



CDC Webinar – *Healthcare-Associated Legionnaires' Disease: Current Strategies for Response and Prevention*

June 15, 2020

Questions and Answers

Can people get Legionnaires' disease from accidentally breathing in drinking water?

People can get Legionnaires' disease or Pontiac fever when they breathe in small droplets of water in the air that contain the bacteria. Less commonly, people can get sick by aspiration of drinking water containing *Legionella*. This can happen when water accidentally goes into their lungs while drinking. People at increased risk of this happening include those with swallowing difficulties. It is not known how often Legionnaires' disease is caused by aspiration, but it is believed to be much less common than inhalation of aerosolized water droplets containing *Legionella*.

What are some common possible sources of *Legionella* exposure? What about other possible sources?

Legionella is a type of bacterium found naturally in freshwater environments, like lakes and streams. *Legionella* bacteria can become a health concern when they grow and spread in human-made building water systems. These systems include showerheads, sink faucets, cooling towers, hot tubs, decorative fountains, hot water tanks, and large plumbing systems. For these reasons, water management programs are an industry standard for large buildings and devices such as cooling towers in the United States. Water management programs identify hazardous conditions and take steps to minimize the growth and transmission of *Legionella* and other waterborne pathogens in building water systems.

Devices that use water, such as respiratory therapy equipment, can spread *Legionella* if they are used with water containing *Legionella*. Users can reduce the risk of *Legionella* transmission by using, maintaining, and cleaning equipment according to the manufacturer's recommendations.

Legionella can also grow and multiply in hot tubs that are not disinfected and cleaned properly. There are [steps](#) you can take to test hot tub water and find out if it is being properly maintained to protect yourself and others.

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

Finally, CDC does not have specific recommendations for small buildings or homeowners, however some factors associated with *Legionella* growth in large buildings may also be present in small ones. This includes low water temperatures or stagnation. Temperatures above 130°F can kill *Legionella*, but also increase the risk of hot water burns. If your water heater temperature is set above 120°F, take extra precautions to mix hot and cold water at the tap to avoid scalding.

How do I know if my water is safe? If it's not, what should I do?

Legionella can grow in building water systems and devices that use water. In general, a *Legionella* water management program is intended to identify areas at risk for *Legionella*, implement control measures to minimize *Legionella* risk, establish corrective actions if control measures are not met, and make sure the program is running as designed and is effective.

The key to preventing Legionnaires' disease is to make sure that building owners and managers maintain building water systems in order to reduce the risk of *Legionella* growth and spread. Control measures and limits should be established for different control points. These control measures include measuring disinfectant levels and maintaining appropriate temperatures (cooler than 77°F and hotter than 108°F). For example, in regions where ambient temperatures are higher than 77°F, insulating cold water lines may help maintain circulating cold water temperatures below 77°F. Developing a water management program is a critical first step to having a plan ready to implement if control measures are not met.

If there is a suspected case of Legionnaires' disease associated with your building, you should contact your local and/or state health department. You should also notify anyone who could be affected by the growth and spread of *Legionella* in your building.

What is a point-of-use filter? What do point-of-use filters do?

Point-of-use filters are a type of immediate control measure for preventing spread of *Legionella* bacteria if a building's potable water is through to be a source of *Legionella* transmission (for example, if there is a Legionnaires' disease outbreak or healthcare-associated cases have been identified). They are filters that can be installed on aerosolizing devices, such as showerheads and sink faucets, to reduce risk of transmission while minimizing disruption for residents, patients, and guests.

Some facilities choose to install 0.2 micron biological point-of-use filters to reduce the possibility of ongoing transmission of *Legionella*. If facilities consider installing point-of-use filters, they should understand the manufacturer's recommendations regarding the



temperature, pressure, and chemical levels that filters can withstand and suggested frequency for replacement. They should also confirm if filters need to be removed during acute remediation procedures.

What type of personal protective equipment should be worn by water testing personnel?

Wearing a half-face air-purifying respirator with an N95 filter may be appropriate in some situations, such as outbreak or cluster investigations, when there is a need to sample a cooling tower and the fan cannot be turned off (or in enclosed spaces with a different type of aerosol-generating device that cannot be turned off). Respirators must be used in accordance with a comprehensive respiratory protection program, which includes fit testing, training, and medical clearance ahead of their use.

Gloves are also useful for sampling hot tub filters or other sites that may be heavily contaminated with organic material.

Are hospitals required to test their water for *Legionella*?

Some states and local jurisdictions require testing for *Legionella* in healthcare and other settings (for example, cooling towers).

The Centers for Medicare & Medicaid Services (CMS) released a survey and certification memo stating that healthcare facilities should develop and adhere to ASHRAE-compliant water management programs to reduce the risk for *Legionella* and other pathogens in their water systems. Routine environmental sampling for *Legionella* is one way to validate a water management program and is consistent with ASHRAE guidance.

Visit the Public Health Foundation website to [access the Healthcare-Associated Legionnaires' Disease: Current Strategies for Response and Prevention webinar archive and related resources.](#)