

## Recommended Re-occupancy Guidance for Buildings

The “New York On Pause” order from Governor Cuomo due to COVID 19 has resulted in many large buildings with little to no occupancy for weeks (schools, offices, hotels, factories, medical facilities, etc.). This results in stagnant water that can allow chlorine to drop to undetectable levels. Chlorine is used in our water system to ensure that there is no regrowth of biofilms that could contain *Legionella* and other potentially harmful bacteria. Long periods of stagnation in building water systems with no chlorine residual can allow the growth of harmful bacteria, and can cause leaching of metals from pipes, leading to discolored water or elevated lead levels.

Property owners are responsible for maintenance of their internal plumbing systems to ensure water quality does not degrade. The Long Island Water Conference urges facility managers at buildings that have been unoccupied to take action to ensure that water is safe to use when normal building use resumes. Prior to re-occupancy, consider developing a Water Quality Mitigation Plan for your building. The following mitigation strategies could be used in developing a plan:

- Inspection of all internal water system components to ensure they are still functional and not leaking.
- Thorough flushing of both cold *and* hot water systems through every tap.
- Post flushing temperature measurement (on cold water system) to ensure stagnant water is removed. (water temperature during May should be around 50 degrees)
- Post flushing testing for free chlorine residual to ensure flushing was successful.
- Draining, cleaning and disinfecting hot water storage tanks.
- Flushing, draining, and/or cleaning of entry point treatment systems such as softeners or particulate filters.
- Bacteriological testing of some representative cold water taps used for drinking or cooking.

Every building plumbing system is unique, so it will be important to consider the design of your plumbing system when developing a mitigation plan. There are several resources available to use to develop a plan. Please consider using the resources below to develop a plan to ensure your building’s water system is safe:

- CDC’s updated [building water system guidance](#),
- Water Research Foundation’s [Flushing guidance for Remise Plumbing to Avoid or Address a Drinking Water Advisory](#).
- The Purdue University [Center for Plumbing Safety](#) organized plumbing, water, and public health experts from across North America to complete a [rapid response study](#) that is freely available and focusses on reducing the risk of harmful water in low to no occupancy buildings, including actions that can be taken now.
- The Environmental Science, Policy & Research Institute (ESPRI) and AH Environmental Consultants, Inc. [roadmap for flushing contaminants from buildings and return the plumbing system water quality back to pre-stagnation conditions](#). Because each building is different, flushing will need to be tailored accordingly.

An official website of the United States government.

Close

We've made some changes to EPA.gov. If the information you are looking for is not here, you may be able to find it on the EPA Web Archive or the January 19, 2017 Web Snapshot.



## Information on Maintaining or Restoring Water Quality in Buildings with Low or No Use

Building and business closures for weeks or months reduce water usage, potentially leading to stagnant water inside building plumbing. This water can become unsafe to drink or otherwise use for domestic or commercial purposes. EPA recommends that building owners and managers take proactive steps to protect public health by minimizing water stagnation during closures and taking action to address building water quality prior to reopening.

You may need a PDF reader to view some of the files on this page. See EPA's [About PDF page](#) to learn more.

- [Maintaining or Restoring Water Quality in Buildings with Low or No Use \(PDF\)](#) (4 pp, 1 MB, May 2020, Version 2)
- [Checklist: Restoring Water Quality in Buildings for Reopening \(PDF\)](#) (1 pg, 81 K, May 2020)

LAST UPDATED ON MAY 21, 2020