Metro Wastewater COVID-19 Monitoring

Metropolitan Council

January 31, 2022

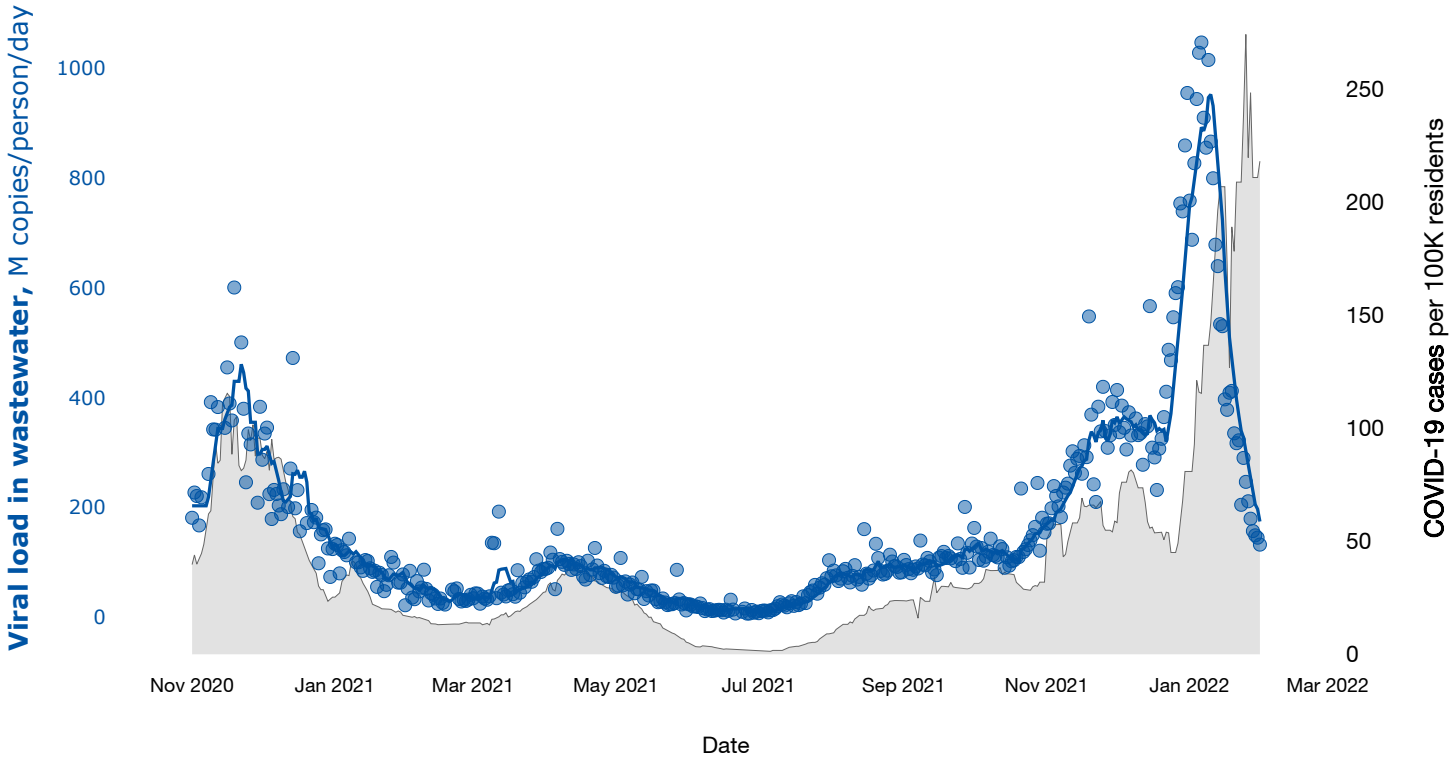
COVID-19 Load

Tracking COVID-19 Prevalence with Metro Plant Wastewater

The daily amount of SARS-CoV-2 viral RNA flowing into the Metro Plant correlates closely with the number of new daily cases reported by the Minnesota Department of Health. The plant serves nearly 2 million people in Minneapolis, Saint Paul, and 64 other metro area communities.

How to read this graph:

The blue line and points show the total amount of SAR S-CoV-2 viral RNA in wastewater flowing into the Metro Plant, in millions copies of the SARS-CoV-2 genome per person served by the wastewater area, per day. Blue points are daily values; the blue line is a running average of the previous 7 days. The gray line shows the average of the previous 7 days of new reported COVID-19 infections in the seven-county Metro area per 100,000 residents. Case data are provided by the Minnesota Department of Health and downloaded from [USA Facts] (www.usafacts.org).



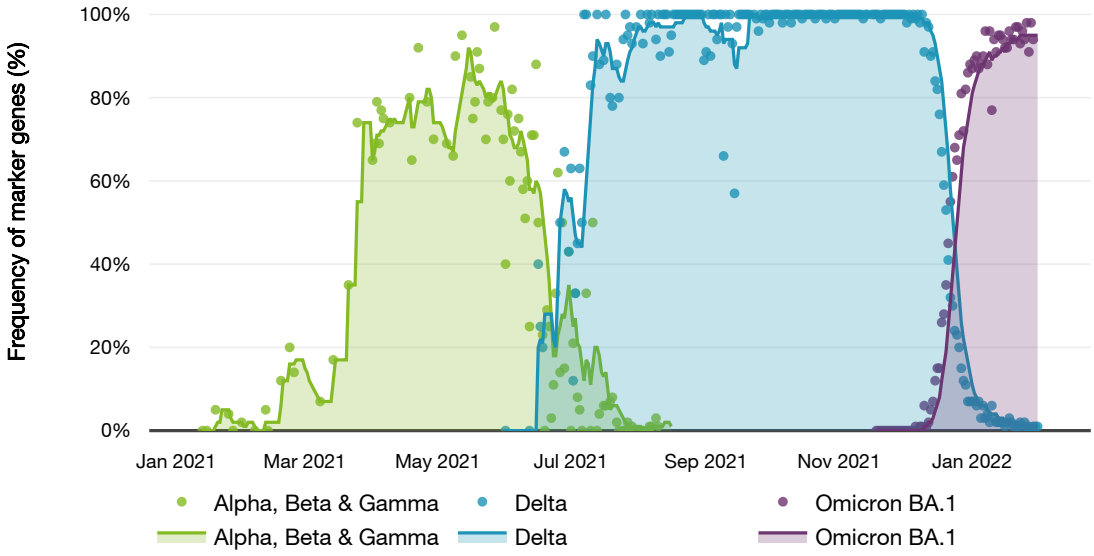
COVID-19 Variants

COVID-19 variant tracker

In December 2021, omicron rapidly replaced delta as the dominant SARS-CoV-2 variant of concern in influent wastewater at the Metro treatment plant in Saint Paul.

How to read this graph:

This graph shows the frequency of SARS-CoV-2 variants. Points are daily data; lines and shaded areas are averages of the previous 7 days.



More information about variant detection

Variant frequencies are inferred from the presence of key mutations in the SARS-CoV-2 genome. Alpha, Beta and Gamma frequencies are inferred from the presence of the N501Y mutation; Delta from the L452R mutation; and Omicron from the K417N mutation. Some variants share mutations: presence of K417N mutation before November 18 were inferred to be the Beta variant.

Monitoring Omicron BA.1 and BA.2 sub-lineages

Metropolitan Council and the University of Minnesota Genomics Center continue to monitor for the BA.1 and BA.2 sub-lineages of Omicron.