

How Does Lead Get Into Drinking Water?

Lead in drinking water most often comes from water distribution lines or household plumbing rather than from the water system source.

Lead and Health

Children under the age of six and unborn babies are the most susceptible to the toxic effects of lead. Because the nervous and circulatory systems of young children are not fully developed, lead and other toxins can easily accumulate in the brain. Long-term exposure to even low levels of lead can cause irreversible learning difficulties, mental retardation, and delayed neurological and physical development. In adults, exposure to lead can harm the peripheral nervous system and cause impairment of hearing, vision and muscle coordination. Lead is also toxic to the blood, kidney, heart and reproductive system.

Lead poisoning is of particular concern 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.
- Lead solder was used on your home water pipes.
- You have soft water (low mineral content), or acidic water.

Get it tested!

The only way to know the amount of lead in your household water is to have your water tested by a certified laboratory. Get a list of certified laboratories at www.tpchd.org/certifiedlabs.

Reduce your Exposure to Lead in Drinking Water

Lead levels in your water may increase if the water sits in your home's pipes for a long period of time.

- 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.
- Use only cold water for drinking, cooking and making baby formula. Hot water contains 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 regulations for lead. These regulations establish:

- A maximum contaminant level goal of zero for lead
- Treatment techniques required for lead reduction
- Require operators of public systems to treat the water when 10% of samples collected from customers household water exceed 15 parts per billion.
- Public education requirements to complement lead reduction techniques.

If you have additional questions or want more information about your responsibilities as a public water system manager, please contact Tacoma-Pierce County Health Department's Drinking Water Program at (253) 798-6470, option 2, or email us at EHDDrinkingWater@tpchd.org