



How To Decrease Risks of *Legionella* Exposure

MARCH 28, 2023

According to the **New Jersey Department of Health**, individuals, particularly those at high risk, can follow the recommended steps below to decrease the risk of *Legionella* exposure and best practices to limit the growth of *Legionella* in household water systems and devices:

- **Avoid high-risk activities.** If you are at an increased risk for Legionnaires' disease, consider avoiding hot tubs, decorative fountains, power washing, or similar activities, which may generate increased amounts of aerosols or mist. A conversation with your healthcare provider may help you assess your level of risk based on underlying health conditions and co-morbidities. Your healthcare provider may recommend that you consider installing specialty biological 0.2-micron filters on your showerhead if you are severely immunocompromised and receive water from

Trenton Water Works (TWW).

- **Maintain in-home medical equipment.** If using medical equipment that requires water for use or cleaning, such as non-steam generating humidifiers, CPAP or BiPAP machines, nasal irrigation devices such as Neti Pots, and attachments for nebulizers, follow manufacturer's instructions for use and maintenance, including using sterile water instead of tap water in the device.

- **Clean and/or replace your showerheads and faucet aerators (screens) per the manufacturer's instructions whenever buildup is visible.** This is particularly important if you haven't cleaned your showerheads or faucet aerators recently. Cleaning might require removing the showerhead and hose and soaking in a solution (such as white vinegar or bleach) to remove build up. If using chemicals, follow the instructions on the back of the bottle for safe use.

- **Keep your water heater set to a minimum of 120 degrees Fahrenheit.** This temperature will reduce *Legionella* growth and avoid the potential for scalding (hot water burns). Setting the water heater to a higher temperature may better control *Legionella* growth, especially if you have household members at increased risk for Legionnaires' disease. However, if the temperature is greater than 120 degrees Fahrenheit, take extra precautions to mix cold and hot water at the faucet and shower to avoid scalding. If you have household members at increased risk of scalding, such as young children or older adults, you may consider installing a thermostatic mixing valve. A mixing valve allows your water to be stored at a higher temperature within your water heater to help kill bacteria while eliminating concerns about water being too hot at sinks or showers. If you decide to install a mixing valve, follow the manufacturer's instructions for routine cleaning and maintenance to avoid bacteria growth within the valve. Consider consulting with a licensed plumbing professional to ensure you follow your local codes and ordinances for home plumbing repairs.

- **After cleaning showerheads and faucet aerators and increasing the water heater's temperature, thoroughly flush the water at each tap (e.g., sink, showerhead) for 20 minutes.** Try to minimize exposure to splashing and mist generation, for example, by leaving the room while the water is running.

- **Conduct routine flushing.** Unused sinks and shower taps can increase the risk of *Legionella* growth in other areas of the home. Let your faucets and showers run for at least three minutes when they have been out of use for over a week. Minimize exposure to splashing and mist generation, for example, by leaving the room while the water is running. Additionally, consider flushing your water following any water disruption to your home, such as low pressure or discoloration, resulting from a water main break or nearby hydrant flushing.

- **Follow the manufacturer's instructions for maintaining your water heater and expansion tank, including periodic flushing, draining, and sediment removal.** If the manufacturer's instructions are unavailable, seek advice from a licensed professional.

- **Clean and/or replace all water filters per the manufacturer's instructions.** Properly maintain all whole-house (e.g., water softeners) and point-of-use filters (e.g., built-in refrigerator filters).

- **Drain garden hoses and winterize hose bibs.** Detach and drain the hose, shut the water valve off inside the home, and drain the pipe when not used for the season.

- **Follow the manufacturer's instructions for maintaining your hot tub.** Ensure disinfectant levels (e.g., chlorine) and maintenance activities (e.g., cleaning, scrubbing, replacing the filter and water) are followed. For more information, review the **Centers for Disease Control and Prevention (CDC)** [recommendations for residential hot tub owners](#).

