

# IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER



We are committed to providing the best information available to help you safeguard your family's health. This fact sheet describes options available to reduce your family's exposure if testing confirms the presence of lead in your water.

## SOURCES OF LEAD IN DRINKING WATER

- ◆ Lead can be found in groundwater in certain areas of Missouri due to naturally occurring lead deposits and from past and present lead mining and associated operations.
- ◆ Lead may also get into your water at the tap through corrosion of household plumbing materials containing lead.
  - Materials that may contain lead include water pipes, solder used to join pipes and brass components.
  - For those with private wells, materials used in well construction may contain lead. For those on public water, water service lines may contain lead.



**Public Health**  
Prevent. Promote. Protect.

If you have questions about lead in drinking water, call your local or state health department.

Missouri Department of  
Health and Senior Services  
Health and Risk  
Assessment Program  
573-751-6102  
[www.dhss.mo.gov/  
ChildhoodLead](http://www.dhss.mo.gov/ChildhoodLead)

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Alternate forms of this publication for persons with disabilities may be obtained by contacting the Missouri Department of Health and Senior Services at 573-751-6102. Hearing and speech impaired citizens telephone 1-800-735-2966. VOICE 1-800-735-2466.

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## HEALTH EFFECTS OF LEAD EXPOSURE

Although the most common sources of lead exposure are lead-based paint and lead-contaminated soil or dust, studies have shown that 10 to 20 percent of exposure to lead may come from drinking water. Infants consuming mixed formula may receive as much as 40 to 60 percent of their exposure to lead from drinking water.

Exposure to lead can be a significant health concern. Lead builds up in the body over time and can affect almost every organ and system in the body.

The greatest risk is to children under the age of 6 and to unborn babies. Even low levels of lead that would have little effect on adults can slow children's normal mental and physical development and cause lifelong health problems.

Although children are especially susceptible to lead exposure, lead can also affect adults and may cause health problems such as nervous system dysfunction, kidney problems, fertility problems and high blood pressure.



# **Steps You Can Take to Reduce Exposure to Lead in Drinking Water**

- ◆ As a short-term solution, consider using an alternate water source such as bottled water to lower your lead exposure from contaminated water.
- ◆ As a long-term solution, install a water treatment system for reducing lead in drinking water. These systems can be installed at the point-of-use (POU) which filters water on individual faucets used for drinking and cooking or at the point-of-entry (POE) which filters water as it enters the house.
  - ⇒ POU systems are appropriate when the source of lead is from groundwater or household plumbing. These systems can be installed under the sink, attached to the faucet, or can sit on the countertop. The National Sanitation Foundation (NSF) certifies POU systems for reducing lead in drinking water. To see if a system is certified to reduce lead, contact NSF at 800-NSF-MARK (800-673-6275) or visit NSF's Web site at [www.nsf.org/Certified/dwtu](http://www.nsf.org/Certified/dwtu). There are several POU treatment methods suitable for removing lead from drinking water, including:
    - Reverse Osmosis Systems
    - Distillers
    - Adsorption Systems using carbon or charcoal filters specially designed to remove lead.
  - ⇒ POE systems are appropriate only when the source of lead is from groundwater. Water softeners have been shown effective as a whole house system for removing lead, although not specifically designed to do so. NSF does not certify that POE systems will keep lead out of your water because, if your household plumbing contains lead, it can get into the water after it goes through a POE system. Therefore, we recommend you consult with your local or state health department before choosing this option.

If you decide to install a home water treatment device, it is important to ensure the system is installed and operated according to the manufacturer's instructions. In addition, these devices need regular maintenance to operate effectively. Follow-up testing may be considered to ensure the device is working properly.

## **Quick tips to reduce exposure to lead from plumbing:**

- \* Use only cold water for drinking, cooking, and preparing baby formula. Never cook or mix formula using hot water from the tap.
- \* Make it a practice to run the water at each tap before use until it becomes cold and reaches a steady temperature, especially if the water has not been used for several hours. This is especially important if you use a water softener in your home.
- \* Do not boil water to remove lead. Boiling water will not reduce lead.



The federal drinking water quality action level established for lead is 15 micrograms per liter ( $\mu\text{g/L}$ ) or 15 parts per billion (ppb). The standard accounts for average lead exposures from other sources. Nevertheless, since even low levels of lead may cause a range of health effects, it is advisable to reduce lead in your tap water as much as possible.