

# Infection Prevention and You



## What You Need to Know about Legionnaires' Disease

### What is Legionnaires' disease? How does it spread?

Legionnaires' disease is a severe pneumonia caused by the *Legionella* bacterium. *Legionella* is commonly found in fresh water sources, but it rarely causes illness in these settings. However, in manmade water sources that are not maintained properly, the bacteria can multiply and cause illness. These manmade water sources include whirlpool spas, the cooling towers of large building air conditioning systems, decorative fountains and water features, hot water tanks and heaters, plumbing systems in large buildings, and in shower heads and other potable (drinking) water sources. Low levels of disinfectant, stagnation, and water temperature fluctuations contribute to the growth of *Legionella*.

*Legionella* can cause disease when the bacteria grow to a sufficient amount in small droplets and aerosols of the contaminated water. People can become ill when they breathe in these small, bacteria-filled water droplets. Because the *Legionella* bacteria are breathed directly into the lungs, the development of pneumonia is common. Generally, Legionnaires' disease does not spread from person to person.

### Who is at risk for contracting Legionnaires' disease?

Healthy people have a lower risk of developing disease when they are exposed to *Legionella* than those who are older or have a chronic disease. Those at a higher risk of becoming ill include the following:

- People older than 50 years of age;
- People living with a chronic lung disease like emphysema or chronic obstructive pulmonary disease (COPD);
- People with a weakened immune system;
- People with certain chronic health conditions like diabetes, cancer, or kidney failure; and
- Current or former smokers.

### What are symptoms of Legionnaires' disease?

Legionnaires' disease is a type of pneumonia whose symptoms include:

- Cough
- Shortness of breath
- Fever
- Muscle aches
- Headaches

Gastrointestinal symptoms like nausea and diarrhea are common symptoms as well. Symptoms usually begin 2-10 days after being exposed, but it can take up to 2 weeks to develop symptoms. If you have symptoms, you should see a doctor right away for diagnosis and to begin treatment.

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## How is Legionnaires' disease treated?

Legionnaires' disease requires treatment with the proper antibiotics. Rest is also important. Many people with Legionnaires' disease require close monitoring and hospitalization, but most recover. Serious complications include lung failure and death.

## How can you prevent Legionnaires' disease?

The most important way to prevent Legionnaires' disease is to maintain the water supply properly. That way the *Legionella* bacteria cannot grow and multiply. This means water systems should be periodically inspected and, if necessary, disinfected. Water features and fountains should be routinely cleaned. According to the Centers for Disease Control and Prevention, "home and car air-conditioning units do not use water to cool the air, so they are not a risk for *Legionella* growth."

If you suspect you have been exposed to the *Legionella* bacteria, contact your healthcare provider immediately.

## Additional resources

- [The CDC—Legionella](#)
- [Legionella.org—About the disease?](#)
- [APIC Public Policy—New CDC Vital Signs report: Legionnaires' disease on the rise](#)

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