

Legionella is a type of bacterium found naturally in freshwater environments, like lakes and streams. It can become a health concern when it grows and spreads in human-made building water systems.

What is Legionnaires' disease?

Legionnaires' disease, a severe form of pneumonia, is caused by breathing in droplets of water containing *Legionella*. Symptoms usually occur within 2 weeks following exposure and include:

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

Who is at increased risk?

In most cases, healthy people exposed to *Legionella* do not get sick. The following people are at an increased risk of getting sick:

- People 50 years or older (especially current or former smokers)
- People with a chronic lung disease
- People with weak immune systems
- People with underlying illnesses such as diabetes, kidney failure, or liver failure

More information is available at:

- Centers for Disease Control and Prevention (CDC): <https://www.cdc.gov/legionella/about/index.html>
- NJ Department of Health (NJDOH): <https://www.nj.gov/health/cd/topics/legion.shtml>

Are you involved in water safety for buildings?

Take the PreventLD CDC training on creating a water management program to reduce risk for Legionnaires' disease. This training aligns with industry standards (ASHRAE 188) on managing risk of *Legionella* bacteria. This training includes templates and other practical resources.

<https://www.cdc.gov/nceh/ehs/elearn/prevent-LD-training.html>

Register today!

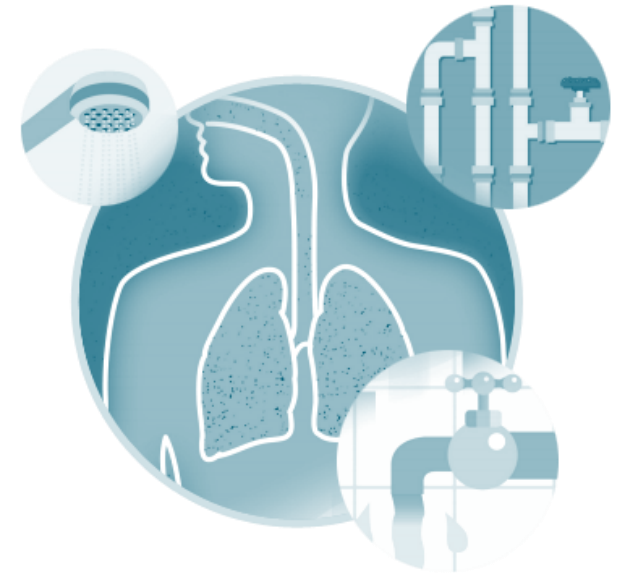
Environmental and Occupational Health Surveillance Program

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Maintaining Building Water Systems Prevents Legionnaires' Disease



Maintaining Healthy Building Water Systems Prevents Disease

Building owners and managers can protect people by developing a water management program.

How does *Legionella* get into my building water systems?

Legionella can enter your building water system when receiving treated drinking water or from untreated groundwater, such as a private well. Disruptions, such as water main breaks, water line construction, and sudden changes in water pressure can increase the amount of *Legionella* mixed into the water delivered. Once the water enters your building, the way the water is conditioned, filtered, stored, heated, cooled, and distributed may increase the likelihood of *Legionella* growth. Currently, there are no drinking water regulations for *Legionella*.

What factors or conditions can lead to the growth or spread of *Legionella* in my building water systems?

- Insufficient disinfectant residual
- Inadequate water temperatures
- Increased water age
- Areas of low flow and/or dead-legs
- Undiagnosed leaks or necessary plumbing maintenance

What type of buildings are most at risk for spreading *Legionella*?

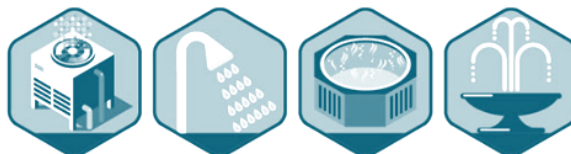
Large buildings with complex water systems are more at risk, such as:

- Apartment buildings with a centralized hot water system
- Hospitals and long-term care facilities
- Retirement homes and assisted-living facilities
- Hotels and travel accommodations



What are the most likely sources of water for *Legionella* growth and spread?

- Showerheads and sink faucets
- Cooling towers
- Hot tubs and decorative fountains
- Hot water tanks and heaters
- Large plumbing systems



What is a Water Management Program?

A water management program is a multi-step, continuous process designed to:

- Identify areas where *Legionella* can grow and spread
- Reduce risk by managing and monitoring the water system
- Trigger actions when risks are identified

Standards and Guidance for Water Management Programs

- CDC *Legionella* Toolkit: Developing a Water Management Program to Reduce *Legionella* Growth & Spread in Buildings
- ASHRAE Standard 188— Legionellosis: Risk Management for Building Water Systems
- ASHRAE Guideline 12-2000 - Minimizing the Risk of Legionellosis Associated with Building Water Systems
- CTI Legionellosis Guideline: Best Practices for Control of *Legionella*