



Detroit Health Department

PURPOSE:

To ensure that all Licensed daycares, preschools, head starts, and elementary schools (early childhood education centers; ECECs) in the City of Detroit have completed a Lead Hazard Risk including screening drinking water for lead contamination.

POLICY:

All ECECs licensed for children in the in the City of Detroit shall complete a Lead Hazard Risk Assessment of the facilities that includes testing the drinking water for Lead in accordance with EPA standards (<https://www.epa.gov/dwreginfo/lead-drinking-water-schools-and-child-care-facilities>) and guidance from the WK Kellogg Foundation (<https://www.wkkf.org/~media/pdfs/healthy%20kids/2016/managing%20lead%20in%20drinking%20water.pdf>).

PROCEDURE:

1. As part of the mandated inspection of all ECECs by the Detroit Health Department (DHealth), all ECECs shall be notified about this new policy in writing.
2. All Lead testing must adhere to the guidelines and protocols set forth by the U.S. Environmental Protection Agency (EPA) (<https://www.epa.gov/dwreginfo/lead-drinking-water-schools-and-child-care-facilities>).
3. Lead testing and assessment must be completed by a 3rd party State or EPA certified vendor (vendor list attached).
4. During DHealth's inspection, or by June 15th, the ECEC is required to provide DHealth with a copy of Lead testing of the drinking water within the last 12 months.
5. If no lead screening test has been done, the ECEC has until June 15th, 2016 to provide DHealth with the Lab results resulting from sampling at three high-flow sources of drinking water in the building (including at least one common-use drinking fountain, if applicable; and the main kitchen tap, if applicable). Failure to provide the test results may result in DHealth's recommendation to the State to suspend or terminate the license or a cease and desist order by the Health Officer.
6. Lead in drinking water must be less than 15 parts per billion (ppb). If the results of Lead in drinking water is greater that 15ppb, the ECEC in conjunction with DHealth shall notify parents/guardians of all children in the ECEC in writing within seven (7) days of the receipt of the Lab results.
 - a. The Health Department shall coordinate services for all children with elevated Lead levels greater than 5µg/dl per usual protocols.
7. If levels are found to be higher than the actionable limit of 15 ppb, the ECEC shall:
 - a. Immediately shut down the flows from which the samples were collected.
 - b. Immediately provide students and staff bottled drinking water in classrooms and main areas.
 - c. Immediately retest all usable water flows in the building per EPA protocol.
 - d. Provide DHealth a written plan within 15 days of the receipt of lab results greater than 15ppb with a plan to mitigate the source of the lead. The ECEC shall ensure that all mitigation work is completed within 90 days with the drinking water tested below 15 ppb during which bottled drinking water will be provided.
8. This policy shall take effect on April 15th, 2016. By this date, each ECEC will be notified of the requirement to have conducted testing by May 15th, 2016.

ADAPTED EPA SAMPLING PROCEDURES:

ECECs will be required to sample at least 3 high-priority sites:



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- Drinking fountains, both bubbler and water cooler style
- Kitchen sinks
- Classroom combination sinks and drinking fountains
- Home economic rooms sinks
- Teacher's lounge sink, nurse's office sink
- Classroom sinks in special education classrooms
- Any sink known to be or visibly used for consumption (for example, coffee maker or cups are nearby)

Before you sample

A written sampling plan is highly recommended. It will clarify procedures for any personnel who are involved in the sampling program.

- Conduct a pre-sampling inspection.
- Identify each outlet that will be tested for lead.
- Check aerators for debris; clean if necessary.
- Make note of cooler make and model.
- Note any locations where electrical wires are grounded to water pipes.
- Identify locations of recalled water coolers.

Code each outlet using a system that will allow you to identify each unique outlet by:

- Location
- Type
- Other relevant characteristic

Example of a coding system

A drinking water bubbler (DW) on the 2nd floor (02) of the middle school (MID), the 15th outlet counted, might be coded as MID- 02- DW-015.

Coding examples can include:

- DW= drinking water bubbler
- WC = water cooler (chiller unit)
- CF = classroom faucet
- KC = kitchen faucet, cold
- KH = kitchen faucet, hot
- EC = home economics room, cold
- EH = home economics room sink, hot
- BF = bathroom faucet
- NS = nurse's office sink
- SC = service connector

In addition to the unique outlet code, a unique sample identifier is necessary if more than one sample will be taken from an outlet. A flush sample would also require a unique identifier.

The first draw (P) and flush (F) samples taken for the above outlet would be MID- 02- DW-015-P-01 and MID- 02- DW-015-F-01.

- P = primary (first draw) sample



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- F = flush
- 01 = first sample
- 02 = second sample

The coding should be identified on a site map and a narrative that describes the location.

Communicate your plans

Be open about goals to avoid confusion and communication breakdowns at a later stage. Communicate to maintenance staff, teachers, parents, and students about the plan and their roles.

How to sample?

Basic sampling protocol: This is an overview of the sampling procedures. A more detailed protocol is contained in EPA's guidance document [3Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance](https://www.epa.gov/dwreginfo/lead-drinking-water-schools-and-child-care-facilities#3Ts) (<https://www.epa.gov/dwreginfo/lead-drinking-water-schools-and-child-care-facilities#3Ts>). 3rd party testers should refer to this document.

- Determine which outlets will be sampled. Determine priorities and code outlets appropriately.
- Outlets must be inactive for at least 6 to 8 hours before testing. (Overnight is best.)
- Take a "first draw" 250 ml** sample at each outlet. A "first draw" is the water that is the first to come out of the tap after the period of inactivity.
- If lead is suspected throughout system, take a 30 second "flush" sample from outlet(s).
- Send samples to a laboratory which is certified to test lead in drinking water.