

BA.2 omicron subvariant's swift rise to dominance in Gothenburg wastewater

February 22 2022



Credit: Pixabay/CC0 Public Domain

Concentrations of coronavirus in the Gothenburg area's wastewater are still decreasing. The latest measurements and analyses from the University of Gothenburg also show that BA.2, a subvariant of omicron,

has rapidly become the dominant form of coronavirus.

SARS-CoV-2 is maintaining its [downward trend](#) in the [wastewater](#) of Gothenburg after the exceptional peak (an all-time record) of four weeks ago. However, the virus level is still higher than the previous record measurements obtained in the first, second, and third waves of the pandemic.

"The trend's still going down, but slowly," says Heléne Norder, adjunct professor at Sahlgrenska Academy, University of Gothenburg, and microbiologist at Sahlgrenska University Hospital.

New this week is the fact that Norder and her team have succeeded, for the first time, in analyzing concentrations of the omicron subvariants, in earlier samples as well as the latest. They have found that BA.2, the newer omicron subvariant, is now dominant and has replaced BA.1.

BA.2 heavily predominant

"My colleagues have developed and applied type identification of omicron BA.1 and BA.2, and it shows that BA.2 seems to have taken over, and was also present back in the second week of January—earlier than we thought," Norder says.

In that week, BA.2 had a smaller share, but since then it has accounted for a steadily rising proportion, overtaking BA.1 in the last week of January. The current results, based on samples taken between 7 and 13 February, show that BA.2 is now far more widespread than BA.1.

In addition, the researchers have found that norovirus (the "winter vomiting bug"), remains at relatively high levels. On the other hand, influenza (both A and B) and RSV ([respiratory syncytial virus](#)) have been at such low levels recently that these viruses are no longer being

measured.

Two years' investigations

The surveys of SARS-CoV-2 in wastewater have been underway for two years, since mid-February 2020, in collaboration with municipally owned Gryaab. This company, which treats wastewater in Gothenburg and its surrounding municipalities, sends the scientists one sample a week composed of daily samples.

The research group continuously reports its results to care providers and the Infection Control Unit in Region Västra Götaland. To a varying extent, the increasing prevalence of coronavirus in the wastewater, showing the rising incidence of disease in society, has allowed prediction of workload peaks in health care during the pandemic.

The researchers' measurements and analyses have become more important as the general testing program for COVID-19 in the population has changed. Fewer people are getting tested, and ever less can be inferred about the spread of infection in society from the number of confirmed cases.

Provided by University of Gothenburg

Citation: BA.2 omicron subvariant's swift rise to dominance in Gothenburg wastewater (2022, February 22) retrieved 2 February 2024 from <https://medicalxpress.com/news/2022-02-ba2-omicron-subvariant-swift-dominance.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--