

## Microbes like Bacteria and Virus in your water

Microbial contaminants can't be detected through sight, smell, or taste. While bacteria, viruses, and protozoans can make anyone sick, the very young, very old, and other immune-compromised people are at greatest risk.

Some of these waterborne microbes can cause illnesses. Very small levels of microbes are naturally present in many water supplies, but some are more dangerous than others. Some of the more dangerous microbial contaminants include:

- Bacteria, e.g., E. coli, typhoid, cholera
- Viruses, e.g., norovirus, polio, hepatitis A
- Cysts, e.g., Giardia, Cryptosporidium



**Bacteria:** Bacteria (along with fungi) are decomposers that break down the wastes and bodies of dead organisms, making their components available for reuse. They exist almost everywhere on earth. Some bacteria are helpful to humans while others are harmful.

**Viruses:** Parasitic infectious microbes can cause disease(s) in humans. Viruses can reproduce only within living cells. They are 0.004 to 0.1 microns in size, which is about 100 times smaller than bacteria.

**Cysts:** Microscopic parasites that can cause illnesses if ingested. Cysts are rare in municipal drinking water. They typically get into a water supply if there is a leakage of sewage along with a failure at the water treatment plant, or if surface water in an agricultural area finds its way into a private well.

**SYMPTOMS:** Gastrointestinal problems and flu-like symptoms.

**APPLICATIONS AFFECTED:** All applications that utilize potentially infected water sources.

**SOLUTION:** Filtration processes can eliminate up to 99.9999% of harmful microorganisms.

**Sources:**

Kineticopro Catalog Digital  
<https://wqa.org/learn-about-water/common-contaminants/bacteria-viruses>