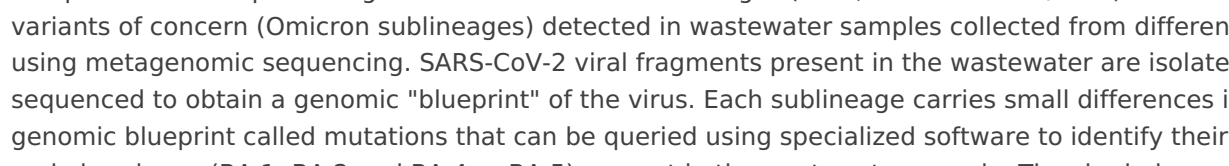


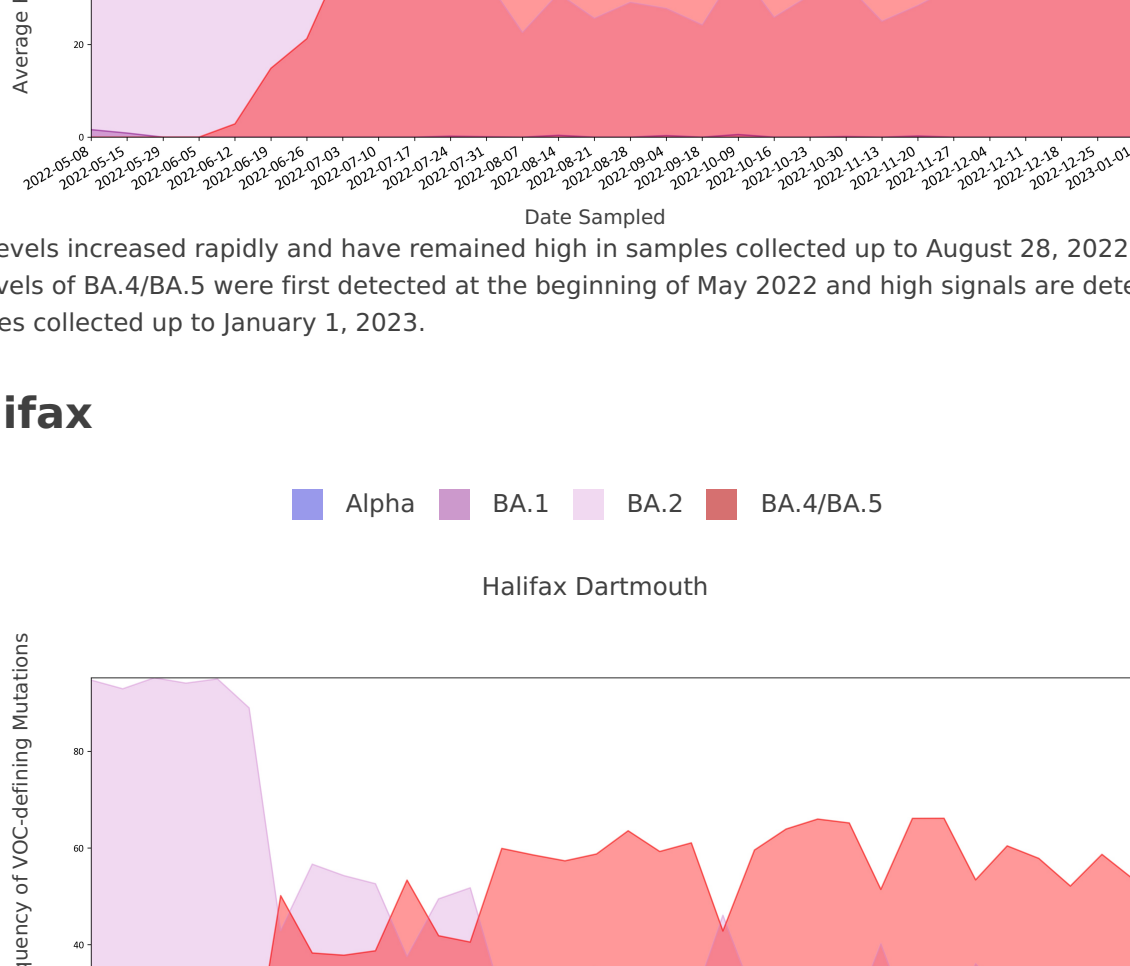
Wastewater Sequencing Trend Report: Detection of SARS-CoV-2 Variants of Concern by Metagenomic Sequencing



