

# Flushing Water Systems FAQs

Before you open for business, you need to complete some essential tasks to make sure your building is ready to welcome employees, customers, and students. These tasks include flushing your building's water system and devices to ensure water is fresh. While schools and universities have annual shutdowns, most businesses do not. For that reason, we want to provide guidance to businesses that may not have experienced this type of interruption before.

## ***Why do pipes and devices need to be flushed in businesses, schools, or commercial buildings that were closed for the Stay-at-Home Order?***

Water that sits in pipes becomes stale when buildings are vacant or kept mostly empty for a long period of time. Harmful pathogens like the one that causes Legionnaires' disease can grow in unused water tanks, hot tubs, and cooling towers and lead to a wave of waterborne illness across the community.

## ***Water is disinfected to prevent pathogens like the one that causes Legionnaires' disease. If it was safe a month ago, what changed?***

The disinfectant the City adds to water at the treatment facilities dissipates when the water stands in pipelines or devices/appliances for extended periods. As disinfectant fades, microorganisms can grow in pipes, fixtures, and tanks.

## ***What devices need to be flushed?***

Any device that water passes through needs to be flushed. This includes: water fountains, ice machines, soda machines, water heaters, dishwashers, and coffee makers. Replace all point-of-use filters, including filters in refrigerators. Keep water heaters set at their designated temperature (ideally at or above 120°F). Continue routine maintenance on hot tubs and swimming pools.

## ***What would happen if buildings just reopened and used stagnant water?***

First, there would likely be complaints about the taste and odor. Also, standing water could be discolored. This stagnant water can create a breeding place for pathogens that could lead to a wave of waterborne illness across the community. That's why it's vital to flush the stale water out before the buildings reopen.

## ***What do medical experts say about this risk?***

The Centers for Disease Control and Prevention (CDC) has published [an online checklist](#) to help determine a building's risk of having problems with water quality after sitting unoccupied for several weeks. It includes questions about whether the building has a centralized hot water system, is taller than 10 stories, or has a cooling tower, hot tub, or decorative fountain.

***How can we make sure our building's water is safe before we reopen for business, education, or other purpose?***

The CDC is offering guidance with [eight recommendations that include](#): developing a comprehensive water management program; making sure your water heater is properly maintained and the temperature correctly set; cleaning all decorative features such as waterfalls or fountains; ensuring hot tubs and spas are safe for use; cleaning safety equipment such as eye wash stations and safety showers; checking with your local utility to request a water quality check; and flushing your building's water system.

***What makes up a building's water system?***

A building's water system starts at the meter and continues through the owner's service line into the building. It includes all the building's plumbing, storage tanks, and fixtures, including fire suppression systems.

***What does flushing involve?***

The American Water Works Association [recommends a thorough flushing process](#) that includes running water through all faucets and spigots for anywhere from 10 to 30 minutes. Flush the cold water lines first and then the hot water lines. Run the water in one direction, from the building's entrance to its outer points. Flush all water-using appliances like ice machines and dishwashers. Flushing for a longer period of time or more than once may be necessary. Any piece of equipment where water is stored should be drained and flushed with cold water. Water treatment devices like filters and water softeners also need to be cleaned and flushed. The sooner you can start this process the better.

***Is flushing all that's needed?***

That's one step in the process for reopening. But every building is different. It's important to take an inventory, examine the parts of your water system, and coordinate a specific plan to address every section where water may have collected during the stay-at-home period. Inspect mechanical equipment such as cooling towers, boilers, pumps, and backflow preventers. Clean showerheads, faucets, and anything else that sprays water and could send bacteria into the air. If your business caters to a clientele that includes people who have chronic health conditions or are immunocompromised, contact a certified laboratory about having your water tested.

***What buildings should flush their water systems?***

These recommendations are for larger buildings such as hotels, offices, stores, restaurants, churches, college campuses, and schools. But experts say it's always smart for small businesses and homeowners to protect themselves from waterborne diseases. Make it part of your regular routine. That means following local and state guidelines for household water use and following manufacturer's instructions for cleaning, disinfecting, and maintaining any device or appliance that uses water.

***Should we be concerned about lead and copper in the water?***

For buildings that went up before lead solder was banned in 1986, water stagnation can present a problem. When water sits in pipes for an extended period, some leaching of copper (from copper pipes) and lead (from the solder) can occur. The same flushing practices recommended above will work to clear pipes and faucets. This is especially important for facilities that serve infants and toddlers, school-age children, and pregnant or nursing mothers.