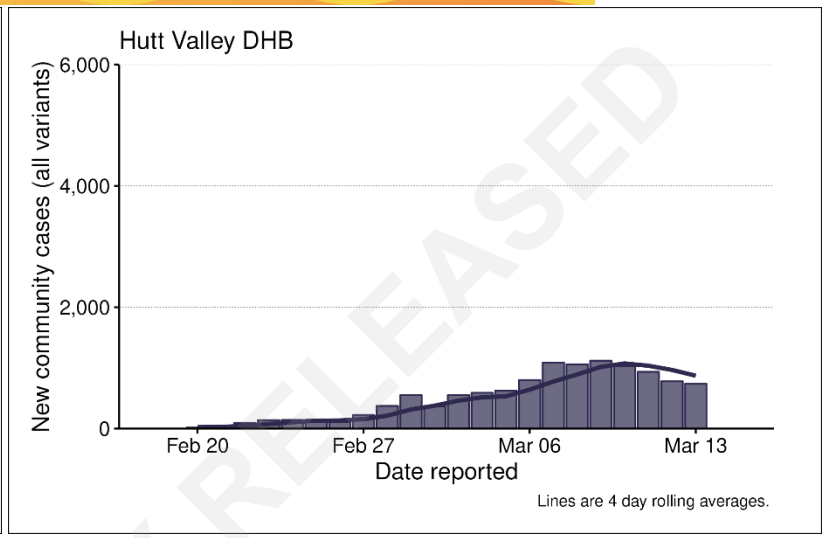


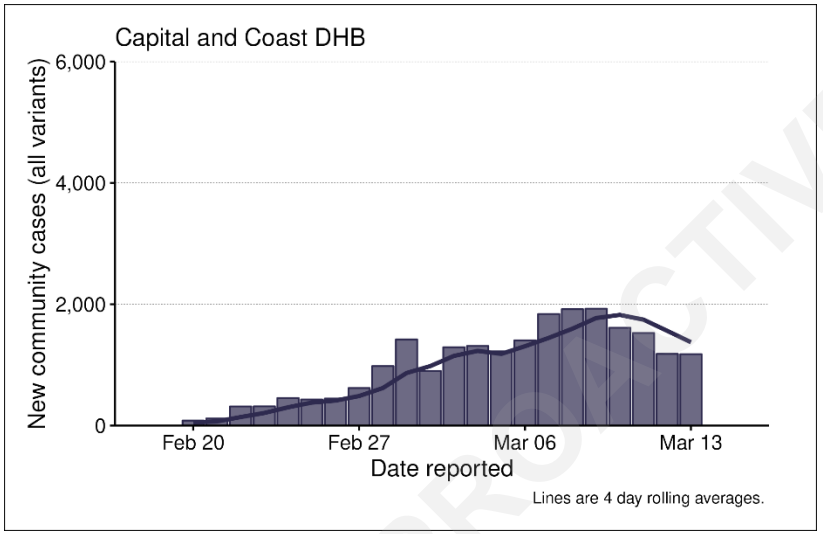


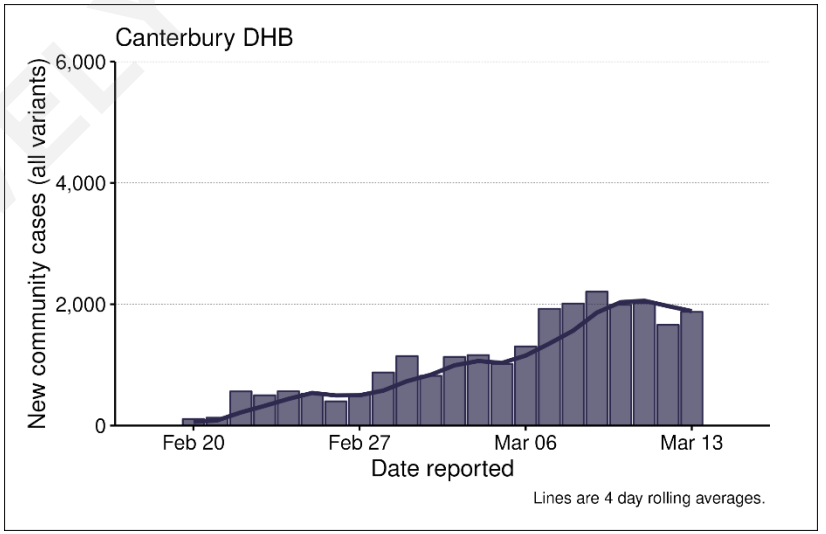


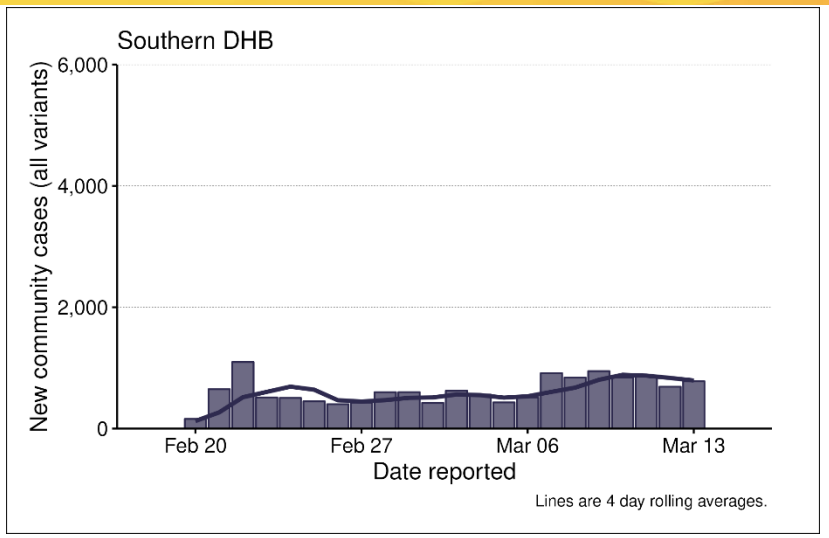












Source: NCTS/EpiSurv as at 2359hrs 13 March 2022

Cases by Ethnicity

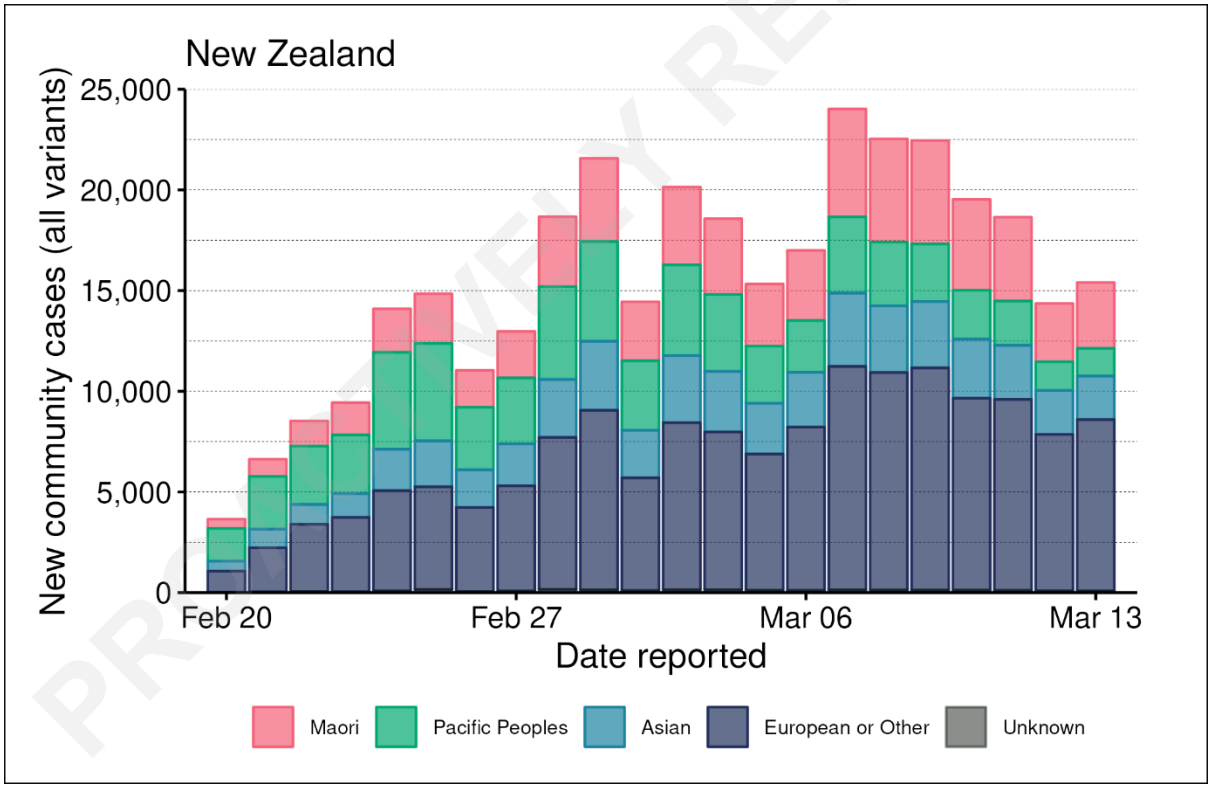
Figure 4 to Figure 8 show the ethnicity of new cases reported in the three weeks from 20 February to 13 March 2022

At the beginning of the Omicron outbreak[1], a high proportion of cases were reported to be of Asian ethnicity, consistent with known early exposure events. Since 09 February, Asian case numbers have been overtaken by Pacific Peoples and European or Other ethnicities. However, while **case numbers are highest in European or Other** ethnicities, they have the **lowest case rates** (Figure 5). Pacific Peoples have the highest case rates **however, these have begun to decrease over the past two weeks.**

The number of new cases in those of European or Other ethnicity has largely plateaued in the Southern region after a sharp increase from the week prior. The national case rate for European or Other ethnicity has begun to flatten after gradually increasing along with Māori and Asian ethnicities (Figure 5).

The number of cases in Māori has begun gradually decreasing in the Te Manawa Taki (Midlands) and Central regions (Figure 7), particularly Bay of Plenty, Waikato, and Lakes DHBs (Figure 8).

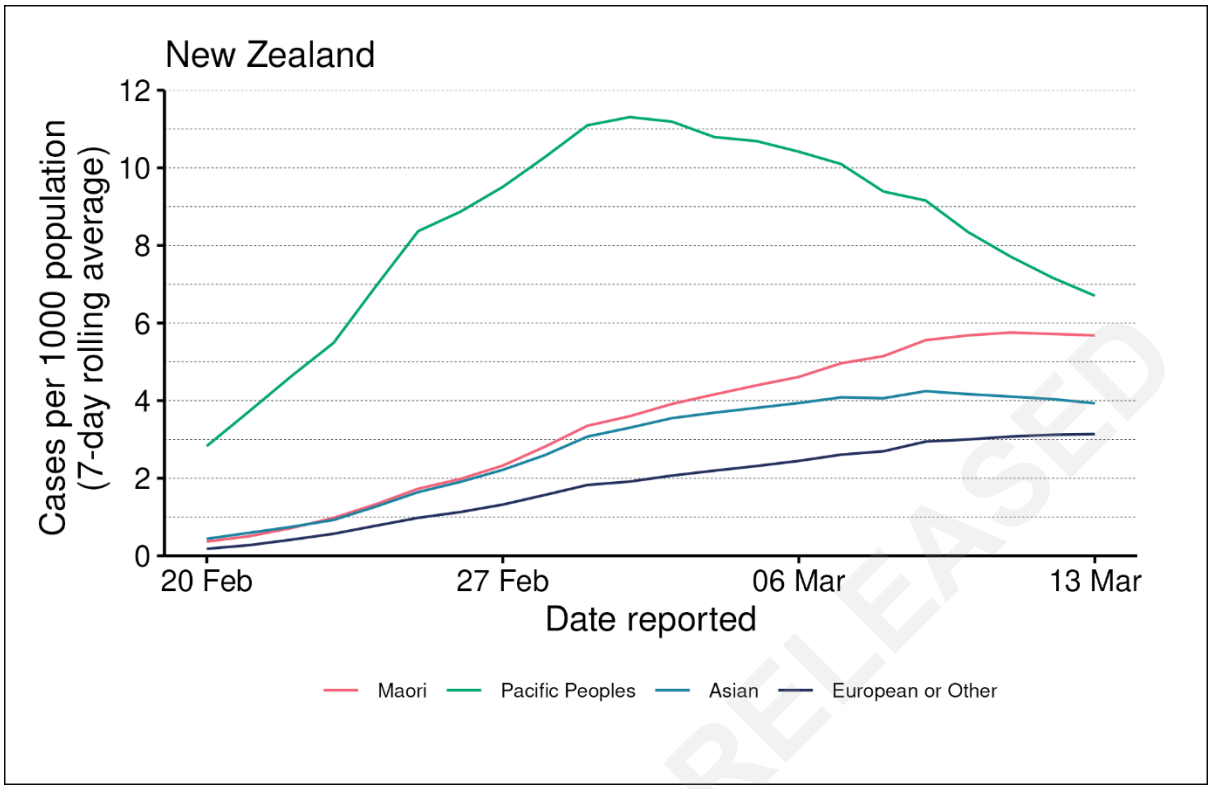
Figure 4: Daily community cases across New Zealand by ethnicity from 20 February to 13 March 2022



