

## **My Water Supplier Has Notified Me that My Water May Contain High Levels of Lead. What do I do?**

If you have received notification from your water supplier that your water system has exceeded the State **lead** action level, PLEASE READ THE PROVIDED NOTIFICATION LITERATURE CAREFULLY. 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. The following information, while very similar to the information you should have already received from your water supplier, also provides important links to additional resources.

Under state and federal law, community/public water systems are required to have a program in place to minimize lead in your drinking water. This program may include corrosion control treatment, source water treatment, and public education. Such a program may also include replacing the portions of lead service line that the water supplier owns if water treatment is not effective.

### **I Am Concerned That My Well Water May Be Corrosive. Is My Family Being Exposed to High Lead?**

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. Possible evidence that your well water may be corrosive includes the following: piping failure and pinhole leaks, copper staining on sinks, tubs, fixtures, laundry and hair, and/or a metallic taste. This does not mean that you have lead in your drinking water. However, if you are concerned that your well water may be corrosive and that you and your family are being exposed to lead in your drinking water, you will find the following information helpful.

## **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 U.S. Environmental Protection Agency 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%. In California, a similar law prohibiting the use of both lead solder and lead pipe was enacted in 1985. Note: As of January 1, 2010, new changes in California Law went into affect which mandate a reduction in the maximum allowable lead content in "lead-free" water pipes, pipe or plumbing fittings, fixtures, solder, or flux. For more information please click on the following link:

[www.dtsc.ca.gov/.../upload/Lead-in-Plumbing-Fact-Sheet.pdf](http://www.dtsc.ca.gov/.../upload/Lead-in-Plumbing-Fact-Sheet.pdf)

*Lead-contaminated drinking water is most often a problem in homes that are either very old or very new. Up through the early 1900s, it was common practice to use lead pipes for interior plumbing. Copper pipes have replaced lead pipes in most residential plumbing. However, the use of lead solder with copper pipes is widespread. Experts regard this lead solder as the major cause of lead contamination of household water in U.S. homes today. Lead concentrations in drinking water can be also be elevated if your home has faucets or fittings of brass which contains some lead. New brass faucets and fittings can also leach lead, even though they are "lead-free". ([Corrosion-Doctors.org](http://Corrosion-Doctors.org))*

When water stands in 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.

## HEALTH EFFECTS OF LEAD

Lead is a common 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.

## STEPS YOU CAN TAKE IN THE HOME TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER

**Have Your Water Tested.** 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. The following is a list of some state approved laboratories in your area that you can call to have your water tested for lead. Sierra Foothill Lab at 209-223-2800 and FGL Environmental at 209-942-0182.

If a water test indicates that the drinking water drawn from a tap in your home contains lead above 15 ppb, then you should especially consider taking the precautions discussed below.

**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 to 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 and costs less than \$3.20 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 are a renter, 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 1986, 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.

**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 record of building permits which should be maintained in the files of the Building Department. 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 that delivers water to your home should also maintain records of the materials located in the distribution system.

**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.

**Consider Home Treatment.** 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, a home treatment device may be needed. The California Department of Health Services certifies the effectiveness of home treatment devices. Only devices certified by the California Department of Health Services to remove lead should be used for this purpose. Check out their website at:

<http://www.cdph.ca.gov/certlic/device/Pages/watertreatmentdevices.aspx>

Do your homework before you purchase 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. And all reduction claims should be investigated. It is important to note that there is evidence that reverse osmosis and water softening systems may actually increase the corrosivity of your homes water because they remove dissolved minerals.

**Purchasing bottled water for drinking and cooking** is another alternative.

### **I STILL HAVE CONCERNS ABOUT MY FAMILY'S HEALTH**

You can consult a variety of sources for additional information. Your family doctor or pediatrician can perform a lead blood test (or refer to a certified laboratory) and provide you with information about the health effects of lead. State and local government agencies that can be contacted include:

California Department of Health Services, Childhood Lead Poisoning Prevention Branch at 209-223-6669

Amador County Public Health Department at 209-223-6439 can provide you with information about the health effects of lead and how you can have your child's blood tested. <http://www.co.amador.ca.us/index.aspx?page=208>

For Further Information on lead in tap water, check out the following links:

<http://www.cdc.gov/nceh/lead/tips/water.htm>

<http://www.epa.gov/ogwdw000/consumer/2ndstandards.html>