

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



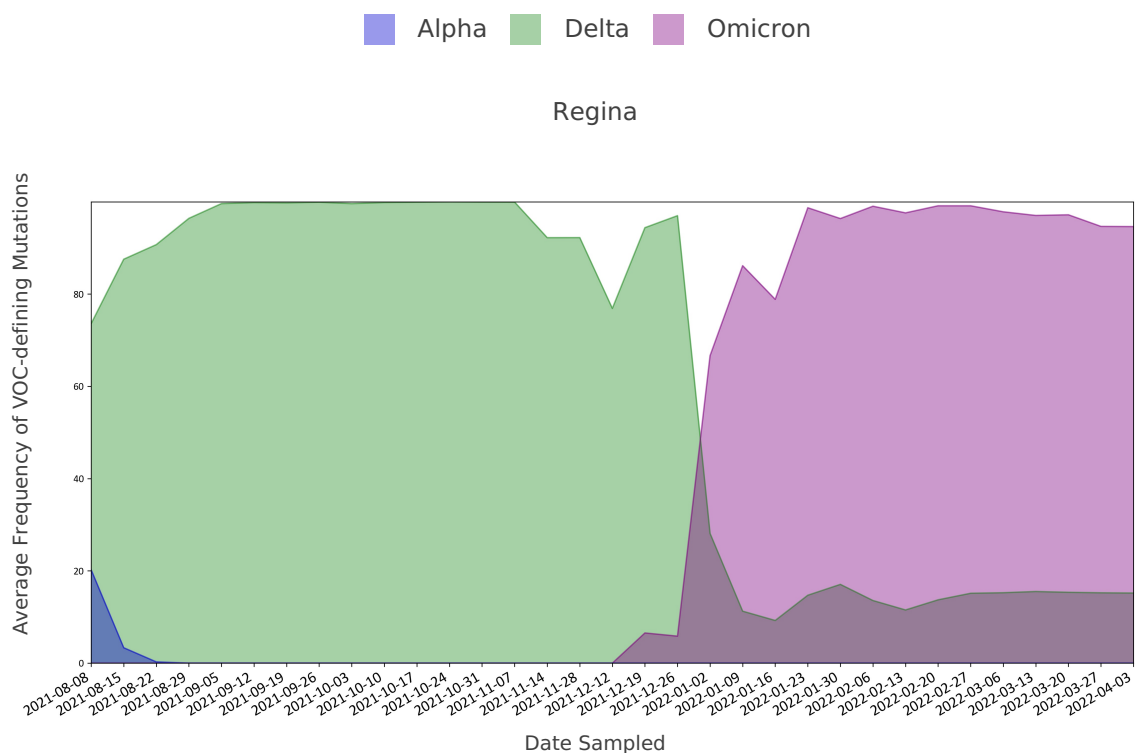
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Longitudinal wastewater sequencing data ending 2022-04-20

The plots show the percentage of three SARS-CoV-2 variants of concern (Alpha, Delta and Omicron) 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 variant of concern carries small differences in their genomic "blueprint" called mutations that can be queried using specialized software to identify the presence and abundance of Alpha, Delta and Omicron present in the wastewater sample. The shaded areas in the plot show Delta in green, Omicron in purple and where applicable, Alpha in blue.

Regina



The plot shows a high presence of Delta until mid-December, followed by a rapid decline. This decrease in Delta coincides with the emergence and rapid increase in Omicron. Omicron was first detected in wastewater samples collected from this site on December 13. The Omicron signal rapidly increased and wastewater samples from this site display a sustained high Omicron presence.