

The United States Environmental Protection Agency (EPA), the MS State Department of Health and **CITY OF JACKSON** are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the EPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). Under Federal law we are required to have a program in place to minimize lead in your drinking water.

This program includes:

1. Corrosion control treatment (treating the water to make it less likely that lead will dissolve into the water);
2. Source water treatment (removing any lead that is in the water at the time it leaves our treatment facility); and
3. A public education program.

If you have any questions about how we are carrying out the requirements of the lead regulation please give us a call at **601-960-2091**.

This brochure also explains the simple steps you can take to protect yourself by reducing your exposure to lead in drinking water.

**If your water was tested you will receive a copy of the results for your home.**

## HEALTH EFFECTS OF LEAD

Lead is a common metal found throughout the environment in lead-based paint, air, soil, household dust, food containers, certain types of pottery porcelain and pewter, and water.

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. In addition, a child at play often comes into contact with sources of lead contamination - like dirt and dust - that rarely affect an adult. It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths. Make sure you use only MDEQ lead safe certified contractors for renovations and repairs to your home to prevent the creation of lead paint dust.

## 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. EPA estimates that drinking water can make up 20% or more of a person's total exposure to lead.

## HOW LEAD ENTERS OUR WATER

Unlike most drinking water contaminants, lead is unusual 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 connect your house to the water main (service lines). 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%.

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.

## STEPS TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER

Despite our best efforts mentioned earlier to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high. To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. 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 bottom of this brochure. For more information on having your water tested, please call **CITY OF JACKSON at 601-960-2091**.

If a water test indicates that the drinking water drawn from a tap in your home does not exceed 15 ppb then no action is needed. If the test indicates that lead exceeds the action level of 15 ppb, then you should ask the water system the following questions:

**Does the service pipe at the street (header pipe) have lead in it?**

This information is very important. It determines which of the next two actions you should follow to protect your household's health.

**If the pipe in the street (header pipe) DOES NOT have lead, the lead in your tap water may be coming from fixtures, pipes, or elsewhere inside your home.**

Until you eliminate the source, you should take the following steps any time you wish to use tap water for drinking or cooking, especially when the water has been off and sitting in the pipes for **more than 6 hours**.

## FLUSH YOUR SYSTEM.

Let the water run from the tap on **COLD** for 1-2 minutes or until it gets noticeably colder before using it for drinking or cooking. The longer water resides in your home's plumbing, the more lead it may contain. 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.

Fill a couple of bottles for drinking, cooking, preparation of baby formula or other consumption after flushing the tap, and whenever possible use the first flush water to wash dishes or water plants.

If you live in a high-rise building, letting the water flow before using it may not lessen your risk from lead. This is because high rise 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.

**If the pipe at the street (header pipe) DOES contain lead, lead in the tap water may be coming from that pipe or connected pipes. It may also be coming from sources inside your home.**

You should take the following steps any time you wish to use tap water for drinking or cooking, especially when the water has been off and sitting in the pipes for **more than 6 hours**. **Please note that additional flushing is necessary.**

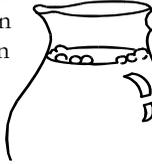
**Before** using any tap water for drinking or cooking, run high-volume taps (such as your shower) on **COLD** for 5 minutes or more; Then, run the kitchen tap on **COLD** for **1-2 additional minutes**.

Fill a clean container(s) with water from this tap. This water will be suitable for drinking, cooking, preparation of baby formula, or other consumption. To conserve

water, collect multiple containers of water at once (after you have fully flushed the water from the tap as described).

#### USE ONLY COLD WATER FOR COOKING AND DRINKING.

Try not to cook with, or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. Do not use hot water for preparing baby formula. If you need hot water, draw water from the cold tap and heat it on the stove. Boiling water does not reduce lead levels.



#### REMOVE LOOSE SOLDER AND DEBRIS FROM PLUMBING MATERIALS.

Remove loose solder and debris from the plumbing materials installed in newly constructed homes, or homes in which the plumbing has recently been replaced. To do this, remove the faucet strainers from all taps and run the water from 3-5 minutes. Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.

#### IDENTIFY AND REPLACE LEAD SOLDER.

If your copper pipes are joined with lead solder that has been installed illegally since it was banned in 1986, notify the plumber who did 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 Mississippi State Department of Health, Bureau of Public Water Supply about the violation.

#### 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.

#### IF LEAD LEVEL PERSISTS

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 treatment device before and after installing the unit.

#### PURCHASE BOTTLED WATER FOR DRINKING AND COOKING.

#### FOR MORE INFORMATION

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 JACKSON** at 601-960-2091 can provide you with information about your community's water supply or visit our website at [www.jacksonms.gov](http://www.jacksonms.gov). Mississippi State Department of Health, Bureau of Public Water Supply at 601-576-7518 can provide you with information about the health effects of lead and a list of local laboratories that have been certified by EPA for testing water quality. Any county health department can provide you with information on how you can have your child's blood tested.

You may also visit:

[www.epa.gov/lead](http://www.epa.gov/lead).  
<http://www.cdc.gov/nceh/lead/tips/water.htm>

The following is a list of some State approved laboratories that you can call to have your water tested for lead.

Micro-Methods Laboratories, Inc.- 228-875-6420  
MSDH- Public Health Laboratory- 601-576-7582

**If your water was tested you will receive a copy of the results for your home.**

# Lead in Drinking Water

