Clean Water for US Kids™
Get the Lead Out: Information on Lead in Drinking Water

As part of the Clean Water for US Kids™ program, RTI International has compiled the following information for parents, schools, and child care providers about lead in drinking water; this information comes from reliable scientific and government resources. Please contact us for more information about our program.

How does lead get into drinking water?
Lead is a naturally occurring metal used today in devices such as car batteries and X-ray aprons. Though lead occurs naturally, most lead exposure is from historical or current use of lead in products. You or your child may be exposed to lead from things such as contaminated soil, paint chips, dust, or drinking water. Lead in drinking water generally comes from corroding pipes, plumbing, and fixtures. Pipe corrosion depends on water chemistry, pipe age, and material.

Why is lead in drinking water bad?
Lead enters the bloodstream when a person is exposed to lead from drinking water or another source. Some lead is then stored in organs and muscles, where it can cause serious health effects. The nervous system, including the brain, is the most sensitive to lead. Health effects and their severity depend on the extent of exposure and the person’s individual characteristics. Children are more vulnerable to the health effects of lead than adults because their bodies absorb lead more easily and because their organs and systems are still developing.

How much lead in drinking water is too much?
The US Environmental Protection Agency (EPA) has set the maximum contaminant level goal (MCLG) for lead in drinking water at 0 parts per billion (ppb) because any amount of lead is harmful to human health. Even bottled or filtered water may have low levels of lead. Refer to the text box for benchmark levels of lead in drinking water.

How do utilities and the EPA monitor lead in drinking water?
The EPA requires utilities to conduct “at the tap” lead testing at a small fraction of homes. If 10% or more of samples exceed an EPA action level of 15 ppb, the EPA mandates that the utility inform the public and reduce exposure by minimizing corrosion in service lines. The EPA does not currently require “at the tap” lead testing at schools and child care centers that use public water supplies. There are no national requirements for lead testing in homes that use private wells for drinking water; however, many public health agencies recommend testing for lead at least every 3 years.

National Benchmark Levels for Lead in Drinking Water
- **0 ppb:** This level is the EPA maximum contaminant level goal for lead in drinking water.
- **5 ppb:** This is the limit of lead allowable in bottled water per the US Food and Drug Administration.
- **10 ppb:** Water filtration devices that are certified to American National Standards Institute standards must reduce lead to this level.
- **15 ppb:** This is the EPA treatment-based lead action level for public utilities.

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How can I reduce the lead in the water I drink?

The only way to make sure you are drinking lead-free water is to test your drinking water for lead. To reduce the amount of lead in your drinking water, the EPA recommends the following:

• Running the water until it becomes cold or for 1–2 minutes before using it for drinking or cooking, especially if you haven’t used the water for several hours
• Using only cold water for cooking and drinking
• Using point-of-use water treatment devices certified to remove lead (Note: Boiling water does not remove lead.)
• Replacing plumbing fixtures (e.g., faucets, water fountains) with ones made of stainless steel

See our separate flyer on water filters for more information about choosing the right filter system for your home, school, or child care center.

Should my child be tested for lead exposure?

Visit your child’s health care provider to evaluate whether your child has been exposed to lead. The provider can give you information and test your child’s blood for lead, which is the best way to detect recent exposure. Some states recommend that all children receive a blood lead test at 12 and 24 months of age.

Where can I find more information and resources?

• Contact your water provider and ask if they provide free water testing for lead or other contaminants.
• Contact your water provider and ask for their annual Consumer Confidence Report. These reports are released each July and provide testing results about drinking water quality.
• Contact your local health department or pediatrician. Some provide free blood lead testing and other services.

Online Resources

EPA: Basic Information About Lead in Drinking Water
EPA: Protect Your Family from Sources of Lead
EPA: Lead in Drinking Water in Schools and Childcare Facilities
CDC: Lead Poisoning Prevention
Clean Water for US Kids
Clean Water for US Kids flyer: Get the Lead Out - How to Choose a Water Filter to Remove Lead

EPA Lead in Drinking Water Regulations

1974
Safe Drinking Water Act (SDWA) enacted, authorizing the US Environmental Protection Agency (EPA) to set drinking water standards for most public water systems.

1988
SDWA revisions take effect; plumbing and fixtures must have < 8% lead; solder and flux, < 0.2% lead.

1991
Lead Contamination Control Act takes effect; school water fountains with lead-lined water tanks must be repaired or removed.

1991
EPA issues a non-enforceable maximum contaminant level goal of 0 ppb for lead in drinking water.

1990
Lead Contamination Control Act takes effect; school water fountains with lead-lined water tanks must be repaired or removed.

2014
SDWA revisions take effect; plumbing and fixtures must now have <0.25% lead; solder and flux <0.2% lead.

2016
The American Academy of Pediatrics (AAP) recommended that EPA establish a reference level of 1 ppb for lead in drinking water.

2021
Pending requirement for schools and child care centers to test for lead in water

More Information

Clean Water for US Kids
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RTI 11136 R4 1021