

Chemical analyses of wastewater may reveal public and environmental health effects of the pandemic

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When investigators analyzed primary sludge collected during the first wave of COVID-19 (March 19 to June 30, 2020) at a wastewater treatment plant in Connecticut, they found trends in the presence of chemicals that related directly to the pandemic—for example, hydroxychloroquine had elevated concentrations in the week following Emergency Use Authorization of the drug for the treatment of COVID-19.

The analysis, which is published in *Environmental Toxicology and Chemistry*, also revealed increases in drugs of abuse and antidepressants, as well as [seasonal changes](#) in chemicals that are used in sunscreens.

"The first wave of the COVID-19 pandemic and associated shut down affected people in many ways, and it was fascinating to see evidence of chemical use changes in our data," said corresponding author Sara L. Nason, Ph.D., of the Connecticut Agricultural Experiment Station. "Wastewater and sewage sludge analysis can provide a wide range of valuable information for communities."

More information: *Environmental Toxicology and Chemistry* (2021). [DOI: 10.1002/etc.5217](https://doi.org/10.1002/etc.5217)

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