

CITY OF ARVADA

LEAD in Drinking Water: Frequently Asked Questions and Answers



Facts on Lead in Drinking Water

What are the major sources of lead exposure for children?

The Centers for Disease Control and Prevention (CDC) say that the major source of lead exposure for children in the United States is lead-based paint and lead-contaminated dust found in deteriorating buildings.



Is there a national problem with lead in drinking water?

So far, there does not appear to be a national problem with lead in drinking water, but U.S. EPA is looking into this. U.S. EPA's *Lead and Copper Rule* seems to be working as intended. Where there is a compliance problem, U.S. EPA or a State may take action to correct the situation.

What has the government done about the problem of lead in household water?

There are two major governmental actions to reduce your exposure to lead:

- Under the authority of the *Safe Drinking Water Act*, EPA set the action level for lead in

drinking water at 15 ppb. This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the homes sampled. If water from the tap does exceed this limit, then the utility must take certain steps to correct the problem. Utilities must also notify citizens of all violations of the standard.

- In June 1986, President Reagan signed amendments to the *Safe Drinking Water Act*. These amendments require the use of "lead-free" pipe, solder, and flux in the installation or repair of any public water system, or any plumbing in a residential or non-residential facility connected to a public water system.

These requirements went into effect in June 1986. The law gave state governments until June 1988 to implement and enforce these new limitations. Although the States have banned all use of lead materials in drinking water systems, such bans do not eliminate lead contamination with existing plumbing. Also, in enforcing the ban, some States have continued to find illegally used lead solder in new

plumbing installations. While responsible plumbers always observe the ban, this suggests that some plumbing installations or repairs using lead solder may be escaping detection by the limited number of enforcement personnel.

If there is lead in my drinking water, where does it come from?

Lead in drinking water rarely comes from the water treatment plant or from water mains. Lead comes from faucets, plumbing fixtures and lead solder within the home and from lead service lines, if they are present. Lead is seldom found in natural sources of drinking water.

What is a lead service line?

Service lines run from the water main under the street to the customer's home. Therefore, part of the line is on public property and the remainder is on the customer's property.

Some service lines in Arvada were made of lead. The City of Arvada replaced these lead service lines in the City's distribution system in the 1980's to meet the EPA and Colorado Department of Public Health and Environment rule requirements.

City of Arvada Main Number.....	720.898.7000
City WEB site.....	www.ci.arvada.co.us
Utilities, Water Quality,.....	720.898.7800
EPA's Safe Drinking Water Hotline.....	1.800.426.4791
EPA's WEB site.....	www.epa.gov/safewater/lead
National Lead Information Center	at 1-800-424-Lead

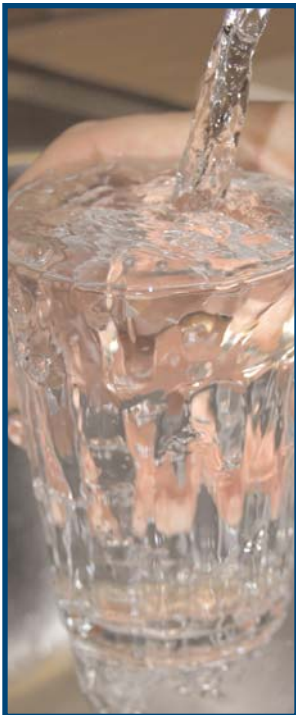
Why is there lead in my faucets and fixtures?

In 1986, Congress amended the *Safe Drinking Water Act* to allow faucets and other plumbing fixtures to contain up to 8% lead. Congress defined such fixtures as "lead-free" even though they could contain a small amount of lead.

How does the U.S. EPA's Lead and Copper Rule protect public health?

The rule protects public health by requiring water systems to control corrosion. This has been determined to be the most effective way for water systems to minimize the lead that leaches from homeowners' plumbing fixtures and lead service lines. The City of Arvada has continued to be in compliance with these EPA and State regulations.

What actions can you take to reduce lead in drinking water?



FLUSH YOUR PIPES BEFORE DRINKING

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.) The more time water has been sitting in your home's pipes, the more lead it may contain.

ONLY USE COLD WATER FOR CONSUMPTION

Use only water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead.

