

Background

Lead in drinking water most often comes from water distribution lines or household plumbing rather than from the water system source. Lead from other sources can add to the effects of lead in water.

Public Health Issues

Because the nervous and circulatory systems in young children are not fully developed, lead and other toxicants can easily enter into the brain. Chronic (long-term) exposure to even low levels of lead can cause irreversible learning difficulties, mental retardation, and delayed neurological and physical development. Young children 6 years of age and younger and unborn babies are most susceptible to these toxic effects. Exposures to adults affect primarily the peripheral nervous system and can cause impairment of hearing, vision, and muscle coordination. Lead is also toxic to the blood, kidney, heart, and reproductive system.

Lead poisoning is a particularly insidious public health threat because there may be no unique signs or symptoms associated with lead exposure. Early symptoms of lead poisoning may include loss of appetite, fatigue, irritability, anemia and occasional abdominal pain. Because of the general nature of symptoms at this stage, lead poisoning is often not suspected.

Measuring Lead in Drinking Water

Lead may be present in your home drinking water if:

- There are lead pipes, brass fixtures, or connectors in your home or community water system, or
- Lead solder was used on your home water pipes, and
- You have soft water (low mineral content), or acidic water.

The only way to know the amount of lead in your household water is to have your water tested by a certified laboratory. The state Public Health Laboratories, 1610 Northeast 150th Street, Seattle, Washington 98155, can perform this analysis. For information about collection of samples and shipping procedures, contact the state laboratory at (206) 361-2898. Testing for lead costs about twenty-five dollars per sample. For the names of other certified drinking water laboratories contact the state drinking water laboratory certification program at (206) 361-2944.

Reducing Exposure to Lead in Drinking Water

Ways to reduce lead in home drinking water:

- If water has not been used in a particular faucet for six hours or longer, run the cold water tap until the water is noticeably colder, about one minute, to “flush” the pipes. The more time water has been sitting in your home’s pipes, the more lead and other dissolved metals the water may contain.

- Use only cold water for drinking, cooking, and making baby formula. Hot water may contain higher levels of lead.
- Frequently clean the screens and aerators in faucets to remove captured lead particles.
- If building or remodeling, only use “lead free” piping and materials for plumbing.

Regulations in Drinking Water

In May 1991, EPA finalized public drinking water system regulations for lead. These regulations establish:

- Maximum contaminant level goal of zero for lead.
- Treatment technique requirement for lead reduction.
- Requirement to treat source water when 10 percent of samples collected from customer’s household water exceed the 0.015 ppm action level.
- Public education requirements as a compliment to treatment techniques.

For More Information

Please contact:

Your Local Health Department, or

Division of Drinking Water Headquarters (360) 236-3100
Northwest Regional Office (206) 464-770
Southwest Regional Office (360) 664-0768
Eastern Regional Office (509)456-5084

Other informational materials on lead, produced by the Department of Health:

Removal of Lead-Based Paint in Homes

Lead and Your Kids

Food and Nutrition, to help prevent lead poisoning in children

Copies of these informational materials may be obtained from the Office of Toxic Substances

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