

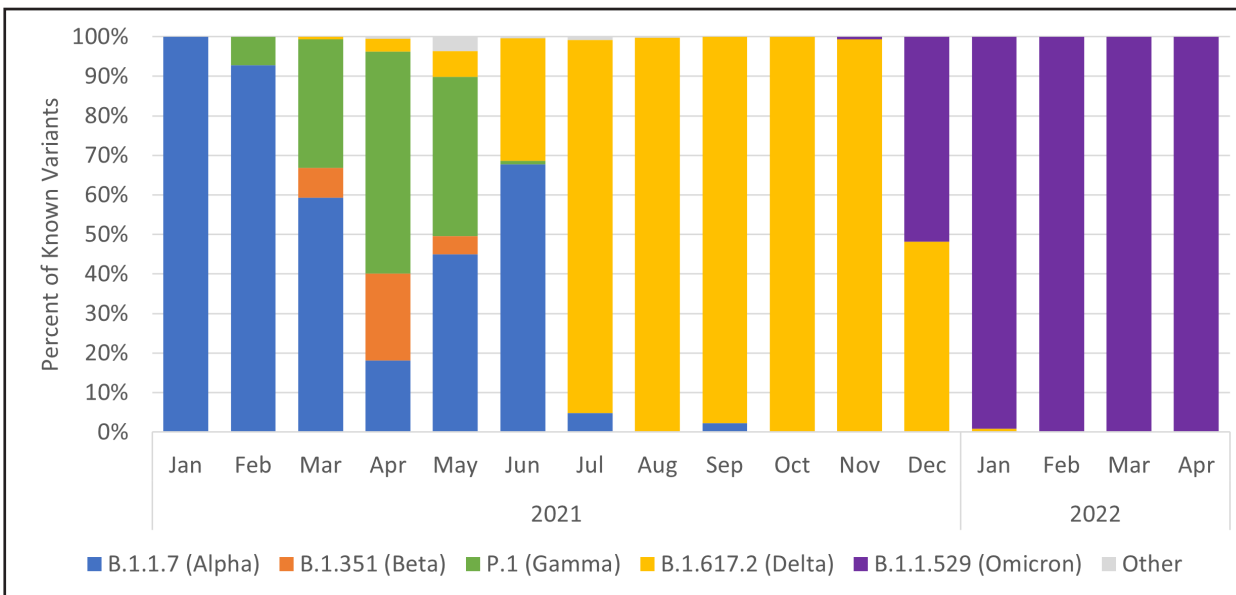
COVID-19: The Emergence of Delta and Omicron Variants in Durham Region

January 2021 - April 2022

Variants of Concern (VOCs) are mutations in SARS-CoV-2 (the COVID-19 virus) that may make the virus more infectious, virulent and/or decrease vaccine efficacy. The Delta variant of concern (B.1.617.2), first documented in October 2020, had higher transmissibility and higher severity than the original SARS-CoV-2 virus and most other variants.(1) The Delta variant became the dominant strain in Ontario at the end of June 2021. The Omicron VOC (B.1.1.529), first identified in November 2021, had higher transmissibility and lower severity than the Delta variant.(2) The Omicron variant became the dominant strain in Ontario in mid-March 2022.(2)

VOC Breakdown

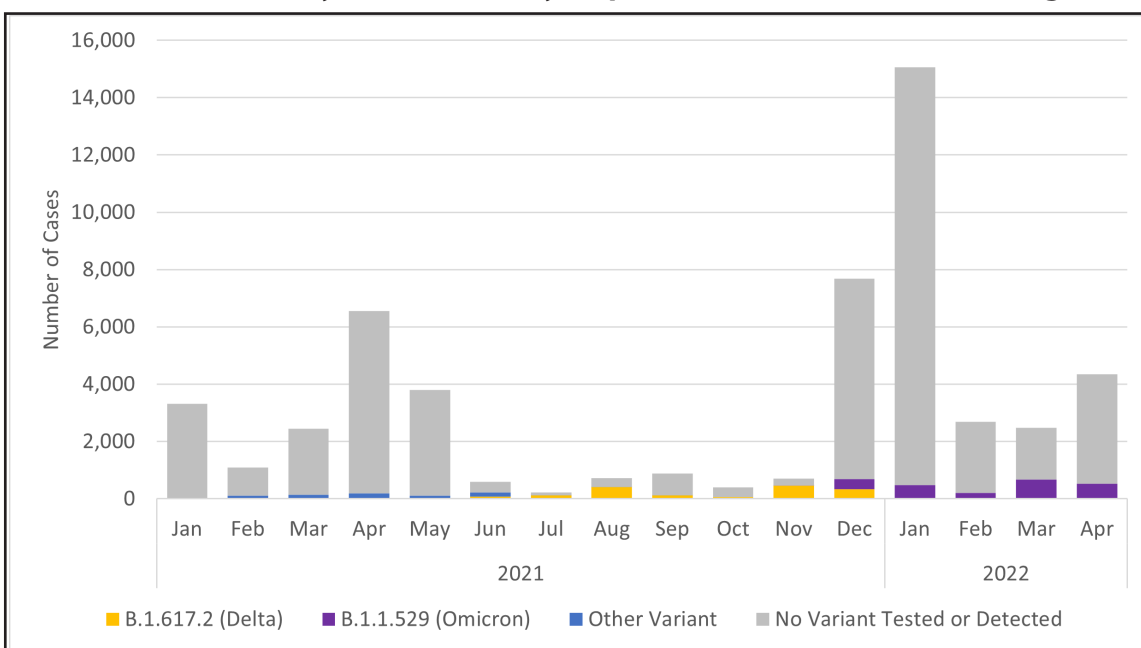
Percentage Breakdown of Known VOC's in Durham Region



