

# LEAD IN DRINKING WATER PUBLIC EDUCATION

The United States Environmental Protection Agency (EPA) requires us to distribute the information in this brochure 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).

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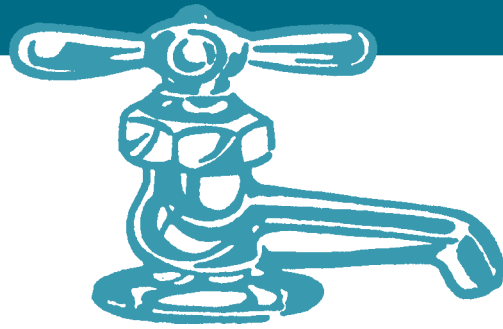
## INTRODUCTION

The United States Environmental Protection Agency (EPA) and the Woodinville Water District are concerned about lead in your drinking water. Although most homes have low levels of lead in their drinking water, some homes in the community have lead levels above the EPA action level of 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. If you have any questions about how we are carrying out the lead regulation please give us a call at 425-487-4125. This brochure explains the simple steps you can take to protect yourself by reducing your exposure to lead in drinking water.

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## HEALTH EFFECTS OF LEAD

Lead is common metal found throughout the environment in lead-based paint, air, soil, household dust, food, certain types of pottery, porcelain, pewter, and water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in your 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 adults. It is important to wash children's hands and toys often, and try to make sure they only put food in their mouths.



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## 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. In 1986, Congress banned the use of lead solder containing greater than 0.2 percent lead, and restricted the lead content of faucet, pipes and other plumbing materials to 8.0 percent.

When water stands in 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, if the water has not been used all day, can contain fairly high levels of lead.

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## 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 too 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. Some local laboratories that can provide this service are listed at the end of this booklet. For more information in having your water tested, please call 425-487-4125. If a water test indicates that the drinking water drawn from a tap in your home contains lead above 0.015 mg/L, then you should take the following precautions:

**A.** 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 the water resides in your home's plumbing the more lead it may contain. Flushing the tap means running the cold-water faucet for 15-30 seconds. Although toilet flushing or showering flushes water through a portion of the 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 should take to protect your health. It usually uses less than one gallon of water and costs less than \$.04 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 dishes or water 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 the smaller buildings. Ask your landlord for help in locating the source of lead and for advice on reducing the lead level.

**B.** 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.

**C.** 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 for 3 to 5 minutes. Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.

**D.** If your copper pipes are joined with lead solder that has been installed illegally since it was banned in King County in 1985, and in the rest of Washington state 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 Department of Health at 1-800-521-0323 or the Seattle-King County Health Department Hazards Line at 206-296-4767 about the violation.

**E.** 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 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 0.015 mg/L after flushing, or after we have completed our actions to minimize lead levels, then you may want to take the following additional measures:**

**1.** 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 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.



2. Purchase bottled water for drinking and cooking. 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 State Environmental Protection Agency Safe Drinking Water Hotline.....1-800-426-4791

Washington State Department of Health Safe Drinking Water Hotline .....1-800-521-0323

Seattle-King County Health Department HAZARDS LINE.....1-206-296-4692

Seattle Public Utilities Water Quality Lab can be reached at 206-684-7801. The lab can provide you with information about Puget Sound area water supply. For a list of local laboratories that have been certified by the EPA for testing water quality, please call 206-684-7801..

The Washington State Department of Health or the Seattle-King County Health Department HAZARDS line, at the phone numbers listed above, can provide you with information about the health affects of lead and how you can have your child's blood tested.

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

- AM Test, Inc., Redmond, WA .....425-885-1664
- Aquatic Research, Seattle, WA.....206-632-2715
- Laucks Testing Labs, Seattle, WA .....206-767-5060
- North Creek Analytical, Bothell, WA .....425-420-9200
- WDOH Environmental Svcs., Seattle, WA .....206-361-2898

Woodinville Water District, Seattle Public Utilities (SPU), the Washington State Department of Health (WDOH) and the United States Environmental Protection Agency (USEPA) are working together to help protect all U.S. residents from contamination caused by exposure to lead.

Woodinville Water District conducted water testing in Woodinville homes that meet the EPA's "high-risk" criteria.

Those guidelines target residential customers most likely to have elevated levels (i.e., homes with copper pipes and lead-solder joints built or replumbed to 1985 in King County).

### How To Reduce Your Exposure To Lead

- Always draw drinking water and cooking water from the COLD-water tap.
- Never make baby formula with water from the HOT water tap.
- If water that has been standing in your pipes for over six hours, run the tap for 15-30 seconds and use the water for something other than consumption.
- Keep your children away from paint chips or paint dust.
- In homes 15-17 years old seek professional assistance in paint removal projects.
- Children and pregnant women should vacate during remodeling of pre-1950 structures if the presence of lead paint is suspected.
- Adults exposed to lead on the job or in a hobby should change out of contaminated clothes and shoes, and shower prior to returning home.
- Do not store acidic liquids or alcoholic beverages in leaded glass crystal or ceramic containers.
- Ensure that your household electrical grounding meets appropriate electrical codes. Inadequate or improper electrical grounding can contribute to corrosion of plumbing materials.

### Where to go for more information

#### Questions about the water sampling?

Contact the Seattle Public Utilities, Water Quality and Supply Division at 206-684-7834.

#### Questions about blood lead level testing?

Contact your family health care provider.

#### Questions about occupational and recreational exposure?

Contact Washington State Dept. of Labor and Industries Office of Health and Safety at 1-800-423- 7233.

For additional information please visit our website at [www.woodinvillewater.com](http://www.woodinvillewater.com) or call our Water Quality Office at 425-487-4125



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# WOODINVILLE WATER DISTRICT

## Living Lead Free



Local Municipalities, City, State and Federal Governments are teaming up to protect you and your family from exposure to lead.



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