Longitudinal wastewater sequencing data ending 2023-01-24

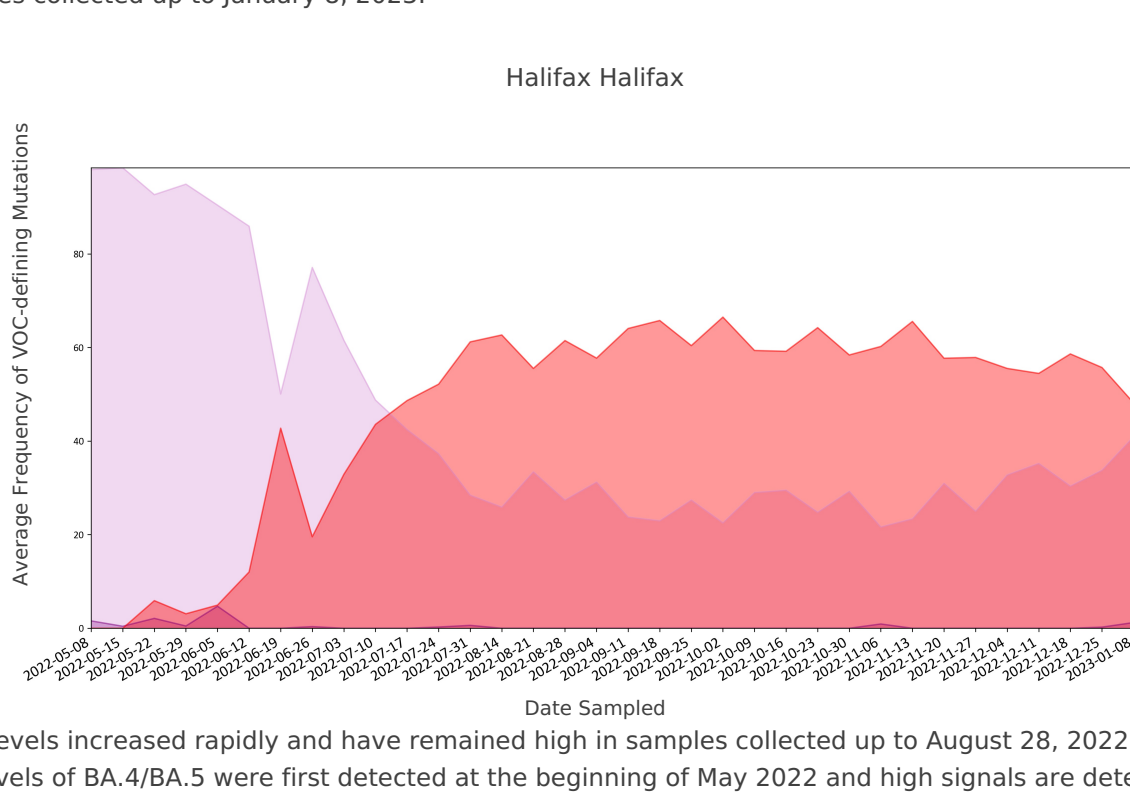
The plots show the percentage of Omicron and its sublineages (BA.1, BA.2 and BA.4/BA.5) SARS-CoV-2 variants of concern (Omicron sublineages) detected in wastewater samples collected from different sites using metagenomic sequencing. SARS-CoV-2 viral fragments present in the wastewater are isolated and sequenced to obtain a genomic "blueprint" of the virus. Each sublineage carries small differences in their genomic blueprint called mutations that can be queried using specialized software to identify their presence and abundance (BA.1, BA.2 and BA.4 or BA.5) present in the wastewater sample. The shaded areas in the plot show BA.1 in dark purple, BA.2 in light purple, BA.4 or BA.5 in red and where applicable, Alpha in blue. To correct for the shared ancestry of BA.2 and BA.4/BA.5 SARS-CoV-2 lineages, the average frequency of VOC-defining mutations for BA.4/BA.5 has been subtracted from BA.2.

Edmonton



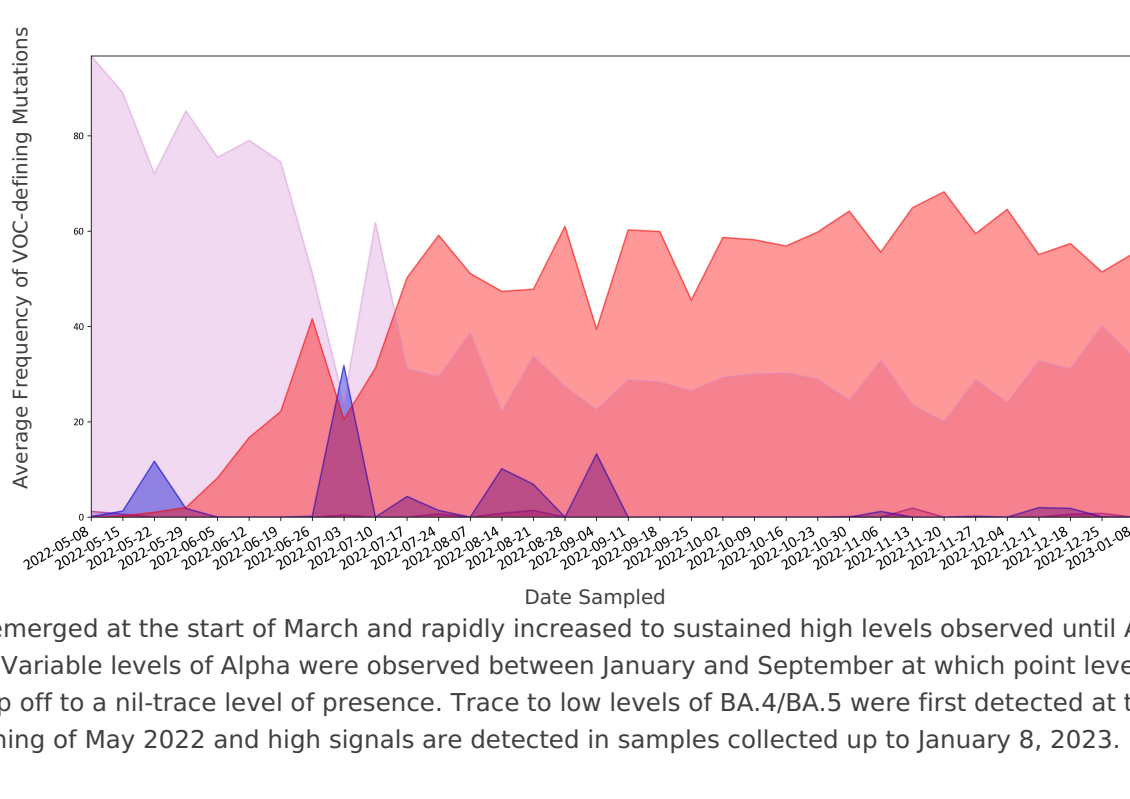
BA.2 levels increased rapidly and have remained high in samples collected up to August 28, 2022. Trace to low levels of BA.4/BA.5 were first detected at the beginning of May 2022 and high signals are detected in samples collected up to January 1, 2023.