Source: NCTS/EpiSurv 2359hrs 13 March 2022

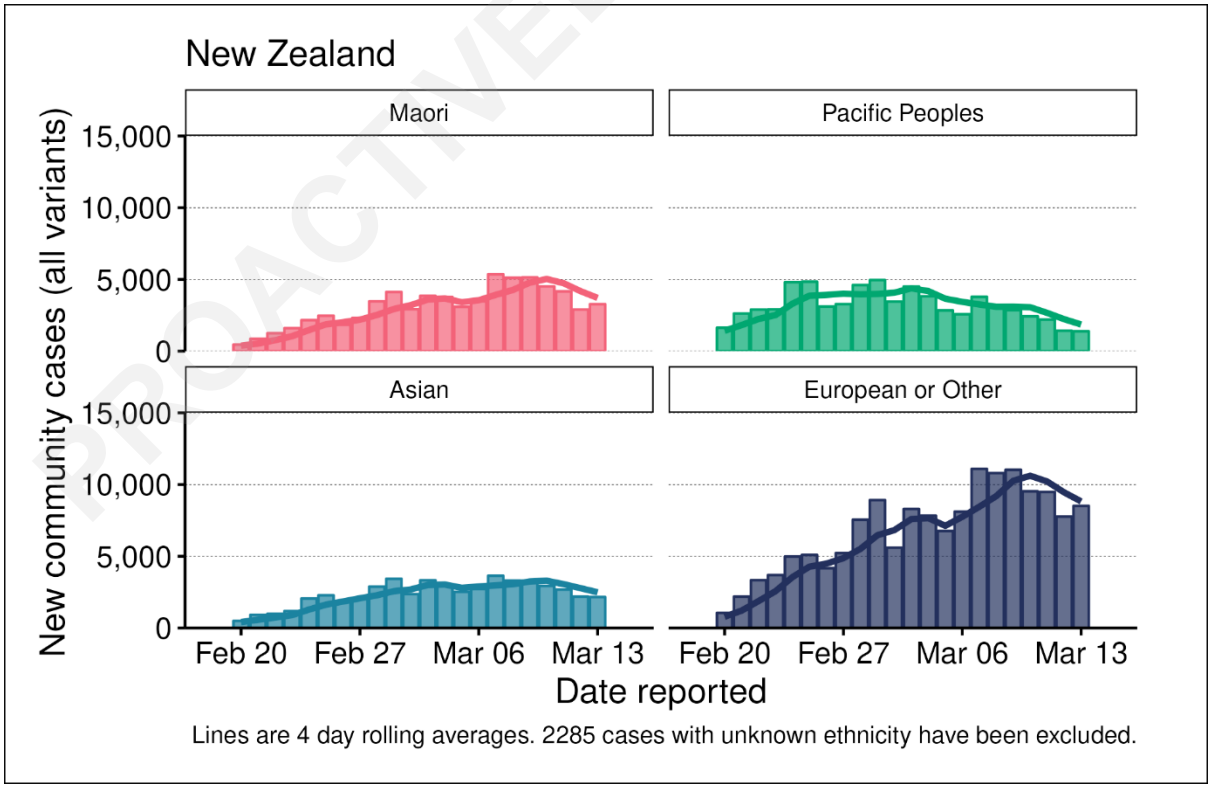
[1] Assumed to be 19 January 2022. The Delta variant has been identified after that date. Case numbers include all confirmed COVID-19 cases, regardless of variant.

Figure 5: Daily case rate per 1,000 population by ethnicity from 20 February to 13 March 2022



Source: NCTS/EpiSurv 2359hrs 13 March 2022

Figure 6: Daily and rolling 4-day average community cases across New Zealand, by ethnicity from 20 February to 13 March 2022



Source: NCTS/EpiSurv 2359hrs 13 March 2022

Figure 7: Daily cases by ethnicity and region from 20 February to 13 March 2022

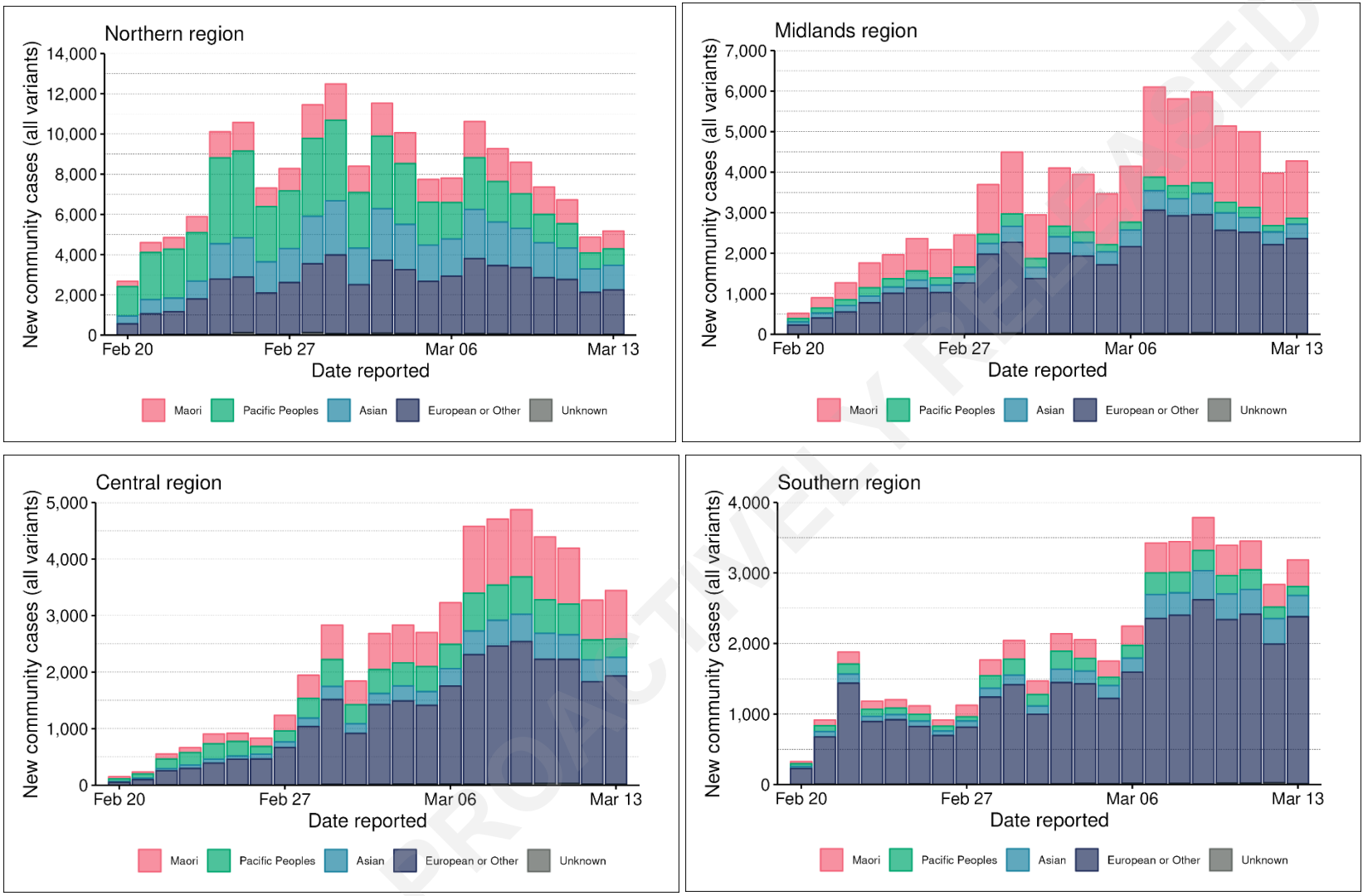
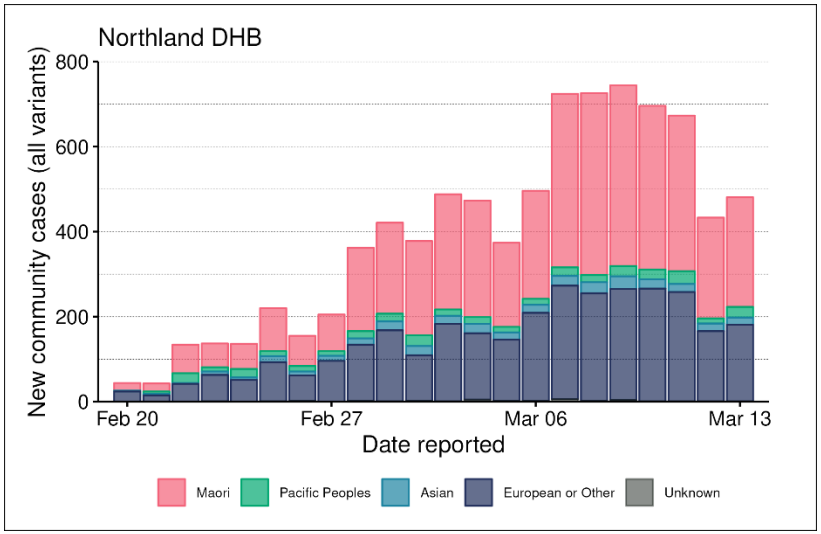
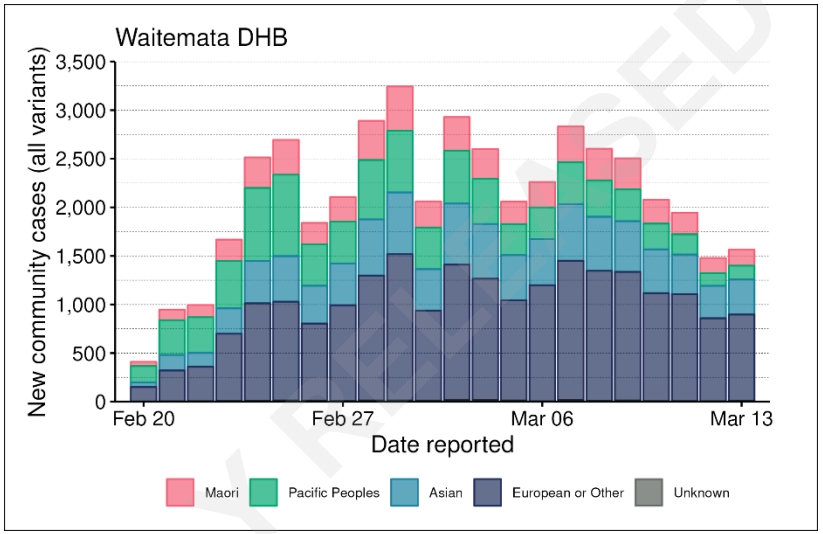
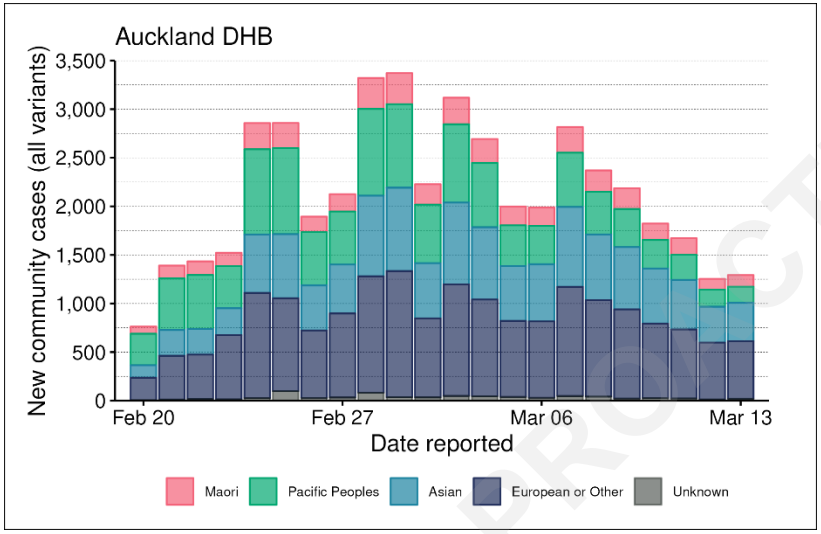
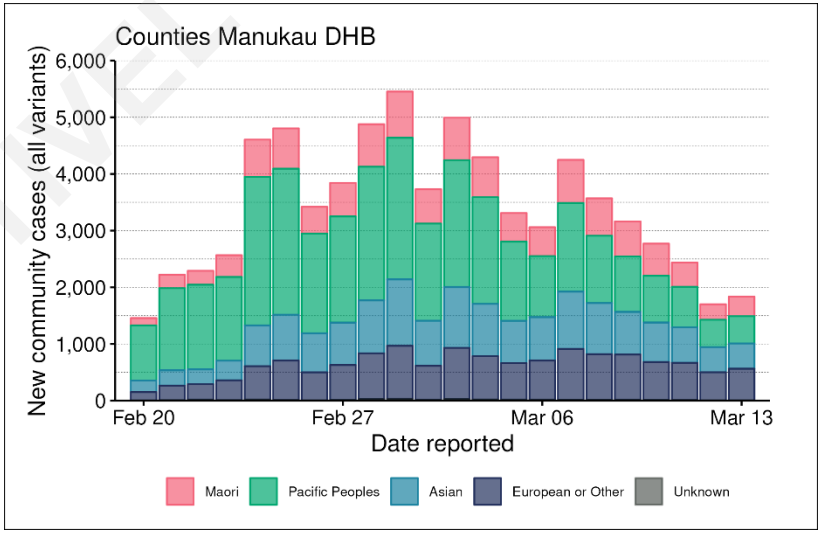


