

Lead and Copper Best Practices



START-UP TIPS TO MITIGATE LEAD AND COPPER LEVELS IN FACILITIES AFTER SCHOOL CLOSURE DUE TO COVID-19

LEAD IN DRINKING WATER IN SCHOOLS

The potential for lead and copper to leach into water can increase the longer the water remains in contact with lead or copper in plumbing. As a result, facilities that closed their buildings due to COVID-19, may have elevated lead and/or copper concentrations.

MassDEP's Lead and Copper Contamination Act (LCCA) Program, in coordination with the EPA's 3Ts program guidance on lead in school drinking water, recommends that schools perform a "throughout", or system-wide flushing of their drinking water pipes and fixtures prior to re-opening their facilities.

WHAT IS FLUSHING?

EPA states that "flushing" involves opening taps and letting the water run to remove water that has been standing in the interior pipes and/or the fixtures. The flushing time can vary by the type of fixture being cleared.

Flushing can be a quick and easy solution to high lead and copper levels, especially when contamination is localized in a small area or in a small building. It can be used as a short-term solution as more permanent solutions are being implemented.

TIPS FOR DEVELOPING A FLUSHING PLAN

When using flushing as a regular practice or as a short-term remediation effort:

- Determine how water enters and flows through your facility by developing a plumbing profile;
- Locate all water fixtures that are used for drinking water, cooking and medical uses;

- Utilize signage to indicate when and for how long flushing needs to occur at each fixture;
- Identify options for collection and non-potable re-use of flushed water (e.g., plant watering); and
- Develop a system for accountability, including identifying one person who is in charge and record keeping.

FLUSHING INSTRUCTIONS

- Locate the faucet furthest away from the service line on each wing and floor of the building, open the faucets wide, and let the cold water run for 10 minutes. For best results, calculate the volume of the plumbing and the flow rate at the tap and adjust the flushing time accordingly. This 10-minute time frame is considered adequate for most buildings.
- Open valves at all drinking water fountains without refrigeration units and let the water run for roughly 30 seconds to one minute, or until cold.
- Let the water run on all refrigerated water fountains for 15 minutes.
- Open all kitchen faucets (and other faucets where water will be used for drinking and/or cooking) and let the water run for 30 seconds to one minute, or until cold.

Remember that each drinking water fixture should be flushed individually; flushing a toilet will not flush your water fountains. All flushing should be recorded in a log submitted to the office, or person, in charge of this program.

Please fill out the checklist located at <https://www.mass.gov/service-details/checking-for-lead-in-drinking-water> to ensure that you are reducing your facility's likelihood of elevated lead and copper levels prior to re-opening.

MORE RESOURCES

- Your facility's sampling plan should follow the protocol developed by MassDEP's LCCA Program available at http://leadandcoppercontrolact.donahue-institute.org/LCCA_Framework_4.26.18/story_html5.html.
- Flushing log template: <https://www.mass.gov/doc/manual-flushing-log-lead-and-copper-remediation/download>.
- The lead and copper sampling result data, collected via MassDEP's electronic data reporting system eDEP, and remediation actions data, collected via the LCCA Program Management Tool, is now available through The Energy & Environmental Affairs Data Portal (EEA Data Portal) at <https://eeaonline.eea.state.ma.us/portal#!/search/leadandcopper>
- Find EPA's 3Ts document here: <https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-leaddrinking-water-toolkit>.

MassDEP is offering free services related to the testing of lead in drinking water at schools and the installation of bottle filling stations at schools with elevated lead in drinking water. For more information,

- Link to free lead testing available for schools: <https://www.mass.gov/service-details/technical-assistance-in-2020-for-lead-in-school-drinking-water>
- Link to funding for bottle filling stations to remediate high lead levels in public schools: <https://www.mass.gov/school-water-improvement-grants>

If you have any questions please contact the MassDEP Drinking Water Program at program.directordwp@mass.gov or contact our technical assistance partner, UMass, at lccadep@umass.edu or 413-545-0840.