Halifax



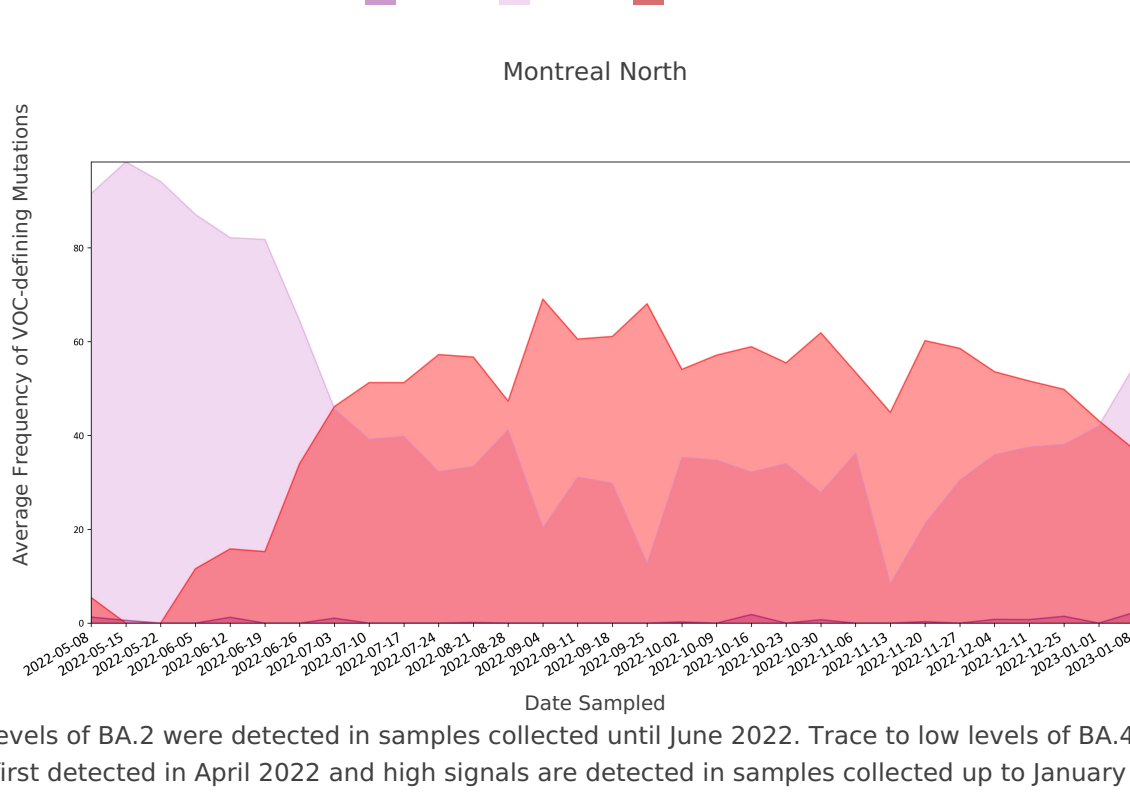
BA.2 levels increased rapidly and have remained high in samples collected up to August 28, 2022. Trace to low levels of BA.4/BA.5 were first detected at the beginning of May 2022 and high signals are detected in samples collected up to January 8, 2023.

Halifax Halifax



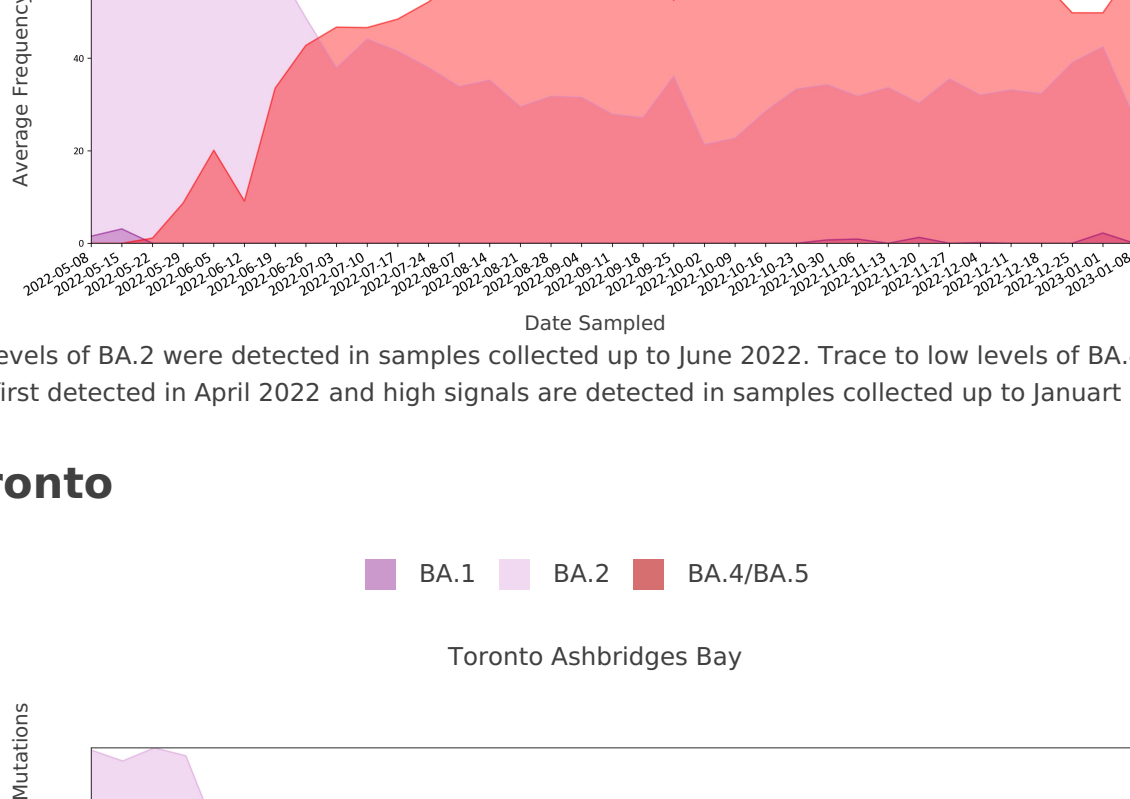
BA.2 levels increased rapidly and have remained high in samples collected up to August 28, 2022. Trace to low levels of BA.4/BA.5 were first detected at the beginning of May 2022 and high signals are detected in samples collected up to January 8, 2023.