The two actions recommended above are very important to the health of your family. They will probably be effective in reducing lead levels because most of the lead in household water usually comes from the plumbing in your house, not from the local water supply.

LEAD LEVELS IN YOUR DRINKING WATER ARE LIKELY TO BE HIGHEST IF:

- your home has faucets or fittings made of brass which contains some lead, or
- your home or water system has lead pipes, or
- your home has some copper pipes with lead solder, and
- the home is less than five years old, or
- you have naturally soft water, or
- water often sits in the pipes for several hours

Should I boil water to remove Lead?

Never boil water to remove lead, because this concentrates the lead as water evaporates.

Never cook with or consume water from the hot-water tap. Hot water dissolves more lead more quickly than cold water. (If you need hot water, draw water from the cold tap and heat it on the stove.) Use only thoroughly flushed water from the cold tap for any consumption.

How much lead is too much?

Federal standards initially limited the amount of lead in water to 50 parts per billion (ppb). In light of new health and exposure data, EPA has set an action level of 15 ppb. If tests show that the level of lead in your household water is in the area of 15 ppb or higher, it is advisable - especially if there are young children in the home - to reduce the lead level in your tap water as much as possible.

Does lead affect everyone equally?

Young children, infants and fetuses appear to be particularly vulnerable to lead poisoning. A dose of lead that would have little effect on an adult can have a big effect on a small body. Also, growing children will more rapidly absorb any lead they consume. A child's mental and physical development can be irreversibly stunted by over-exposure to lead. In infants, whose diet consists of liquids made with water - such as baby formula - lead in drinking water makes up an even greater proportion of total lead exposure (40 to 60 percent).

If my water has high lead levels, is it safe to take a bath or shower?

Yes, bathing and showering should be safe for you and your children, even if the water contains lead over EPA's action level. Human skin does not absorb lead in water.

Should I have my water tested?

After you have taken the two precautions above for reducing the lead in water used for drinking or cooking, have your water tested. The only way to be sure of the amount of lead in your household water is to have it tested by a competent laboratory. Your water supplier may be able to offer information or assistance with testing. Testing is especially important for

apartment dwellers, because flushing may not be effective in high-rise buildings with lead-soldered central piping.

How do I have my water tested?

Water samples from the tap will have to be collected and sent to a qualified laboratory for analysis. Contact your local water utility or your local health department for information and assistance. In some instances, these authorities will test your tap water for you, or they can refer you to a qualified laboratory. You may find a qualified testing company under "Laboratories" in the yellow pages of your telephone directory. You should be sure that the lab you use has been approved by your State or by EPA as being able to analyze drinking water samples for lead contamination. To find out which labs are qualified, contact the:



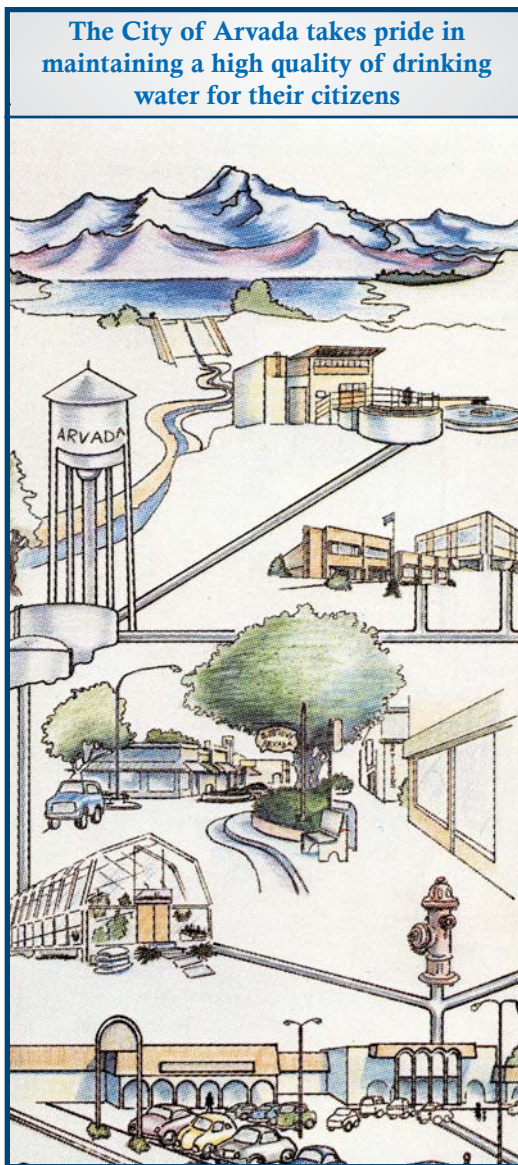
Colorado Department of Public Health and Environment

Colorado Department of Public Health and Environment at 303.692.3500

What are the testing procedures?

