

## LEAD IN MISSOURI DRINKING WATER

Lead is a naturally occurring metal that can be found in air, soil, water, food, lead-based paint, household dust, and certain types of pottery. Lead has no characteristic taste or smell.

Lead is a poison that affects virtually every system in the body. It is particularly harmful to developing brains and nervous systems in fetuses and young children (below 6 years of age). The effects of low levels of lead toxicity may not be obvious, however, studies show they may harm a child's development or can lower their IQ scores. Low levels of lead toxicity can also cause behavior changes that can cause a child to easily be upset, be unable to concentrate, or overreact. There may be no symptoms present or symptoms can be mistaken for the flu or other illnesses. As more lead accumulates in a child's blood stream, clumsiness, weakness, and the loss of recently acquired skills can occur - progressing to seizures and coma at higher elevations.

Unborn children can be exposed to lead through their mothers. This may cause premature births, smaller babies, and decreased mental ability of an infant.

In adults, lead exposure may decrease reaction time and possibly cause memory loss. Lead exposure may also cause weakness in the fingers, wrists, or ankles. Lead exposure may increase blood pressure in middle-aged men.

The U.S. Environmental Protection Agency (EPA) has established a lead action level of 15 parts per billion (ppb) or 0.015 milligrams per liter (mg/l) of water.

Most of the water being supplied to residential homes in Missouri is low in lead. Even water coming from wells in the lead belt is usually low in lead. The major source of lead in drinking water is from lead pipes, faucets, and the solder used in plumbing. Brass faucets may legally contain up to 8% lead in their alloys.

In general, lead in drinking water is not the predominant source of lead poisoning, but it can increase a person's total exposure - particularly infants who drink baby formulas and concentrated juices that are mixed with water.

Your water utility can probably furnish you with information on the lead content of your water.

Recent extensive monitoring by more than 1,600 water systems in Missouri indicates that less than 2% of those public water systems may have a lead contamination problem. Much of the well water in Missouri is hard; thus, it is saturated with minerals and does not tend to pick up metals, such as lead, from plumbing systems. Many community water systems that treat water from lakes and rivers treat it so that it will not be corrosive to distribution systems.

The only sure way of knowing if the water in your home contains lead is to have your water tested.

Following these steps can avoid most lead in drinking water:

- Any time the water in a faucet has been unused for more than six hours let the water run from the tap before using it for drinking or cooking. Let the water run until it gets noticeably colder. This will usually eliminate lead from taps.
- If your home has a lead service line, it may require an extra 20 to 30 seconds of running to purge the line. Your water company can probably tell you if you have a lead service line.
- Use cold water for drinking and cooking. Lead is more likely to dissolve in hot water.
- Make sure any repairs are made with lead-free solder.
- Always run water through new brass fixtures for several seconds before using water from them.

For more information on lead testing or if you have other questions on lead in drinking water, call the Missouri Department of Natural Resources, Public Drinking Water Branch at 573-751-1406.