

Water Quality Guidance When Returning to Your Home or Place of Business

As homes or buildings have been unoccupied or used less frequently, interior water quality can deteriorate. Stagnant or standing water can lead to low or undetectable levels of disinfectant, such as chlorine, and cause conditions that increase the risk for growth and spread of *Legionella* and other biofilm-associated bacteria. It is important to ensure that your private water system, which begins at the meter, is safe to use after a prolonged shutdown. Flushing clears the low quality water that sat in your pipes during low/no use and replaces it with fresh, high quality water.

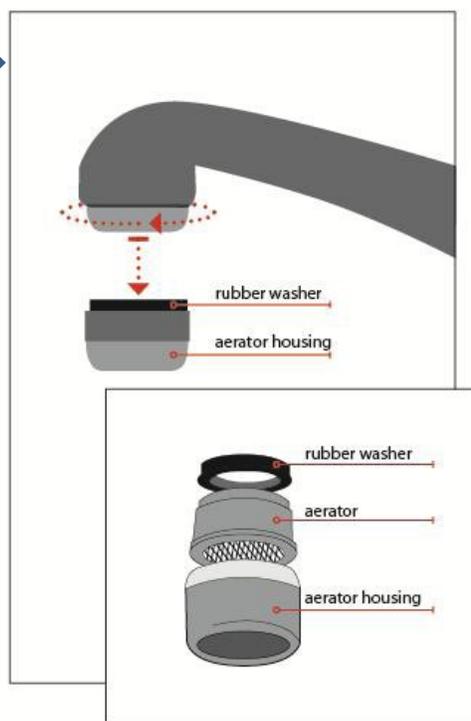
What should be flushed?

The entire building, including all water-using appliances such as ice machines, dishwashers, kitchen sink sprayers, water fountains, cooling towers, etc.

How do I flush a home or small building?

Flushing instructions will vary depending on the structure. However, key elements include:

1. Remove or bypass devices like point-of-entry treatment units prior to flushing.
2. Take steps to prevent backflow or the siphoning of contaminants into plumbing (e.g., close valves separating irrigation systems from home plumbing; disconnect hoses attached to faucets, etc.)
3. Remove faucet aerators from all faucets. 
4. Begin flushing in the lowest level of the home/building by fully opening the cold water taps throughout the home. Be sure to run water in bathtubs and showers as well as faucets.
5. Run enough water through all outlets (e.g., hose bibs, faucets, showerheads, toilets, etc.), Water may be discolored or have an odor when first turned on. Typical flushing durations range from 10 to 30 minutes for



each outlet (duration varies based on outlet velocity).

6. Turn off faucets starting with the taps in the highest level of the home.
7. Flush the cold water lines first, and then the hot water lines. Note: the hot water tank can be drained directly; it can require roughly 45 minutes to fully flush a typical 40-gallon hot water tank.
8. Clean aerators and re-attach to faucets.
9. Replace all point-of-use filters, including the filter in refrigerators.
10. Additional precautions may be warranted if water has an odor or remains discolored after excessive flushing. Actions that might be warranted include sampling, installation of a point-of-use device, or engaging a contractor to thoroughly clean the plumbing system.

What about larger buildings?

It is important to understand that building closures and reduced occupancy impact all environmental systems operating inside buildings including: 1) potable and non-potable water systems, 2) cooling towers and 3) heating, ventilation and air conditioning (HVAC) that regulate interior relative humidity and control mold. These systems must be actively managed and maintained to protect the health of building users. In addition to managing systems during shutdown periods, building owners and operators need to implement well thought out start up protocols to ensure public health protection. By implementing procedures now, you can protect the public and minimize the steps needed to safely re-open closed or partially closed facilities.

The CDC provides guidance for large building water systems and water features at:

<https://www.cdc.gov/coronavirus/2019-ncov/php/building-water-system.html>