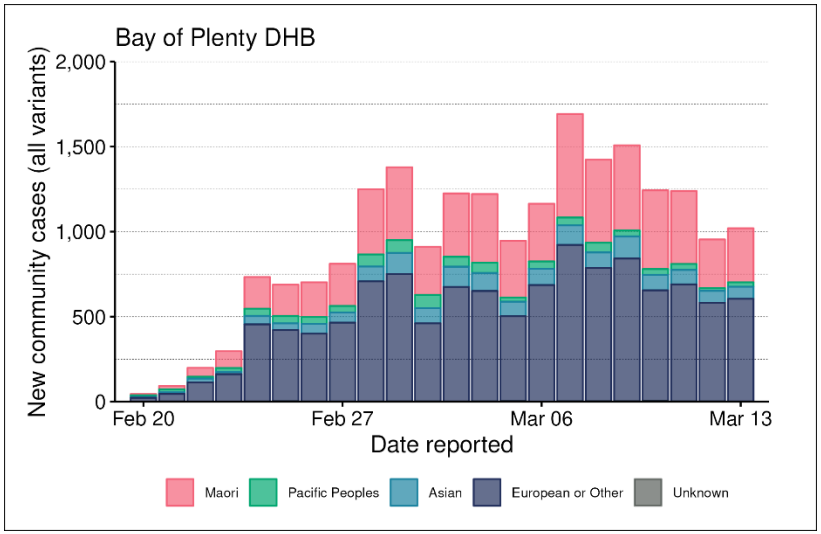
Figure 8: Daily cases by ethnicity from 20 February to 13 March 2022 by selected DHB

