Drinking water and COVID-19: What you need to know when reopening a building

Updated Aug. 17, 2020

The COVID-19 pandemic and resulting public health orders have resulted in many commercial buildings, including schools, offices, hotels and retail establishments, using little to no water for extended periods of time.

Stagnant water in buildings can cause conditions that increase the risk for growth and spread of Legionella and other bacteria and lead to low or undetectable levels of disinfectants such as chlorine. Stagnant water can also create unsafe levels of lead in older buildings.

Because of these potential conditions, it is imperative that building owners thoroughly flush pipes and appliances to protect the health of students, customers and staff when returning a building to service after weeks or months of reduced or no use.

The New Mexico Environment Department recommends:

Prior to reopening a building that has been closed or had limited occupancy as a result of COVID-19, building owners should confirm that their water meter is working properly, all piping is intact, and the building's plumbing is thoroughly flushed.

Flushing processes vary depending on the structure, but key elements of flushing protocols include:

1) Remove or bypass devices such as point-of-use treatment units prior to flushing. Remove aerators from faucets if possible.

2) Take steps to prevent backflow or the siphoning of contaminants into plumbing (e.g., close valves separating irrigation systems from the plumbing, disconnect hoses attached to faucets) Flushing may need to occur in segments (e.g., floors, individual rooms) depending on facility size and water pressure.

3) Flush the cold waterlines first for 10 to 30 minutes, starting from the closest tap to where the water enters the building, then open all remaining cold-water taps including hose bibs, faucets, water fountains, showerheads, toilets, etc. Care should be taken to minimize splashing and aerosol generation during flushing.

next page…

4) Drain and clean hot water tanks. Ensure your water heater is properly maintained and the temperature is set at or above 140°F. Ensure that all maintenance activities are carried out according to the manufacturer's instructions or by professionals. Higher temperatures can further reduce the risk of Legionella growth. Take measures to prevent scalding.

    a) Flush the hot waterlines starting from the closest tap to the water heater and the open all remaining hot water taps. Run the waterlines for 10 to 30 minutes at each outlet. Run the hot water until it reaches maximum temperature and begins to empty the tank.

    b) After the lines have been flushed, clean and flush all appliances that use water, including humidifiers, ice machines (dump at least two batches of ice), and dishwashers.

5) Replace the aerators and all point-of-use treatment units. Replace filters, including those used in refrigerators, water fountains etc. with new filters.

Ingesting some types of bacteria can cause gastrointestinal illness. Symptoms may include stomach cramps or pain, diarrhea, vomiting and fever. Ingesting Legionella can cause Legionnaires' disease, a rare but dangerous pneumonia-like illness that especially affects older adults and those with compromised immune systems.

Additional resources:

COVID-Safe Practices for Individuals and Employers

CDC guidance on reopening buildings

CDC toolkit: Developing a Water Management Program to Reduce *Legionella* Growth and Spread in Buildings

Public water systems should be prepared for questions from building owners and operators surrounding reopening buildings and should consult these resources. Properties that are managed as large campuses (business parks, colleges, etc.) should also have these resources available.

If you have any comments, questions, or concerns, please contact us at: drinking.water@state.nm.us.