Halifax Millcove



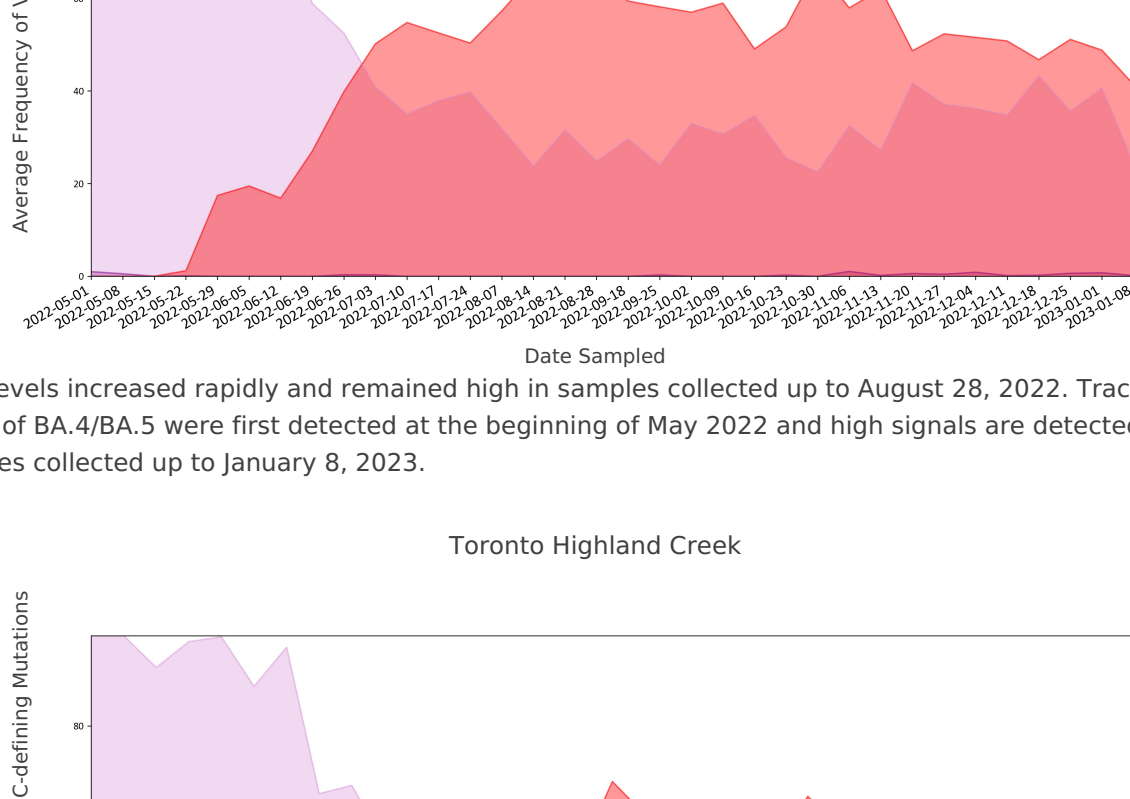
BA.2 emerged at the start of March and rapidly increased to sustained high levels observed until August 28 2022. Variable levels of Alpha were observed between January and September at which point levels began to drop off to a nil-trace level of presence. Trace to low levels of BA.4/BA.5 were first detected at the beginning of May 2022 and high signals are detected in samples collected up to January 8, 2023.

