

# **IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER**

**Este informe contiene informacion muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuniquese con alguien que pueda traducir la informacion**

**[INSERT NAME OF WATER SYSTEM]**

\_\_\_\_\_ found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

## **What are the health effects of lead?**

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

## **What is lead?**

Lead is a naturally occurring element found in small amounts in the earth's crust. While it has some beneficial uses, it can be toxic to humans and animals, causing health effects.

## **What are possible sources of lead in drinking water and how does lead enter drinking water?**

Lead can enter drinking water when service pipes that contain lead corrode, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures. The most common problem is with brass or chrome-plated brass faucets and fixtures with lead solder, from which significant amounts of lead can enter into the water, especially hot water.

Homes built before 1986 are more likely to have lead pipes, fixtures and solder. The Safe Drinking Water Act (SDWA) has reduced the maximum allowable lead content - that is, content that is considered "lead-free" - to be a weighted average of

0.25 percent calculated across the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures and 0.2 percent for solder and flux.

Corrosion is a dissolving or wearing away of metal caused by a chemical reaction between water and your plumbing. A number of factors are involved in the extent to which lead enters the water, including:

- the chemistry of the water (acidity and alkalinity) and the types and amounts of minerals in the water,
- the amount of lead it comes into contact with,
- the temperature of the water,
- the amount of wear in the pipes,
- how long the water stays in pipes, and
- the presence of protective scales or coatings inside the plumbing materials.

To address corrosion of lead and copper into drinking water, EPA issued the [Lead and Copper Rule \(LCR\)](#) under the authority of the SDWA. One requirement of the LCR is corrosion control treatment to prevent lead and copper from contaminating drinking water. Corrosion control treatment means utilities must make drinking water less corrosive to the materials it comes into contact with on its way to consumers' taps.

### **Are there other important sources of lead exposure in addition to drinking water?**

Lead can be found in all parts of our environment – the air, the soil, the water, and even inside our homes. Much of our exposure comes from human activities - the use of fossil fuels including past use of leaded gasoline, some types of industrial facilities, and past use of lead-based paint in homes. Lead and lead compounds have been used in a wide variety of products found in and around our homes, including paint, ceramics, pipes and plumbing materials, solders, gasoline, batteries, ammunition, and cosmetics.

Lead may enter the environment from these past and current uses. Lead also can be emitted into the environment from industrial sources and contaminated sites, such as former lead smelters. While natural levels of lead in soil range between 50 and 400 parts per million, mining, smelting, and refining activities have resulted in substantial increases in lead levels in the environment, especially near mining and smelting sites.

When lead is released to the air from industrial sources or vehicles, it may travel long distances before settling to the ground, where it usually sticks to soil particles. Lead may move from soil into ground water depending on the type of lead compound and the characteristics of the soil.

Federal and state regulatory standards have helped to minimize or eliminate the amount of lead in air, drinking water, soil, consumer products, food, and occupational settings.

Simple steps like keeping your home clean and well-maintained also will go a long way in preventing lead exposure. You can lower the chances of exposure to lead in your home, both now and in the future, by taking the following steps.

- Inspect and maintain all painted surfaces to prevent paint deterioration
- Address water damage quickly and completely
- Keep your home clean and dust-free
- Clean around painted areas where friction can generate dust, such as doors, windows, and drawers. Wipe these areas with a wet sponge or rag to remove paint chips or dust
- Clean debris out of outlet screens or faucet aerators on a regular basis
- Wash children's hands, bottles, pacifiers and toys often
- Teach children to wipe and remove their shoes and wash hands after playing outdoors
- Ensure that your family members eat well-balanced meals. Children with healthy diets absorb less lead.

### **How can I reduce my exposure to lead in drinking water?**

**Flush your pipes before drinking:** The more time water has been sitting in your home's pipes, the more lead it may contain. Anytime the water in a particular faucet has not been used for six hours or longer, "flush" your cold-water pipes by running the water until it becomes as cold as it will get. This could take as little as five to thirty seconds if there has been recent heavy water use such as showering or toilet flushing. Otherwise, it could take two minutes or longer. Your water utility will inform you if longer flushing times are needed to respond to local conditions.

**Only use cold water for eating and drinking:** Use only water from the cold-water tap for drinking, cooking, and especially for making baby formula. Run cold water until it becomes as cold as it can get. Hot water dissolves lead more quickly than cold water and is, therefore, more likely to contain greater amounts of lead. **Never use water from the hot water tap for drinking, cooking, or making baby formula.**

### **Does boiling water remove or reduce lead levels in the water?**

No, boiling water **does not** remove lead. Boiling water can concentrate lead levels and increase the amount of lead in water.

**What other steps can I take to reduce my exposure to lead in drinking water?**

Testing your home's drinking water is the only way to confirm if lead is present. If you discover that you have high levels of lead in your home, you should consider using bottled water or a water filter. There are many home water filters that are certified for effective lead reduction, but devices that are not designed to remove lead will not work. Verify the claims of manufacturers by checking with independent certifying organizations. [NSF International Exit](#) and the [Water Quality Association Exit](#) provide lists of treatment devices they have certified. [Underwriters Laboratories Exit](#) is also a good resource for certified devices. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.

**Have your child's blood tested for lead.**

Find out if your child has elevated levels of lead in his or her blood. Because lead poisoning often occurs with no obvious symptoms, it frequently goes unrecognized. You can test your child for lead poisoning by asking your pediatrician to do a simple blood test. Children with elevated blood lead levels can have serious [health effects](#). If you know your child has lead poisoning, talk to your pediatrician and local health agency about what you can do.

**Why are there elevated levels of lead in the [INSERT NAME OF WATER SYSTEM] \_\_\_\_\_ drinking water system and what we are doing to reduce the lead levels in the homes/buildings served by our water system?**

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For more information, call us at [\[INSERT WATER SYSTEM PHONE NUMBER\]](#), \_\_\_\_\_ or visit our Web site at [\[INSERT WEBSITE ADDRESS\]](#).

For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at <http://www.epa.gov/lead> or contact your health care provider.