

Important Info About Lead in your Drinking Water

The Pittsburgh Water & Sewer Authority (PWSA) found elevated levels of lead in drinking water in some homes.

Lead can cause serious health problems, especially for pregnant women and young children. Please read this information carefully to see what you can do to reduce lead in your drinking water.

(CONTINUE READING FOR DETAILED TEST RESULTS)

1. What are the health effects of lead?

According to the U.S. Environmental Protection Agency (EPA):

“Lead can cause serious health problems if too much enters your body from drinking water and 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.”

Additional sources of information on health effects of lead, including the Centers for Disease Control and Prevention, are listed below.

2. What are the sources of lead?

Lead is a common metal found in the environment. Although most lead exposure occurs when people eat paint chips and inhale lead-contaminated dust, or ingest lead-contaminated residential soil, drinking water is one possible source of lead exposure. In addition, lead can be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the work place and from certain hobbies (lead can be carried on clothing or shoes).

EPA estimates that 10 to 20 percent of a person’s potential exposure to lead may come from drinking water. Infants who consume mostly formula mixed with lead-containing water can receive 40 to 60 percent of their exposure to lead from drinking water.

Don’t forget about other sources of lead such as lead paint, lead dust, and lead in soil. Wash your children’s hands and toys often as they can come into contact with dirt and dust containing lead.

3. How does lead get into drinking water?

PWSA has not experienced issues with lead in water leaving the water treatment plant. Lead enters drinking water mainly through corrosion in:

- **Lead full or partial service lines** (that connect some properties to the water mains)
- **Interior lead pipe**
- **Interior galvanized pipe** (especially if there was, or is, a full or partial lead service line)
- **Interior copper pipe with lead soldered joints** (installed prior to 1988)
- **Interior plumbing fixtures** (purchased or installed prior to January 2014 before the effective date of new definition of “lead-free”)

Not all PWSA customers have lead service lines, and not all customers with lead service lines have tested above the “action” level. Homes built before 1986 are more likely to have lead pipes, fixtures and solder, but newer homes may also be at risk. The federal Safe Drinking Water Act establishes the definition of “lead-free” as no more than 0.25 percent lead (as a weighted average) for pipes, fittings & fixtures and 0.2 percent lead for solder and flux. Many manufactures use third-party certification programs to certify that their plumbing products meet the definition of “lead-free.” Products manufactured prior to January 2014 may contain higher amounts of lead.

4. What can I do?

If you have specific health concerns, consult your health care provider.

EPA suggests that you may want to ask your health care provider about testing children to determine levels of lead in their blood.

Here are some steps you can take to reduce exposure to lead in drinking water:

- **Run your water to flush out lead.** If water hasn't been used for several hours, run water for 15-30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking. This process flushes lead-containing water from pipes.
- **Use cold water for cooking and preparing baby formula.** Do not cook with or drink water from the hot water tap. Do not use water from the hot water tap to make baby formula. Lead dissolves more easily in hot water.
- **Do not boil water to remove lead.** Boiling water will not reduce lead.
- **Look for alternative sources or treatment of water.** The NSF Consumer Affairs Office has developed a NSF Water Fact Kit for a consumer that includes specific information about lead in drinking water at: www.nsf.org/consumer/newsroom/ket_water.asp. 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. Water treatment device information can be found at www.nsf.org/consumer/drinking_water/dw_treatment.asp?program=Waterre.
- **Identify if your plumbing fixtures contain lead.** There are lead check swabs that can detect lead on plumbing surfaces such as solder and pipes. These swabs can be purchased at plumbing and home improvement stores. Consider having lead-containing pipes and fixtures replaced, or use the precautions listed above.
- **Contact PWSA if you decide to replace your lead service line** for information about coordinating efforts.

5. Can I test my tap water for lead?

PWSA offers residential customers a free test for lead. After requesting a test kit, you will be provided with a plastic bottle and instructions on how to draw water under very specific guidelines. For more information, please e-mail servicelines@pgh2o.com or call 412.782.7554. You may also contact private labs for testing. More information on testing alternatives can be found at our website at www.pgh2o.com/lead-facts. Additional information on testing for lead can be found at www.nsf.org/consumer/newsroom/ket_water.asp.

6. What did PWSA find and what is an “action” level?

PWSA recently tested 100 pre-selected sites in its service area that were known to have lead service lines. EPA has established an action level for lead of 15 parts per billion (ppb). This means that water providers must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the homes sampled. The action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that include water quality parameter monitoring, corrosion control treatment, source water monitoring, public education, and lead service line replacement. An action level exceedance is not a violation. While a majority of those sites sampled resulted in no detection of lead or amounts less than the action level, 17 percent of the sites exceeded the action level. One of the 17 samples that exceeded the standard is calculated to be the 90th percentile test result and for this set of tests, that number is 22 ppb. Another set of tests will be conducted by December of 2016.

7. What is being done?

PWSA adds anti-corrosion chemicals at the treatment plant to help to address this problem. A study is underway to determine if the current application is the most effective for reducing lead corrosion. PWSA will also continue to (1) test tap water for lead, (2) educate customers about lead, and (3) replace any lead service lines it owns and will work with customers who want to replace lead service lines that they own. Since corrosion happens in service lines and interior plumbing that contain lead, water providers cannot take care of the entire problem.



8. Where can I get more information?

For more information, visit the PWSA website at www.pgh2o.com/lead-facts or call the Water Quality Office at 412.782.7554; there are also a number of other on-line sites that provide valuable information about lead and drinking water.

If you do not have access to a computer, visit your local library branch and they will help you connect for free. PWSA can also provide paper copies of information.

THE FOLLOWING ARE SOME SUGGESTED SITES:

Visit the Allegheny County Health Department's website at: www.achd.net/lead

Visit EPA's website at: www.epa.gov/lead

Visit DEP's website at: www.dep.pa.gov/Citizens/My-Water/PublicDrinkingWater/Pages/Lead-in-Drinking-Water.aspx

Visit the Centers for Disease Control's website at: www.cdc.gov/nceh/lead/tips/water.html

Call the National Lead Information Center at 800-424-LEAD, or Contact your health care provider.