

# Lead in School Drinking Water: Guide for Parents and Others

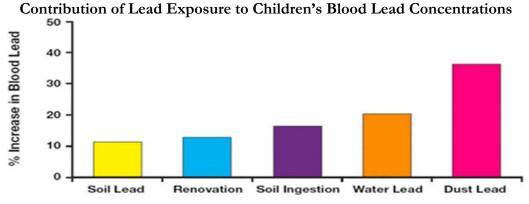
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# Children's Environmental Health and Lead in School Drinking Water

Children are uniquely vulnerable to environmental contaminants. Their bodies are still developing, they eat, drink, and breathe more per pound of body weight than adults, have lungs that are still developing, and they may be more exposed to hazards and unaware of how to protect themselves.

Lead exposure can cause serious damage to children's developing brains. Roughly 20% of the lead ingested by children comes from the drinking water that flows through lead plumbing in communities across the nation. Hundreds of schools have failed lead-at-the-tap tests: from Ithaca, NY, to Newark, NJ, to Flint, MI, and more districts nationwide (USA Today, 2016).



Contribution of lead exposure to children's blood lead concentrations.

Accessed June 28, 2016.

http://pediatrics.aappublications.org/content/early/2016/06/16/peds.2016-1493

### Lead hazards

Lead is very toxic to humans and animals. There is no safe level of lead. Lead can enter people's bodies in the food they eat, the air they breathe, and the water they drink. Children are most likely to be exposed to lead from dust on the floors and windowsills of their homes. The dust gets on their hands then into their mouths. Exposure to very high blood lead levels can cause serious health effects including seizures, coma, and death. Although it is uncommon today to see blood lead levels that are high enough to be life threatening, any exposure to lead may have the potential to cause adverse health effects. However, because of the large number of children who are involved nationwide, lead poisoning is still a very important public health problem. In addition to paint, soil, and dust, drinking water is a major source of lead. The lead

comes from pipes and solder, as well as faucets, valves, and other plumbing fixtures, such as those made of brass.

#### Why parents should care

No amount of lead exposure is safe for children. Most of children's lives are spent in schools when they are not at home. Lead in drinking water is an issue most schools have not been required to address or report.

As a parent, you should learn about lead in the drinking and cooking water in your child's school or child care center.

#### Health effects on children & pregnant women

Children (EPA, 2016): behavior and learning problems, lower IQ, hyperactivity, impulsiveness, slowed growth, hearing problems, anemia (low number of red blood cells, which can be fatal); rare, severe cases can result in seizures, comas, and sometimes even death.

**Pregnant Women (CDC, 2015):** risk for miscarriage; child being born too early or too small; harm to the developing baby's brain, kidneys, and nervous system; learning or behavior problems in your child.

# Healthy Schools Network's 5-Point Plan for lead in school drinking water

- 1. **Test** Require all schools and child care centers to test water at the tap for lead and copper contamination.
- **2. Plan** Provide free, safe drinking water to all school occupants if elevated lead levels are found in school drinking and cooking water.
- 3. Tell Disclose test results to parents, personnel, and state and local health departments quickly.
- **4. Fix** Replace lead-containing components of the water system where possible. Install and appropriately maintain filters certified to remove lead when components cannot be replaced and retest to insure that the filter removes lead to a <1ppb level.
- **5. Evaluate** The state health agency should annually report on tests at the tap by schools and remediation steps taken.

First in the Nation: NYS Safe Drinking Water Act puts the plan in action. The bill requires schools to test at the tap and inform parents and teachers of the test and the health department of the results; the state must reimburse schools for testing and remediation and then the health and education agencies must issue a biannual report based on test results. Link to NYS bill passed June 2016: <a href="https://nnw.nysenate.gov/legislation/bills/2015/a10740/amendment/original">https://nnw.nysenate.gov/legislation/bills/2015/a10740/amendment/original</a>

**N.J. State Board of Education adopted new rules for lead testing in schools:** these rules require districts to sample and analyze all drinking water in their educational facilities for elevated lead levels within 365 days of the effective date of these rules. Districts must immediately make publicly available the results of all testing at both the school facility and district's website. NJ Board of Education rules: N.J. State Board of Education rules for testing lead in school drinking water 2016

