

All the Drinking Water Customers of the City of Benton Harbor, please open and read this Notice

**The City of Benton Harbor's Water Department Presents
A Public Education Document Regarding:**

IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

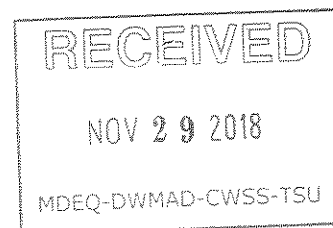
The Benton Harbor Water Department; found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this notice closely to see what you can do to reduce lead in your drinking water.

This notice is brought to you by the Benton Harbor Water Department. Water Supply Serial Number MI0600 Date: November 30, 2018.

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 it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

**Local
Postal Customer
Benton Harbor, MI. 49022**



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EDDM Retail

Benton Harbor Water Plant
200 E. Wall Street
Benton Harbor, MI. 49022

Sources of Lead

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure.

Action Levels	90 th Percentile Value	Range of results (minimum-maximum)	# of samples used for 90 th Percentile
Lead 15 parts per billion (ppb)	22 ppb	0 to 60	27 th of 30 Samples
Copper 1.3 parts per billion (ppb)	61 ppb	1.5 to 86	27 th of 30 Samples

Other sources of lead exposure for most individuals are lead-based paint, lead-contaminated dust or soil, and some plumbing materials. In addition, lead can be found in certain types of pottery, pewter, fixtures, food, and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies (lead can be carried on clothing or shoes).

Plumbing products such as pipes and fixtures, may contain lead. Homes built before 1988 are more likely to have plumbing containing lead, but newer homes may also contain lead. Beginning in 2014, the law reduced the allowable level of lead in these products to a maximum of 0.25 percent to be labeled as "lead free." Older fixtures may contain higher levels of lead.

Benton Harbor's water source is Lake Michigan and it does not contain lead. The water is treated and pumped to the community from the Plant in the SW corner of Jean Klock Park. Some of the water mains in the streets are old enough to be cast iron with lead sealed joints. However, the service lines to the homes could be made of lead and if those lines are not in use for several hours, the lead may enter drinking water. Lead, Copper, and other heavy metals do not dissolve very quickly. Water sitting still for several hours may dissolve lead and other heavy metals. Corrosion has never been an issue as the Lake water is considered Scale Forming, from the Moderately hard (around 160 ppb Calcium Carbonate Hardness) Lake Michigan water.

Most of the Benton Harbor homes were built during the City's Industrial days from early 1900's to the 1960's. Homes built before 1986 are more likely to have plumbing containing lead. New homes may also have lead; even "lead-free" plumbing may contain some lead.

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.

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.

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 three to 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.

2. **Use cold water for cooking and preparing baby formula.** Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.

3. **Do not boil water to remove lead.** Boiling water will not reduce lead levels. *However if you follow step 1 above, you can boil your water for cooking and Coffee; as there is no significant lead in your piping once you have flushed out the stagnant water.*

4. **Look for alternative sources or treatment of water.** You may want to consider purchasing bottled water or a water filter. 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 for information on performance standards for water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.

5. **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.

[Items 6 and 7, below, may be omitted if the water supply is a facility, such as a prison or a hospital, where the population served is not capable of or is prevented from making improvements to plumbing or installing point of use treatment devices or if the supply provides water as part of the cost of services provided and does not separately charge for water consumption.]

6. **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.

7. **Identify if your plumbing fixtures contain lead.** Faucets, fittings, and valves may contribute lead to drinking water unless they have been replaced since 2013. Any new connecting plumbing and fittings should meet the 2014 lead-free definition. If you replace your faucet, buy a new one that meets the 2014 lead-free definition. Visit the National Sanitation Foundation Web site at www.nsf.org to learn more about lead-containing plumbing fixtures.

What Happened? What is Being Done?