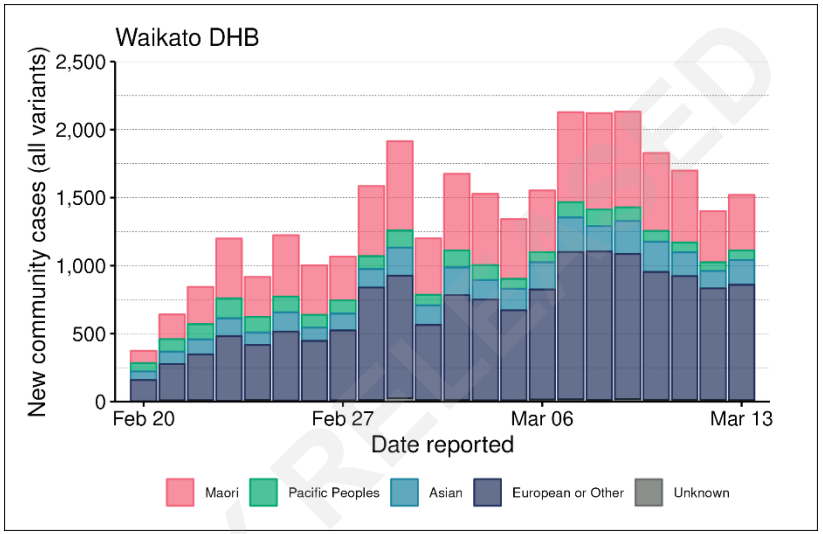


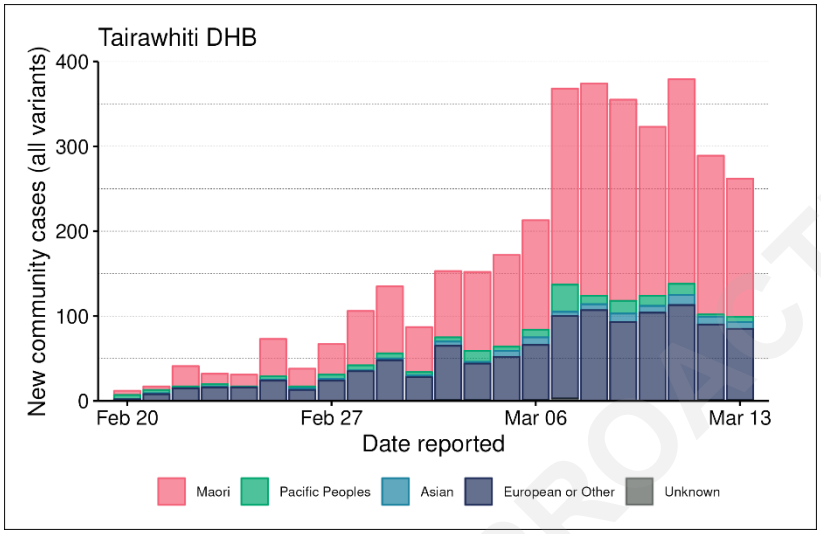


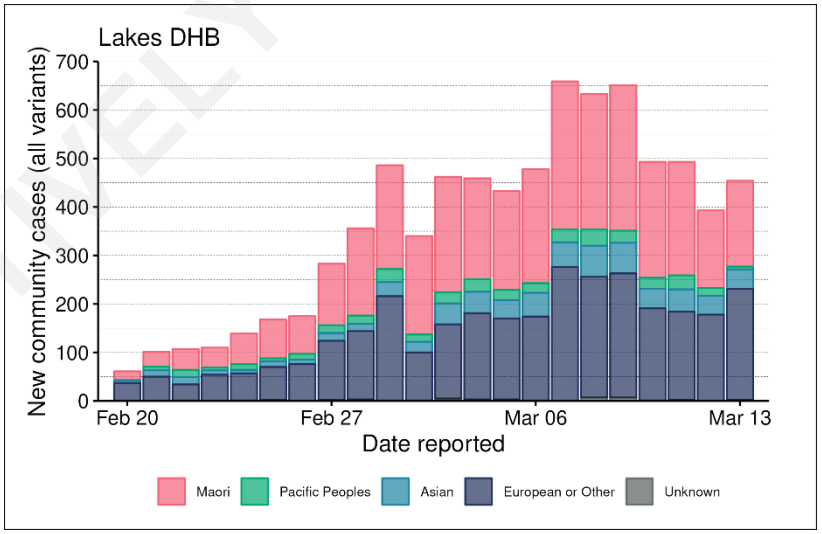


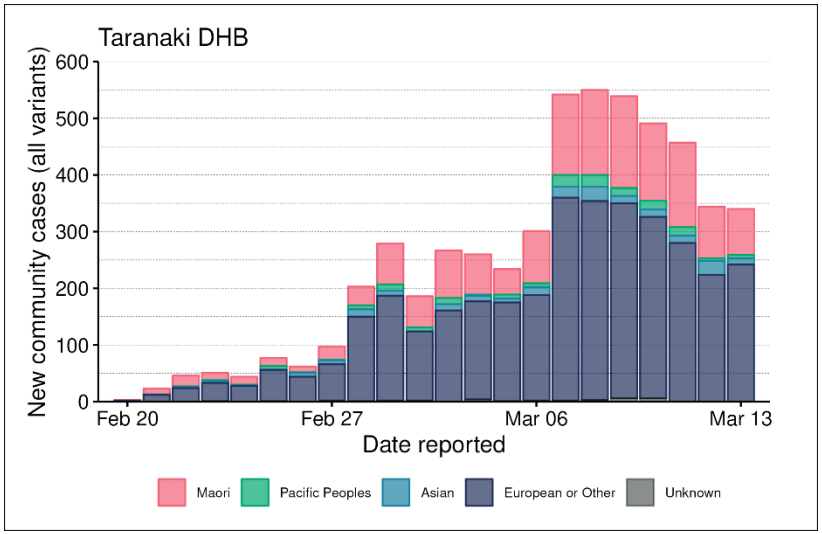


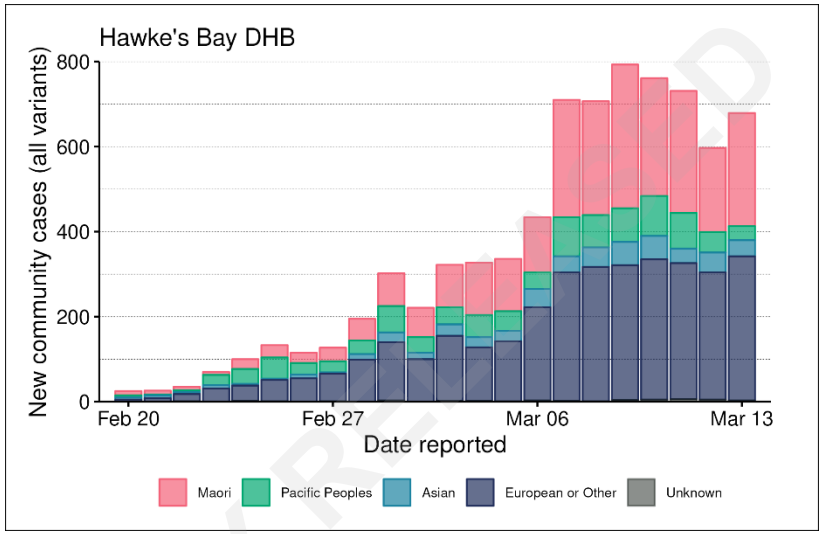


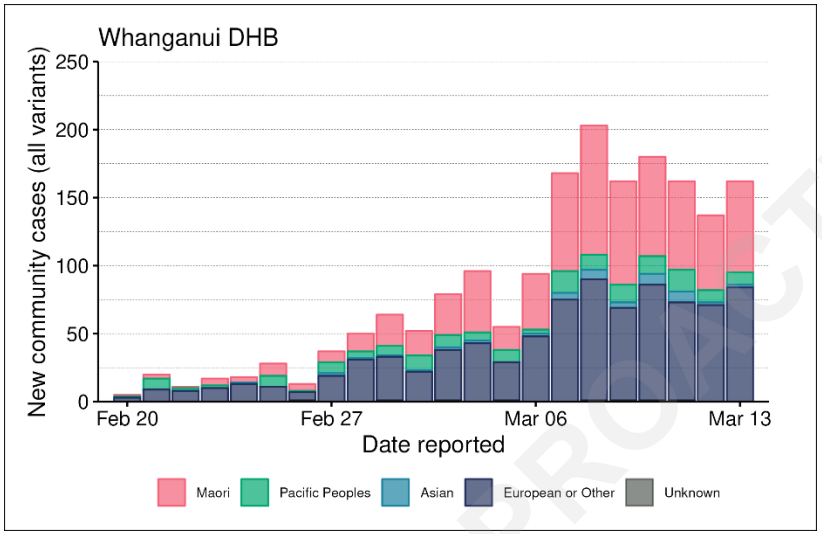


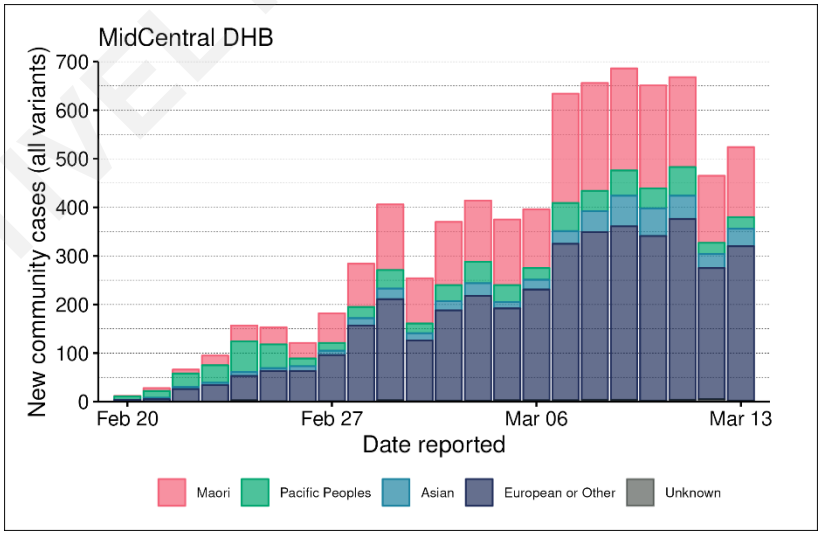


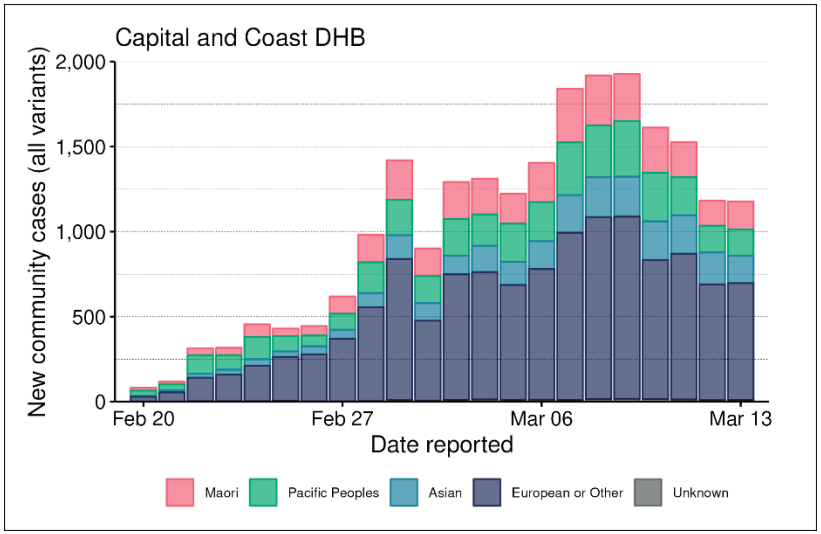


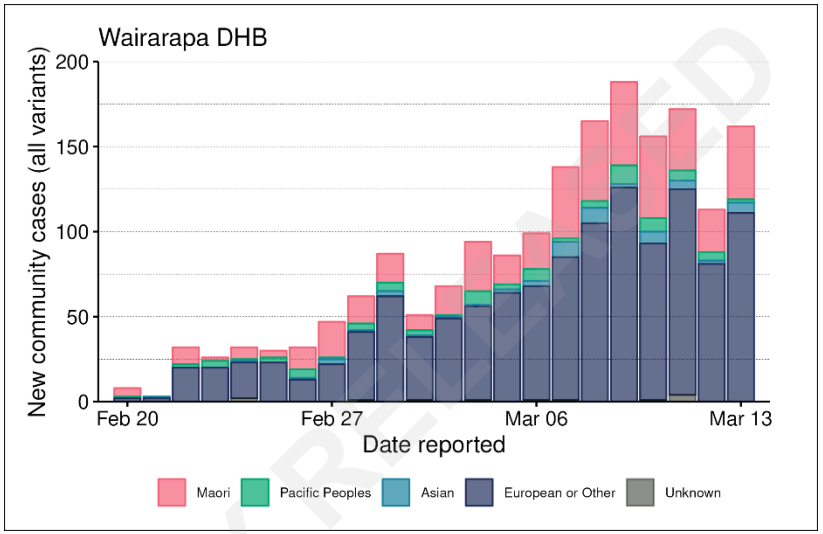


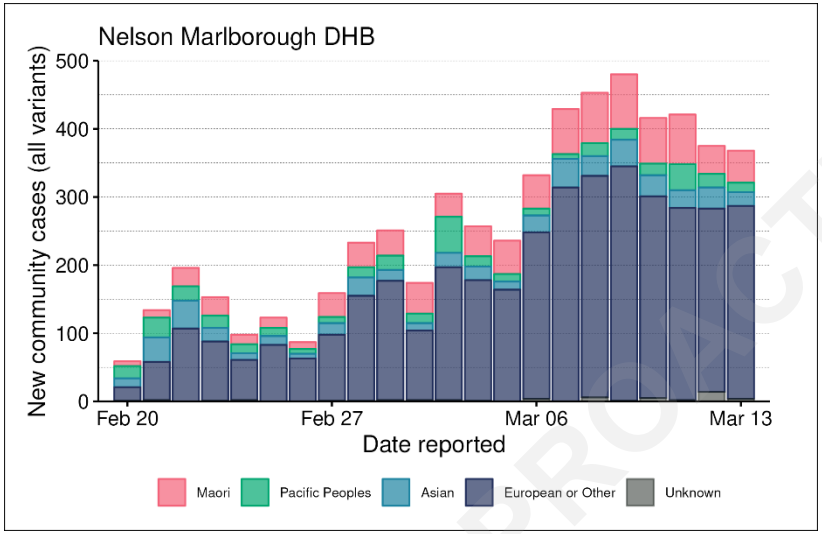


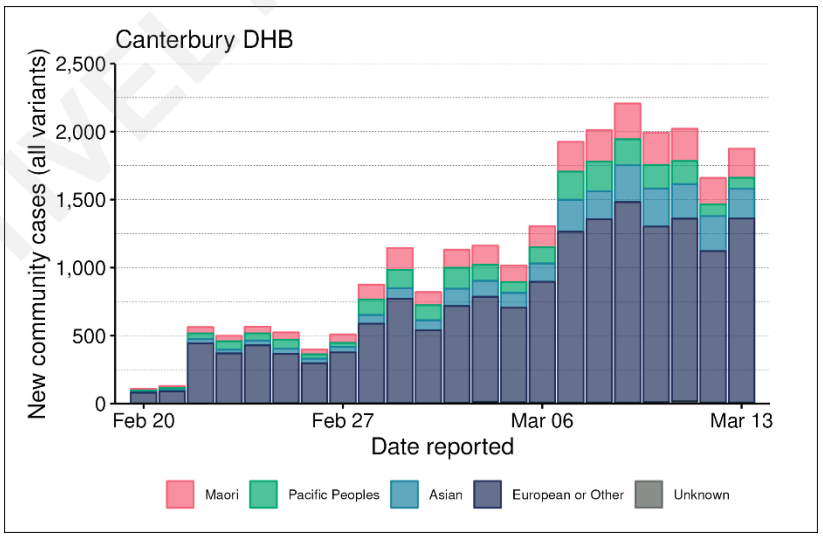


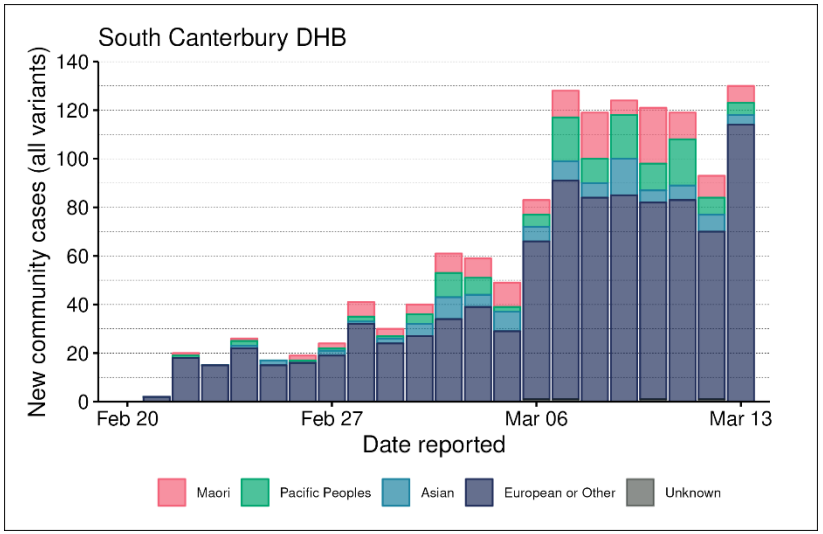


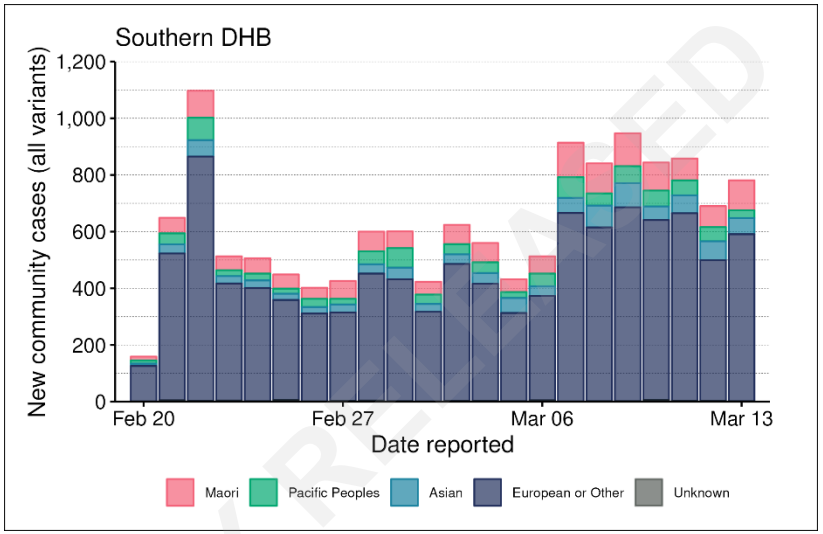












Source: NCTS/EpiSurv 2359hrs 13 March 2022

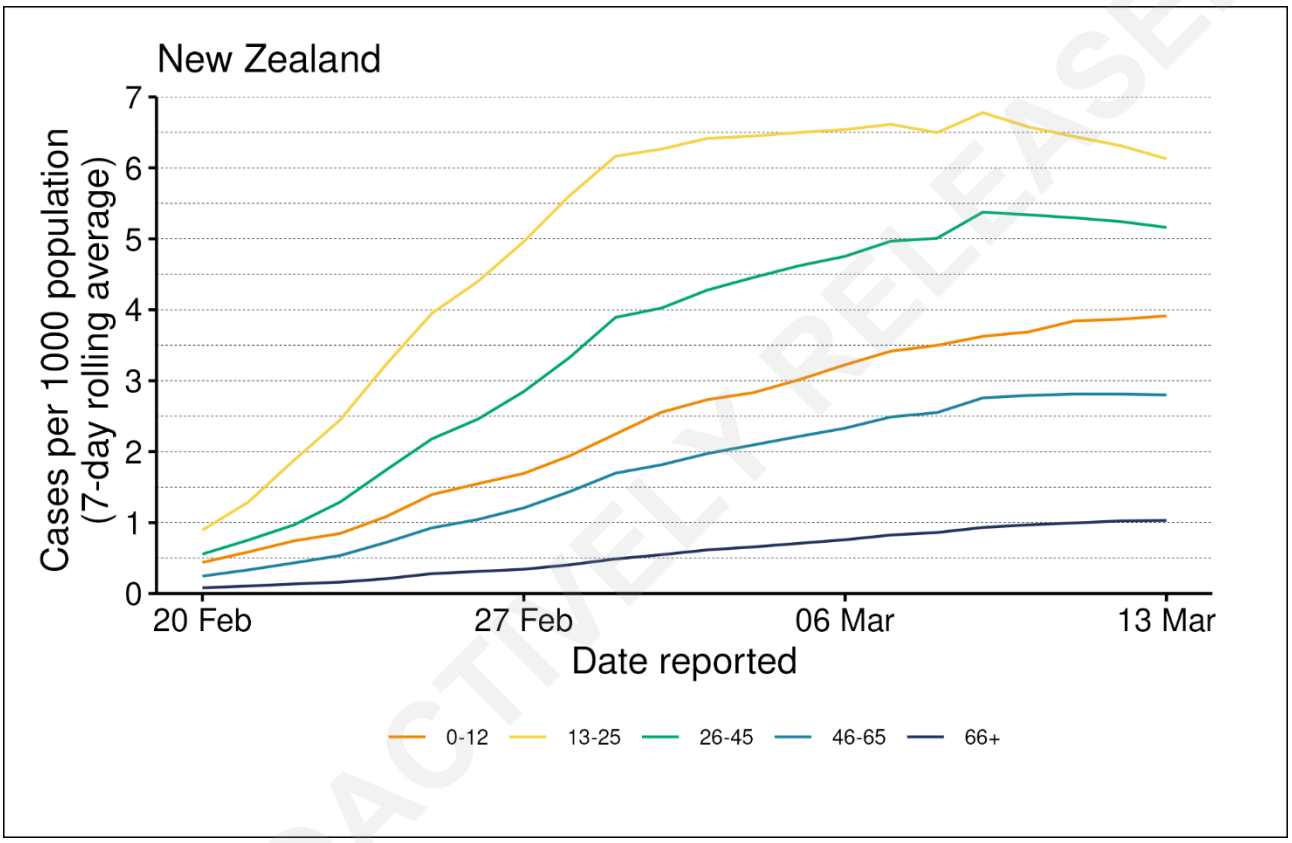
Cases by Age

Figure 9 and Figure 10 show cases by age group from 20 February to 13 March 2022.

Case rates continue to be highest in the 13-25 and 26-45 age groups (Figure 9). Case rates are plateauing across all ages and remain the lowest in the 66+ age group.

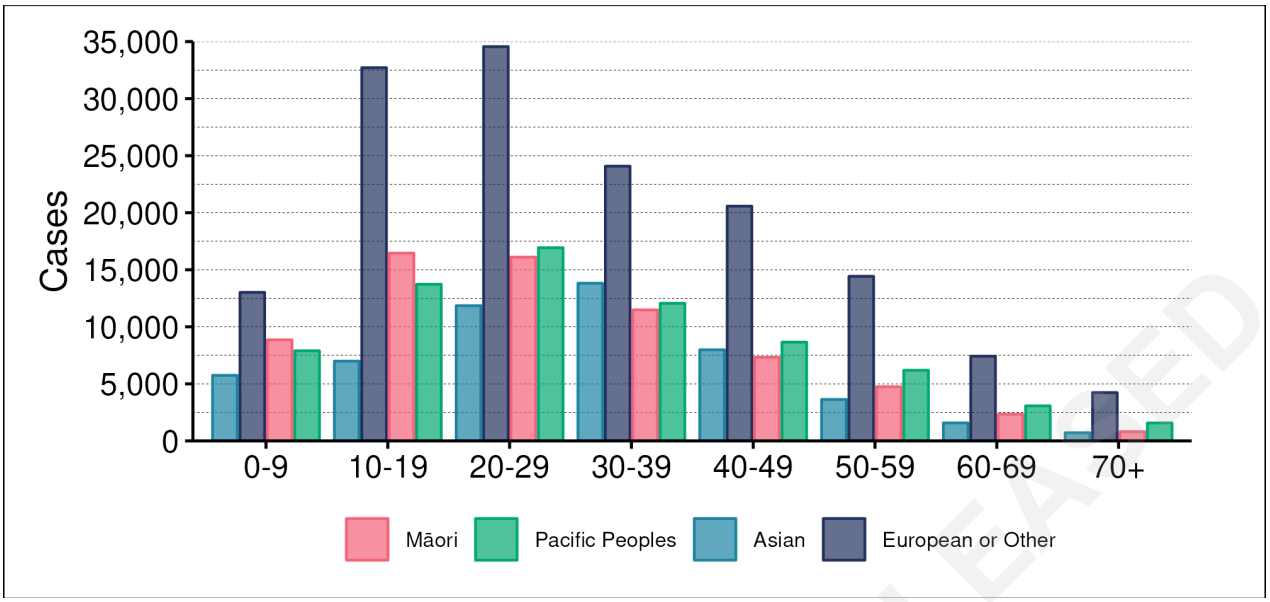
The breakdown of cases by age and ethnicity (Figure 10) shows that the age distribution of cases is broadly similar across ethnicities. Asian, Māori and Pacific Peoples case numbers follow a similar distribution across the younger age groups. Though case numbers in European and Other are highest across all age groups, they are higher in the youth and young adult age range 10-19 and 20-29.

Figure 9: COVID-19 community case rates per 1000 population by age, 20 February to 13 March 2022



Source: NCTS/EpiSurv 2359hrs 13 March 2022

Figure 10: COVID-19 community case counts by prioritised ethnic group and age group, 20 February to 13 March 2022



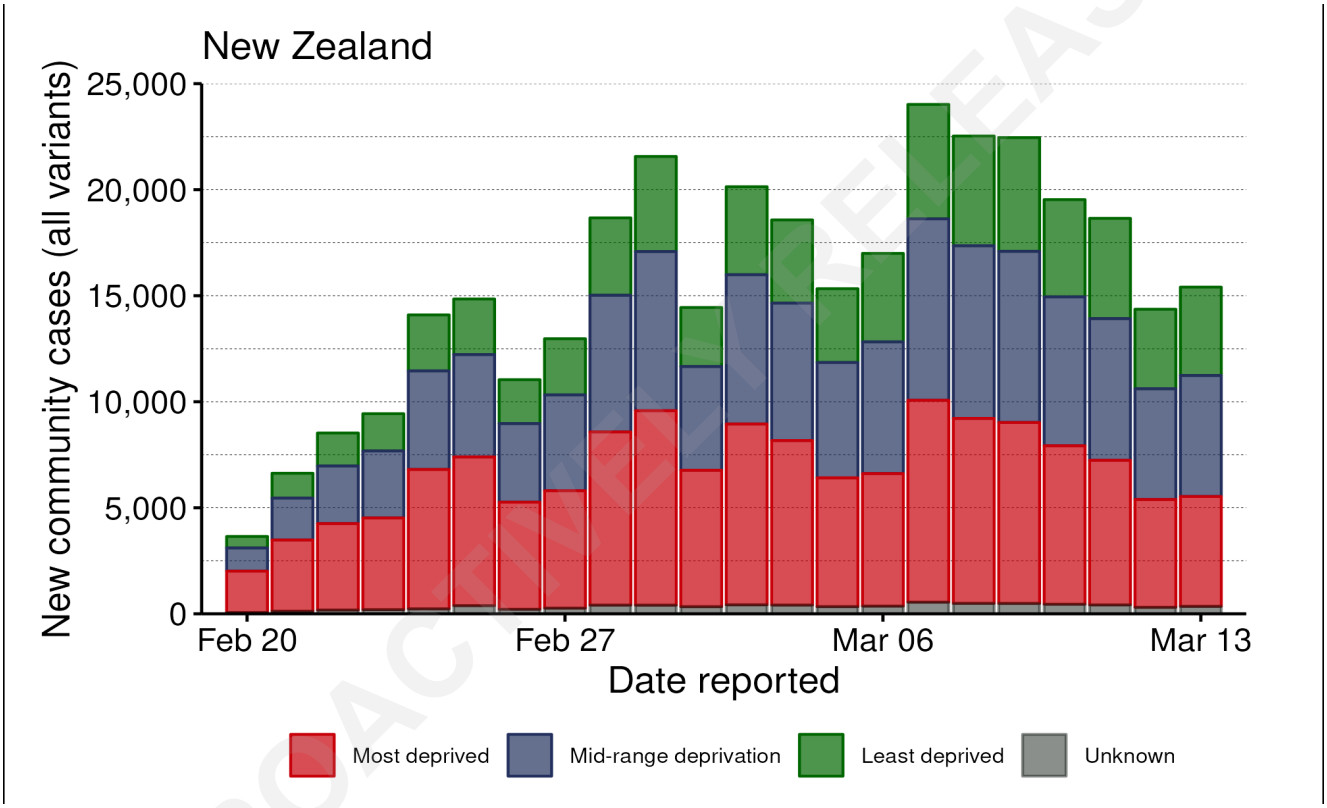
Source: NCTS/EpiSurv 2359hrs 13 March 2022

Cases by socio-economic indicators

