

SARS-CoV-2 Testing in Wastewater

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Board of Public Utilities
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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



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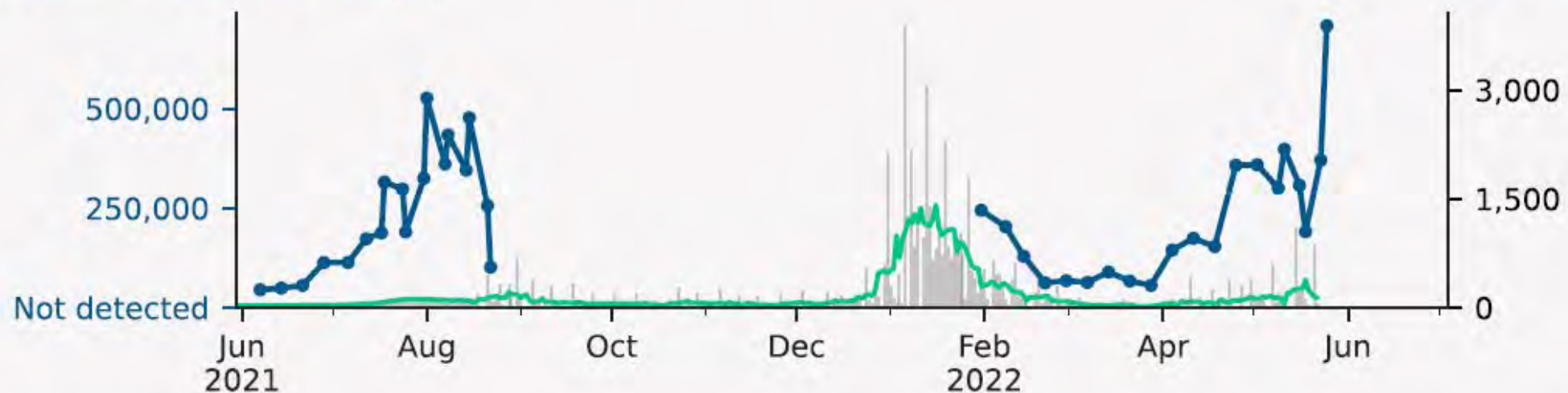


Data

Effective virus concentration over time

Effective SARS-CoV-2 virus
concentration (copies / L of sewage)

New cases in county
on sampling date



—●— Effective SARS-CoV-2 virus concentration

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

■ New cases in your county



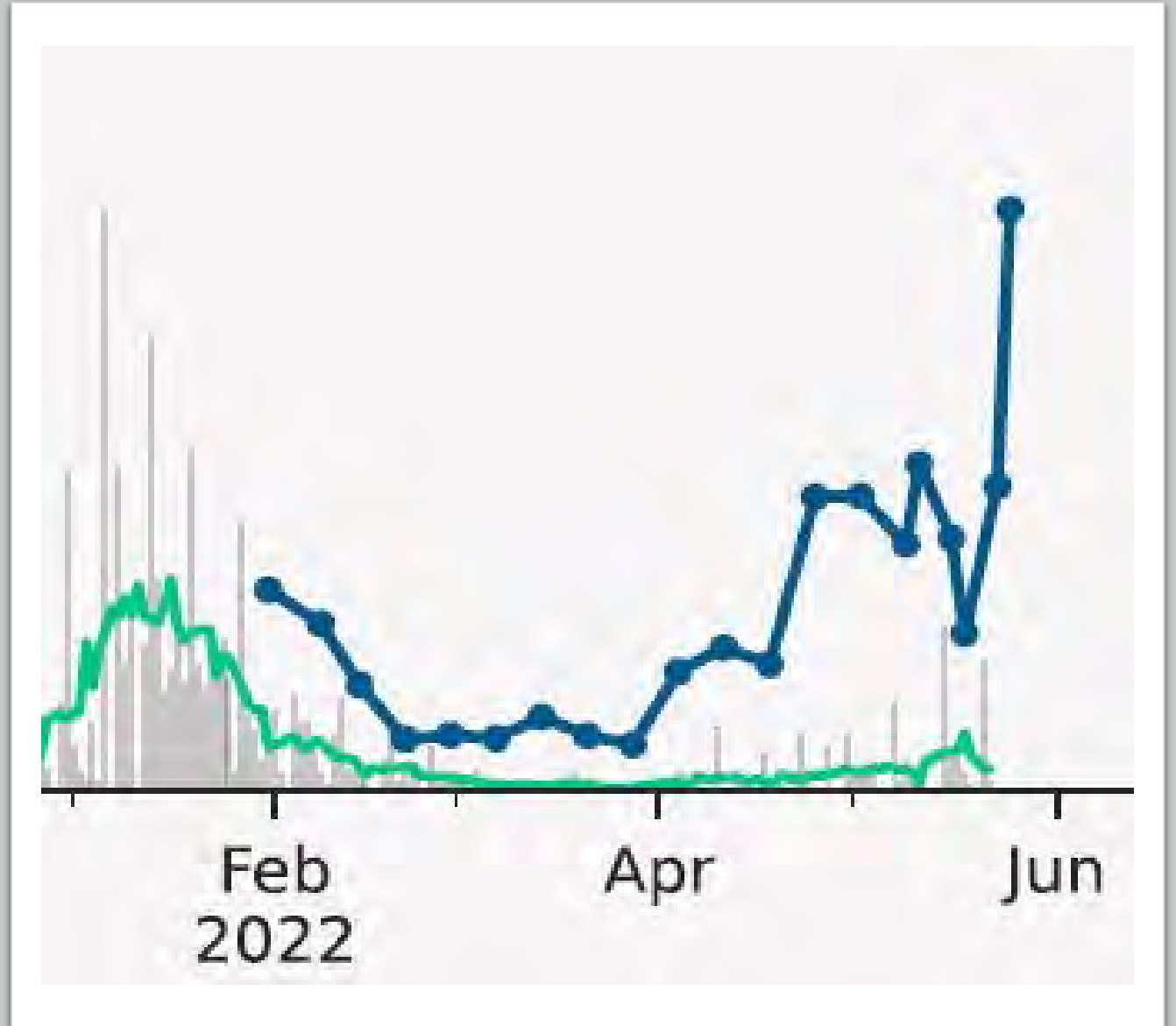
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Underreported Public Health Data

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



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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



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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.



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Questions