Montreal



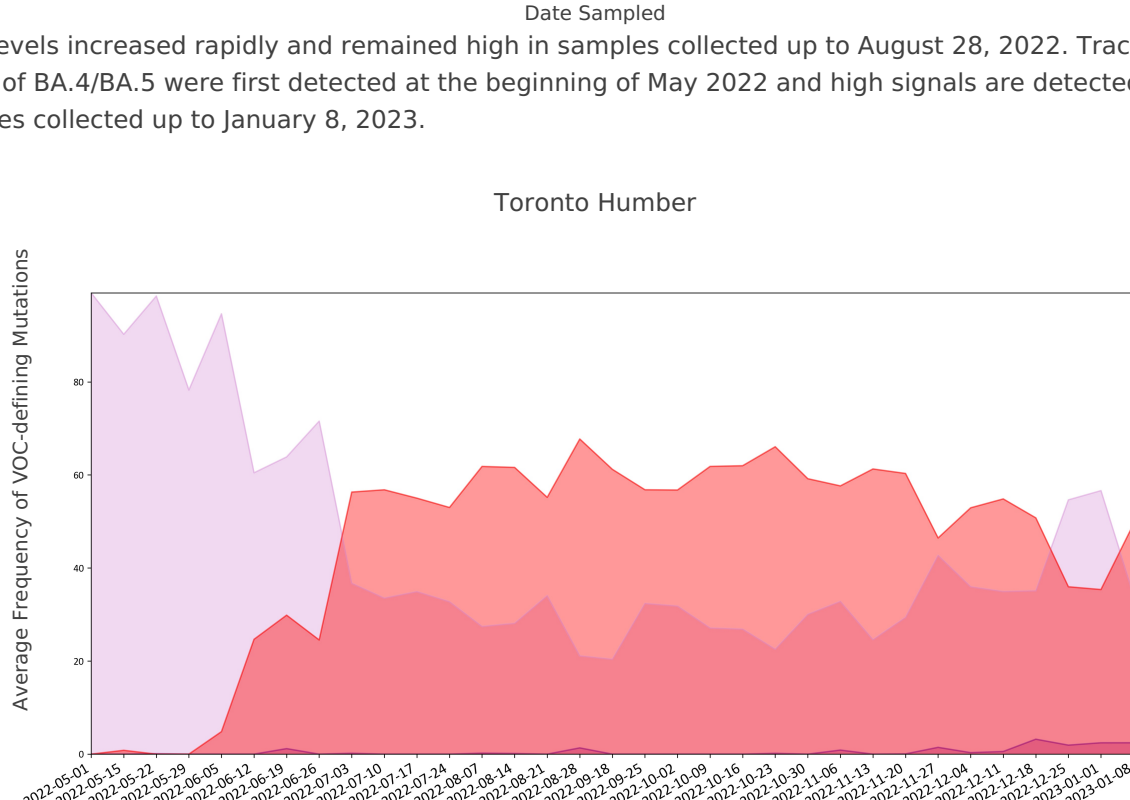
High levels of BA.2 were detected in samples collected until June 2022. Trace to low levels of BA.4/BA.5 were first detected in April 2022 and high signals are detected in samples collected up to January 8, 2023.

Montreal South



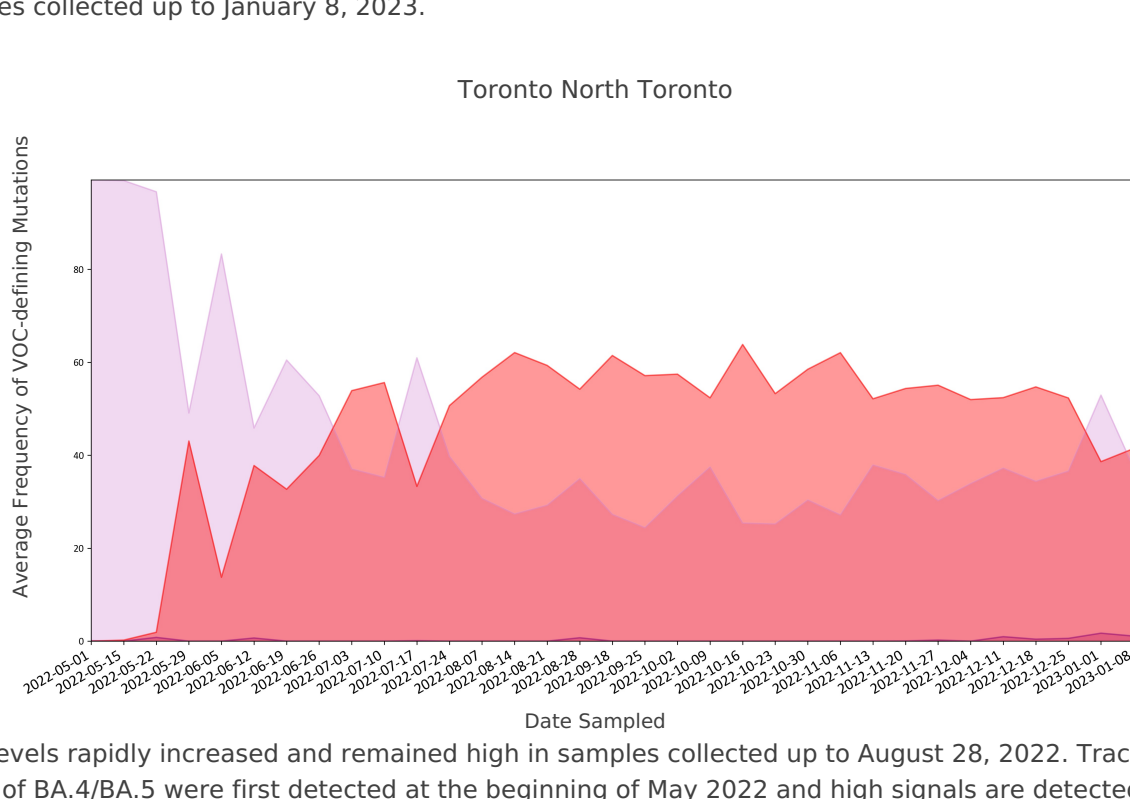
High levels of BA.2 were detected in samples collected up to June 2022. Trace to low levels of BA.4/BA.5 were first detected in April 2022 and high signals are detected in samples collected up to January 8, 2023.

