

The EPA, Lead, and Your Drinking Water...

The United States Environmental Protection Agency (EPA) requires us to distribute the following information in this brochure annually under the provisions of the National Primary Drinking Water Regulations, Control of Lead and Copper, Public Education Requirements (40CFR Part 141.85 Federal Register, V.56, No. 110, P. 26553 June 7, 1991). While the information on the following pages may cause some concern, please note that this brochure is written in a "mandatory" language prescribed by the EPA. **You should also know that as an individual water distribution system, Soos Creek Water & Sewer District tests within the guidelines set by the EPA and meets the stringent standards prescribed by the EPA for lead and copper.**

1. Introduction

The United States Environmental Protection Agency (EPA) and Soos Creek Water and Sewer District are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the EPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). **Under Federal law we are required to have a program in place to minimize lead in your drinking water. This program includes corrosion control treatment, source water treatment, and public education.** Corrosion control treatment has been in place since 1982. We are also required to replace each lead service line that we control if the line contributes lead concentrations of more than 15 ppb after we have completed the comprehensive treatment program. If you have any questions about how we are carrying out the requirements of the lead regulation, please give us a call at (253) 630-9900. This brochure explains the simple steps you can take to protect you and your family by reducing your exposure to lead in drinking water.

2. Health Effects of Lead

Lead is a common, natural and often useful metal found throughout the environment in lead-based paint, air, soil, household dust, food, certain types of pottery porcelain and pewter, and water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells and kidneys. The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination - like dirt and dust - that rarely affect an adult. It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths.

3. Lead in Drinking Water

Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. The EPA estimates that drinking water can make up 20 percent or more of a person's total exposure to lead.

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome-plated brass faucets, and in some cases, pipes made of lead that connect your house to the water main (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2 % lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0 %.

When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

4. Steps You Can Take in the Home to Reduce Exposure to Lead in Drinking Water

Despite our best efforts mentioned earlier to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high. To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water. To hear a recorded list of State certified water-testing laboratories, call (206) 684-7801. If a water test indicates that the drinking water drawn from a tap in your home contains lead above 15 ppb, then you should take the following precautions:

⇒ *Let the water run from the tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours. The longer water resides in your home's plumbing the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder, usually about 15-30 seconds.* If your house has a lead service line to the water main, you may have to flush the water for a longer time, perhaps one minute, before drinking. Although toilet flushing or showering flushes water through a portion of your home's plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your family's health. It usually uses less than one or two gallons of water per day and costs less than \$.10 - \$.20 per month. To conserve water, fill a couple of bottles for drinking water after flushing the tap, and whenever possible, use the first flush water to wash the dishes or water the plants. If you live in a high-rise building, letting the water flow before using it may not work to lessen your risk from lead. The plumbing systems have more, and sometimes larger pipes than smaller buildings. Ask your landlord for help in locating the source of the lead and for advice on reducing the lead level.

⇒ *Try not to cook with, or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and heat it on the stove.*

⇒ *Remove loose lead solder and debris from the plumbing materials installed in newly constructed homes, or homes in which the plumbing has recently been replaced, by removing the faucet strainers from all taps and running the water from 3 to 5 minutes. Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.*

⇒ *If your copper pipes are joined with lead solder that has been installed illegally since it was banned in King County in 1985 and the rest of Washington in 1987, notify the plumber who did the work and request that he or she replace the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key looks shiny. In addition, notify your State Health Department or the Seattle-King County Health Department Plumbing Inspector at (206) 233-7914 about the violation.*

⇒ **Determine whether or not the service line that connects your home or apartment to the water main is made of lead. The best way to determine if your service line is made of lead is by either hiring a licensed plumber to inspect the line or by contacting the plumbing contractor who installed the line. You can identify the plumbing contractor by checking the county's record of building permits which should be maintained in the files of the King County Department of Development and Environmental Services (building permit) or Seattle-King County Health Department (plumbing permit). A licensed plumber can at the same time check to see if your home's plumbing contains lead solder, lead pipes, or pipe fittings that contain lead. The public water system should also maintain records of the materials located in the distribution system. If the service line that connects your dwelling to the water main contributes more than 15 ppb to your drinking water after our comprehensive treatment program is in place, we are required to replace the line. If the line is only partially controlled by Soos Creek Water and Sewer District we are required to provide you with information on how to replace your portion of the service line, and offer to replace that portion of the line at your expense and take a follow-up tap water sample within 14 days of the replacement. Acceptable replacement alternatives include copper, steel, iron, and plastic pipes.*

⇒ *Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. **DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.***

⇒ *The steps described above will reduce the lead concentrations in your drinking water. However, if a water test indicates that the drinking water coming from your tap contains lead concentrations **in excess of 15 ppb** after flushing, or after we have completed our actions to minimize lead levels, then you may want to take the following additional measures:*

- Purchase or lease a home treatment device. Home treatment devices are limited in that each unit treats only the water that flows from the faucet to which it is connected, and all of the devices require periodic maintenance and replacement. Devices such as reverse osmosis systems or distillers can effectively remove lead from your drinking water. Some activated carbon filters *may* reduce lead levels at the tap; however, all lead reduction claims should be investigated. Be sure to check the actual performance of a specific home treatment device before and after installing the unit.
- Purchase bottled water for drinking water and cooking.

5. Additional Information

You can consult a variety of sources for additional information. Your family doctor or pediatrician can perform a blood test for

lead and provide you with information about the health effects of lead. Federal, state and local government agencies that can be contacted include:

- United States Environmental Protection Agency, Safe Drinking Water Hotline: 1-800-426-4791
- Seattle Public Utilities Water Quality and Supply Division can provide you with a recorded list of Puget Sound area state-certified laboratories at (206) 684-7801. For general information about your community's water supply, call (253) 630-9900.
- King County Department of Development and Environmental Services (206) 296-6600 or Seattle-King County Health Department (206) 296-4722 can provide you with information about building and plumbing permit records, respectively, that should contain the names of plumbing contractors that plumbed your home.
- The Washington State Department of Health (1-800-521-0323) or the Seattle-King County Health Department HAZARDS line, (206) 296-4692) can provide you with information about the health effects of lead and how you can have your child's blood tested.

The following is a list of some State approved laboratories in your area that you can call to have your water tested for lead:

Am Test, Inc.	Redmond	(425) 885-1664	Laucks Testing Labs	Seattle	(206) 767-5060
Aquatic Research	Seattle	(206) 632-2715	WDOH Environ. Chemistry	Seattle	(206) 361-2898
Analytical Resources, Inc	Seattle	(206) 621-6490	Orion Environ. Lab	Federal Way	(253) 874-8118

***According to Soos Creek Water and Sewer District records, there are no lead lines in our water mains or distribution system.**