Figure 11 shows cases based on the Index of Multiple Deprivation 2018 housing deprivation scores. The increase in cases observed from 09 February 2022 first affected people living in the most deprived areas. However, as case numbers have increased, there has been an increasing proportion of cases in mid- and least-deprived areas.

For the week ending 13 March 2022, the proportion of cases that were least deprived, mid-range deprived and most deprived was 24%, 36% and 37%. Breaking down housing deprivation by ethnicity indicates the impact of high housing deprivation across all ethnic groups, but also the inequities between ethnicities exposed to housing deprivation. 75% of European/other and 64% of Asian cases were from areas of low to mid housing deprivation, whereas only 33% of Pacific People and 38% of Māori cases were from areas of low to mid housing deprivation. Comparison of case rates of least deprived (2,135 per 100K), mid-range deprived (3,496 per 100K) and most deprived (2,739 per 100K) reveals that **mid-range deprived are now the most overrepresented in cases.**

Figure 11: COVID-19 community cases between 20 February 2022 and 13 March 2022 by housing deprivation



Source: EpiSurv/NCTS/ 2359hrs 13 March 2022

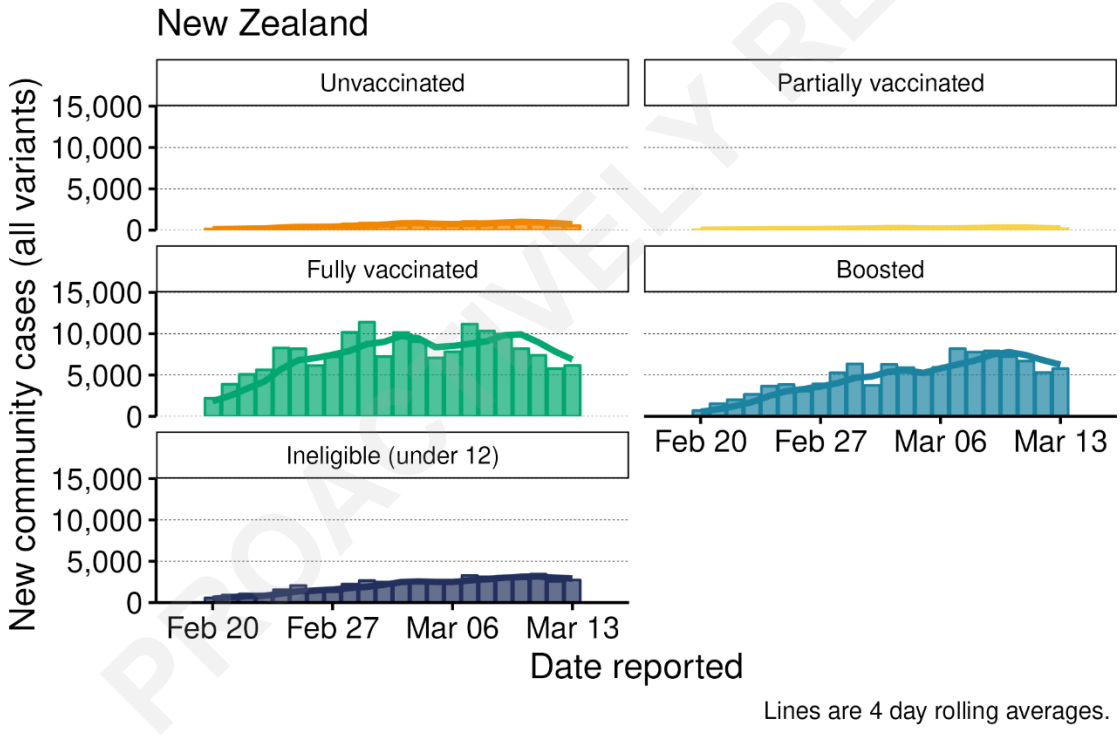
Cases by vaccination status

Cases by vaccination status are shown in Figure 12. Vaccinated case numbers are consistently higher than the number of non-vaccinated cases. This is expected due to the high level of vaccination across New Zealand, with over 95% of people aged 12+ now having received at least two vaccination doses. However, since 08 March 2022, cases in those fully vaccinated have steadily declined. Cases are steadily increasing in children under 12, who remain largely ineligible for full COVID-19 vaccination. Paediatric vaccination for 5-11 year olds only allows for a second dose to be administered 8 weeks after the first which for those who received a first dose as soon as they were eligible would be 14 March 2022.

