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# Summary of preliminary results from wastewater analysis for tracing SARS-CoV-2 in Stockholm

Sampling of wastewater has been done since April 6 at two wastewater treatment plants (WWTP) in Stockholm; Bromma WWTP and Henriksdals WWTP. They receive wastewater from a population of approximately 363,000 and 860,000, respectively. During the period, the number of COVID-19 confirmed cases in Stockholm region has remained high.

After concentration, filtering and preparation, the samples have been screened for genetic material belonging to the virus SARS-CoV-2, known to cause the COVID-19 pandemic. Four samples have been analyzed, representing two different time periods (week 15 and week 17, respectively).

Virus have been detected in all four samples. The preliminary assessment indicates that Bromma (western part of Stockholm) appears to have had more virus than Henriksdal in the first sampling period, and the virus seem to have increased in Henriksdal between the first and the second sampling. More analyses and a larger dataset are necessary to optimize the method, make quantitative assessments and to monitor, or predict, trends.

The first results demonstrate that it is possible to trace SARS-CoV-2 in wastewater and underscores the potential of this method for monitoring the pandemic. Mobilizing a rapid research response such as this is challenging in terms of resources, manpower and equipment, but these preliminary results encourage us to move ahead. International collaboration is vital. Within a few days, wastewater samples from Italy will arrive for comparative analysis.

The methodology and preliminary results will soon be presented in a scientific brief.

Please observe that water is not known to be a transmission pathway for COVID-19. These results do not imply increased health risk associated with wastewater.

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