

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

THE CITY OF BIRMINGHAM HAS EXCEEDED THE ACTION LEVEL FOR LEAD. Lead can cause serious health and development 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.

This notice is brought to you by the City of Birmingham.
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Health Effects of Lead

Lead can cause serious health and development problems. 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. Although other sources of lead exposure exist, such as lead paint, and lead contaminated dust, the City of Birmingham is contacting you to reduce your risk of exposure to lead in drinking water. If you have questions about other sources of lead exposure, please contact the Oakland County Health Division at 248.858.1280 or health@oakgov.com or visit their website at www.oakgov.com/health.

Sources of Lead

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure due to the widespread use of lead in plumbing materials. EPA estimates that drinking water can make up 20 percent or more of a person's potential exposure to lead. Infants who consume mostly mixed formula can receive 40 percent to 60 percent of their exposure to lead from drinking water.

The action level is 15 parts per billion (ppb) for lead and 1.3 parts per million (ppm) for copper. The action level is a measure of corrosion control effectiveness. It is not a health-based standard. To meet the requirements of the Lead and Copper Rule, 90 percent of the samples collected must be below the action level. The following table summarizes the lead and copper data collected during the most recent monitoring period:

Most Recent Sampling Information

Action Levels	90 th Percentile Value	Range of results (minimum-maximum)	# of samples used for 90 th Percentile
Lead 15 parts per billion (ppb)	17 ppb	1 - 150 ppb	32
Copper 1.3 parts per million (ppm)	0.1ppm	0.013 – 0.92 ppm	32

Lead can enter drinking water when pipes, solder, home/building interior plumbing, fittings and fixtures that contain lead corrode. Corrosion is the dissolving, or wearing away, of metal caused by a chemical reaction between water and your plumbing. Several factors affect the amount of lead that enters the water, including the water quality characteristics (acidity and alkalinity), the amount of lead in the pipes, plumbing and/or fixtures, and the frequency of water use in the home.

Some plumbing products such as service lines, pipes and fixtures may contain lead. The infographic below demonstrates where sources of lead in drinking water could be in your home. Older homes may have more lead unless the service line and/or plumbing has been replaced. Homes built...

- **Before the 1960s** are more likely to have lead service lines, lead pipes, fixtures, and/or solder that contain lead.
- **Before 1988** are likely to have fixtures and/or solder that contains lead.
- **Between 1996 and 2014** are likely to have fixtures that contain up to eight percent lead but were labelled “lead-free.”
- **In 2014 or later** still have potential lead exposure. “Lead free” was redefined to reduce lead content to a maximum of 0.25 percent lead in fixtures and fittings. Fixtures that are certified to meet NSF Standard 61 meet this more restrictive definition of “lead free.”

Leaded solder and leaded fittings and fixtures are still available in stores to use for non-drinking water applications. Be careful to select the appropriate products for repairing or replacing drinking water plumbing in your home.

Galvanized plumbing can be a potential source of lead. Galvanized plumbing can absorb lead from upstream sources like a lead service line. Even after the lead service line has been removed, galvanized plumbing can continue to release lead into drinking water over time. Homes that are served by a lead service line should consider replacing galvanized plumbing inside the home.

Drinking water is only one source of lead exposure. Other common sources of lead exposure are lead-based paint, and lead-contaminated dust or soil. Because lead can be carried on hands, clothing, and/or shoes, sources of exposure to lead can include the workplace and certain hobbies. Wash your children’s hands and toys often as they can come in contact with dirt and dust containing lead. In addition, lead can be found in certain types of pottery, pewter, food, and cosmetics. If you have questions about other sources of lead exposure, please contact the Oakland County Health Division at 248.858.1280 or health@oakgov.com or visit their website at www.oakgov.com/health.

Particulate Lead

Lead results can vary between tests. A single test result is not a reliable indicator of drinking water safety. Two different types of lead can be present in drinking water, soluble lead and particulate lead. Soluble lead is lead that dissolves because of a chemical reaction between water and plumbing that contains lead. Particulate lead is dislodged scale and sediment released into the water from the sides of the plumbing and can vary greatly between samples. Disturbances, such as replacing a water meter, construction and excavation activities, or home plumbing repairs can cause particulates to shake free from inside pipes and plumbing. Particulate lead is a concern because the lead content can be very high. Lead particulate could be present in a single glass of water, but not present in water sampled just before or after. During construction, monthly aerator cleaning and using a filter certified to reduce lead are recommended to reduce particulate lead exposure.

Check whether your home has a lead service line.

Homes with lead service lines have an increased risk of having high lead levels in drinking water. Please contact the City of Birmingham Engineering Department at 248.530.1840 for more information about your home’s service line.

Steps You Can Take to Reduce Your Exposure to Lead in Your Water

1. **Run your water to flush out lead.** The more time water has been sitting in your home’s pipes, the more lead it may contain. Therefore, if your water has not been used for several hours, run the water before using it for drinking or cooking. This flushes lead-containing water from the pipes.

- If you **do not** have a lead service line, run the water for 30 seconds to two minutes, or until it becomes cold or reaches a steady temperature.

