Introduction

Lead has been a known toxin for hundreds of years. As a heavy metal, it can affect almost every organ in the body, the most sensitive of which is the central nervous system. Children are at greatest risk because of their developing neurological systems. For them, even lower blood lead levels can cause impaired growth, reduced IQ and attention span, learning disability, behavioral problems and hearing loss.

Lead is also harmful to developing fetuses. Lead from the mother’s bloodstream can cross the placenta and result in premature birth and low birth weight, as well as brain, kidney and neurological problems. No safe blood lead level in children has been identified. For this reason, the EPA has set the maximum contaminant level goal for lead in drinking water at zero.

Prolonged lead exposure in adults can lead to neurological problems and can also damage kidneys and increase risk for conditions like high blood pressure.

While most lead poisoning comes from ingestion of lead paint dust, lead in water has been an increasing concern. The tragic accounts of lead poisoning from the water in Flint, Michigan, and high levels discovered in Newark, New Jersey, are reminders of how important it is to test water and repair and replace sources of lead.

Lead in Water

Lead poisoning from water is not likely to elevate adult blood lead levels. However risk varies by individual, circumstances and the amount of water consumed. Because children and pregnant women are so vulnerable, it’s important for schools to make sure the water supply doesn't contribute to or create lead exposure.

Lead gets in water from corrosion of older fixtures or from solder that connects pipes. This is especially of concern in buildings constructed before 1986. Lead can leach into the water after sitting in pipes for several hours.

The only way to know if you have lead in your water is to have it tested. The action level for lead in school drinking water is 15 micrograms per liter (mcg/L) or parts per billion (ppb). This is the same as 0.015 milligrams per liter (mg/L) or parts per million (ppm).
Effective Sept. 6, 2016, New York State requires all public schools to test all potable (drinkable) water outlets for lead contamination, to remediate contamination where lead is found and to notify parents and the public of test results. Testing for schools serving children in any of the levels prekindergarten through grade five should have been done by Sept. 30, 2016.

Any school serving children in grades six through 12 that is not also serving students in prekindergarten through grade five must complete testing by Oct. 31, 2016.

The State Department of Health emergency regulations include the following steps for testing:

- “First-draw” samples must be collected at all potable water fixtures currently or potentially used for drinking or cooking purposes outlets within the school.
- “First-draw” samples are those collected from a cold water outlet where water is motionless in the pipes for a minimum of 8 hours, but not more than 18 hours, before sample collection. During this time period, no water can be used in the facility.
- All first-draw samples must be analyzed by a laboratory approved to do lead testing by the Department’s Environmental Laboratory Approval Program (ELAP). A list of approved labs can be found at: www.wadsworth.org/regulatory/elap/certified-labs.
- Test results must be reported to the local health department within one business day after the school receives the report from the lab. Schools must also document testing through a statewide electronic reporting system by Nov. 11, 2016.
- Staff and parents/guardians must be notified of test results within 10 business days after the school receives the report from the lab.
- Public notification of test results must be done no more than six weeks after the school receives the lab report.
- Continued monitoring is required and schools must collect first-draw samples at least every five years. Schools are ultimately responsible for ensuring that the samples are taken correctly.

What If Tests Are Above the Action Level?

Faucets that exceed the action level must be taken out of service (or not allowed) for drinking and cooking purposes until they are remediated and tests show lead levels are at or below the action level. Schools must also provide information about lead remediation plans on their websites. Until the faucets are safe, schools must provide an adequate supply of water for drinking and cooking.

Because lead does not enter the body through the skin, non-drinking water outlets can be used for hand washing or cleaning. It is important that signs are placed at faucets to indicate acceptable water use, if they are not totally taken out of service. Those faucets should also be monitored to make sure occupants are not using them for drinking or cooking.
What if the school says it’s “lead free”?  

A building may only be considered lead free if it meets the definition in 1417 of the Federal Safe Drinking Water Act, and is exempt from sampling. Buildings are judged to be lead free if: (1) they were built after Jan. 4, 2014; or (2) a New York State licensed professional engineer or architect certifies a building to be lead free.

How is lead exposure determined?  

Lead in drinking water can increase a person’s total lead exposure, particularly the exposure of children under the age of six. The EPA estimates that drinking water can make up 20% or more of a person’s total exposure to lead.

A family doctor or child’s pediatrician can perform a blood test for lead and provide health information. State, city or county departments of health can also provide information about how you can have blood tested for lead.

Some districts in New York with high lead levels in a school have offered to pay for blood tests if employees and/or parents request it. Talk to your local president and Labor Relations Specialist to approach the district about providing these tests.

For More Information  

Information on the regulations, sampling instructions, a question and answer document and webinars about the requirements can be found at: [www.p12.nysed.gov/facplan/LeadTestinginSchoolDrinkingWater.html](http://www.p12.nysed.gov/facplan/LeadTestinginSchoolDrinkingWater.html).

Your local health department will also be able to answer questions about the law and health concerns related to lead exposure. Contact information is available at: [health.ny.gov/environmental/water/drinking/doh_pub_contacts_map.htm](http://health.ny.gov/environmental/water/drinking/doh_pub_contacts_map.htm).