



FACT SHEET: COVID-19 and wastewater

Can I catch COVID-19 from wastewater (sewage)?

Wastewater, also called sewage, is used water that goes down toilets, sinks and drains from homes and businesses through a network of pipes before it is treated and discharged to waterways or recycled for beneficial uses.

There is no evidence that the coronavirus causing COVID-19 has been transmitted via wastewater systems – including before and after treatment. Wastewater continues to be managed and treated properly and carefully by water utilities to protect public health and the environment.

Coronaviruses are very susceptible to routinely used disinfection methods. The processes used by water utilities to disinfect wastewater have been developed based on the most resistant pathogens including viruses that are more resistant than the COVID-19 virus.

Given coronaviruses are susceptible to disinfection the current disinfection methods in wastewater treatment are expected to be sufficient to manage the COVID-19 virus and have been proven to be effective against all similar viruses tested. These disinfection methods include oxidation (chlorine, monochloramine and chlorine dioxide) as well as inactivation through the use of ultraviolet irradiation.

Why is COVID-19 being found in wastewater?

In some countries, particularly in China, the Netherlands and the US, samples have been collected from the wastewater network to help track the remnants of genetic material from viruses in wastewater.

It is important to note that these studies are looking for the genetic material, termed 'RNA' (similar to 'DNA'), found in the genome of the viruses. These studies are not trying to test the ability of viruses in wastewater to cause the COVID-19 infection.

Finding remnants of genetic material from the COVID-19 virus does not mean the infectious virus is present. The genetic material (RNA) can persist for long periods after the virus is able to infect.

However, the information is useful to help identify how much virus might be present in the population. The presence of inactivated virus remnants in specific wastewater catchments can be used as part of understanding where in the community infection might be occurring.

Are we doing this testing in Australia and New Zealand?

There are similar wastewater testing studies being progressed in Australia and New Zealand. Testing may be requested by health agencies and would take place in conjunction with researchers and water utilities to help inform surveillance and management of the COVID-19 outbreak.

WSAA, as the peak body representing the water utilities in Australia, is working with Water Research Australia to develop a collaborative project between water utilities, health agencies and researchers that aims to provide COVID-19 wastewater testing results integrated with health data to help inform and optimise COVID-19 control programs at local and national scales.

I work with wastewater – will I catch COVID-19?

There is no evidence to suggest that additional specific protections are needed to protect wastewater workers from the COVID-19 virus. This includes those who work at wastewater treatment plants and in plumbing and wastewater networks.

Best practice, business as usual protections should continue to apply. That is, in all circumstances, workers should follow existing routine practices to prevent excessive exposure to wastewater. This includes engineering and administrative controls, safe work practices, and protective clothing and other personal protective equipment (PPE), as normally required for work tasks when handling untreated wastewater, sludge and biosolids.

These existing practices are in place to keep workers safe from pathogens and viruses – including those that are much more readily transmissible than COVID-19. These existing practices also protect workers from chemical and other safety hazards.

Current international advice is that no special or specific changes need to be made for the COVID-19 virus. The most authoritative sources are advice from the World Health Organization here: <https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19> and from the United States Centers for Disease Control and Prevention here: <https://www.cdc.gov/coronavirus/2019-ncov/php/water.html>.

What about COVID-19 and drinking water?

Please refer to our fact sheet on COVID-19 and drinking water here: <https://www.wsaa.asn.au/publication/covid-19-fact-sheet>

How do I help prevent the spread of coronavirus?

The Australian Department of Health advises the best way to protect yourself and others is:

- practise good [hygiene](#)
- practise social distancing
- follow the limits for public gatherings
- understand how to self-isolate if you need to.

More information is available from www.health.gov.au

This fact sheet has been reviewed by experts and is based on advice from the World Health Organization and US Centers for Disease Control and Prevention.

About WSAA

The Water Services Association of Australia (WSAA) is the peak industry body representing the urban water industry. Our members provide water and sewerage services to over 22 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

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