Arrangements for sample collection will vary. A few laboratories will send a trained technician to take the samples; but in most cases, the lab will provide sample containers along with instructions as to how you should draw your own tap-water samples. If you collect the samples yourself, make sure you follow the lab's instructions exactly. Otherwise, the results might not be reliable.

Make sure that the laboratory is following EPA's water sampling and analysis procedures. Be certain to take a "first draw" sample. (The first-draw sample taken after at least six hours of no water use from the tap tested - will have the highest level of lead.)



Aren't there types of water treatment devices that would work to remove lead?

Avoid being misled by false claims and scare tactics. Be wary of "free" water testing that is provided by the salesperson to determine your water quality; many tests are inaccurate or misleading. Research

the reputation and legitimacy of the company or sales representative. Verify claims of manufacturers by contacting the National Sanitation Foundation International or the Water Quality Association.

What about lead in sources other than drinking water?

As mentioned above, drinking water is estimated to contribute only 10 to 20 percent of the total lead exposure in young children. Ask your local health department or call EPA for more information on other sources of exposure to lead. A few general precautions can help prevent contact with lead in and around your home.

- Avoid removing paint in the home unless you are sure it contains no lead. Lead paint should only be removed by someone who knows how to protect you from lead paint dust. However, by washing floors, window sills, carpets, upholstery, and any objects children put in their mouths, you can get rid of this source of lead.
- Make sure children wash their hands after playing outside in the dirt or snow.
- Never store food in open cans. Keep it in glass, plastic or stainless steel containers. Use glazed pottery only for display if you don't know whether it contains lead.
- If you work around lead, don't bring it home. Shower and change clothes at work and wash your work clothes separately.

More Information and Tips

The Centers for Disease Control and Prevention have a very informative website located at: www.cdc.gov

What You Can do to Protect Your Family

If you suspect that your house has lead hazards, you can take some immediate steps to reduce your family's risk:

If you rent, notify your landlord of peeling or chipping paint.

Clean up paint chips immediately.

Clean floors, window frames, window sills, and other surfaces weekly. Use a mop, sponge, or paper towel with warm water and a general all-purpose cleaner or a cleaner made specifically for lead.

REMEMBER: NEVER MIX AMMONIA AND BLEACH PRODUCTS TOGETHER SINCE THEY CAN FORM A DANGEROUS GAS.

Thoroughly rinse sponges and mop heads after cleaning dirty or dusty areas.

Wash children's hands often, especially before they eat and before nap time and bed time.

Keep play areas clean. Wash bottles, pacifiers, toys, and stuffed animals regularly.

Keep children from chewing window sills or other painted surfaces.

Clean or remove shoes before entering your home to avoid tracking in lead from soil.

Make sure children eat nutritious, low-fat meals high in iron & calcium, such as spinach & dairy products.

Children with good diets absorb less lead.

In addition to day-to-day cleaning and good nutrition: You can temporarily reduce lead hazards by taking actions such as repairing damaged painted surfaces and planting grass to cover soil with high lead levels. These actions (called "interim controls") are not permanent solutions and will need ongoing attention.

To permanently remove lead hazards, you must hire a certified lead "abatement" contractor. Abatement (or permanent hazard elimination) methods include removing, sealing, or enclosing lead-based paint with special materials. Just painting over the hazard with regular paint is not enough.

Always hire a person with special training for correcting lead problems--someone who knows how to do this work safely and has the proper equipment to clean up thoroughly. Certified contractors will employ qualified workers and follow strict safety rules set by their state or the federal government.

Contact the National Lead Information Center (NLIC) for help with locating certified contractors in your area and to see if financial assistance is available.

1.800.424.LEAD 1.800.424.5323