- **Operate and maintain your indoor and outdoor decorative fountains according to manufacturer's instructions to limit your exposure to *Legionella*.** Household members at increased risk for Legionnaires' disease should avoid exposure to decorative fountains. Find minimum cleaning recommendations in the CDC's [Legionella Control Toolkit](#) if the manufacturer's cleaning and maintenance instructions are unavailable.

- **Remove, shorten, or regularly flush existing dead legs.** Plumbing renovations can lead to the creation of dead legs, a section of capped pipe that contains water but has no flow (or is infrequently used). For future renovations, ensure your plumber avoids creating dead legs.

Recommended Actions for Building Owners

- **Complete this quick yes/no worksheet to determine if your building, or certain devices in your building, need a Water Management Program.** Resources to help you develop a **Water Management Program** and for *Legionella* control in common sources of exposure are available at the [New Jersey Department of Health's Legionella website](#).

- **Store hot water at temperatures above 140 degrees Fahrenheit and ensure hot water in circulation does not fall below 120 degrees Fahrenheit** (or at the highest temperature allowable by local regulations and codes). Install thermostatic mixing valves as close to fixtures to prevent scalding while permitting circulating hot water temperatures above 120 degrees Fahrenheit.

- **Clean and maintain water system components.** These components include devices such as thermostatic mixing valves, aerators, showerheads, hoses, filters, water heaters, storage tanks, and expansion tanks, regularly per manufacturer instructions.

● **Flush hot and cold water at all use points (faucets, showers, drinking fountains) at least weekly** to replace the water standing in the pipes. Healthcare settings and facilities that house vulnerable populations should flush at least twice weekly.

● **Remove dead legs or, where unavoidable, make them as short as possible.** Where a dead leg (a section of pipe capped off with little or no water flow) cannot be avoided, flush regularly to prevent water stagnation, which may require the installation of a drain valve.

● **Monitor water quality parameters such as temperature, disinfectant residuals, and pH regularly.** Adjust the frequency of monitoring based on the stability of values. For example, increase the frequency of monitoring if there is a high degree of measurement variability. Pay particular attention to water quality parameters following a water disruption event, such as low pressure or discoloration, resulting from a water main break or nearby hydrant flushing.

● **Safely operate and regularly maintain cooling towers to protect staff, visitors, and the adjacent community from exposure to *Legionella*.** Use a **Water Management Program** to establish, track, and improve operation and maintenance activities.

● **Follow recommendations from the New Jersey Department of Health when reopening your facility following a prolonged shutdown or reduced operation due to the COVID-19 Pandemic.** Recommendations are available at <https://bit.ly/3CG2s8S>.

To review updates on TWW's *Legionella* mitigation, visit trentonwaterworks.org/legionella.

If you have questions about TWW's *Legionella* mitigation work, please call TWW's **Office of Communications and Community Relations** at **(609) 989-3033**, Monday to Friday, 8:30 a.m. to 4:30 p.m.

TWW communicates with its customers and service-area consumers in various ways: direct mail, conventional media outlets, advertising, Facebook, and municipal government websites for regular communications.

During an emergency, the water utility utilizes its Reverse 911 system, **TWW-Connects** (CodeRed), and coordinates communications and messaging, as needed, with service-area officials, OEM personnel, state government officials, and regulators, guided by its Emergency Response Plan (ERP).



How to Reach TWW

TWW's regular business hours are Monday to Friday, 8:30 a.m. to 4:30 p.m. TWW is not open on federal and municipal holidays. **We are at your service.**

- For account-related questions, call **1-866-TWW-BLUE**. Please listen carefully to the prompts. Spanish-speaking customer service representatives are available.
- **Unable to pay your water or sewer bills?** Call **2-1-1** or visit [waterassistance.nj.gov](https://www.waterassistance.nj.gov).
- For water emergencies, such as service leaks, water main breaks, and damaged fire hydrants, call (609) 989-3222. You can reach our **Meter Shop** at (609) 989-3225.
- To sign up for TWW's Reverse 911 system, [click here](#). TWW utilizes its Reverse 911 system to communicate with customers and service-area residents during water emergencies.
- To learn more about your rights as a utility customer, [click here](#).
- To reach TWW's **Office of Communications and Community Relations**, call (609) 989-3033.