

COVID-19

Guidance for Wastewater Workers

This information is a summary of the current knowledge about this emerging viral pathogen. The state of knowledge will evolve as additional investigation and research is conducted, so continuous review of reputable sources and websites is advised (refer to Resource Links).

It appears that contracting COVID-19 through exposure to wastewater is unlikely.

Despite the detection of genetic material (or RNA) of the COVID-19 virus in the faeces of some patients diagnosed with COVID-19 and in wastewater samples, the scientific community has not yet found evidence of viable (infectious) virus in wastewater systems. Current epidemiological evidence does not support the potential of wastewater to act as a route of infection with COVID-19. COVID-19 virus cannot replicate outside a host, therefore it will not independently multiply in plumbing, wastewater or the collection system. There is no evidence that the COVID-19 virus survives the disinfection process for drinking water or wastewater.

There is no evidence to suggest that additional, COVID-19-specific protections are needed for employees involved in wastewater management operations.

This includes those at wastewater treatment facilities, collection systems and laboratories. Wastewater operations should ensure workers follow routine practices to prevent exposure to wastewater, including using engineering and administrative controls, safe work practices, and personal protection equipment (PPE) normally required for work tasks involving wastewater exposure.

Proper personal hygiene is critical to protect workers from COVID-19 and other pathogens present in wastewater. The following table outlines administrative controls and basic hygiene practices that will help keep wastewater workers, and their families, safe.

Table 1: Administrative controls and basic hygiene practices for wastewater workers

Administrative controls

- Review task-specific standard operating procedures, risk and hazard assessments, and safe work plans to minimize exposure to wastewater pathogens; and
- Train staff on how to properly put on and take off PPE as well as how to clean/disinfect, maintain, store, and dispose of PPE.

Hygiene practices and infection controls

- Wear protective clothing and equipment, liquid repellent coveralls, boots and gloves; a face shield may be needed where possibility of splashing is high;
 - Wear goggles and N95 (or higher protection) masks in the presence of heavy aerosols, especially in the collection system or at headworks;
 - Disinfect PPE or frequently touched surfaces that come in contact with wastewater with 0.1 – 0.5 % hypochlorite for 1 minute;
 - Wash hands with soap and water: immediately after handling waste or sewage, before eating or drinking, before and after using the toilet and at end of work shift;
 - Never eat, drink, or use tobacco or vaping products before washing hands;
 - Avoid touching face, mouth, eyes, or nose before washing hands;
 - Before eating, remove work clothes and eat only in designated areas of the plant and away from treatment facilities;
 - If working in a vehicle, clean area where food will be placed or consumed;
 - Keep open sores, cuts, and wounds covered with clean, dry bandages;
 - Shower and change clothes before going home;
 - Leave work clothes, gloves and boots on-site to prevent possible disease transmission to family or friends;
 - Use separate lockers for street and work clothes to minimize contamination; and
 - Launder work clothes at work, not at home. If not possible, soiled clothes should be put in a sealed bag and laundered immediately. When work clothes are washed at home, separate from the family wash. Machine-washing with warm water at 60–90°C (140–194°F) with laundry detergent is recommended. The laundry can then be dried according to routine procedures.
-

Resource Links

Water Environment Federation (WEF)

- WEF maintains a resource site with up-to-date information about COVID-19, including webinars and news releases: <https://www.wef.org/news-hub/current-priorities/coronavirus/>
- WEF webinar (Feb 25,2020) – Update on Corona Virus: <https://www.wef.org/resources/online-education/webcasts/ArchivedWebcasts/CoronavirusWebcastArchive/>
- Water Professional's guide to COVID-19 <https://wef.org/news-hub/wef-news/the-water-professionals-guide-to-the-2019-novel-coronavirus/>
- "Biological Hazards at Wastewater Treatment Facilities," in *Safety, Health, and Security in Wastewater Systems*, 6 ed., Alexandria, Virginia: WEF Press, 2013, pp. 256-75

American Water Works Association (AWWA)

- AWWA has compiled a list of resources around maintaining business continuity plans: <https://www.awwa.org/Resources-Tools/Resource-Topics/Health-Effects>

- AWWA Public Affair Advisory 2-28-2020: <https://www.awwa.org/AWWA-Articles/coronavirus-and-water>

The Canadian Water and Wastewater Association (CWWA)

- CWWA has compiled a list of resources around COVID-19: <https://cwwa.ca/COVID-19-links-and-resources/>
- CWWA Water Sector Pandemic Action Plan: <https://cwwa.ca/wp-content/uploads/2020/03/CWWApandemicAction.pdf>

Alberta Government

- Guidance for workplaces: <https://www.alberta.ca/guidance-for-workplaces.aspx>
- COVID-19 information for Albertans: <https://www.alberta.ca/coronavirus-info-for-albertans.aspx>

World Health Organization (WHO)

- This Technical Brief supplements existing Infection Prevention and Control documents by referring to and summarizing WHO guidance on water, sanitation and health care waste which is relevant for viruses (including coronaviruses). This Technical Brief is written in particular for water and sanitation practitioners and providers: <https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-COVID-19>

Health Canada

- <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html>

U.S. Occupational Safety and Health Administration

- Covid-19 Control and Prevention: <https://www.osha.gov/SLTC/covid-19/controlprevention.html#solidwaste>

U.S. Centers for Disease Control and Prevention

- Water and COVID-19 FAQs: <https://www.cdc.gov/coronavirus/2019-ncov/php/water.html>