

COVID Testing in Wastewater



Be Right™

The Challenge

Community spread of COVID is difficult to control because symptoms can take up to 2 weeks to appear after contracting the virus. Making this even more challenging is that fact that many cases remain asymptomatic. Since individual testing is not always a viable option, communities, including universities, are searching for a more proactive approach to identify early trends for infection.

Wastewater Monitoring

- Testing Sars-CoV-2 in wastewater has shown to be an effective tool for pro-actively minimizing community spread by identifying outbreaks earlier.
- Sars-CoV-2 has been detected in stool days before symptoms arise.
- Universities and municipalities are beginning to embrace wastewater monitoring to identify hot spots within the community.
- Multiple success stories have been documented where wastewater surveillance in dorms, followed by individual COVID testing, has led to early detection and containment.



Testing wastewater on University of Virginia grounds to detect coronavirus.
(Source: Dr. Amy Mathers)

- University of Arizona, University of Virginia, Utah State University, and University of Colorado were among the first to utilize wastewater surveillance to identify COVID trends and take action to minimize community spread within dorms and throughout campus.

Find it at fishersci.com

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Cost-Effective, Scalable Solution

- Monitoring wastewater has helped identify COVID trends in a community early
 - Early virus stool shedding + efficient sample collection + rapid test method allows tracking changes in days vs. weeks
 - Includes information from asymptomatic and symptomatic individuals
 - Approximately 75-80% of US population connected to sewer system
- Provides actionable insights that complement existing COVID management strategies
- Cost effective and scalable at the community level compared to relying exclusively on individual testing
- Allows targeting of high-risk locations: **Universities/Dorms • Communities • K-12 Education • Prisons • Nursing Homes • Large Industrial Facilities • Military Bases**



Be Right™

The Foundation for Your COVID Wastewater Monitoring Program

Representative samples are key to an effective COVID wastewater monitoring program. Hach® compact portable samplers enable automated composite wastewater sample collection and can be deployed throughout communities; helping to prevent an outbreak when combined with laboratory testing.

- Intuitive interface with a large full color display makes setup and installation easy—preventing errors*
- Rugged and reliable pump minimizes maintenance requirements*
- Compact base for smaller manhole applications*



Hach Portable Samplers

Catalog Number	Description	What's Included?	Power Requirements	Sample Container
029380012	AS950 Portable Compact Sampler Bundle, 12V, with 2.5 Gallon Bottle	1 ea. AS950 controller on compact portable base 1 ea. 12V battery (8754400) 1 ea. Bottle kit (PC010030) includes 2.5 gallon polyethylene bottle w/cap (1918) and full bottle shut-off (8996) 1 ea. 25' vinyl intake tubing (920) 1 ea. strainer (926)	12V Battery (included) Battery charger 8753500US sold separately.	(1) 2.5 gal poly (included)
029380014	AS950 Portable Compact Sampler Bundle, 115V, with 2.5 Gallon Bottle	1 ea. AS950 controller on compact portable base 1 ea. 115V power supply (8754500US) 1 ea. Bottle kit (PC010030) includes 2.5 gallon polyethylene bottle w/cap (1918) and full bottle shut-off (8996) 1 ea. 25' vinyl intake tubing (920) 1 ea. strainer (926)	115V	(1) 2.5 gal poly (included)

Portable Sampler Accessories

Catalog Number	Description
029380009	12 Volt Lead Acid Battery with 3 pin connector
029380008	Battery Charger Assembly, 115V US
029380011	Portable Sampler Suspension Harness
029380028	Manhole Support Bracket/Spanner, 18 to 28 in.
029380010	Manhole Support Bracket/Spanner, 28 to 48 in.
029380029	2.5 Gallon Polyethylene Bottle Kit for AS950 Portable Compact Sample

REFERENCES

<https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/wastewater-surveillance.html>
<https://www.who.int/news-room/commentaries/detail/status-of-environmental-surveillance-for-sars-cov-2-virus>
<https://www.washingtonpost.com/nation/2020/08/28/arizona-coronavirus-wastewater-testing>
<https://wina.com/news/064460-uva-reports-covid-positives-in-three-more-dorms-over-the-weekend>
 Kirby, A., & Mattioli, M. (2020, July 8). COVID-19 Sewage Surveillance [Webinar]. CDC <https://cste.sharefile.com/share/view/s552abc13bbc436d8>

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