

Ensuring Drinking Water Safety Through the Massachusetts Assistance Program for Lead in School Drinking Water

The Massachusetts Assistance Program for Lead in School Drinking Water protects children from harmful lead exposures in drinking water thanks to collaboration across the state's departments of environmental protection, public health, early education and care, and elementary and secondary education, as well as the University of Massachusetts at Amherst and the Massachusetts Water Resources Authority.

The Flint water crisis led to greater nationwide scrutiny and concern for water safety following widespread lead contamination in the city's drinking water. The Massachusetts Department of Environmental Protection (MassDEP) has statutory responsibility to oversee and implement the federal and state Safe Drinking Water Act requirements, including the Lead and Copper Rule (LCR). Historically, the Massachusetts Department of Public Health (MDPH) has partnered with MassDEP to assist schools and communities in understanding the health risks associated with contaminants in drinking water. The Massachusetts Assistance Program for Lead in School Drinking Water is a formalized initiative between multiple organizations and state agencies designed to help protect children from harmful lead exposures in drinking water. It began in 2016 in response to the increased public awareness nationwide of lead exposure via drinking water. The program was so successful that the state extended it and directed funding for the 2017-18 school year to serve public schools and child care facilities that had not yet participated.

During the 2016-17 School Year:

- 818 schools in 153 communities (about 40% of schools and communities) participated in the Massachusetts Assistance Program for Lead in School Drinking Water.
- Nearly 56,000 samples were collected from approximately 32,000 school fixtures.
- 92 percent of samples were below the lead action level.
- 69 percent of schools had one or more fixtures that exceeded the action level.

Steps Taken

- In April 2016, Gov. Charlie Baker allocated \$2.75 million dollars from the Massachusetts Clean Water Trust for the Massachusetts Assistance Program for Lead in School Drinking Water. MassDEP, with the University of Massachusetts and the Massachusetts Water Resource Authority, provided sampling and analysis services and technical support, including guidance on follow-up actions.
- The MDPH Bureau of Environmental Health (BEH) supported the initiative by [developing](#) school-specific educational materials, establishing a school outreach program, and assisting school departments with risk communication.
- Within the health department, the Childhood Lead Poisoning Prevention Program (CLPPP) also enhanced its case management activities for children with elevated levels of blood lead. The program produced Childhood Lead Screening Progress Reports for each community in Massachusetts and sent them to pediatricians statewide, along with a link to information on lead in drinking water. Additionally, as part of a pilot project, CLPPP added routine drinking water sampling and testing for lead service lines to its residential lead paint inspections.

Results

- In the first year, 818 Massachusetts schools participated in the program, with nearly 56,000 samples collected from 32,000 school water fixtures. Ninety-two percent were at or below the action level for lead (0.015 mg/L).¹ Sixty-nine percent of schools had one or more fixtures above the action level. This information allowed schools to take the necessary remedial actions to protect the health of their students.
- Between October 2016 and February 2017, CLPPP analyzed 402 water samples for 200 families. Four samples in homes exceeded the EPA action level upon first draw; upon second draw, no lead was detected. One home had its water sampled twice and both times the second draw exceeded the EPA action level.

Lessons Learned

- The school drinking water program is a clear example of how interagency collaboration best serves the public and, in this case, a particularly vulnerable population.
- Through regular meetings and collaboration, MDPH identified several keys to success, including: an agreed-upon protocol for action with each agency's roles clearly delineated, the electronic sharing of sampling data, consistent and clear messaging to stakeholders that is appropriately timed and easily accessible, and access to the appropriate agency staff for follow-up questions.

For additional information, visit:

- <http://www.mass.gov/eea/docs/dep/water/leadinschoolsprogramfinalreport-522017.pdf>
- <https://www.mass.gov/assistance-program-for-lead-in-school-drinking-water>

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For more information:

Jana Ferguson
Director
Bureau of Environmental Health
Massachusetts Department of Public Health
Jana.ferguson@state.ma.us

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¹ Massachusetts Department of Environmental Protection. "Massachusetts Assistance Program for Lead in School Drinking Water." Available at <http://www.mass.gov/eea/docs/dep/water/leadinschoolsprogramfinalreport-522017.pdf>. Accessed 9-6-2017.