This 2018 sampling year had to be changed quite a bit, because many of the homes were gone or vacant. Several homes were added, mostly by volunteers, in order to get the required number of 30 homes. Some of those added homes, measured high and some of the previous homes measured high for lead and some for copper. There were 7 homes that had lead results higher than the 15ppb Action Level (AL). When the sample results were reported to the MDEQ, the action level was exceeded for Lead at 22ppb.

The City has provided the Public Announcement of the exceedance; and free lead and copper testing. The 1st results were for a group of 159 homes. 17% of these homes showed lead levels higher than the AL for lead. These homeowners received a letter with their results and the results are listed on the City's new web site at www.bhcity.us

Water Service tap records the City has is mostly information about their location in the tree lawn. And essentially nothing about the materials they were made of. City crews through the last couple of years have had to dig up many of these lines due to leaks and many were found to be made of lead. At a Commission meeting, Lead lines received some attention and it was determined, based on the dig ups, that maybe 30% of the lines in the City were made of lead.

The MDEQ in 2018 has awarded the City with a Lead Service line grant for identification and some full replacements. Work towards these 2 tasks is nearly ready to begin.

Benton Harbor began lead and copper sampling the same as all communities in 1991. At that time, there was very limited information about lead service lines. A pool of 60 homes from the Benton Harbor Housing Commission had been properly inspected and all of the qualified as proper Tier 1 sites. In 1993 Benton Harbor qualified for reduced monitoring. Since then every 3-years, Benton Harbor sampled 30 sites as required. Occasionally, Benton Harbor would have 1 or 2 sites above the Action Level of 15 ppb. The sampling pool has changed frequently through the years.

For More Information please contact Mike O'Malley, Water Treatment Plant Superintendent, at his email : momalley@cityofbentonharbormi.gov or try the water plant phone: 269 927-8471 press 2
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 or contact your health care provider.

Additional Important Information About Benton Harbor Drinking Water The 3rd Quarter TOC removal levels were not met.

The City of Benton Harbor (City) Water Treatment Plant was recently cited for a treatment technique violation for inadequate removal of Total Organic Carbon (TOC). We routinely monitor our source water from Lake Michigan for TOC, the amount of carbon found in natural organic compounds. TOC removal is calculated as the ratio between the actual TOC removal and the TOC removal requirements. Our TOC removal ratio during the 1st; 2nd and now the 3rd quarter of 2018 was below 1.00 which is less than the standard Safe Drinking Water Act requirement of 1.00.

The TOC levels in source water and treated water are monitored quarterly to measure TOC levels and the removal efficiency of the treatment process. Historically, TOC levels in the source water have been low enough that the determination of TOC removal efficiency has not been necessary. However, in the past year, TOC levels in Lake Michigan have increased triggering removal requirements. Normal treatment processes were not able to meet the TOC removal requirements in the first quarter of 2018.

What does this mean?

This is not an emergency. This notice is required to be distributed to all customers within 30 days of the violation being identified. If a situation arises where the water is not safe to drink you will be quickly notified within 24 hours.

TOC has no health effects; however, TOC provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the Maximum Contaminant Level (MCL) may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

All drinking water standards for disinfection byproducts in the water delivered to our customers have been met. The water is safe for drinking and all other uses and no alternative water sources are needed.

So, you know, the **Water from Benton Harbor has never exceeded the TTHM or HAA5s MCLs.** Since the testing began in 2008. Benton Harbor recently tested for the alternative value of a constituent called (SUVA) specific ultra violet absorbance; of the raw Lake Michigan Water. The result was 0.93 which qualifies the City to be exempt from any potential TOC result in the 4th Quarter of 2018. The rule states that a SUVA result of less than 2.0 is allowed and Exemption of TOC for that quarter. I am apologize, I did not do this SUVA in the 1st; 2nd and 3rd qtrs. of 2018.

What is being done?

We are investigating the reason for the increased TOC in our source water and are taking steps to improve the removal efficiency of our treatment process. And have found them for now. And, are looking at potential treatments. You will be notified if a future violation occurs.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information, please contact Mike O'Malley, Water Treatment Plant Superintendent, at his email : momalley@cityofbentonharbormi.gov or try the water plant phone: 269 927-8471 press 2

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