The number of cases who had received a booster was increasing until 10 March when it began to decrease. Between 20 February and 13 March 2022, boosted cases accounted for 32% (a slight increase from when last reported) of cases, while those fully vaccinated account for 49% (a slight decrease from when last reported) and those ineligible continue to only account for 14%. Case rates for those who are boosted are 3,141 cases per 100,000 compared to 4,003 cases per 100,000 for those who are fully vaccinated; this is a 21% difference between the two groups[2].

It should be noted that **this is not a vaccine effectiveness estimate** and does not account for differences in age and other factors that may affect the likelihood of becoming a case and/or being vaccinated.

Figure 12: COVID-19 community cases between 20 February 2022 to 13 March 2022 by vaccination status



Source: EpiSurv/NCTS/CVIP 2359hrs 13 March 2022

In the graph above, “unvaccinated” refers to people who have had no doses prior to becoming a case. “Fully vaccinated” are people who received their second dose at least 7 days before being reported as a case. “Boosted” refers to people who have received a total of 3 doses of an approved COVID-19 vaccine, one week prior to their report date as a case.

[2] Please note that in the last Trends & Insights Report (08 March 2022), it was reported that the percentage difference between boosted and double vaccinated cases had dropped from 23% to 4%. This was a mistake and should have read that it increased from 23% to 38%.

Community Testing

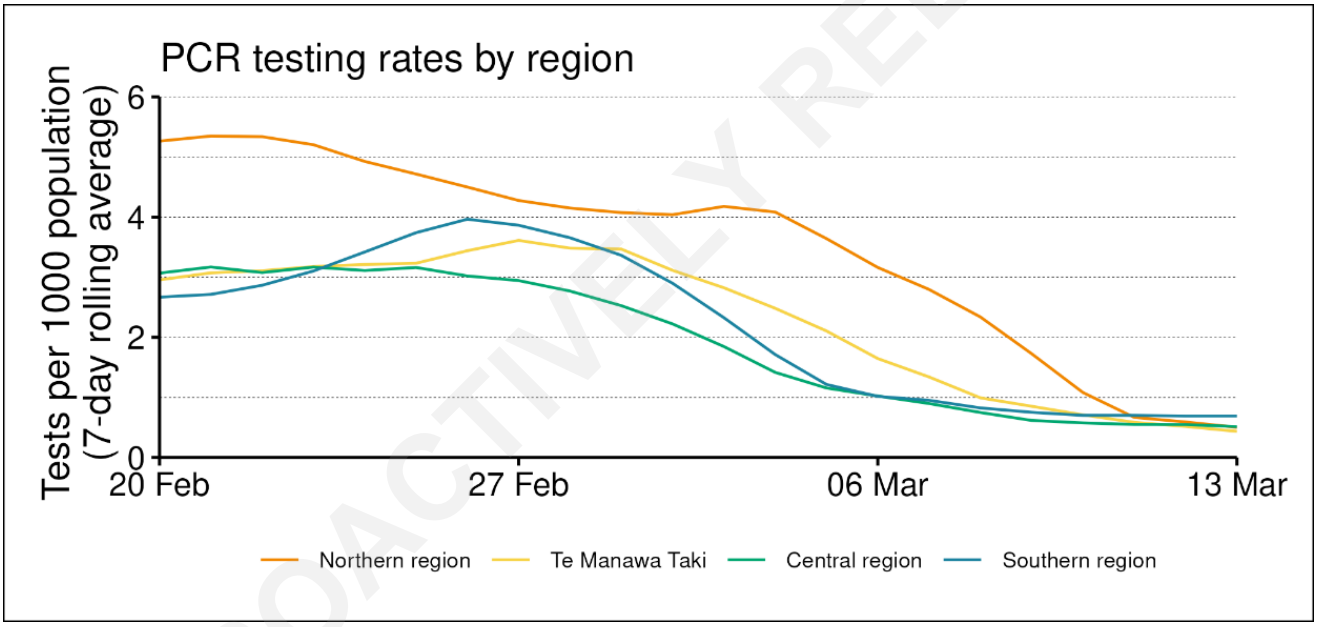
As New Zealand has entered Phase 3 of the Omicron response[3], an increased proportion of testing is carried out through rapid antigen tests (RATs) rather than PCR tests. RATs are self-administered and therefore require the individual to self-report their results, which may result in under-reporting. In addition to this, RATs carry a larger risk of registering a false-negative (especially if used during early periods of infection) or false-positive result compared to PCR-based testing and as such are likely to give a less accurate reflection of COVID-19 prevalence in New Zealand.

Testing rates and test positivity are shown for PCR testing only. At this time, it is not possible to provide the same for RATs due to the lack of complete data on the number of RATs conducted (especially negative results). Please note that, as PCR testing is only used to monitor priority populations and confirm positive RATs in specific situations, this testing data is not representative of the current testing state of New Zealand. New analyses will be constructed to assess test positivity from PCR tests and assess the demographics of cases who self-upload their RAT results.

The figures in this section show the rates of community testing from 20 February to 13 March 2022.

Tests per 1,000 are between 0 and 1 in all regions. This is a decrease from when last reported where tests per 1,000 were between 1 and 5 for all regions.

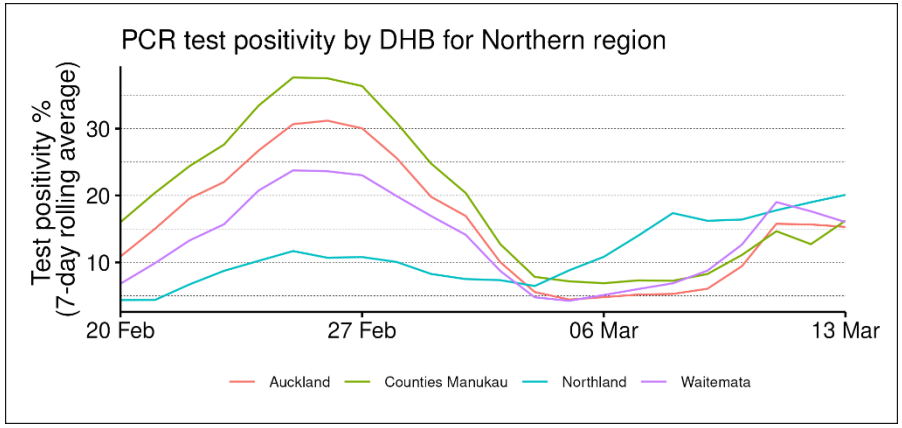
Figure 13: Testing rate by region (seven day rolling average) by region and DHB from 20 February to 13 March 2022

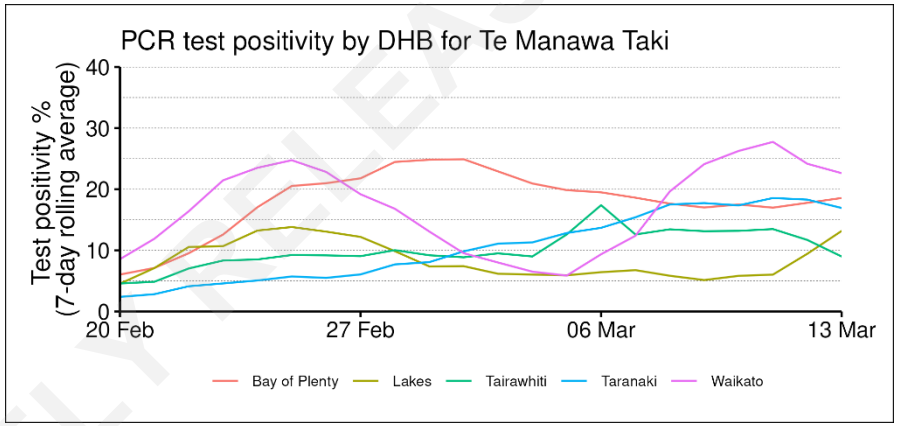


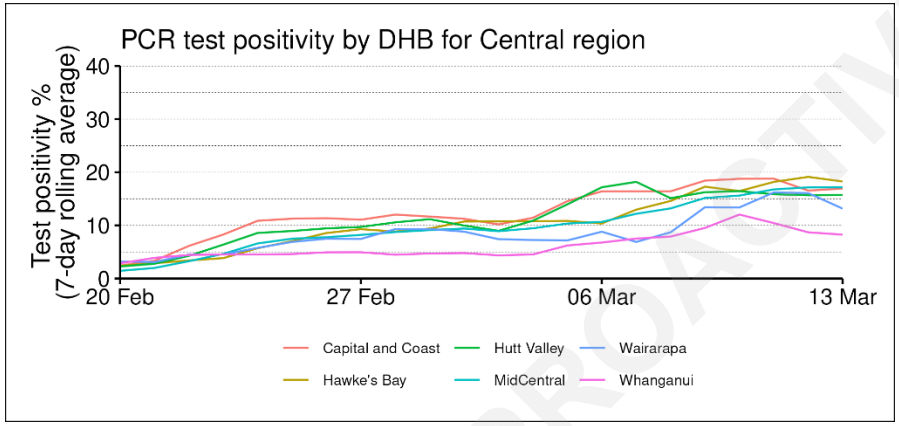
[3] Our response to Omicron | Unite against COVID-19 (covid19.govt.nz)

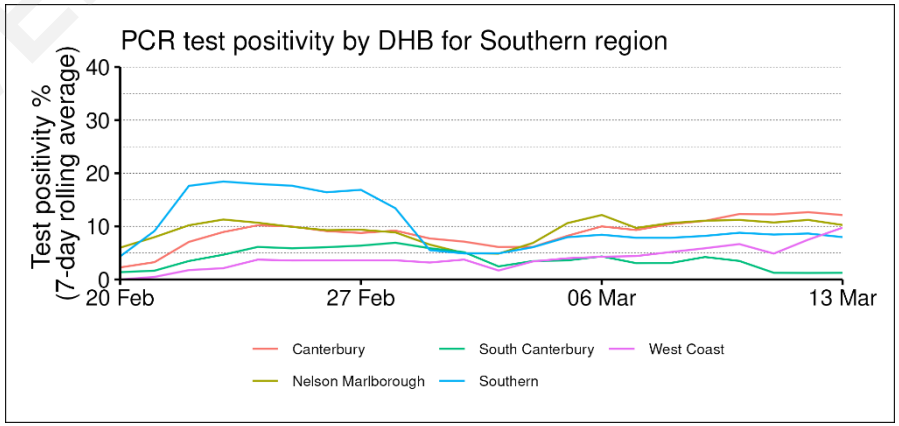
PCR test positivity for the Northern region reached a peak in late February and has since decreased significantly, likely due to testing changes under Phase 3. In Te Manawa Taki (Midlands), test positivity in Waikato rose significantly in early March, reaching a peak of 27% but appears to be tapering off, now sitting at around 23%. All other DHBs in this region are between 9% and 19%. In the Central region, most DHBs are between 10% and 12% except for Whanganui which is lower at 8%. Southern region DHBs all remain at 13% or lower.