- If you **do** have a lead service line, run the water for at least five minutes to flush water from both the interior building plumbing and the lead service line.

Additional flushing may be required for homes that have been vacant or have a longer service line. Your water utility can help you determine if longer flushing times are needed.

- 2. Use cold water for drinking and cooking.** Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water.
- 3. Use cold water for preparing baby formula.** Do not use water from the hot water tap to make baby formula. If you have a lead service line, consider using bottled water or a filter certified to reduce lead to prepare baby formula.
- 4. Do not boil water to remove lead.** Boiling water will not reduce lead levels.
- 5. Consider using a filter to reduce lead in drinking water.** Public health recommends that any household with a child or pregnant woman use a certified lead filter to reduce lead from their drinking



System Tested and Certified by NSF International against NSF/ANSI Standard 53 for the reduction of Lead.

water. Look for filters that are tested and certified to NSF/ANSI Standard 53 for lead reduction. Some filter options include a pour-through pitcher or faucet-mount systems. If the label does not specifically mention lead reduction, check the Performance Data Sheet included with the

device. Be sure to maintain and replace the filter device in accordance with the manufacturer's instructions to protect water quality. If your household has a child or pregnant woman and are not able to afford the cost of a lead filter, please contact your County Health Department.

- 6. Consider purchasing bottled water.** The Food and Drug Administration (FDA) regulates bottled water. The bottled water standard for lead is 5 ppb.
- 7. Get your child 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. For more information contact the Oakland County Health Division at 248.858.1280 or health@oakgov.com or visit their website at www.oakgov.com/health.
- 8. Identify older plumbing fixtures that likely contain lead.** Older faucets, fittings, and valves sold before 2014 may contain higher levels of lead, even if marked "lead-free." Faucets, fittings, and valves sold after January 2014 are required to meet a more restrictive "lead-free" definition but may still contain up to 0.25 percent lead. When purchasing new plumbing materials, it is important to look for materials that are certified to meet NSF standard 61. The EPA prepared a brochure that explains the various markings that can indicate that materials meet the new "lead free" definition: <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100LVYK.txt>.
- 9. Clean your aerator.** The aerator on the end of your faucet is a screen that will catch debris. This debris could include particulate lead. The aerator should be removed at least every six months to rinse out any debris.
- 10. Test your water for lead.** If you are unsure if you have a lead or copper water line to your property, you can contact the City of Birmingham's Engineering Department at 248.530.1840 to find out. Additionally, if you are interested in having your home tested for lead, you can contact the Oakland County Health Division at the following:

North Oakland Health Center
1200 N. Telegraph Rd.
Pontiac, MI 48341
248-858-1280

South Oakland Health Center
27725 Greenfield Rd.
Southfield, MI 48076
248-424-7000

A comprehensive list of laboratories that test for lead can be found on the State of Michigan's website at: https://www.michigan.gov/documents/lead/Lead_Copper_Lab_Certs_6.1.18_633434_7.pdf.

What Happened? What is Being Done?

The Michigan Safe Water Drinking Act was created to ensure our state has safe drinking water standards. In June of 2018, the State of Michigan took a more proactive approach to addressing lead in the water by enacting new Lead and Copper Rules that establish action levels (AL) for lead and copper based on a 90th percentile level of tap water samples. An action level exceedance is not a violation but triggers other requirements to minimize exposure to lead and copper in drinking water, including water quality parameter monitoring, corrosion control treatment, source water monitoring/treatment, public education, and lead service line replacement.

Every six months, the City of Birmingham conducts testing of tap water in homes for lead and copper.

This summer, we collected samples from 32 of homes with known lead service lines. Of these, five (5) homes were above the Action Level for lead (15ppb). The first testing under these new rules was completed in September of 2019. Because Birmingham's 90th percentile of testing resulted in a level of 17 ppb, which is above the action level of 15 ppb, the City has become more active in its testing and education initiatives.

The City of Birmingham does not have lead in its water mains. However, lead can enter drinking water when it is in contact with pipes, solder, home/building interior plumbing, fittings and fixtures that contain lead. The Detroit Water and Sewer Department that supplies water to the City of Birmingham does employ corrosion control treatment to reduce lead leaching.

This is the first of several informational notices you will receive about lead in drinking water. We will be collecting a minimum of 64 samples every six months and reviewing the results to determine if corrective actions are necessary to reduce corrosion in household plumbing.

COMMUNITY WATER FORUM

A community forum on water will be held on Thursday, November 14, 2019 from 6 to 9 pm at Seaholm High School located at 2436 W. Lincoln, Birmingham, MI 48009. Representatives from the Michigan Department of Environment, Great Lakes and Energy (EGLE), Department of Health and Human Services (DHHS), South Oakland County Water Authority (SOCWA) and the Oakland County Health Division along with City representatives will be on hand to answer questions about your water.

For More Information

Visit the City of Birmingham website at www.bhamgov.org/leadtesting or for more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at www.epa.gov/lead, call the National Lead Information Center at 800-424-LEAD, or contact your healthcare provider.

CONCERNED ABOUT LEAD IN YOUR DRINKING WATER?

Sources of **LEAD** in Drinking Water

