

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.

WHO IS AT RISK

- Children ages 6 and under are at the greatest risk. Pregnant women and nursing mothers should avoid exposure to lead to protect their children.
- Additional risk factors for individuals:
 - Your home or a home that your child spends time in was built before lead paint was banned in 1978
 - Renovation work is being done in such a home
 - Adults in the home work with lead

HOTLINES & INFORMATION

EPA Safe Drinking Water Hotline:
800-426-4791

National Lead Information Center:
800-424-LEAD
www.epa.gov/lead

Lead in Drinking Water Web Site:
www.epa.gov/safewater/lead

KDHE Public Water Supply Section:
785-296-5514
<http://www.kdheks.gov/pws/>

Kansas Certified Labs:
<http://www.kdheks.gov/envlab/disclaimer.htht>

NSF International:
www.nsf.org

Lead in Drinking Water



Kansas
Department of Health
and Environment

SOURCES OF LEAD

Lead is a common metal found in the environment. The greatest exposure to lead is swallowing or breathing in lead paint chips and dust. Lead can also be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies (lead can be carried on clothing or shoes). Lead is found in some toys, some playground equipment, and some children's metal jewelry.

LEAD IN DRINKING WATER

Lead enters the water through contact with corroding plumbing materials, such as:

- Pipes
- Solder
- Fixtures and faucets (brass)
- Fittings

Some household plumbing materials and water service lines can contain lead. Brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 0.25 percent wetted surface lead to be labeled as "lead-free."

When water is in contact with pipes, and plumbing containing lead for several hours, the lead may enter drinking water. Homes built before 1988 are more likely to have lead pipes or lead solder.

STEPS YOU CAN TAKE TO REDUCE YOUR EXPOSURE TO LEAD IN YOUR WATER

1. Run your water to flush out lead

Run water from the cold water tap for 15-30 seconds to flush lead from interior plumbing or until it becomes cold and reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours.

2. Use cold water for cooking and preparing baby formula

Do not cook with or drink water from the hot water tap. Also, do not boil water from the hot water tap, as hot water can dissolve lead more quickly than cold water. Rather, if you need hot water, draw water from the cold tap and heat it on the stove. Do not use water from the hot water tap to make baby formula.

3. Identify and replace plumbing fixtures containing lead

New brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 0.25 percent wetted surface lead to be labeled as "lead-free."

4. Test your water for lead

Call your water system to find out how to get your water tested for lead.

5. Get your child's blood tested

Contact your local health department or healthcare provider to find out how you can get your child tested for lead, if you are concerned about exposure.

6. Look for alternative sources or treatment of water

You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or www.nsf.org for information on performance standards for water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.

ADDITIONAL INFORMATION

Most water systems test for lead as a regular part of water monitoring. These tests give a system-wide picture and do not necessarily reflect conditions at a specific drinking water outlet. Read the annual report sent out from your water system to find out your water system's lead values.

Contact your local public health department or talk to your doctor about reducing your family's exposure to lead.