



Memorandum

Date: April 16, 2020
To: David Burks, Deputy Water Services Director
From: Bob Hollander, Environmental Resources Manager
Re: **Latest Coronavirus Research Update Webcast – Take Away Messages**

Today I listened into a webcast hosted by the Water Research Foundation providing an update on coronavirus research, especially as it pertains to the water/wastewater industry.

Information on the webcast is as follows:

Speakers:

- Peter Grevatt, PhD, CEO – The Water Research Foundation
- Charles Haas, PhD – Drexel University, WRF Academic Council, *A Risk Assessment Update and Perspective*
- Matthew Arduino, DrPH – Centers for Disease Control and Prevention, *CDC's Current Update on COVID-19*
- Charles Gerba, PhD – University of Arizona, *The Survivability of the COVID-19 Virus in Air, Water, Wastewater, and Various Surfaces*
- Krista Wigginton, PhD – University of Michigan, *Overview of the COVID-19 Virus Loads in Human Samples and Using Predictive Models to Predict Fate in the Environment*
- Gertjan Medema, PhD – KWR Water Research Institute in Nieuwegein, the Netherlands, *The Dutch Case Study on Sewage Surveillance of COVID-19*
- Mark LeChevallier, PhD – Dr. Water Consulting, LLC, *Overview of PPEs and the Current Implications and Applicability to COVID-19*

Moderators:

- Charles Haas, PhD – Drexel University, WRF Academic Council
- Lola Olabode, MPH, BCES, Research Program Manager – The Water Research Foundation

While there was much technical research presented key practical takeaways for water services utilities are as follows:



- SARS-CoV-2 (Coronavirus) RNA has been found in fecal samples and is detectable in sewage. Research in the Netherlands suggest sewage surveillance may serve as an early warning system for transmission of COVID-19 in the community.
- Currently the risk of transmission of the virus from the feces of an infected person is unknown.
- A PPE Selection Matrix was shown which is difficult to reproduce here, but provides valuable information. Highlights include:
 - All staff who may contact sewage should wear gloves, boots, and uniform/coveralls, at a minimum.
 - If at risk of splashing (e.g. sewer entry - live, sewer pipe repair work – live), the PPE should add safety glasses, face shield or goggles.
 - If there will be whole body contact (e.g. sewer entry - live, sewer pipe repair work – live), the PPE should include Tyvek suits or coveralls.
 - For abrasion, cut, or puncture hazards, PPE should include durable gloves designed to protect from cuts and punctures.
 - For respiratory hazards from sprays, mists, or dust (e.g. sewer entry - live, sewer pipe repair work – live), the PPE should include N95 respirator or dust mask.
- The Centers for Disease Control (CDC) is a valuable resource for information, including, but not limited to, cleaning and disinfecting your facility, how to protect yourself and, resources for businesses and employers. Go to the CDC website.

The webcast was recorded and is now available at the following link:

https://event.webcasts.com/starthere.jsp?ei=1298571&tp_key=e0469efe57.