Toronto



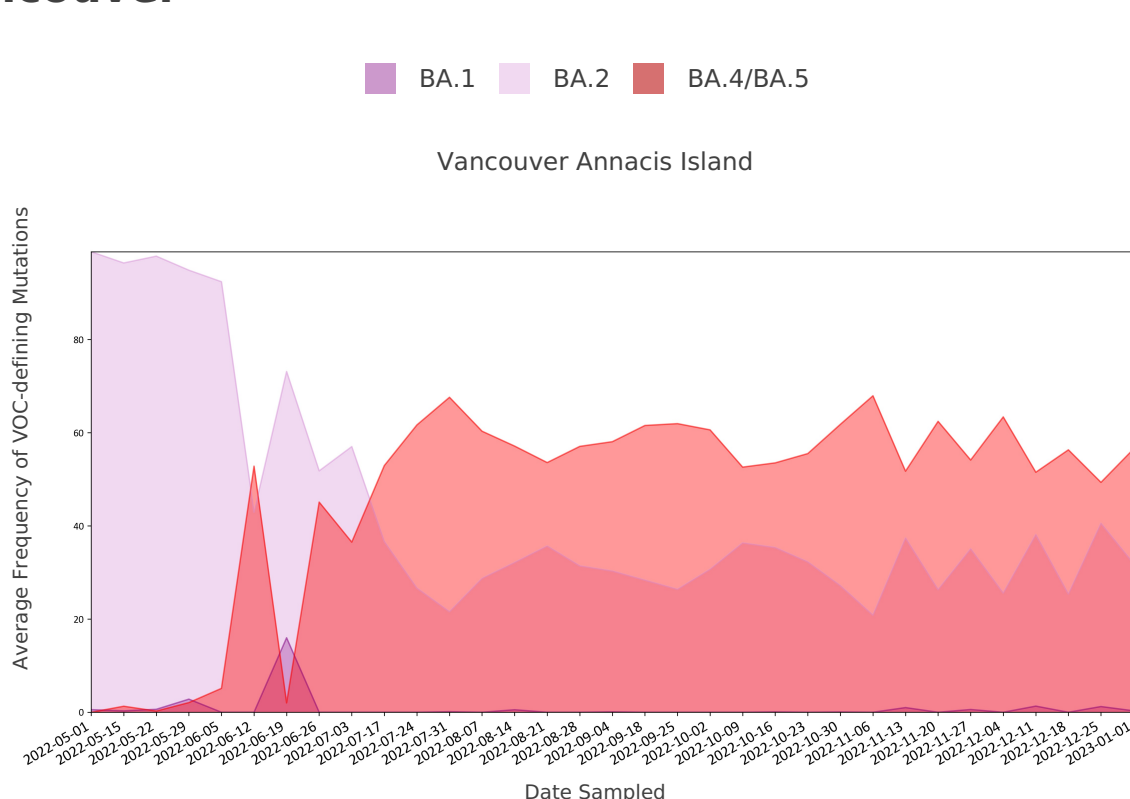
BA.2 levels increased rapidly and remained high in samples collected up to August 28, 2022. Trace to low levels of BA.4/BA.5 were first detected at the beginning of May 2022 and high signals are detected in samples collected up to January 8, 2023.

Toronto Highland Creek



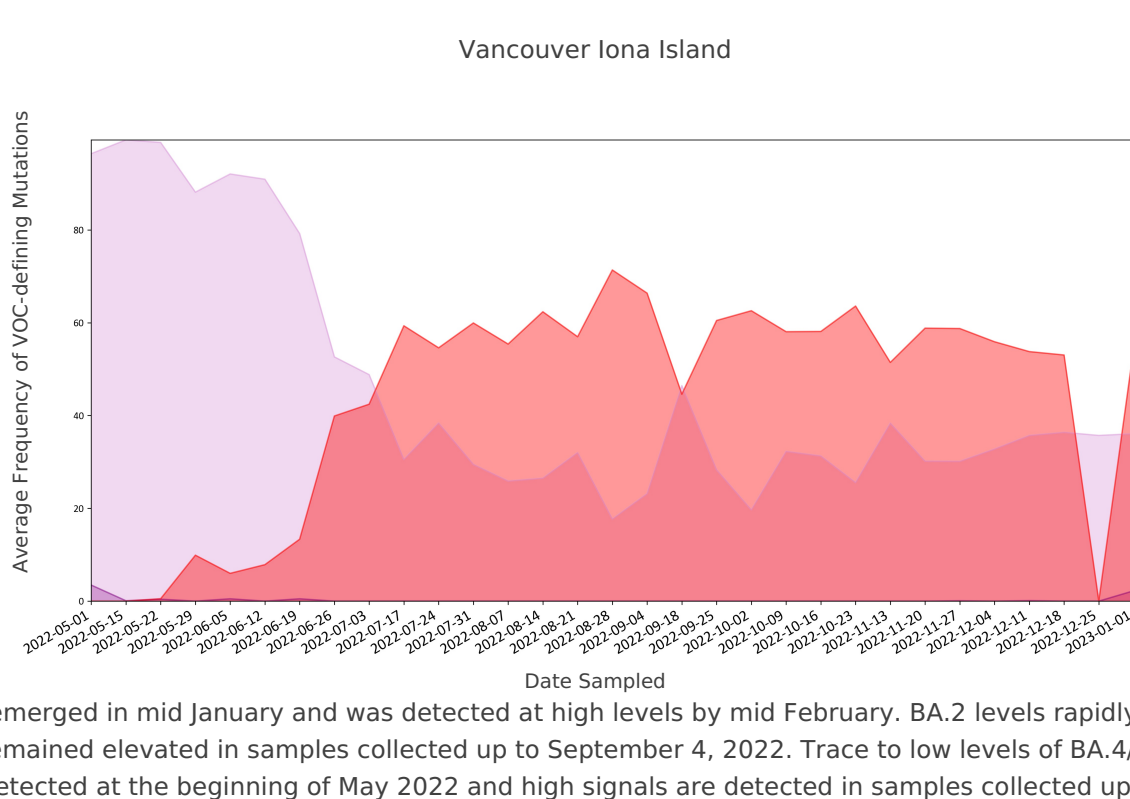
BA.2 levels increased rapidly and remained high in samples collected up to August 28, 2022. Trace to low levels of BA.4/BA.5 were first detected at the beginning of May 2022 and high signals are detected in samples collected up to January 8, 2023.

