

IMPORTANT INFORMATION ABOUT LEAD AND COPPER IN YOUR DRINKING WATER

The City of Parchment water supply was recently found to have levels of perfluoroalkyl and polyfluoroalkyl substances (PFAS) above the Lifetime Health Advisory level (LHA) of 70 parts per trillion (ppt), as set by the U.S. Environmental Protection Agency (EPA). Because of this discovery, the Parchment City wells have been disconnected from the distribution system, and the city has changed source water to the City of Kalamazoo.

The water provided by the City of Kalamazoo meets the LHA requirement of 70 ppt. Extensive flushing was done on the Parchment distribution system. You also completed flushing in your home to remove the water containing PFAS. This flushing may have dislodged lead and copper particles in your water service line or home plumbing. Water sampling at homes on the Parchment distribution system since the change in water source showed that detectable levels of lead and copper are present in 95% of samples. In some homes lead was detected above 15 ppb, or copper was detected above 1.3 ppm (State action levels). For the most recent set of samples collected between 8/21/2018 and 8/24/2018, all results for lead and copper were lower than the action levels.

Please read this document to learn how to reduce your exposure to lead and copper, and some options you have if you are concerned about lead or copper in your home.

Why are lead and copper present in my drinking water?

The major source of lead and copper in drinking water is corrosion of household plumbing systems. The City of Kalamazoo source water does not contain lead.

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 in fixtures and faucets. Beginning in 2014, the law reduced the allowable level of lead in these fixtures, faucets and other plumbing materials to a maximum of 0.25 percent. These fixtures can be labeled as “lead free.” Older fixtures may contain higher levels of lead.

Lead and copper leaches into water through corrosion – a dissolving or wearing away of metal caused by a chemical reaction between water and your plumbing. Leaching primarily occurs from pipes, but fixtures and faucets, and brass fittings can also be a source. Lead and copper typically leach into your water during times when water is not flowing in your pipes, such as overnight, or while you are away from home at work or school. This lead and copper is dissolved in your water, and you will not be able to see it.

Tiny particles of lead and copper can also break loose from piping or fixtures and end up in your drinking water. During the source water change from Parchment wells to the City of Kalamazoo, a lot of water flowing at a high speed was flushed through the distribution pipes, in a different direction and at a different pressure than what was normal for the Parchment distribution system. A lot of water also passed through pipes in your home as you flushed your house. Some particles may have broken loose during this flushing process, causing higher lead and copper levels at some homes.

The amount of lead and copper in your water also depends on the types and amounts of minerals in the water, how long the water stays in the pipes, the amount of wear in the pipes, the water's acidity and its temperature. The DEQ, City of Parchment and City of Kalamazoo are working together to test for these factors and will adjust water treatment as needed to make sure all of the factors affecting corrosion remain stable in the Parchment distribution system.

I am concerned about lead and copper in my home, what options do I have as a homeowner/resident?

1. Clean the aerator on your faucets—instructions are attached on how to do this. Lead and copper particles that break loose can become trapped in your faucet aerator. Cleaning the aerator regularly can help remove these particles and reduce your exposure.
2. Additional steps You Can Take to Reduce Your Exposure to Lead and Copper in Your Water.
 - a. Run your water to flush out lead and copper. If it hasn't been used for several hours, run water for 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking. This helps flush lead and copper-containing water from the pipes.
 - b. Use cold water ONLY for cooking, drinking, and preparing baby formula. Do not cook with or drink water from the hot water tap; lead and copper dissolve more easily into hot water. Do not use water from the hot water tap to make baby formula.
 - c. Do not boil water to remove lead and copper. Boiling water will not reduce lead or copper levels.
 - d. Use a filter to reduce lead and copper levels. If the lead or copper levels in your home are above the action level, 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 (meets NSF/ANSI Standards 42 and 53) 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 according to the manufacturer's instructions to protect water quality.
 - e. 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.
 - f. Test your water for lead and copper. Call the City of Kalamazoo at 269-337-8550 to find out how to get your water tested for lead and copper. Testing is available at no charge for customers of the Parchment and Kalamazoo water supplies.
 - g. Check whether your home has a lead service line. Homes with lead service lines have a higher risk of having high lead levels in drinking water. Please contact the City of Parchment for more information and let us know if you find a lead service line in your home.
 - h. Identify if your plumbing fixtures contain lead. Faucets, fittings, and valves may contribute lead to drinking water unless they have been replaced since 2014. 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. Additional information is enclosed from the EPA on how to identify lead free fixtures.

Are there any health impacts from drinking water with lead and copper?

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.

Copper is an essential nutrient, but some people who drink water containing copper above the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper above the action level over many years could suffer liver or kidney damage. People with Wilson's disease should talk with their doctor.

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.

Please contact your doctor, Kalamazoo County Health and Community Services at (269) 373-5210, or the Michigan Department of Health and Human Services at 1-800-648-6942 if you have questions on other sources of lead, or the health impacts from lead and copper.

What is the City of Parchment, Michigan Department of Environmental Quality (MDEQ) (and others) doing to protect the water supply and residents?

Extensive water chemistry testing began as soon as the source water changed from the Parchment wells to the City of Kalamazoo water. The City of Parchment, City of Kalamazoo, and MDEQ, in consultation with the EPA Region 5 office and EPA Office of Research and Development, are monitoring this data daily. Both the City of Parchment and the City of Kalamazoo treat their water with phosphate compounds to prevent corrosion. Although they both have treatment, they use different compounds, so we are carefully watching the phosphate residuals in the distribution system and adjusting amounts of these compounds to make sure the corrosion treatment and other water chemistry remains stable. Beyond PFAS, water chemistry and lead and copper testing, additional sampling has been done for disinfection byproducts and bacteria. The testing meets the requirements of the Safe Drinking Water Act.

To further research the source water change, MDEQ started lead and copper testing on homes within the Parchment distribution system. Eight houses were selected by the City of Parchment, four with copper service lines, and four with lead service lines. DEQ personnel will work individually with the City of Parchment and homeowners/residents to review interior plumbing, verify service line material, and collect a series of samples to assess the presence of lead and copper from the tap all the way to the water main. This will help the cities and MDEQ make decisions on future water treatment and plans for lead service line removal.

For More Information

Please call the City of Parchment at 269-349-3785 or visit our Web site at www.parchment.org. 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.