

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

THE CITY OF BENTON HARBOR'S WATER SUPPLY 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 Benton Harbor.
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Please read this entire document to get all the information!

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, Benton Harbor 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 Berrien County Health Department at 800-815-5485.

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

Lead

Action Level 15 ppb	Summer 2018	Jan-June 2019	July-Dec 2019	Jan-June 2020	July-Dec 2020	Jan-June 2021
90 th percentiles	22 ppb	27 ppb	32 ppb	23 ppb	24 ppb	24 ppb
Range of results	0 - 60 ppb	0 - 59 ppb	0 - 72 ppb	0 - 440 ppb	0 - 240 ppb	0 - 889 ppb
# of sites used for the 90 th percentile	30	46	39	63	66	78

Copper

Action Level 1.3 ppm	Summer 2018	Jan-June 2019	July-Dec 2019	Jan-June 2020	July-Dec 2020	Jan-June 2021
90 th percentiles	0.1 ppm	0 ppm	0 ppm	0 ppm	0 ppm	0.1 ppm
Range of results	0 - 0.1 ppm	0 - 0.1 ppm	0 - 0.1 ppm	0 - 0.2 ppm	0 - 0.2 ppm	0 – 7.6 ppm
# of sites used for the 90 th percentile	30	46	39	63	66	78

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 Berrien County Health Department at 800-815-5485.

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 [insert name of water supply] 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. **Everyone can consider using a filter to reduce lead in drinking water.** The Department of Health and Human Services (DHHS) recommends that any household with a child or pregnant woman use a



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

certified lead filter to reduce lead from their drinking 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 the Berrien County Health Department at 800-815-5485.

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, the Berrien County Health Department at 800-815-5485, or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.

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?Dockkey=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.** Call us at The City Water Payment Center: (269) 927-8400 press 2, then 3. If you have already taken advantage of the City's Free Lead and Copper testing, your results have been mailed to you or will be once available.

What Happened? What is Being Done?

Since the initial action level exceedance in October 2018, the City of Benton Harbor, along with many community partners, have been taking several steps to inform residents and reduce exposure to lead. The City of Benton Harbor has successfully started the replacement the City's lead service lines, has introduced new corrosion control treatment at the City's Water Plant, provided filters through the Berrien County Health Department, and provided ongoing support and education for residents for water testing and understanding how they can limit lead exposure.

The city has begun studying service line materials and also removed a number of lead service lines in recent years. In October 2020, the U.S. Environmental Protection Agency (EPA) awarded the City of Benton Harbor a nearly \$5.6 million grant. This funding along with additional state grants and loans will help remove lead service lines and support a study to improve the city's lead corrosion control treatment to protect public health in Benton Harbor. Residents will see this work take place throughout the City in the coming years, starting in 2021.

The City is committed to continuing to take all corrective actions, as well as partnering with the Benton Harbor Water Outreach Task Force. The Task Force will continue to provide regular updates about lead outreach efforts and lead service lines. Members of the Task Force will include a representative from the Benton Harbor Community Water Council, the City of Benton Harbor, Berrien County Health Department, Andrews University, Freshwater Future, and the Benton Spirit Community Newspaper, along with the Office of the Clean Water Public Advocate, Michigan Department of Environment, Great Lakes, and Energy, and the Michigan Department of Health and Human Services. If you are interested in helping to support the Task Force, contact EGLE-CleanWater@Michigan.gov.



THE PROBLEM: Benton Harbor's water distribution system, which are the pipes that help deliver water to your home, is about 100 years old. It is known that a high number of lead service lines were installed in the first half of the 20th century and many homes built before the 1960s are likely to have lead service lines or pipes that pose a health risk to residents.



HOW TO PROTECT YOUR FAMILY: Obtain a lead reducing filter and maintain it by regularly cleaning and changing the cartridge. Berrien County Health Department provides free water filters and replacement cartridges to City of Benton Harbor residents. While the city is replacing lead service lines, you should routinely replace your filter

cartridge. For help with getting a free water filter or replacement cartridges, call 800-815-5485 or go to: berriencounty.org/1599/City-of-Benton-Harbor.



HOW IS THE CITY FIXING THE PROBLEM: The City began replacing lead service lines in 2019 and will continue this project until all lead lines have been replaced. Since these replacements will take some time, the city has installed corrosion control treatment to help limit corrosion of the current infrastructure and reduce lead levels in the meantime. The State of Michigan requires public water supplies to replace all lead service lines by 2041.



GET YOUR WATER MOVING: If you have not used your water for several hours, flushing your pipes may reduce the amount of lead in your drinking water. To get your water moving, you can do anything that uses water including washing dishes, doing load of laundry, and taking a shower. For more information about flushing, visit Michigan.gov/MiLeadSafe.

Looking for more information? Visit <https://bhcity.us/water/> for an overview of the history of the City of Benton Harbor's water system and current efforts to reduce lead in drinking water. Additional information regarding lead in drinking water and how to reduce risk of lead exposure can be found at Michigan.gov/MiLeadSafe, Michigan.gov/EGLEleadpublicadvisory, or by calling 1-800-662-9278. If you are operating a food establishment such as a store, restaurant, bar, or food manufacturing establishment please visit this page www.michigan.gov/mdardleadinfo for specific information for food firms.

For More Information

Contact the Berrien County Health Department at 800-815-5485, the Benton Harbor Water Department at, 269-927-8440, or visit our website at www.bhcity.us or www.michigan.gov/MiLead. 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.

Is it OK to use lead-containing water to wash my hands?		
Yes! Human skin does not easily absorb lead from water.		
	<p>Even if you have lead in your drinking water, you can wash your hands with water that is not filtered or flushed.</p> <p>Public Health advises residents to wash hands often and for at least 20 seconds with soap and water to help prevent the spread of coronavirus (COVID-19).</p>	<p>You can use water that has not been filtered or flushed for:</p> <ul style="list-style-type: none"> ○ Showering or bathing (avoid swallowing the water) ○ Washing hands, dishes, or clothes ○ Cleaning
To learn more please visit, Michigan.gov/coronavirus or Michigan.gov/MiLeadSafe		

CONCERNED ABOUT LEAD IN YOUR DRINKING WATER?

Sources of **LEAD** in Drinking Water