In January 2021, the Alpha variant was the dominant strain in cases that had test results for VOCs. Between April and June other variants emerged and in July 2021 Delta took over as the dominant strain in Durham Region. The Omicron strain first emerged in December 2021 and then became the dominant strain in January 2022. This report includes all subvariants of the Omicron variant and does not differentiate between them.

Number of Cases

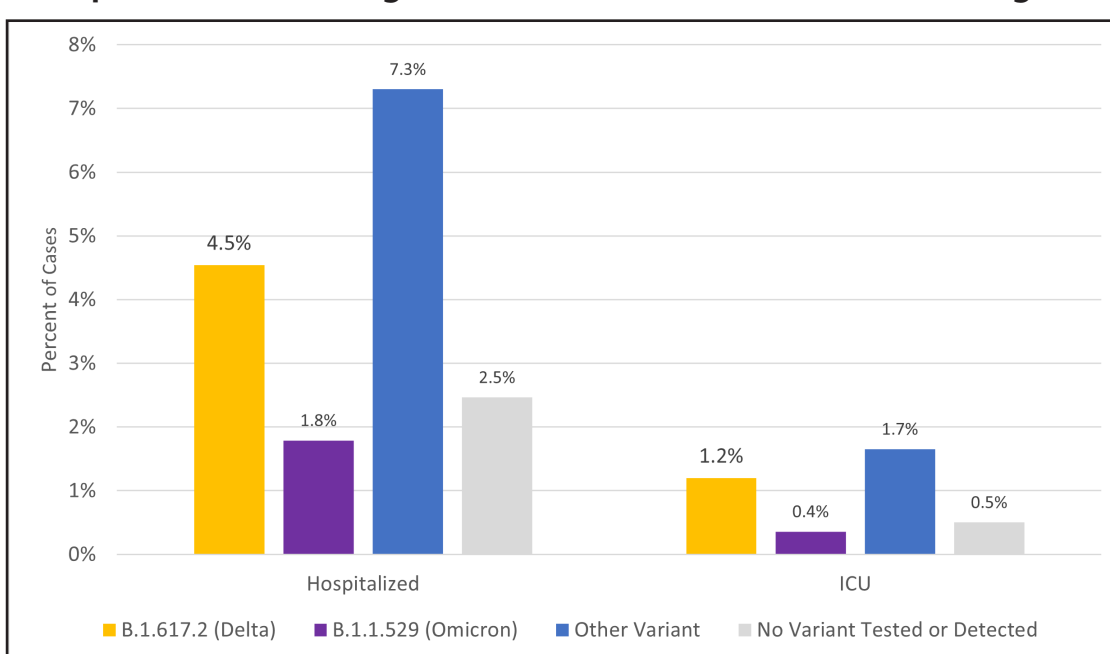
Number of Cases by VOC Status by Reported Month in Durham Region



Provincial laboratories change their testing strategy for VOCs based on factors such as the capacity of labs given the number of cases occurring across Ontario, what variants are potentially in the population, and whether screening for mutations is sufficient to detect a VOC or whether whole genome sequencing (WGS) is necessary. The VOC testing strategy influences how many VOC cases are detected. (3)

Hospitalizations

Hospitalizations Among Delta and Omicron Cases in Durham Region



A higher percentage of Delta cases were hospitalized and in ICU than Omicron cases. The higher percentage of "other variant" cases, such as Alpha, Beta and Gamma, that were hospitalized and in ICU compared to Delta cases may partially reflect the timing of those cases in January to June 2021 when vaccination rates were much lower.

References:

1. Public Health Ontario. Evidence Brief: **COVID-19 Delta: Risk Assessment and Implications for Practice** (September 20, 2021 Update).
2. Public Health Ontario. Evidence Brief: **COVID-19 Variant of Concern Omicron (B.1.1.529): Risk Assessment, February 23, 2022** (February 23, 2022).
3. Public Health Ontario. Weekly Epidemiological Summary: **SARS-CoV-2 Whole Genome Sequencing in Ontario** (May 24, 2022).



Durham Health Connection Line
905-668-2020 or 1-800-841-2729
durham.ca/NovelCoronavirus

If you require this information in an accessible format, contact 1-800-841-2729.

