



Fact Sheet for Schools and Child Care Facilities: Lead in Drinking Water

Sources of Lead in Drinking Water

Lead enters drinking water primarily as a result of corrosion or wearing away of materials in the plumbing.

- Lead pipes in interior plumbing
- Lead soldered (bonded) joints
- Water fountains
- Faucets that contain lead
- Leaded brass fittings
- Galvanized steel pipes
- Lead service line to building
- Sediment in aerators (faucet screens)
- Water use length & frequency
- Water sits in the pipe for several hours

Health Effects of Lead

Exposure to lead can cause damage to the brain, nervous system, red blood cells, and kidneys.

- Behavior and learning problems
- Lower IQ and attention span
- Hyperactivity
- Poor classroom performance
- Developmental delay
- Hearing and vision impairments
- Anemia

EPA's Lead and Copper Rule (LCR) Lead Action Level for Public Water Systems (PWS):

0.015 milligrams per liter (mg/L)

or 15 parts per billion (ppb)

If exceeded, requires corrosion control treatment

Note: All regulated (PWS) must continue to follow all state and federal guidelines, this document does not overrule any preexisting regulations.

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Lead is a common metal found throughout the environment. Lead is a toxic material known to be harmful to human health if ingested or inhaled. Lead can affect almost every organ and system in the body. Schools and child care facilities should take voluntary actions to reduce children's exposure to lead from drinking water by testing for lead in drinking water, disseminating results to the school community and by taking the following steps.

Steps You Can Take to Reduce Lead in Drinking Water

1. Follow-up sampling of Lead

Conduct follow-up sampling to determine if the source of the lead contamination is the fixture or the connecting plumbing. Collect four (4) 250 mL samples consecutively (without flushing) to identify which section of piping is the source of the elevated lead.

2. Use only cold water for food and beverage preparation

Use only cold water for drinking, preparing food, and making baby formula. Hot water releases more lead from pipes than cold water. The cold water may be warmed before use in formula.

3. Flush the taps before use

The longer water has been standing in the plumbing system, the more concentrated the lead may be in the water. Running water at a tap, for a minimum of 30 seconds if not longer, prior to using it for drinking or food preparation after a long standing time will often reduce lead levels in the water. Taps should be flushed at least once a day in the morning. The only way to know if lead has been reduced after letting it run is to check with a test.

4. Other routine maintenance

- Clean faucet aerators on a quarterly basis, more often if debris buildup is observed, as lead-containing materials may accumulate in aerator screens.
- Use only certified lead free materials when performing plumbing work.
 - Check the link to identify "Lead Free Certification" products (<http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100GRDZ.txt>)
- Follow the manufacturer's recommendations for water softener settings to ensure an appropriate level of hardness. The hardness of the incoming water may have to be determined by asking your water supplier or having a sample analyzed.

5. Stop drinking water from the problem tap

Immediately place a placard on the tap with sample results exceeding the lead action level indicating that it is not for drinking until further notice. Use bottled water if necessary.

6. Conduct Outreach to Staff and Parents

Provide staff, students, and parents with a letter informing them of the lab results and describing your plans to address any results with elevated lead level.

7. Permanent measures

Permanently reduce or eliminate the sources of lead that originate in your building's plumbing.

- Shut off and remove or replace problem taps or components.
- Check electrical ground wires and eliminate any that may accelerate corrosion.
- Check and replace all lead service lines. *Contact your water supplier to check status of lead service line.*
- Replace lead pipes within the plumbing or reconfigure plumbing to bypass sources of lead contamination.
- Install time-operated valves to automatically flush problem outlets.
- Use lead-free materials to repair or replace the facility's plumbing system.

For more information, refer to the EPA's 3Ts for Reducing Lead in Drinking Water Toolkit:
<https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water-toolkit>

If you have any questions, you can contact a certified water system operator, your local health department, or DPH.