

# Recommended Protocol for Testing Your School for Lead in Drinking Water

Maine CDC Drinking Water Program • 11 SHS Augusta, ME 04330 • 287-2070 • [www.medwp.com](http://www.medwp.com)

## Overview

Even though your public water utility may deliver water that meets all federal and state public health standards for lead, you may end up with too much lead in your drinking water because of the plumbing in your facility.

The potential for lead to leach into water can grow the longer the water remains in contact with lead in plumbing. As a result, facilities with intermittent water use patterns, such as schools, may be susceptible to elevated lead concentrations. Testing drinking water in schools is important, because children spend a significant portion of their day in these facilities and are likely to consume water while they are there. That is why testing water from your drinking water outlets for lead is so important. Drinking water outlets are locations where water may be used for consumption, such as a drinking fountain or water faucet.



Although your water utility may treat the water to minimize corrosion, it is very important that you test to determine to what extent lead may be leaching from plumbing within the school. Interior plumbing, soldered joints, leaded brass fittings and various drinking water outlets that contain lead materials are the primary contributors of lead in drinking water.

## Where to Sample?

Any outlet for potable water is a potential source of drinking water. Some outlets are regularly used by students and staff for drinking, cooking, or making coffee. Others, like a mop sink in a utility closet, may rarely be used for consumption. With limited funds, choose sampling sites based on potential use and risk. Use the following high and low priority system as a general guideline when determining which locations to sample:

### High priority:

- Drinking fountains, sink mounted and stand alone refrigerated units
- Classroom combination sinks and drinking fountains
- Classroom sinks in special education classrooms
- Home economics room sinks
- Teachers' lounge sink, nurse's office sink
- Kitchen sinks used to prepare food
- Other classroom sinks where there is a potential for water consumption (e.g. filling water bottles and classroom cooking projects)



### Low priority:

- Bathroom faucets
- Utility sinks and hose attachments, unless used to fill water jugs (for example, for sports team practice)
- Hot water outlets

Samples should be collected from as many high priority sites as practical. However, schools may collect representative samples from similar and/or adjacent faucets and fountains (e.g. when two drinking fountains are located adjacent to each other, a school could choose to only sample one of the two fountains).

## How to Sample?

**Sample Bottles** — Obtain the necessary number of sample bottles from a laboratory certified to test for lead (A list of Maine laboratories can be found at [www.medwp.com](http://www.medwp.com)). Sample bottles should hold a volume of 250 milliliters.

**Stagnation Period** — Ideally, the water should sit in the pipes, unused, for at least 8 hours, but not more than 18 hours, before a sample is taken. If appropriate, tag each sample location with a “Do Not Use” sign at the beginning of the stagnation period to reduce the risk that the outlet is inadvertently used.

### Sample Collection

1. “First draw” samples are collected from a **COLD WATER** faucet that has not been used for at least 8 hours.
2. Do not take samples after weekends or extended periods of time without use.
3. If the tap has an aerator or screen at the end of the tap, do not remove it before taking samples.
4. Place the open container under the faucet and open the cold water tap to a flow approximating normal usage.
5. Fill the container with **COLD WATER**. **Do Not Rinse The Container Before Filling.**
6. Move the container away from the water and put the cap on tightly.

**Documentation** — Record the necessary information on the sample tracking form enclosed with the sample containers.

Mail or deliver filled sample bottles to the certified laboratory as soon as possible, but no more than 14 days after sample collection.



## Other Steps to Reduce the Risk of Lead Exposure in Drinking Water

Never use hot water for drinking or cooking. Lead leaches more easily into hot water than into cold water. The water may also sit for long periods of time in contact with lead components in a hot water tank. Consider conducting educational outreach to food preparation staff and appropriate teachers.

Since contact time may increase the concentration of lead in water, flushing of the most critical drinking water fixtures is recommended. Water should be flushed after weekends, holidays and vacations. A good rule of thumb for flushing fixtures is to flush for 30 seconds to one minute or until the water runs cold (longer for refrigerated water fountains).

Because lead leaching can be a dynamic process, a regular routine sampling program of the most critical drinking water fixtures is recommended every 3-5 years. In addition, work on the plumbing or drinking water fixtures may effect lead concentrations. Lead sampling is recommended after removing or replacing piping or drinking water fixtures.

## Understanding Sample Results

See [Testing Your School for Lead in Drinking Water: Post Sampling Guidance](#)

## Questions

If you have any questions about this procedure, please contact the Drinking Water Program at 207-287-2070.

**FMI:** *More information about lead in drinking water in schools can be found at [www.medwp.com](http://www.medwp.com)—Click on “Lead in Drinking Water.”*

