

# COVID-19

# AND ITS EFFECT ON YOUR BUILDING WATER HEALTH






## Preventing the Amplification of Waterborne Pathogens in Low Occupancy Buildings in Times of National Crises

The critical actions taken to slow and prevent the spread of COVID-19 worldwide, such as physical distancing and temporary shutdowns of businesses, have resulted in an unprecedented decline in the utilization of water in commercial, education, hospitality and manufacturing facilities. While we manage the risks from COVID-19, it is critical that we also control the physical, microbiological and chemical risks associated with low- or non-operating building water systems.

### TOP RISK AREAS

The top risks we see in buildings with low or no utilization during this time are:

-  **Amplification of *Legionella*** and other waterborne pathogens due to water age
-  **Leaching of lead** and other metals into water distribution systems, causing drinking water quality issues
-  **Expedited corrosion of plumbing components** leading to premature pipe failure and unexpected costs for emergency repair



### NOT ALL BUILDINGS ARE CREATED EQUAL

Since each building and the combination of water systems is unique, it is critical to follow site-specific procedures, so your water management strategies prevent additional public health hazards. If you have a water management plan, it should be updated to reflect risk management strategies during COVID-19 operating conditions. If a water management plan is not in place, one should be created.

### Which building types are most likely at risk?



Commercial



Educational/Cultural



Hospitality








Manufacturing



Medical

### PRACTICAL STEPS FOR RISK PREVENTION

There are several practical steps that can be taken to help prevent risks from amplifying in your building:

-  Keep water flowing to reduce water age
-  Strategically monitor disinfectant residuals
-  Maintain routine treatment of cooling towers and other aerosol-generating water systems
-  Control water temperature ranges to reduce amplification of *Legionella* and other waterborne pathogens
-  Put in place water quality monitoring strategies (disinfectant residual, pH, temperature, microbiological analysis)
-  Keep your records updated and defensible (verification and validation)
-  Incorporate water safety into your business continuity plans. Prior to returning to normal service, a site-specific plan for evaluating and documenting the safety of water systems must be prepared.

### TAKING ACTION



Acting now will help control amplification of risks during COVID-19 operations and expedite your building returning to normal operations knowing waterborne disease and lead exposure risks have been properly managed.

For more information about how NSF's building water health experts can help you minimize the risks associated with all water systems in your buildings or facilities during these uncertain times, email us at [buildingwaterhealth@nsf.org](mailto:buildingwaterhealth@nsf.org).