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

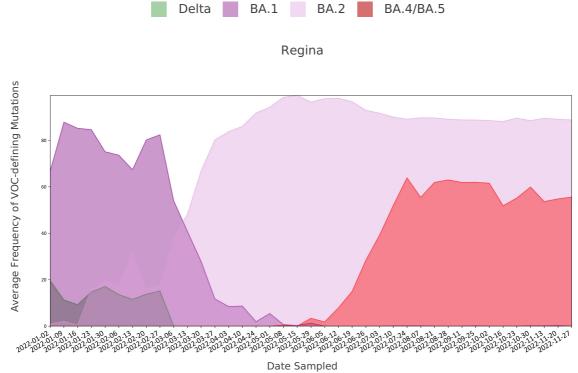


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Longitudinal wastewater sequencing data ending 2022-11-27

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 BA.1 until early March when BA.2 levels increase and overtake BA.1. BA.2 levels increased rapidly and have remained high in samples collected up to September 11, 2022. Trace levels of BA.4/BA.5 were first detected at the beginning to May 2022 and high signals are detected in samples collected up to November 27, 2022.