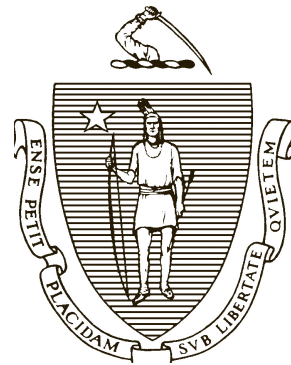


Does the Drinking Water at Your Childcare Facility Have Elevated Lead Levels?

Guidance for Owners & Staff of Childcare Facilities in MA

This brochure was prepared by the MassDEP Drinking Water Program with assistance from EPA New England, New England Interstate Water Pollution Control Commission, and Worcester State College.



The Massachusetts Department of Environmental Protection (MassDEP) Drinking Water Program and its partners urge you to protect the children at your childcare facility by testing your drinking water for lead.

The MassDEP partners are the MA Department of Public Health (DPH), the MA Department of Education (DOE) and the MA Department of Early Education & Care (DEEC).

What is lead?

Lead is a naturally occurring toxic metal that is harmful if inhaled or swallowed. Lead is found throughout the environment in air, soil, lead-based paint, household dust, wood, certain types of pottery, porcelain and pewter, and water. Lead was commonly used in plumbing materials and water service pipes prior to 1986. Current regulations still allow for low levels of lead in plumbing and fixtures.

What is the standard for lead in drinking water?

The United States Environmental Protection Agency (US EPA) Lead and Copper Rule (LCR) was established to protect public health by minimizing lead and copper levels in drinking water. MassDEP set an LCR drinking water action level (AL) of 0.015 mg/L (15 ppb) for lead and 1.3 mg/L (1300 ppb) for copper. To further reduce lead exposure in drinking water at schools and childcare facilities, the US EPA passed the Lead Contamination Control Act (LCCA) in 1988. The LCCA created guidelines for all schools for lead sampling and reporting and for the replacement of drinking water faucets and bubblers that contained excessive levels of lead.

Why protect children from lead?

Exposure to elevated lead levels can result in adverse health effects, especially in infants and children up to the age of six. This is because growing children absorb lead more completely and rapidly, drink more fluid per pound of body weight than adults, and are thus more negatively impacted by lead levels. Adverse effects can include delays in normal physical and mental development such as deficits in attention span, hearing, motor skills, and learning abilities. Damage caused by over-exposure to lead can be irreversible. The US EPA estimates that drinking water can make up to 20% or more of a person's total exposure to lead. Even in very small doses, lead can pose a health threat.





How does lead get into a childcare facility's drinking water?

Most sources of drinking water have no lead or very low levels of lead. Lead gets into drinking water after the water leaves a well or treatment plant and comes into contact with plumbing materials containing lead. These include lead pipes, lead solder (commonly used until 1986), as well as faucets, valves, and other components made of brass. Depending on the water and plumbing materials, pipe corrosion may occur over time. As plumbing materials containing lead begin to corrode, the lead is released into the drinking water. Corrosion is accelerated by extended contact time with plumbing especially when water stands in pipes overnight, over the weekend, and during vacations.

What can you do? *These actions are based on the LCCA guidelines and are voluntary.*

✓ Evaluate your facility for lead

Complete the MassDEP Lead in Drinking Water Maintenance Checklist. To get a copy of the checklist go to <http://www.mass.gov/dep/water/drinking/leadtothe.htm> then click on the Lead Maintenance Checklist.

✓ Sample your water for lead

Sample ALL faucets at your facilities that are used for drinking water and/or to prepare food or beverages. Samples must be collected after the water has had time to sit in the pipes for at least 8 hours. These samples are referred to as "first draw" and are typically taken in the morning before anyone uses the water supply. If lead is suspected, additional samples should be taken following the first draw sample.

If your childcare facility has its own drinking water well and is regulated as a public water system (PWS) (see box at right), you are required to follow specific regulatory requirements regarding the number and frequency of sampling in accordance with the LCR.

For information on sampling procedures: <http://www.mass.gov/dep/water/drinking/sclcatlg.doc>
All samples must be analyzed by a Massachusetts certified laboratory. For information on where to send water samples: <http://public.dep.state.ma.us/labcert/labcert.aspx>

✓ Report your results

Report all sampling results to MassDEP and return all completed checklists to the MassDEP Drinking Water Program.

✓ Take corrective action

Take action to address all results that exceed the MassDEP action level. If the sample results exceed the MassDEP lead action level:

1. Contact the Drinking Water Program at your MassDEP Regional office to help you determine a course of action.
2. Inform parents of the testing results and let them know what steps are being taken to reduce the lead.
3. If your facility receives water from a municipal water supplier, contact your water supplier.
4. Flush your faucets prior to use or drink bottled water until the lead problem is resolved. For more detailed information on how to correct your lead problem or on the MassDEP Lead in Schools Program, contact the MassDEP Drinking Water Program or view information: <http://www.mass.gov/dep/water/drinking/leadtothe.htm#leadcop>

How is drinking water at childcare facilities regulated and who is responsible for testing?

Several state and local agencies may regulate the drinking water at your childcare facility based on these factors: who has control over the water, where your water comes from, how many people drink it per day and how much time they spend at the facility.

A. Drinking Water Supplied by Municipal Water Service

If your childcare facility receives water from a municipal water supplier that serves residents and businesses in your community, the water supplier is regulated by the MassDEP and must test the water for lead according to the LCR and comply with the MassDEP action level.

Although the municipal water may meet MassDEP's action level for lead, lead can still get into the drinking water from the plumbing in your facility. As water moves through your building's plumbing system, lead can leach into the drinking water from plumbing materials and faucets that contain lead. Testing drinking water from faucets in your childcare facility is the best way to know if there are elevated lead levels in your facility's drinking water. For information on testing, see "What can you do?"

B. Drinking Water Supplied from a Private Well

If your childcare facility has its own drinking water well and serves 25 or more people (include the number of children on your childcare license(s) and the number of facility staff) for at least 60 days per year, your childcare facility is considered a public water system (PWS) and is regulated by the MassDEP. If your childcare facility is a PWS but is not currently registered with MassDEP, you must immediately contact the appropriate regional MassDEP Drinking Water Program office. To locate your regional office, visit <http://mass.gov/dep/about/regional.htm>. Regional staff will help you determine which regulations apply to you (see below).

- If the same people are at the facility more than 4 hours per day, 4 or more days per week and more than 180 days per year, your facility is a "non-transient non-community" PWS and must comply with the MassDEP Lead and Copper Rule.
- If the same people are at the facility for less time, or if the people vary, your facility is a "transient non-community" PWS. Your facility is not required to test for lead under the Lead and Copper Rule, however testing and other actions are strongly recommended, see "What can you do?"



Resources:

MassDEP Drinking Water Program

Attn: Lead in Schools and Childcare Facilities Initiative
One Winter Street, Boston, MA 02108
Email Contact: Program.Director-DWP@state.ma.us
Main Number – 617-292-5770
<http://www.mass.gov/dep/water/drinking/leadtothe.htm#leadcop>

Environmental Protection Agency

Drinking Water in Schools & Childcare Facilities
<http://www.epa.gov/safewater/schools>

Massachusetts Department of Public Health Center for Environmental Health

Main Number – 617-624-5757; Toll-free – 800-240-4266
<http://www.mass.gov/dph/ceh>