Toronto Humber



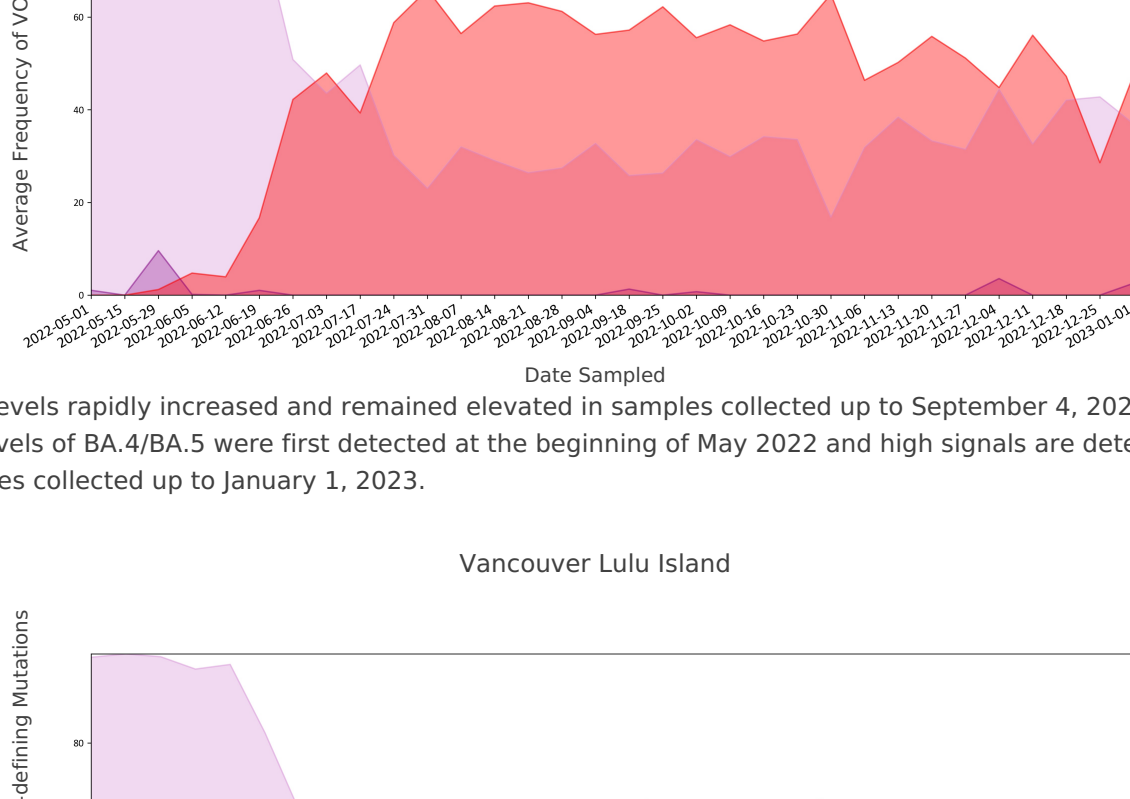
BA.2 levels rapidly increased and remained high in samples collected up to August 28, 2022. Trace to low levels of BA.4/BA.5 were first detected at the beginning of May 2022 and high signals are detected in samples collected up to January 8, 2023.

Toronto North Toronto



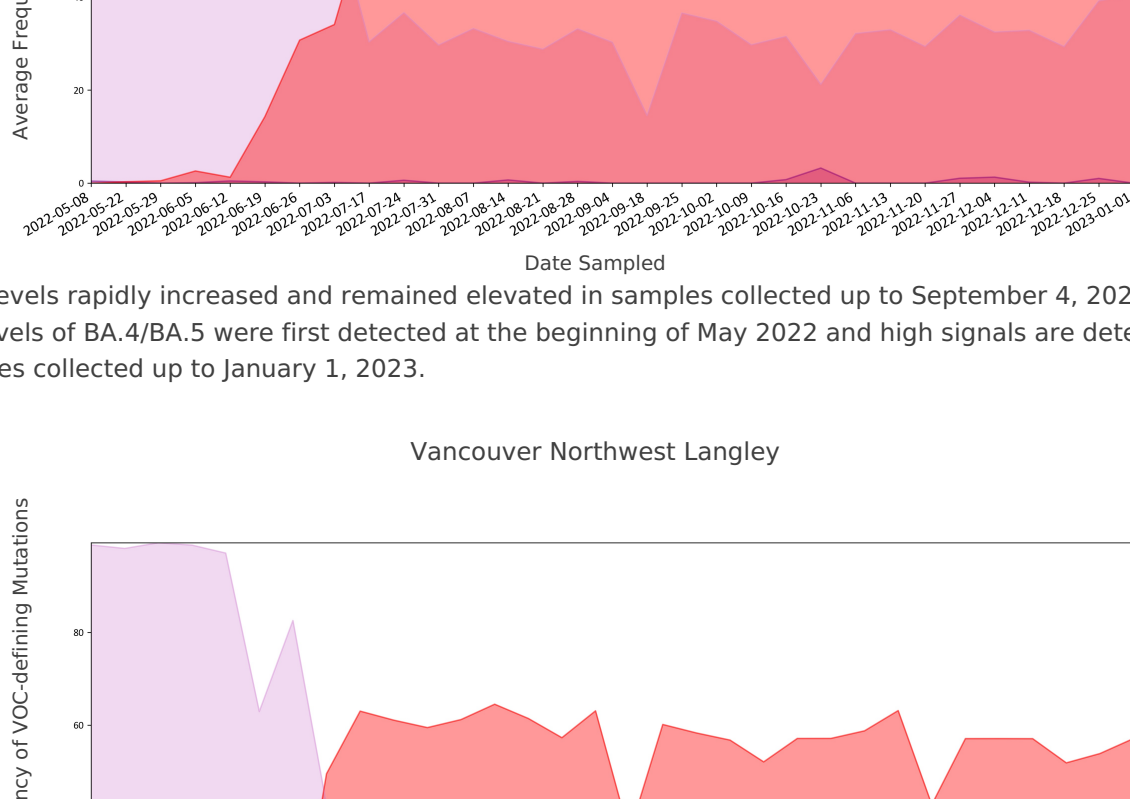
BA.2 levels rapidly increased and remained high in samples collected up to August 28, 2022. Trace to low levels of BA.4/BA.5 were first detected at the beginning of May 2022 and high signals are detected in samples collected up to January 08, 2023.