Governor of Oregon directed Oregon Health Authority and Oregon Department of Education to create a plan guiding school districts and child care facilities to test for lead:

<a href="http://www.ode.state.or.us/wma/nutrition/snp/memos/oha-guidance-schools-lead-in-drinking-water.pdf">http://www.ode.state.or.us/wma/nutrition/snp/memos/oha-guidance-schools-lead-in-drinking-water.pdf</a>

#### What state officials and school officials can do

- State education officials should require schools to test drinking water for lead.
- State health departments should monitor tests at the tap and help educate teachers, parents, and children about the dangers of lead in drinking water; they should also monitor children's blood lead levels.
- State departments of health and education should coordinate new regulatory efforts and oversee protecting the water supplies.
- Schools must provide free, safe drinking water to all school occupants and tell parents and staff the results of testing at the tap.

### What parents can do

- Ask your child's school or district office for a copy of the most recent tests at the tap for drinking water. If you are declined and believe tests have been done, you can file a written Freedom of Information Act request to access public documents.
- If there have not been any tests, ask your public school Board of Education or private school head and his/her board and your state health agency to conduct testing at the tap.
- Test your water at home. Ask your local water supplier to test your water. If you have elevated lead levels in your home drinking water, have your child's blood lead levels tested or re-tested.
- Contact your family doctor, local and state health department, and/or education department for further questions or problems.
- Contact the federally-designated **Pediatric Environmental Health Specialty Unit (PEHSU)** for your region to answer lead-related questions that are not answered by your family health care provider, your state health department, and or your state education department. You can find the information about your regional PEHSU at <a href="https://www.pehsu.net">www.pehsu.net</a>.

#### Additional Resources:

- 3Ts for Reducing Lead in Drinking Water, US Environmental Protection Agency, October 2006. Accessed June 28, 2016. <a href="https://www.epa.gov/sites/production/files/2015-09/documents/toolkit\_leadschools\_guide\_3ts\_leadschools.pdf">https://www.epa.gov/sites/production/files/2015-09/documents/toolkit\_leadschools\_guide\_3ts\_leadschools.pdf</a>
- 2. AMA Adopts New Policies to Prevent Future Lead Poisoning, American Medical Association, June 2016. Accessed June 29, 2016. <a href="http://www.ama-assn.org/ama/pub/news/news/2016/2016-06-14-prevent-future-lead-poisoning.page">http://www.ama-assn.org/ama/pub/news/news/2016/2016-06-14-prevent-future-lead-poisoning.page</a>
- **3.** Children's Environmental Health, American Academy of Pediatrics, June 2016. Accessed June 20, 2016. <a href="http://pediatrics.aappublications.org/content/116/4/1036">http://pediatrics.aappublications.org/content/116/4/1036</a>
- **4.** Basic Information about Lead in Drinking Water, US Environmental Protection Agency, 2016. Accessed July 11, 2016. <a href="https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#health">https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#health</a>
- 5. Testing Schools and Child Care Centers for Lead in the Drinking Water, US Environmental Protection Agency, November 2015. Accessed June 29, 2016. https://www.epa.gov/dwreginfo/testing-schools-and-child-care-centers-lead-drinking-water
- **6.** Lead Taints Drinking Water in Hundreds of Schools, Daycares across USA, USA Today, 2016. Accessed June 28, 2016. <a href="http://www.usatoday.com/story/news/nation/2016/03/17/drinking-water-lead-schools-day-cares/81220916/">http://www.usatoday.com/story/news/nation/2016/03/17/drinking-water-lead-schools-day-cares/81220916/</a>
- 7. Pregnant Women and Lead, Centers for Disease Control and Prevention, December 2015. Accessed June 29, 2016. <a href="https://www.cdc.gov/nceh/lead/tips/pregnant.htm">https://www.cdc.gov/nceh/lead/tips/pregnant.htm</a>
- **8.** Safety and Health Topic: Lead, US Department of Labor. Accessed June 29, 2016. <a href="https://www.osha.gov/SLTC/lead/">https://www.osha.gov/SLTC/lead/</a>