

## FAQ: Preparing Buildings for Reopening Ensuring Water Quality

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.



This information is provided:

- In preparation for when Orange County and North Carolina restrictions for COVID-19 are eased.
- For essential businesses that chose to close but are now planning to provide some services as allowed under the stay at home orders.
- For any buildings operating at reduced capacity.

### **Why do pipes and devices need to be flushed in businesses, schools, or commercial buildings that were closed or underutilized?**

Water that sits in pipes becomes stale when buildings are vacant or operating at drastically reduced capacity 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 waterborne illness across the community.

### **Water is disinfected to prevent pathogens like the one for Legionnaires' disease. What has changed?**

The chlorine and ammonia added at the Water Treatment Plant for disinfection begin to dissipate over time. Without them, 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 the filter 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 do medical experts say about the risk associated with stagnant water?**

The Centers for Disease Control and Prevention 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 water is safe before we reopen?**

The CDC offers [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.
- 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 10 to 30 minutes. Flushing longer or more than once may be necessary.

- Flush cold water lines first and then hot water lines.
- Run water in one direction, from the water's entrance into the building to its outer points.
- Flush all water-using appliances, like ice machines and dishwashers.
- For any piece of equipment where water is stored, drain and flush with cold water.
- For water treatment devices like filters and water softeners, clean and flush.

### **Is flushing all that's needed for reopening?**

That's one step in the process for reopening. 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 clientele includes people who have chronic health conditions or are immunocompromised, collect water samples and deliver them to a laboratory for analysis.

### **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.

### **Will we have to pay for the water flushed?**

The responsibility for maintaining water quality in a facility falls to the property owner or property manager. Water used for flushing can be captured and used for other purposes, like outdoor watering or cleaning measures that would be needed before any facility reopens.

### **More questions?**

See the resources below. For more information, call the Hillsborough Water Treatment Plant at 919-732-3621.

- [CDC Guidance for Building Water Systems](#)
- [Coronavirus Building Flushing Guidance from Environmental Science Policy and Research Institute](#)
- [Developing a Water Management Program to Reduce Legionella Growth and Spread in Buildings](#)