

Local association action plan

Is there lead in your school's drinking water?



The local association should work with its UniServ field rep to get school officials to implement the 3 T's for reducing lead in drinking water in accordance with the EPA guidance document listed under Resources. The district should carefully follow the EPA guidance and is responsible for all costs of training, testing, and telling—as well as any remediation that is needed.

- **Training** to raise awareness of lead in drinking water, identify potential areas where elevated lead may occur, and establish a testing plan to identify and prioritize testing locations.
- **Testing** drinking water in schools to identify potential problems and take corrective actions as necessary. First draw samples (i.e. stagnant water is collected before any flushing or use occurs) should be taken at every drinking water source in the school. Sources where the water is above 20 parts per billion (ppb) are retested with flush testing (i.e. water is left to run slowly for 30 seconds before collection).
- **Telling** staff, students, parents, and the larger community about monitoring programs, potential risks, the results of testing, and remediation actions. Parents may be valuable allies to the local on this issue.

Resources

Environmental Protection Agency (EPA) Safe Drinking Water Hotline: 800-426-4791

Is There Lead in the Drinking Water? Two pages, 2002, EPA

www.epa.gov/safewater/lead/pdfs/v2final.pdf

3 Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance, 100 pages, 2006, EPA

www.epa.gov/OGWDW/schools/pdfs/lead/toolkit_leadschools_guide_3ts_leadschools.pdf

Pages 86-87 list water fountains of concern.

EPA compliance assistance webpage for schools and child care facilities that are also public water systems

www.epa.gov/ogwdw/lcrmr/compliancehelp.html

New Jersey Department of Health and Senior Services, Drinking Water Fact Sheets

www.state.nj.us/health/eoh/hhazweb/edmat.htm

Lead in school and day care drinking water is still a problem in New Jersey, especially in buildings that have old pipes, solder, fixtures, faucets, fittings, and water fountains. These may contain lead, bronze, or brass, which are lead alloys.

Lead in drinking water can also be a problem in newer buildings and suburban districts. Recent testing has shown high lead levels in water in suburban, urban, and rural schools in every region of New Jersey. Yet there are no laws requiring testing of drinking water in schools except those that have their own water supply.

Lead can enter the body from one or more sources: air, soil, paint and other dust, food, or water. High levels of lead in the body can cause seizures, severe brain damage resulting in mental retardation, coma, and even death. Medium levels can cause stomach pains and anemia. Long-term exposure to lead, even at relatively low levels, has been associated with decreased hearing, lower intelligence, hyperactivity, attention deficits, and problems in school.

Young children and infants, whose diet may be mostly liquid and whose bodies tend to absorb more lead than adults, are particularly vulnerable. Also at high risk are staff and older students who could be pregnant, since fetuses are very susceptible to lead. Fortunately, it is unlikely for an adult to get lead poisoning solely from drinking water.

Sources of lead in drinking water

Water supply: Water from public water systems such as cities, towns, and water districts may exceed the New Jersey drinking water action level for lead of 15 parts per billion (ppb). Every year by July 1, water companies must give users a Consumer Confidence Report listing contaminants that were detected. Schools must post the report near major entrances.

Plumbing in older schools: Up through the early 1900s, lead pipes were commonly used for interior plumbing in public buildings. Plumbing installed before 1930 is most likely to contain lead. After 1930, copper generally replaced lead as the most commonly used material for water pipes. However, the use of lead solder with copper pipes remains widespread. Experts regard the corrosion of lead solder as the major cause of lead contamination in drinking water today.

Plumbing in newer schools: Schools built after 1930 are not likely to have lead pipes in their plumbing systems, but they are very likely to have copper pipes with lead solder at the joints between pipes. Lead solder with more than 0.2 percent lead and plumbing with more than 8 percent lead were banned in 1987. Buildings did not have to be built with certified “lead-free” fixtures until 1997, but even new certified components can leach some lead. Lead solder particles caught in aerator screens are also a source of contamination.

Older water fountains: Some older water fountains have lead-lined chiller tanks that could leach lead. Despite past efforts to identify and remove these, some are still in service. Therefore, the makes and models of all school water fountains should be compared with those known to contain lead. See the Resources section in the sidebar to learn where to find a list.

Blood lead testing

Blood lead testing is a simple way to see if any individual has elevated levels to which water may have contributed. New Jersey state law requires every physician, professional registered nurse, and health care facility to screen all children under six years of age who come to them for care. Any blood lead level of 10 micrograms per deciliter (ug/dL) or

more is very significant, indicating lead exposure from air, soil, dust, food, and/or water has occurred. Levels above 45 ug/dL are especially dangerous and need the immediate attention of a doctor. A level of 70 ug/dL or more is an emergency requiring hospitalization.

Remediation steps to ask the district to undertake

Routine Practices

- Flush the pipes every morning: let the water run for 5-10 minutes to bring in fresh water that has not been standing in the pipes and fixtures over a night or weekend.
- Flush holding tanks to remove sediment.
- Clean debris from accessible screens (aerators) frequently.
- Use only cold water for food and beverage preparation in cafeterias, nurseries, and cooking classes.

Permanent Remedies

- Install corrosion control devices for individual buildings, known as point-of-entry devices.
- Install point-of-use devices that control lead at the tap.
- Find alternate grounding for electrical wires so that they are not grounded to water pipes.
- Replace lead service line and other lead pipes.
- Replace water fountains that have lead-lined chiller tanks.
- Replace outlets where there is localized contamination with new, certified components. EPA recognizes NSF Standard 61, Section 9 as a performance standard limiting the leaching of lead into the drinking water.