SARS-CoV-2 Testing in Wastewater

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Board of Public Utilities June 16, 2022







SARS-CoV-2 Tracking

- Is SARS-CoV-2 (COVID 19) underreported?
- People shed virus in Stool 3-4 days after infection
- Virus does not survive in the sewer, but dead viruses leave RNA traces that can be detected and analyzed

City of Santa Rosa's Sampling Program

- Submitted data as part of two studies
 - Biobot
 - LuminUltra
- One to two samples per week
- Samples are raw wastewater
- Staff responsible for the collection, preservation, and shipping samples

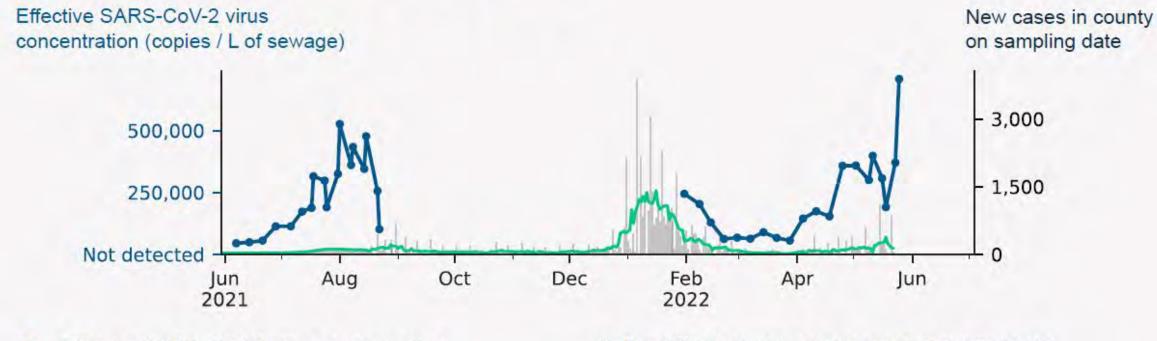






Data

Effective virus concentration over time



--- Effective SARS-CoV-2 virus concentration

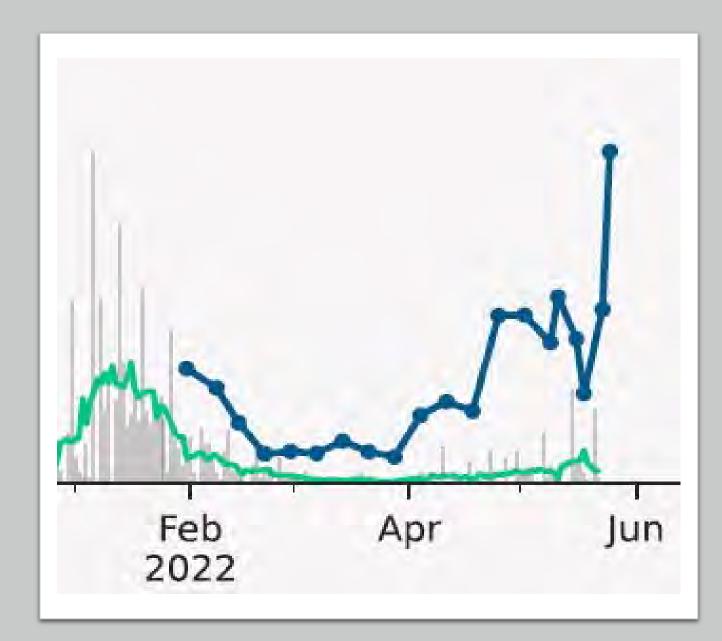
7-day rolling average of new cases in your county
 New cases in your county



Underreported Public Health Data

- SARS-CoV-2 is underreported
- Public/Private
 Collaboration with Verily
 Life Sciences
- Agencies with more than 50,000 people





Agreement with Verily



- One year agreement
- Three samples per week
- Water will be paid \$200 per sample
- Samples collected from settled solids
- Water staff to collect, preserve, and ship samples to Verily
- Data quantified via ddPCR
- Data provided to the City of Santa Rosa, the CDC, Stanford, and local Public Health Officials

Recommendation

It is recommended by the Water Department that the Board, by motion, authorize the Chair to sign the Materials Transfer Agreement with Verily Life Sciences for SARS-CoV-2 testing in wastewater at the Laguna Treatment Plant.



Questions

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