



Department of Health

Bureau of Environmental Health & Radiation Protection

General Legionella Factsheet for Homeowners

What is *Legionella*?

Legionella is a naturally occurring disease-causing bacterium that can live and grow in our pipes and devices like humidifiers. *Legionella* is more likely to grow when water is stagnant, at lukewarm temperatures, or when water is not treated correctly. *Legionella* may be present in tap water even when the drinking water meets federal and state public water quality and safety standards.

Legionella can cause two primary types of illness when water droplets containing the bacteria are inhaled:

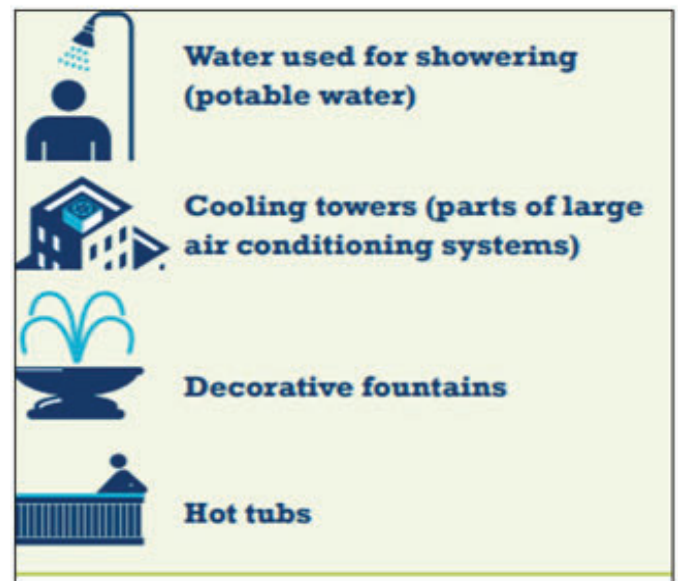
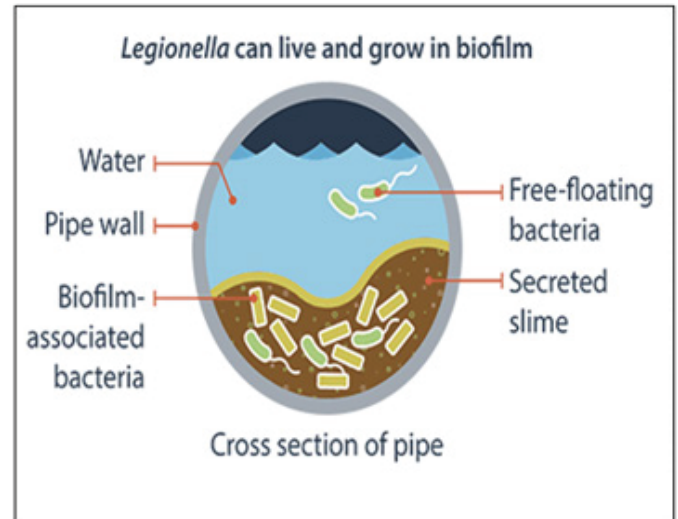
- **Legionnaires' disease:** A more serious lung infection like other types of pneumonia. Symptoms include fever, chills, cough, shortness of breath, headaches, weakness, and aches and pains.
- **Pontiac fever:** A less severe form of Legionnaires' disease with flu-like symptoms.

If you are experiencing any of these symptoms or have questions about your health, contact your healthcare provider.

How and where does *Legionella* grow?

- In buildings and homes, *Legionella* can live and grow in water pipes. Certain conditions can promote the growth of these bacteria, including:
 - Stagnant water.
 - Low amounts of water treatment chemicals (like chlorine) from the city water.
 - Warm water temperatures. *Legionella* grows best at temperatures between (77°F-113°F).
 - Presence of a thin, slimy layer (biofilm), scale, and sediment.
- *Legionella* can be introduced into the water system during disruptions such as construction (on the property or nearby), and water main breaks.

Home and car air-conditioning units do not use water to cool the air, so they are not at risk for *Legionella* growth.



Pic source: CDC

How does *Legionella* spread?

When a sink, shower, or other device goes unused for a week or more, germs may grow in the water pipes and lines. Turning on a faucet, especially one without regular use, may cause germs, including *Legionella*, to come loose. People become sick when they breathe in the mist from the splashing water droplets containing *Legionella*. People may also accidentally inhale water containing *Legionella* when drinking, although this is less common.

Some Common Potential Exposure Sources in Homes

Water System/ Plumbing	Indoor Water Devices
<ul style="list-style-type: none"> Faucets Shower heads Bathtubs Sinks Icemakers Hot water tanks/ boilers Water filter devices 	<ul style="list-style-type: none"> Humidifier Decorative fountains Mister Hot tub Whirlpool Jacuzzi Bathtub Nebulizer Aquarium
Outdoor Water Devices	
<ul style="list-style-type: none"> Decorative fountains Swimming pool Pond aerator Birdbath aerator Hot tubs 	

Who is at risk for Legionnaire's disease?

Most healthy people do not get Legionnaire's disease. Certain risk factors may make someone more susceptible to the disease. People who may be at increased risk of getting Legionnaire's disease include:

- Individuals 50 years of age and older.
- Current and former smokers.
- People with underlying illnesses like cancer, diabetes, COPD (chronic obstructive pulmonary disease), emphysema, or kidney disease.
- Individuals with weakened immune systems.

What can you do to reduce your risk of Legionnaire's disease?

Proper maintenance and cleaning of common sources:

- Set your hot water devices above 120°F.
 - If your home has a mixing valve, set the water heater to 140°F and the mixing valve to 120°F.
- Clean removable fixtures such as showerheads by soaking them in a diluted bleach solution.
- Clean hot tubs, whirlpool tubs, and jacuzzies on a routine basis.
- Clean and sanitize your humidifiers, nebulizers, or any medical devices per the manufacturer's guidance.

- Flush all sinks by running hot water for at least 2 minutes at least twice a month.
- Flush the hot water system after any period of non-use (vacation, water shutoffs, etc.) by flushing all hot water taps and showers for 15 minutes and cold water taps for 5 minutes. Flush any remaining fixtures including toilets, hose bibs, and external faucets use cold water for 5 minutes.
- Check for any pipes that water no longer flows through such as one that may previously have been hooked up to a fixture but is no longer in use (for example, washing machine hookups.)
- Change water filters according to manufacturer's guidance for devices that use them (for example, filters in fridge, water dispenser, humidifier, etc.)
- Regularly drain and clean decorative outdoor water devices such as fountains and bird baths.
- If you suspect Legionella in your home, consider filling out the ODH Home Assessment Form and consider testing for *Legionella*. Reach out to your local health district if you have questions regarding testing.

What resources are available?

If you intend to complete this risk assessment and require assistance, please contact your local health department with questions about Legionella in your home. You may also reach out to a private contractor with experience remediating *Legionella* in buildings. Visit the following websites for more information:

CDC *Legionella* Factsheet:

<https://www.cdc.gov/Legionella/downloads/fs-legionnaires.pdf>

Preventing Waterborne Germs at Home Webpage:

www.cdc.gov/healthywater/drinking/preventing-waterborne-germs-at-home.html

CDC ELITE Certified Lab List:

www.cdc.gov/Elite/Public/MemberList.aspx

Ohio Department of Health *Legionella* Webpage:

www.odh.ohio.gov/Legionella