

# Building Solutions

## Why Flush Your Facilities Piping?

While we have concentrated more on the Covid-19 Virus, how to isolate and stop the spread, how to promote social distancing, and enhance facilities sanitation in our facilities, we have overlooked other issues that would normally not be considered in your facility maintenance, namely stagnant water in your facilities pipes. Most of our clients' facilities are operational year round with minor breaks between occupancies. Some facilities have not ever been "Not Used".

Because of the extended shutdowns, new issues have begun to emerge into the spotlight. COVID-19 emptied these buildings and shut some of them down in a day. The time they stood empty or not used has surpassed the normal time frames we are used to and could lead to unsafe water trapped inside the water pipes. Stagnant water in your pipes is harmful to the occupants and can contain impurities that can cause numerous ailments. Legionnaires is just one of them. When water isn't flowing, the chemicals used to stop organic growth begins to dissipate, allowing organisms to build up in the plumbing. It can happen in underused water fountains, gyms, office buildings, schools, shopping malls, and other facilities. These organisms and chemicals can reach unsafe levels when water sits in water pipes for just a few days. But what happens when water sits for weeks or months? It is important to test the water and flush the pipes after a prolonged shutdown period. In small commercial buildings it may only take a few minutes of running the water to achieve acceptable levels. In larger facilities, it may take hours. Even larger facilities (e.g. healthcare facilities) it might require a professional testing company to help you meet the minimum requirements.

To avoid stagnant water issues, "fresh" water must regularly flow through a building's faucets. Most water providers add chlorine to disinfect the water and kill harmful organisms, but these chemicals dissipate with time. In short periods of nonuse, opening shower, tub and lavatory faucets, flushing urinals and water closets, emptying ice makers so that they cycle through completely are just a few of the things that can be done to help elevate stagnant water issues. Older facilities may have trapped lines, dead end lines, and line drops, all of which have been deemed unacceptable by newer code requirements.

Health agencies in the U.S., Canada, and some states have released recommendations recently advising that building water be kept fresh during COVID-19 stay-at-home orders and be flushed professionally prior to in-person classes resuming. There is some debate over the best way to do that, but the message is the same: Do not let water sit in the building's pipes for extended periods of time. Water left sitting in the pipes of buildings can present serious health risks. Building Solutions has been recommending that clients exercise valves and flush the pipes throughout the building in almost every Clean Slate review we have completed. We base this recommendation on information provided by the CDC.

The CDC has set up guidelines for facilities to follow when setting up a comprehensive

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September 2020

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## Health Risks in Water After COVID-19 Lockdown (cont'd)

water management plan. These guidelines can be found [here](#).

These 8 steps minimize risks before your facility reopens and include the following:

1. Develop a comprehensive water management program (WMP) for your water system and all devices that use water.
2. Ensure your water heater is properly maintained and the temperature is correctly set.
3. Flush your water system. Flush hot and cold water through all points of use (e.g., showers, sink faucets)
4. Clean all decorative water features, such as fountains
5. Ensure hot tubs/spas are safe for use
6. Ensure cooling towers are clean and well-maintained
7. Ensure safety equipment including fire sprinkler systems, eye wash stations, and safety showers are clean and well-maintained
8. Maintain your water system

Resources and additional reading:

PBS Series - [\[read more\]](#)

CDC Guidelines - [\[read more\]](#)

ASHRAE Standard 188- [\[read more\]](#)

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