Figure 14: Test positivity (seven day rolling average) by region and DHB from 20 February to 13 March 2022









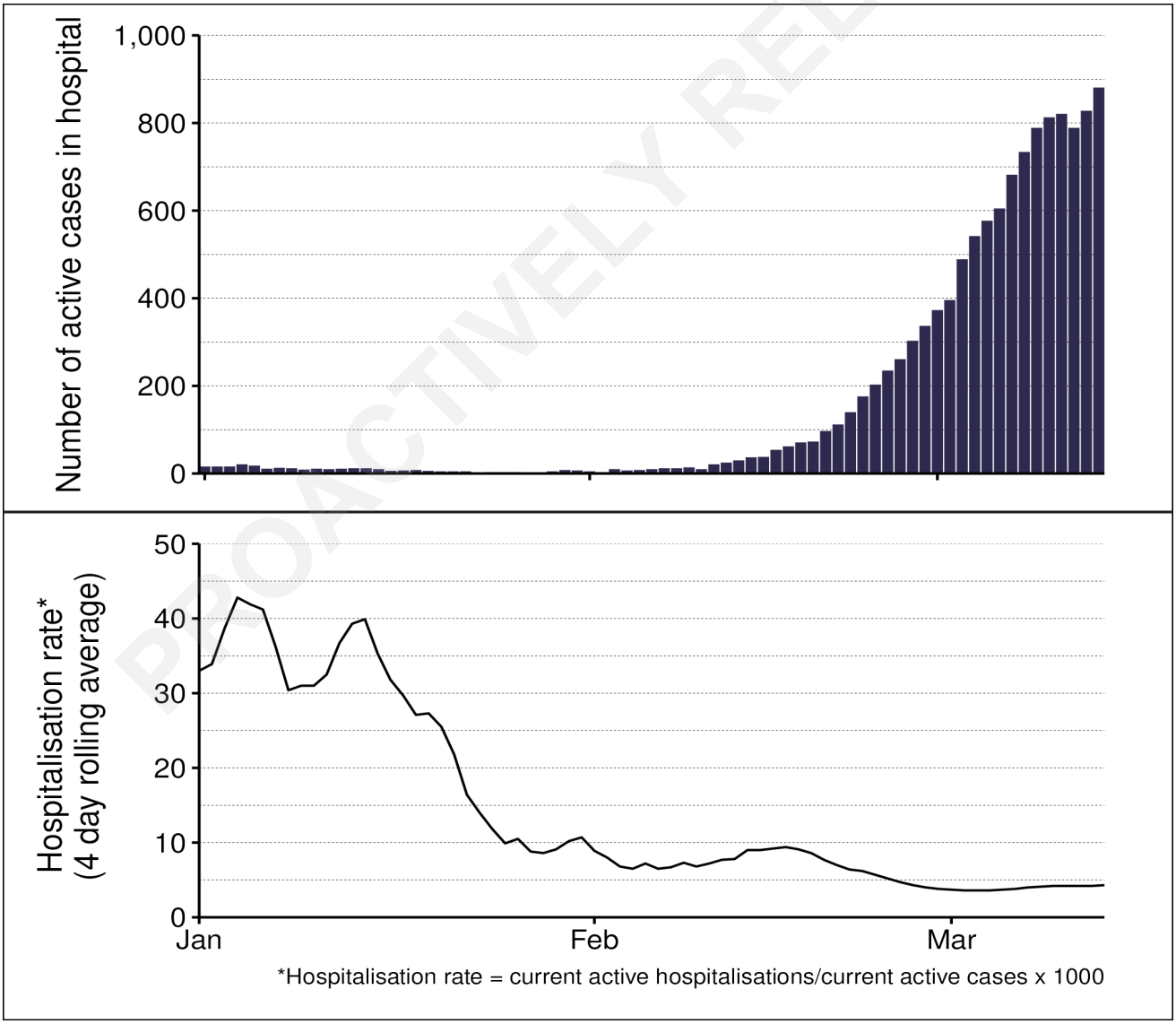
Hospitalisation

Figure 15 shows the number of active cases in hospital, as well as the hospitalisation rate for this year nationally. The number of cases in hospital dramatically increased in mid-February and continue to steadily rise. The hospitalisation rate, however, declined steadily from mid-January onwards and continues to remain low. As rate takes into account total number of active cases, it is expected that this will decline with a rise in cases like the one observed from mid-February onwards.

Figure 16 shows hospitalisations by cases, cases per 10,000 population and ethnicity for cases reported in Auckland, Counties Manukau and Waitemata for the 3 weeks up to 13 March 2022. While the European or Other group has the highest case numbers hospitalised, their hospitalisation rate and percentage of cases hospitalised is low (apart from the percentage of cases hospitalised for the 70+ age group). Pacific Peoples have the highest hospitalisation rate and rates of hospitalisation across most age groups but particularly in those 70+. Māori have the second highest hospitalisation rate consistent with the outbreak disproportionately affecting vulnerable communities. Across all ethnicities, the percentage of cases hospitalised is highest in the 70+ age group.

The breakdown of ethnic group and hospitalisation is currently only available for DHBs in the Northern region due to data availability. If similar data for other regions becomes available, this will be included.

Figure 15: Nationwide hospitalisations numbers and proportion of cases hospitalised



Source: EpiSurv 0900hrs 14 March 2022

Figure 16: COVID-19 hospitalisations for Auckland, Counties Manukau and Waitemata by cases, per 10,000 population and percentage for all ethnicities

Source: EpiSurv/Northern Region hospitalisations data 2359hrs 13 March 2022

Mortality

As cases increase, it is expected that reported deaths will increase too. As numbers increase, *Trends & Insights* will analyse patterns in the location, age, ethnicity, sex, vaccination status and socioeconomic status of deaths due to or associated with COVID-19.

Variants of Concern

Most hospitalised cases are the Omicron BA.2 subvariant

The majority of sequenced hospitalised cases this year have been identified as the Omicron variant (Table 5), with the BA.2 subvariant now being the most common SARS-CoV-2 lineage in those hospitalised as well as in New Zealand generally. As case numbers are high, only a small number are referred for sequencing and WGS data reflects biases in testing lab capacity for referral as well as a bias towards cases referred for urgent sequencing (which may be those with more severe disease).

Between 01 January to 14 March 2022 both Delta and Omicron have been detected in hospitalised cases, with Delta accounting for a smaller proportion (12) of sequenced cases compared to Omicron (86). The last hospitalised case confirmed as Delta was reported as a case on 02 February 2022. 415 out of 513 hospitalisations in this period have no available sequencing data meaning there is not yet a full picture of the distribution of variants and subvariants in hospitalised COVID-19 cases.

Table 5: Hospitalised cases reported from 01 January to 14 March 2022

DHB	Delta	Omicron BA.1-like	Omicron BA.2	To be received	Total
Auckland	0	8	3	19	30
Bay of Plenty	2	6	24	76	108
Canterbury	1	0	0	0	1
Capital and Coast	1	2	2	62	67
Counties Manukau	1	6	4	33	44
Hawke's Bay	2	0	0	1	3
Hutt Valley	0	1	0	38	39
Lakes	1	3	1	27	32
MidCentral	0	3	4	36	43
Nelson Marlborough	0	0	0	1	1
Northland	0	0	0	9	9
South Canterbury	0	0	0	1	1
Southern	0	1	0	0	1
Tairāwhiti	0	0	0	8	8
Taranaki	0	0	1	0	1
Waikato	1	2	1	93	97
Waitemata	3	7	6	9	25
West Coast	0	0	0	2	2
Whanganui	0	0	1	0	1
Total	**12**	**39**	**47**	**415**	**513**

Source: ESR Whole Preliminary WGS Analysis Report, EpiSurv/Microreact 1050hrs 14 March 2022

No recent community sequences are Delta variant

The last Delta case sequenced was reported as a case on 15 February 2022. In the 2 weeks up to 14 March 2022, no community cases were identified as Delta, while 345 were identified as Omicron (Table 6).

Whether this marks the complete transition to severe cases being exclusively caused by the Omicron variant will only be clear as and when more sequencing is carried out on future priority cases.

Among Omicron cases, BA.2 has become the dominant subvariant. This has been the experience internationally due to slight advantages in transmission (Figure 17).

As with hospitalised cases, as community case numbers grow, only a minority of positive cases are being referred for sequencing meaning caution must be taken when interpreting these results as providing a full picture of the variants circulating in the community.

Table 6: Community cases based on variant in the past 14 days to 14 March 2022

DHB	Delta	Omicron BA.1-like	Omicron BA.2-like	Omicron (Unassigned)	Total
Northland	0	1	1	0	**2**
Waitemata	0	17	54	1	**72**
Auckland	0	2	7	0	**9**
Counties Manukau	0	0	4	0	**4**
Waikato	0	4	7	0	**11**
Lakes	0	1	1	0	**2**
Bay of Plenty	0	2	17	0	**19**
Tairawhiti	0	0	1	0	**1**
Taranaki	0	2	19	0	**21**
Hawke's Bay	0	1	0	0	**1**
Whanganui	0	0	1	0	**1**
MidCentral	0	2	4	0	**6**
Wairarapa	0	1	7	0	**8**
Hutt Valley	0	1	3	0	**4**
Capital and Coast	0	5	11	0	**16**
Nelson Marlborough	0	3	6	0	**9**
West Coast	0	0	0	0	**0**
Canterbury	0	21	60	0	**81**
South Canterbury	0	0	1	0	**1**
Southern	0	23	54	0	**77**
Total	**0**	**86**	**258**	**1**	**345**

Source: ESR Whole Preliminary WGS Analysis Report, EpiSurv/Microreact 1050hrs 14 March 2022

Figure 17: Frequency of variants of concern among all community cases sequenced in New Zealand

Source: ESR Whole Preliminary WGS Analysis Report, EpiSurv/Microreact 1050hrs 14 March 2022

Short-term projections

Scenario modelling versus actual cases

Predicted scenarios from the COVID-19 Modelling Aotearoa group on 27 February have been allocated to DHBs by the TAS agency. Figure 18 shows projected reported cases and actual reported cases per day nationally, Figure 19 shows them by region. Hospitalisations are in Figure 21.

Reported cases have peaked in the three Auckland Metro DHBs and are tracking down slightly above the modelled "high" scenario. Reported cases are also tracking to the "high" scenario of the Te Manawa Taki, Central and Southern regions, and are now at about their predicted peak levels.

Hospitalisations are still tracking closely to the COVID Modelling Aotearoa group's "medium" scenario, that peaks in the second half of March with around 1,000 people hospitalised with COVID-19.

Australia's experience and early modelling suggests that after the peak, both cases and hospitalisations will decline more slowly than predicted by the models, then "level out" for at least several weeks.

The model also predicts true underlying prevalence; on balance, the modelling group is cautiously advising that overall, after adjusting for the move from PCR tests to RATs, New Zealand's true prevalence is closer to the "medium" scenario than to the "high". This advice is supported by the observation that hospitalisations are tracking closely to the medium scenario.

