



# HOMEOWNERS GUIDANCE TO LEAD IN DRINKING WATER



Lead is a toxic heavy metal that was used for years in products found around the home. Lead can be found in:

- water
- lead-based paint
- air
- soil
- household dust
- food
- certain types of pottery, porcelain, and pewter

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 because of corrosion of materials containing lead in the water distribution system and household plumbing. Some common causes of corrosion are dissolved oxygen, low pH, and low mineral content in the water. In 1986, Congress banned the use of lead solder containing more than 0.2% lead and restricted the lead content of faucets, pipes, and other plumbing materials to not more than 8.0%.

When water stands for several hours in lead pipes or plumbing systems containing lead, the lead may dissolve into the drinking water. This means the water from the faucet in the morning, or later in the afternoon after returning from work or school, can contain higher levels of lead.

## Effects of Lead on Health

Lead can cause serious health problems if it enters the 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 the 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.

**You are receiving this information because you had your residential water tested for lead.**

**If your water test results show a lead level greater than 15 ppb:**

- Pregnant woman, infants, and young children should not consume water. Use an alternative source of drinking water such as bottled water or water tested to have no detectable level of lead.
- Use bottled water for infants and young children



- Use bottled water to prepare formula or use ready to feed formula
- Mix concentrated juices with bottled water

**If your water test results show a lead level of 5 to 15 ppb:**

- Pregnant woman, infants, and young children are recommended to minimize exposure by:
  - Filtering water
  - Following a flushing procedure (see information below) and
  - Using cold water

**Steps to Take to Reduce Exposure to Lead in Drinking Water**

- Flushing procedure: Flush faucets before using them for drinking or cooking anytime the water in a faucet has gone unused for more than six hours. Flush the faucet by running the cold-water faucet until the water gets noticeably colder, usually about 30 seconds to 2 minutes. If your house or building has a lead service line to the water main, you may have to flush the water for a longer time. Although toilet flushing or showering flushes water through a portion of your home or building's plumbing system, you still need to flush water in each faucet before using it for drinking or cooking. To conserve water, fill a couple of bottles for drinking water after flushing the faucet, and wherever possible use the first flush to wash dishes or water the plants.
- Do not cook with or drink water from the hot water tap. Hot water can dissolve more lead in less time than cold water.
- Do not boil water to remove lead. Boiling water will not reduce lead levels.
- Periodically remove the strainers from faucets and flush by running water for 3 to 5 minutes to remove any loose lead solder or debris that has accumulated over time.
- Homeowners may purchase or lease a point of use treatment device (filter). These devices treat only water that flows from the faucet(s) to which it is connected, and all of the devices require periodic maintenance and replacement. Counter top devices such as reverse osmosis systems installed on the faucet or distillers can effectively remove lead from your drinking water. Some activated carbon filters may reduce lead levels at the faucet.

**Water test results that show NON DETECT require no action.**

For additional information, see the following from the Centers for Disease Control and Prevention at <http://www.cdc.gov/nceh/lead/tips/water.htm>.