Vancouver



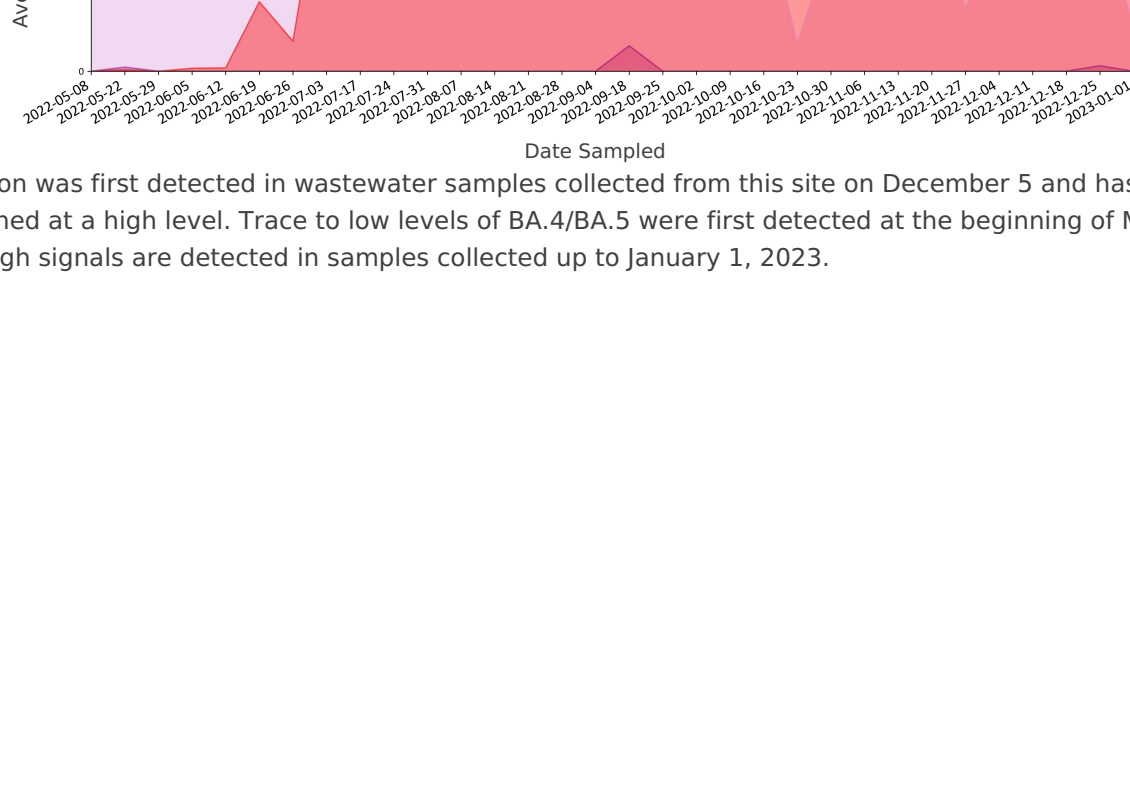
BA.2 levels rapidly increased and remained elevated in samples collected up to September 4, 2022. Trace to low levels of BA.4/BA.5 were first detected at the beginning of May 2022 and high signals are detected in samples collected up to January 1, 2023.

Vancouver Iona Island



BA.2 emerged in mid January and was detected at high levels by mid February. BA.2 levels rapidly increased and remained elevated in samples collected up to September 4, 2022. Trace to low levels of BA.4/BA.5 were first detected at the beginning of May 2022 and high signals are detected in samples collected up to January 1, 2023.

Vancouver Lions Gate



BA.2 levels rapidly increased and remained elevated in samples collected up to September 4, 2022. Trace to low levels of BA.4/BA.5 were first detected at the beginning of May 2022 and high signals are detected in samples collected up to January 1, 2023.

Vancouver Lulu Island



BA.2 levels rapidly increased and remained elevated in samples collected up to September 4, 2022. Trace to low levels of BA.4/BA.5 were first detected at the beginning of May 2022 and high signals are detected in samples collected up to January 1, 2023.

Vancouver Northwest Langley



Omicron was first detected in wastewater samples collected from this site on December 5 and has since remained at a high level. Trace to low levels of BA.4/BA.5 were first detected at the beginning of May 2022 and high signals are detected in samples collected up to January 1, 2023.