

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 a viable option, communities, including universities, are searching for a more proactive approach to identify trends for early infection.

Wastewater Monitoring

- Testing COVID in wastewater has shown to be an effective tool for pro-actively minimizing community spread.
- COVID has been detected in stool days before symptoms arise.
- Universities and municipalities are beginning to embrace this approach 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 Virgina 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 COVID trends within the wastewater and take action to minimize community spread within dorms and throughout campus.



Cost-Effective, Scalable Solution

- Monitoring wastewater has helped identify COVID 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 compliment 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 Public Schools Prisons Nursing Homes

The Foundation for Your COVID Wastewater Monitoring Program

Representative samples are <u>key</u> 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

Part Number	Description	What's Included?	Power Requirements	Sample Container
20A00R367	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)
20A00R369	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

Part Number	Description		
20A00R364	12 Volt Lead Acid Battery with 3 pin connector		
20A00R363	Battery Charger Assembly, 115V US		
20A00R366	Portable Sampler Suspension Harness		
20A00T402	Manhole Support Bracket/Spanner, 18 to 28 in.		
20A00R365	Manhole Support Bracket/Spanner, 28 to 48 in.		
20A00T403	2.5 Gallon Polyethylene Bottle Kit for AS950 Portable Compact Sample		

For more information, contact your Thomas Scientific Account Manager

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