Figure 18: COVID-19 Modelling Aotearoa predictions compared to actual cases nationally

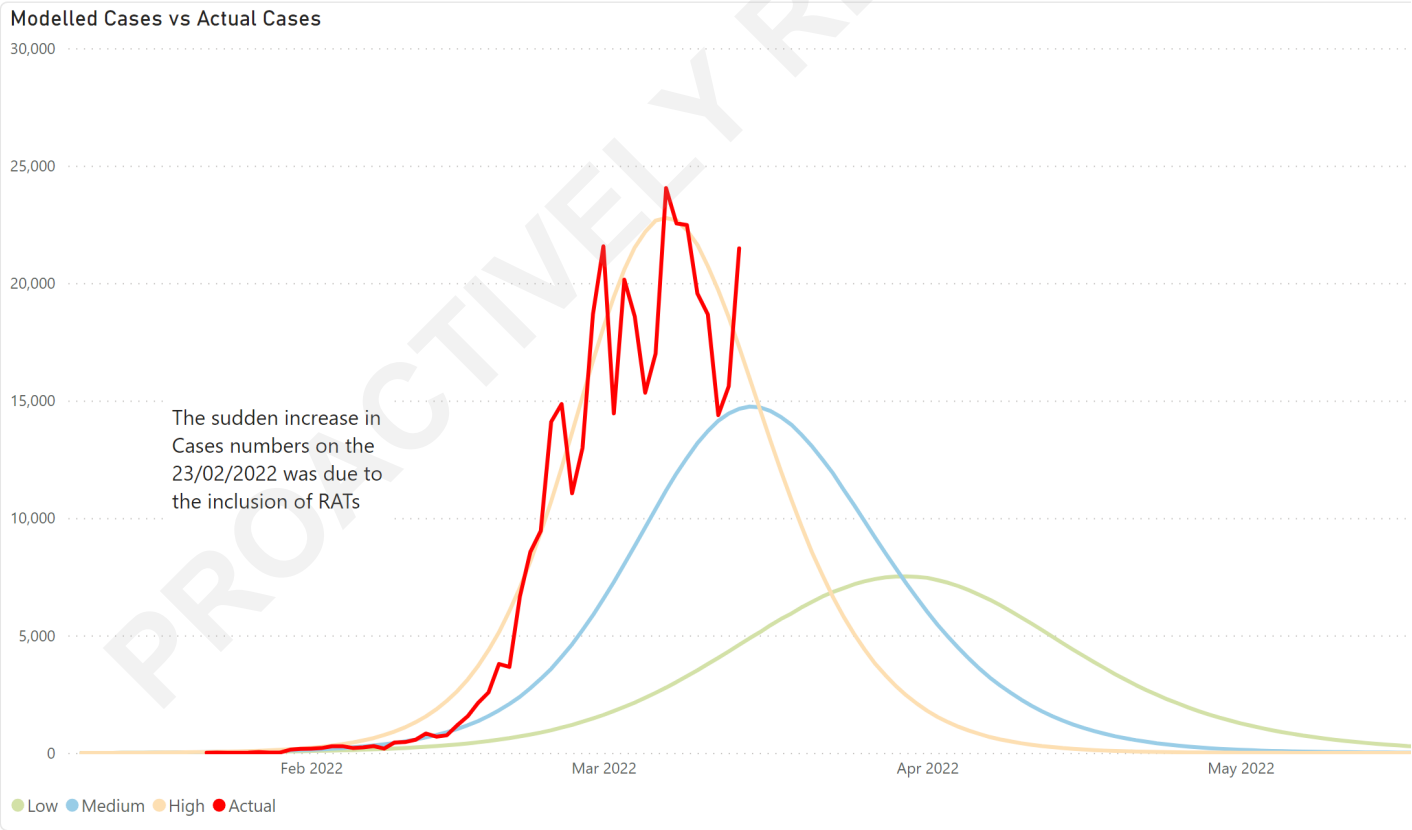
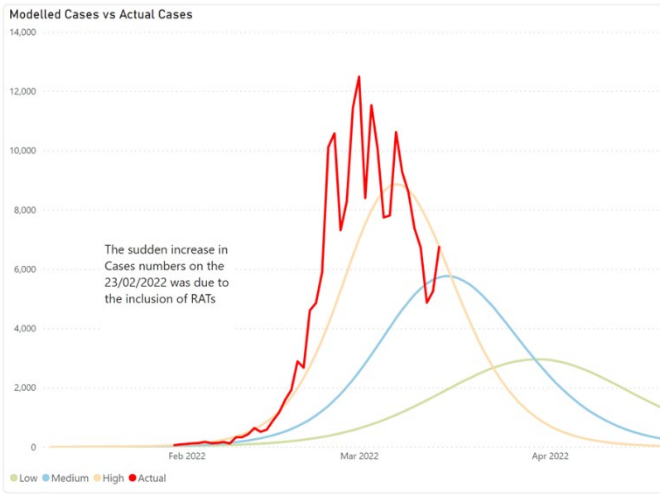
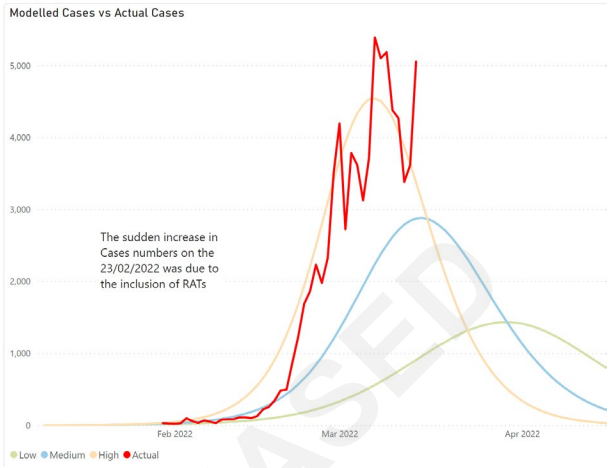


Figure 19: COVID-19 Modelling Aotearoa predictions compared to actual cases by DHB region

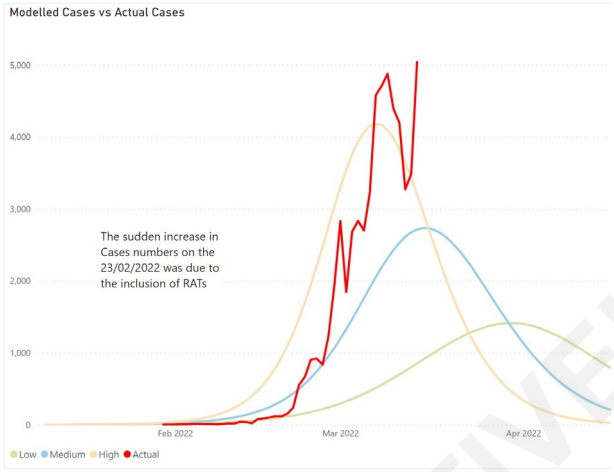
Northern Region



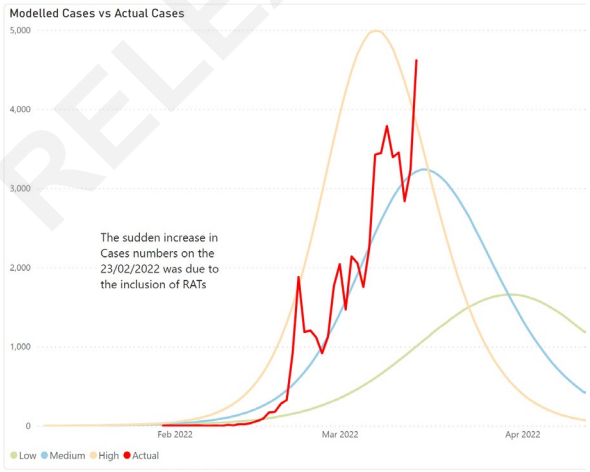
Te Manawa Taki (Midland) Region



Central Region

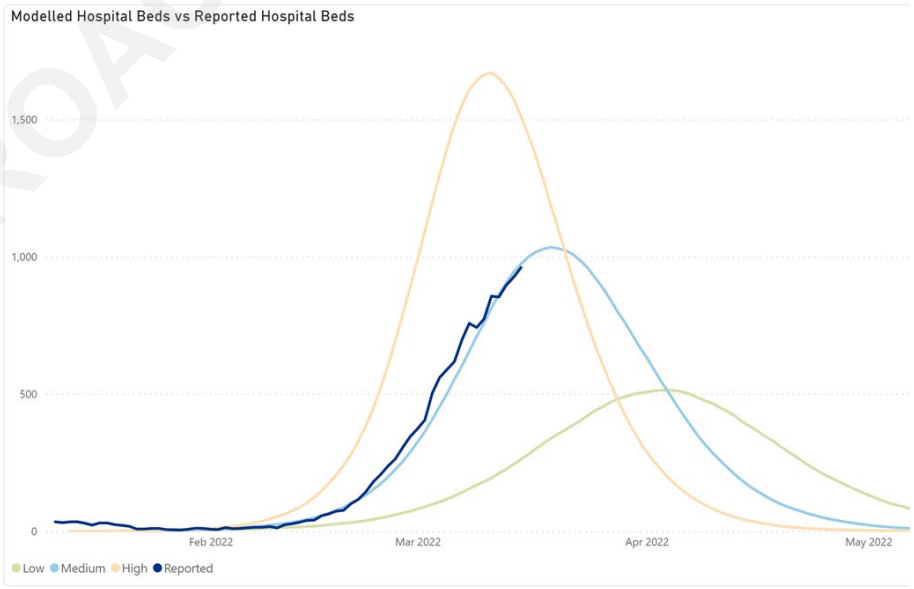


Southern Region



Source: TAS; COVID-19 Modelling Aotearoa group (Te Pūnaha Matatini) 27 February 2022; Actual cases MoH to 14 March 2022.

Figure 20: COVID-19 Modelling Aotearoa TPM hospitalisation scenarios compared to actuals



Source: TAS; COVID-19 Modelling Aotearoa group (Te Pūnaha Matatini)), 27 February 2022; Actual cases MoH to 14 March 2022.

Effective reproduction rate

These estimates used the *EpiNow2* package on 13 March using data to 11 March.[4]

- The median estimate of **effective R (R_{eff}) nationally is declining to 0.77** (90% Credible Interval [CI]: 0.3-1.6) for cases to 11 March, after adjusting for data lags.
- Estimates for R_{eff} for PHU regions have been generated this week and are shown in Table 7.
- For some regions, the model is estimating an R number less than 1. This could reflect a decrease in transmission as we reach a peak due to increased immunity in the population or could be due to changes in behaviour of the population (e.g., people being more cautious), or due to under-reporting of cases as a result of testing backlogs, or a combination of these factors.
- Median doubling times have little meaning while case are declining, and so have been omitted.

Table 7: Estimated median effective R (R_{eff}) by Public Health Unit region, cases to 11 March 2022

Public Health Unit region	R_{eff}
Northland	0.9 (90% Credible Interval [CI]: 0.4–1.9)
Auckland	0.5 (90% Credible Interval [CI]: 0.2–1.1)
Taranaki	1.0 (90% Credible Interval [CI]: 0.5–1.7)
Waikato	0.8 (90% Credible Interval [CI]: 0.3–2.0)
Toi Te Ora	0.5 (90% Credible Interval [CI]: 0.2–1.2)
Tairawhiti	1.4 (90% Credible Interval [CI]: 0.8–2.0)
Regional Public Health (Wellington Region)	0.8 (90% Credible Interval [CI]: 0.4–1.6)
Mid Central	0.9 (90% Credible Interval [CI]: 0.5–1.6)
Hawkes Bay	1.1 (90% Credible Interval [CI]: 0.5–2.0)
Canterbury/ South Canterbury	1.3 (90% Credible Interval [CI]: 0.5–3.2)
Southern	1.3 (90% Credible Interval [CI]: 0.5–3.8)
Nelson Marlborough	1.2 (90% Credible Interval [CI]: 0.4–3.1)
National	0.8 (90% Credible Interval [CI]: 0.3–1.6)

Forecasts of cases and infections

Forecasting assumes that the Effective R will be constant over the next week at its most recent value, and that testing lags are constant. As the most recent case data are likely still affected by lags in reporting, a 7-day forecast is only included for the national estimates.

Estimates of the number of new confirmed cases nationally by their date of infection are in Figure 21.

Assuming that the current level of transmission stays constant:

- The model's median estimate is that national reported positive tests could be 14,000 cases per day by 18 March (50% CI: 9,270 –22,740). The credible intervals for the projected cases would be even wider if the possibility of continuing trend changes in Effective R were included.
- The previous model that made forecasts using cases from 7 March 2022 estimated that 17,150 cases per day would be reported by 14 March, whereas 15,540 actual cases were reported.

[4] The EpiNow package 'now-casts' and forecasts cases to measure current, past and future transmission nationally by calculating and then extrapolating the effective reproduction number, R_{eff}. The model does not consider several factors that may impact transmission, such as rapid changes in public health measures, population behaviour, mobility, or school holidays. This model requires sustained daily cases before it can make predictions. It only counts cases that become confirmed at some stage.

Figure 21: Projected national cases by (A) date of report and (B) date of infection