COVID-19 Genomics Insights Dashboard (CGID) #14

The COVID-19 genomics insights dashboard (CGID) provides a public and high-level overview of viral genomic surveillance across Aotearoa. It aims to explain how whole genome sequencing (WGS) complements other epidemiological data to support public health decision making. As SARS-CoV-2, the virus that causes COVID-19, continues to adapt, mutate, and spread, the CGID reports trends and insights gained by our WGS surveillance programme here in Aotearoa, New Zealand and abroad.

Summary Infographics & Insights:

Genomes analysed in the past week*:

635

new genomes since the last report on 29/6/22

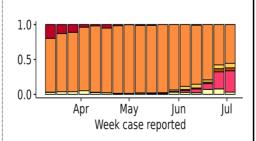
~11,500

genomes reported so far in 2022

*new genomes are typically collected over the preceding fortnight

Variant surveillance:

BA.2 (orange) continues to be the most prevalent Omicron lineage across NZ, but BA.5 (pink) is trending up rapidly across the country. See next page for annotated figure.



Hospital surveillance:

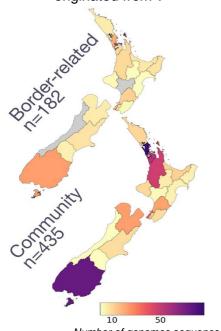
~16% (69 of 421)

of PCR positive cases with a hospital admission date in the past fortnight have been genome sequenced.

Composition of hospital cases:

- 74% BA.2
- 9% BA.2.12.1
- 17% BA.5

Graphical overview of where new border and community genomes originated from*.



Number of genomes sequenced [*border/community metadata is sometimes missing]

Key Trends & Insights

- Omicron BA.2 remains the most abundant variant across Aotearoa; approximately one in every three community cases is now the BA.4 or BA.5 variant.
- BA.5 is on track to become the dominant variant (>50%) in the next week. There is high certainty that BA.5 is driving up case numbers around the country (and internationally).
- Border surveillance reveals that ~50% of border-related cases arriving into NZ are BA.4 or BA.5.
- Wastewater variant analysis is increasingly detecting BA.4/BA.5, 19/20 sentinel sites were positive. Aggregated data over the past 4 weeks detected BA.4/5 at: 2.8%, 6%, 10.5% and now 33%.
- A recent subvariant BA.2.75 looks to be gaining a global foothold. So far there are 4 reported cases found within NZ - all are associated with the border. As yet there is no indication of community spread of BA.2.75.

Frequency of SARS-CoV-2 variants in the New Zealand community each week (March 2022 - 4th July) throughout 2022 determined by whole genome sequencing. Data is subject to change as samples may still be added to the most recent two-week period. [The category 'Omicron unassigned' is typically where a partial genome has been recovered and a definitive assignment to a variant is not possible.]

