

## **IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER**

1. The City of Harrison Water Department found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.
2. 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 can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.
3. Sources of lead: Lead is found throughout the environment in lead-based paint, soil, household dust, plumbing fixtures, household plumbing, service lines and certain types of porcelain and pewter. Lead is also found in drinking water, food and air. Lead is a heavy metal which becomes toxic once concentrations in the body exceed a certain level. The Centers for Disease Control and Prevention states that a blood lead level greater than 10 micrograms per deciliter is cause for concern.
  - (A) Lead in drinking water: Lead in drinking water, although rarely the sole cause of lead poisoning can significantly increase a person's total lead exposure, particularly the exposure of infants, who drink baby formulas and concentrated juices that are mixed with water. EPA estimates that drinking water can make up to 20 percent or more of a person's total exposure to lead.
    - (i) 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 as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome-plated brass faucets, and in some cases, pipes made of lead that connects your house to the water main (service line). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes, and other plumbing materials to 8.0%.
    - (ii) When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

- (iii) The majority of lead poisoning in children occurs under the age of twelve and comes from the ingestion of dust and chips from the deterioration of lead based paints. Additionally, children may also ingest soil contaminated with lead.
4. Steps you can take in the home to reduce the exposure to lead in drinking water: Testing the water is essential because you cannot see, taste, or smell lead in drinking water. Some local laboratories that can provide this service are listed at the end of this booklet. For more information on having your water tested please call (870) 741-6382

If a water test indicates that the drinking water drawn from a tap in your home contains lead above 15 ppb or 0.015 mg/L, then you should take the following precautions:

Let the water run from the tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours. The longer water resides in your home's plumbing the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder, usually about 15-30 seconds.

If your house has a lead service line to the water main, you may have to flush the water for a longer time, perhaps one minute, before drinking. Although toilet flushing or showering flushes water through a portion of your home's plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your family's health.

It usually uses less than one or two gallons of water and costs less than thirty-six (36) cents per month. To conserve water, fill a couple of bottles for drinking water after flushing the tap, and whenever possible use the first flush water to wash the dishes or water the plants. If you live in a high-rise building, letting the water flow before using it may not work to lessen your risk from lead. The plumbing systems have more and sometimes larger pipes than smaller buildings. Ask your landlord for help in locating the source of the lead and for advice on reducing the lead level.

Try not to cook with, or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and heat it on the stove. Never use water from the hot water tap to prepare baby formula.

Boiling water will not remove lead. As well, most home water purifiers will not remove lead.

The steps described above will reduce the lead concentrations in your drinking water. However, if a water test indicates that the drinking water coming from your tap contains lead concentrations in excess of 15 ppb after flushing, or after we have completed our actions to minimize lead levels, then you may want to take the following additional measures:

Purchase or lease a home-treatment device. Home treatment devices are limited in that each unit treats only the water that flows from the faucet to which it is connected, and all of the devices require periodic maintenance and replacement. Devices such as reverse osmosis

systems or distillers can effectively remove lead from your drinking water. Some activated carbon filters may reduce lead levels at the tap, however all lead reduction claims should be investigated. Be sure to check the actual performance of a specific home treatment device before and after installing the unit.

Purchase bottled water for drinking and cooking.

Remove loose lead solder and debris from the plumbing materials installed in newly constructed homes, or in homes in which the plumbing has recently been replaced, by removing the faucet strainers from all taps and running the water for 3 to 5 minutes. Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.

If your copper pipes are joined with lead solder that has been installed illegally since it was banned in 1986, notify the plumber who performed the work and request that he or she replace the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key looks shiny. In addition, notify the Arkansas Department of Health about the violation.

Determine whether or not the service line that connects your home or apartment to the water main is made of lead. The best way to determine if your service line is made of lead is by either hiring a licensed plumber to inspect the line or by contacting the plumbing contractor who installed the line. You can identify the plumbing contractor by checking the city's record of building permits that should be maintained in the files of the Harrison Code Enforcement Office: (870) 741-5535.

A licensed plumber can at the same time check to see if your home's plumbing contains lead solder, lead pipes, or pipe fittings that contain lead. The public water system that delivers water to your home should also maintain records of the materials located in the distribution system. If after our comprehensive treatment program is in place, the service line that connects your dwelling to the water main contributes more than 15 ppb to drinking water, we are required to replace the portion of the line we own.

If the line is only partially owned by the City of Harrison, we are required to provide the owner of the privately-owned portion of the line with information on how to replace the privately-owned portion of the service line, and offer to replace that portion of the line at the owner's expense. If we replace only the portion of the line that we own, we are also required to notify you in advance and provide you with information on the steps you can take to minimize exposure to any temporary increase in lead levels that may result from the partial replacement, to take a follow-up sample at our expense from the line within 72 hours after the partial replacement, and to mail or otherwise provide you with the results of that sample within 3 business days of receiving the results. Acceptable replacement alternatives include copper, steel, iron, and plastic pipes.

Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your

local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

You can consult a variety of sources for additional information. Your family doctor or pediatrician can perform a blood test for lead and provide you with information about the health effects of lead.

State and local government agencies that can be contacted include:

City of Harrison Water Department at (870) 741-6382 can provide you with information about your community's water supply, and a list of local laboratories that have been certified by EPA for testing water quality;

City of Harrison Code Enforcement Office at (870) 741-5535 can provide you with information about building permit records that should contain the names of plumbing contractors that plumbed your home; and

The Arkansas Department of Health at 1-800-235-0002 or the Local County Health Unit at (870) 741-5244 can provide you with information about the health effects of lead.

For more information, call us at (870) 741-6382 or visit our web site at [www.cityofharrison.com](http://www.cityofharrison.com). For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at <http://www.epa.gov/lead> or contact your health care provider.

The following is a list of laboratories in your area that you can call to have your water tested for lead:

American Interplex	501-224-5060
Sorrell's Research	501-562-8139