

Legionella Overview

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Legionella Background

A type of bacteria called *Legionella* causes [Legionnaires' disease](#) and [Pontiac fever](#). *Legionella* bacteria are found naturally in freshwater environments at generally low levels. *Legionella* only poses a health risk when growth occurs in warm stagnant water, the water is aerosolized, and the small droplets are inhaled.

People do not typically get sick from drinking water containing *Legionella* bacteria, rather symptoms are induced through inhalation. When *Legionella* bacteria grow in the biofilm of plumbing and are aerosolized through devices such as showers, cooling towers, hot tubs or fountains, people can breathe in small, contaminated water droplets that enter the lungs, resulting in Legionnaires' disease or a milder version called Pontiac fever.

Legionnaires' disease is a type of pneumonia caused by *Legionella* bacteria. Certain people are at increased risk for this infection, but it's treatable with antibiotics. Pontiac fever is a mild respiratory disease that gets better without treatment.

Legionella in Livingston County

It is not unusual for cases of Legionnaires' disease and/or Pontiac fever to be identified in Livingston County. Since 2020, forty (40) confirmed cases of Legionnaires' disease were reported in Livingston County.

When a case is reported to the Livingston County Health Department (LCHD), our staff follow-up with a call to the patient to collect information about possible sources of exposure. This information is used to look for commonalities between other reported cases across the country. If multiple cases report visiting the same location, we begin a more in-depth investigation, which could involve collecting water samples for testing to identify a source of the bacteria. Sometimes, the source of infection is never found.

Common sources of *Legionella* infection

The bacteria can become a health concern when they grow and spread in human-made building water systems like:

- Showerheads and sink faucets
- Hot tubs
- Decorative fountains and water features
- Hot water tanks and heaters

- Large, complex plumbing systems
- Cooling towers
 - Cooling towers are structures that contain water and a fan as part of centralized air-cooling systems for buildings or industrial processes.
- Vehicle windshield wiper fluid

Home and car air-conditioning units don't use water to cool the air, so they aren't a risk for *Legionella* growth. This includes window units, such as the kind seen at some hotels.

Legionnaires' disease is not spread by people.

How *Legionella* spreads

Once *Legionella* grows and multiplies in a building water system, it can spread to people in a few ways.

Breathing in mist

Water containing *Legionella* can spread in droplets small enough for people to breathe in. People can get Legionnaires' disease or Pontiac fever when they breathe in (inhale) those small droplets containing the bacteria. This is the most common way people get sick.

Swallowing water into the lungs

Less commonly, people can get sick by aspiration of drinking water containing *Legionella*. This happens when water accidentally goes into the lungs while drinking. People at increased risk of aspiration include those with swallowing difficulties.

People do not typically get sick from drinking water containing *Legionella* bacteria.

Not spread person to person

In general, people don't spread Legionnaires' disease and Pontiac fever to other people. However, this may be possible under rare circumstances.