What are the concerns about lead in drinking water?

Lead is a toxic metal that can enter our bodies from air, food, dust, dirt or water. Unlike most other contaminants, lead is stored in our bones and is later released into our bloodstreams. As a result, even small doses can accumulate and become harmful, especially for pregnant and nursing women, infants and young children. Growing bodies tend to absorb more lead than the average adult.

Exposure to lead is a health risk. At very low levels of exposure, children can experience reduced I.Q. levels, reduced attention spans, impaired learning and language skills, loss of hearing and poor classroom performance. At high levels, lead can seriously damage the brain. The Centers for Disease Control and Prevention (CDC) has identified a blood lead level of 10 micrograms per deciliter as the level of concern for lead in children.

Although rarely the sole cause of lead poisoning, lead in drinking water can significantly increase a person's total lead exposure. Since you cannot see, taste, or smell lead in water, testing is strongly encouraged by the EPA. Many children spend a large part of their day at school or in child care facilities. The outlets that provide water for drinking, cooking, lunch, and preparing juice and infant formula should be lead free.

Is there lead in school drinking water?

Water delivered from your community's public water supply must meet federal and state standards for lead. You may, however, still end up with too much lead in your drinking water due to the plumbing in your building and the building's

water use patterns. Water system tests are not an indicator of conditions at a specific outlet.

Lead generally gets into drinking water through contact with plumbing materials, such as pipes, fountain/faucet fixtures, and solder that contain lead. In general, older fixtures and pipes contain more lead than newer parts. In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes, and other plumbing materials to 8.0%. Buildings did not have to be built with certified lead-free fixtures until 1997, so the original lead may still be in the plumbing system



or fixtures at your school or child care center.

Also, the longer water stays in contact with leaded plumbing, the more the opportunity exists for lead to enter the water. As a result, facilities with on-again, off-again water use patterns, such as schools and child care centers, may have high lead levels.

EPA has established a guideline for lead in school drinking water of 20 parts per billion (ppb). EPA recommends that when this level is exceeded, steps should be taken to limit exposure or reduce it.

What steps can you take to reduce lead in your school's drinking water?

Use cold water for drinking/food preparation.

Flush the plumbing: Let the cold water run until it becomes as cold as it can get. Flush out water that has been standing in the pipes and fixtures overnight, over a weekend or during vacation.

Clean debris from faucet screens frequently.

Have an electrician find alternate grounding for electrical wires that are grounded to water pipes.

Check for recalled water coolers. EPA's fact sheet *Lead in Drinking Water Coolers* (EPA A810/F-90-021) has a list of manufacturers and model numbers of coolers that contain lead.

Use a certified lab to test for lead at outlets. Consult EPA's 1994 publication *Lead in Drinking Water in Schools and Non-residential Buildings*. This guidance document contains step-by-step instructions for sampling water for lead at an outlet and indicates how to correct lead problems.

Turn off outlets with lead results above 20 ppb and prioritize remediation.

Keep up to date with plumbing standards. Consult www.nsf.org for most recent information.

Educate: Provide data about your lead testing program to your community.

Further Information on Lead in School Drinking Water

EPA Web site on Lead in Drinking Water in Schools

www.epa.gov/safewater/lead/schoolanddccs.htm

Publications at www.epa.gov/safewater/Pubs.

Lead in Drinking Water at Schools and Nonresidential Buildings, EPA 812-B-94-002, 1994. Also available in pdf format at www.epa.gov/safewater/consumer/leadinschools.pdf

Sampling for Lead in Drinking Water in Nursery Schools and Day Care Facilities, EPA 812-B-94-003, 1994. Also available in pdf format at www.epa.gov/safewater/lead/testing.htm#fix

<u>Lead in School Drinking Water</u>, EPA 5709-89-001, 1989.

National Lead Information Center (800) 424 - LEAD [5323] http://www.epa.gov/lead/nlic.htm

EPA Safe Drinking Water Hotline (800) 426 - 4791 http://www.epa.gov/safewater/hotline/index.htm





Protecting Children from Lead in Drinking Water at Schools & Child Care Centers

