



Coronavirus Disease 2019 (COVID-19)

Water Transmission and COVID-19

Drinking Water, Recreational Water and Wastewater: What You Need to Know

Can the COVID-19 virus spread through drinking water?

The COVID-19 virus has not been detected in drinking water. Conventional water treatment methods that use filtration and disinfection, such as those in most municipal drinking water systems, should remove or inactivate the virus that causes COVID-19.

Is the COVID-19 virus found in feces?

The virus that causes COVID-19 has been detected in the feces of some patients diagnosed with COVID-19. The amount of virus released from the body (shed) in stool, how long the virus is shed, and whether the virus in stool is infectious are not known.

The risk of transmission of COVID-19 from the feces of an infected person is also unknown. However, the risk is expected to be low based on data from previous outbreaks of related coronaviruses, such as severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). There have been no reports of fecal-oral transmission of COVID-19 to date.

Can the COVID-19 virus spread through pools and hot tubs?

There is no evidence that COVID-19 can be spread to humans through the use of pools and hot tubs. Proper operation, maintenance, and disinfection (e.g., with chlorine and bromine) of pools and hot tubs should remove or inactivate the virus that causes COVID-19.

Can the COVID-19 virus spread through sewerage systems?

CDC is reviewing all data on COVID-19 transmission as information becomes available. At this time, the risk of transmission of the virus that causes COVID-19 through sewerage systems is thought to be low. Although transmission of COVID-19 through sewage may be possible, there is no evidence to date that this has occurred. This guidance will be updated as necessary as new evidence is assessed.

SARS, a similar coronavirus, has been detected in untreated sewage for up to 2 to 14 days. In the 2003 SARS outbreak, there was documented transmission associated with sewage aerosols. Data suggest that standard municipal wastewater system chlorination practices may be sufficient to inactivate coronaviruses, as long as utilities monitor free available chlorine during treatment to ensure it has not been depleted.

Wastewater and sewage workers should use standard practices, practice basic hygiene precautions, and wear personal protective equipment (PPE) as prescribed for current work tasks.

Should wastewater workers take extra precautions to protect themselves from the COVID-19 virus?

Wastewater treatment plant operations should ensure workers follow routine practices to prevent exposure to wastewater. These include using engineering and administrative controls, safe work practices, and PPE normally required for work tasks when handling untreated wastewater. No additional COVID-19-specific protections are


recommended for employees involved in wastewater management operations, including those at wastewater treatment facilities.

For additional information:

[CDC: Guidance for reducing health risks to workers handling human waste or sewage](#)

[CDC: Healthcare professionals: Frequently asked questions and answers](#)

[CDC: Healthy Water](#)

[Occupational Safety and Health Administration: COVID-19 Control and Prevention: Solid waste and wastewater management workers and employers](#) 

[World Health Organization: Water, sanitation, hygiene and waste management for COVID-19](#) 

Page last reviewed: March 10, 2020