

COVID-19 Genomics Insights Dashboard (CGID) #22

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:

1,009

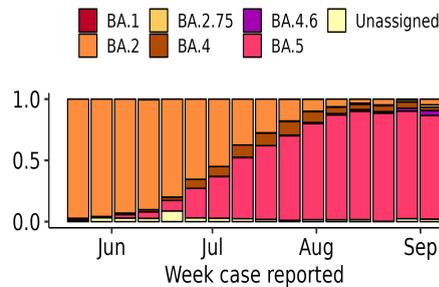
genomes from cases reported within the past two weeks (20th Aug - 2nd Sept)

~20,000

genomes reported so far in 2022

Variant surveillance:

BA.5 (pink) continues to be the dominant Omicron variant across NZ, making up >86% of community cases in the last reporting week. Variants BA.2.75 and BA.4.6 (purple) continue to be detected at low levels. *See next page for annotated figure.*



Hospital surveillance:

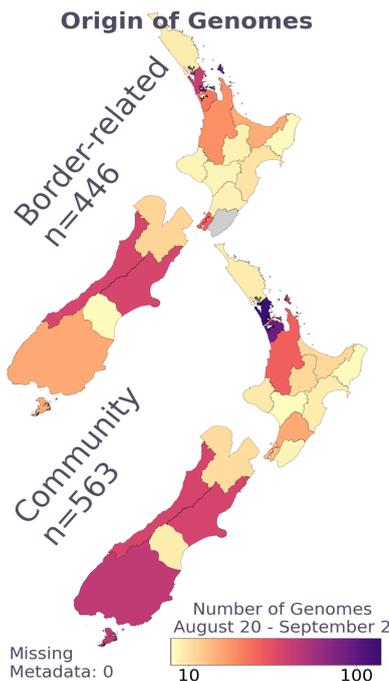
~24% (105 of 442)

of PCR positive cases with a hospital admission date in the past fortnight (20th Aug - 2nd Sept) have been genome sequenced.

Approximate composition of hospital cases:

- 3% BA.2
- 2% BA.2.75
- 6% BA.4
- 3% BA.4.6
- 87% BA.5

Graphical overview of sample acquisition (20th Aug - 2nd Sept)



Key Trends & Insights

- There is good temporal and spatial coverage within our genomic surveillance system: ~1.8% of all community cases and ~26% of border-related cases were sequenced.
- Omicron BA.5 remains the dominant variant and continues to make up the bulk of cases (community and border). In the last reporting week BA.5 was > 86% of all community cases.
- We continue to monitor a relatively small number of community Omicron BA.2.75 (7 cases) and BA.4.6 (15 cases). In the past 2 weeks we have seen a slight rise in the proportion of community BA.4.6, however the low number of detections suggests any growth advantage is small and unlikely to result in an increase in overall cases.
- BA.4/5 was detected at all wastewater sentinel sites - levels are at >97%. Of all the sentinel sites monitored over the last 2 weeks 84% were 100% BA.4/5.

Figure: Frequency of SARS-CoV-2 variants in the New Zealand community each week (for the past 16 weeks) as 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 ‘unassigned’ is typically where a partial genome has been recovered and a definitive assignment to a variant is not possible.]

