



LEAD IN DRINKING WATER

FREQUENTLY ASKED QUESTIONS

Does Detroit's water have lead in it?

The water leaving Detroit's water treatment plants, operated by the Great Lakes Water Authority (GLWA), does not contain lead, but lead can be released into drinking water from lead service lines and home plumbing as the water moves from the water mains to your tap. Detroit homes built prior to 1945 are most likely to have a lead pipe that connects the home to the water main, known as a lead service line. It is possible, but less likely, for homes built after 1945 to have lead service lines. The lead in lead service lines, and household plumbing (pipes and faucets) can dissolve or break off into water and end up in tap water. The water provided to the Detroit Water and Sewerage Department (DWSD) customers contains a corrosion inhibitor to reduce leaching from lead service lines and other lead components, but lead can still be present in water at the tap.

What are the lead in drinking water sampling results for 2019?

This summer, DWSD collected water samples from 55 homes with lead service lines. The 90th percentile of samples was 10 parts per billion (ppb) for lead, which is under the federal and state action level of 15 ppb. This was an increase from DWSD's last report of 4 ppb in 2016. This increase is due to a change in the testing protocol required by the State of Michigan in the Revised Lead and Copper Rule. Fifty-four homes tested recorded below the action level of 15 ppb. Only one home tested above the action level. The first liter sampled from the home exceeding the action level was at 114 ppb. The fifth liter sample at the same home tested was 6 ppb. The resident was notified, and provided flushing instructions, a pitcher filter with replacement cartridges, instruction on cleaning faucet aerators, and a plumbing inspection by DWSD personnel to identify components that need to be replaced. Also, DWSD will provide secondary testing to see if the results change after the recommended actions. DWSD will continue to work with this homeowner to help minimize lead in their drinking water.

Why does DWSD have higher lead results than last time DWSD collected samples?

The new Michigan Lead and Copper Rule (enacted in June 2018) – the most stringent in the nation – changed the way that lead samples are collected throughout the state of Michigan. Now, five sequential sample bottles are collected, instead of one as was required in the old rule. In the past, DWSD collected only the first liter of water out of the tap. Under the new rule, five liters, in five separate, sequential sample bottles, are collected. The first liter represents water from household plumbing and fixtures, and the fifth liter is more likely to represent water from the lead service line. Only the first and the fifth liter samples are analyzed. The new sampling technique more accurately represents the range of lead in the drinking water. Under the revised Michigan Lead and Copper Rule, it's likely most communities will have an increase in their results versus past years due to the change in sampling method.

What are the primary sources of lead in homes linked to health problems?

Drinking water is not known to be the sole cause of elevated blood lead levels in Detroit homes. Older homes can have many other sources of lead exposure including paint, dust and soil which cause concern. Lead-based paint and lead-contaminated dust and soil are the greatest hazards to children and are nearly always identified as the major cause for children who test with an elevated blood lead level. Lead-based paint and lead-contaminated dust and soil are especially hazardous to children six years old and under due to their tendency to put things in their mouths. According to the Centers for Disease Control and Prevention, because no safe blood level has been identified for young children, all sources of lead exposure for children should be controlled or eliminated. Talk with your doctor if you have concerns about exposure to lead. Children six years old and younger can receive free testing at the City of Detroit Health Department. For more information call 313-876-0133 or visit www.detroitmi.gov/leadsafe.

What health problems can lead cause?

Lead exposure can have many health impacts. The greatest concern for health is the impact of lead on the developing brain of children under 6 years old. Other significant health impacts include damage to blood cells, the kidneys, and the cardiovascular system. Pregnant women, fetuses, and young children are at highest risk for lead exposure from drinking water. Lead has been associated with premature birth and increased possibility of miscarriage. Young children take up more lead from drinking water and consuming other lead contaminated material than adults, putting them at higher risk. Infants less than six months of age are most vulnerable to lead exposure from drinking water compared with other sources of lead.

How many samples are required and how often?

The sample size is determined by population. The Michigan Department of Environment, Great Lakes and Energy (EGLE, formerly MDEQ) requires DWSD to sample 50 homes with lead service lines determined by a formula in the Lead and Copper Rule. This means at least a total of 100 samples (the first and fifth liters) are used to calculate the 90th percentile of lead in drinking water. In summer 2019, DWSD sampled 55 single family homes. Prior to the revised Lead and Copper Rule, the sampling was to take place every three years; now it's every year. DWSD's last sampling was in 2016.

How are sample sites selected?

The Lead and Copper Rule requires water suppliers to sample the same sites as the most recent year for compliance testing, as long as the house still has a lead service line. If the pipe was replaced since the prior sampling year or the resident is unresponsive, then new sites need to be added to reach the minimum of 50 samples.

What is the 90th percentile?

A water supply exceeds the action level if more than 10 percent of all samples is over the action level. The current level is 15 ppb lead in drinking water. Michigan will reduce the action level to 12 ppb in 2025.

What is DWSD doing to protect us?

The water provided to DWSD customers contains a corrosion inhibitor to reduce leaching from lead service lines and other lead components, but lead can still be present in water at the tap. DWSD is committed to complying with the new Lead & Copper Rule and is replacing lead service lines throughout the entire city as part of planned water main replacement projects. To date under its asset management program, DWSD has replaced more than 500 lead service lines.

What is a service line?

A service line connects the water main in the street to the house. Under the new Lead and Copper Rule, DWSD will replace the entire lead service line (from the water main to inside the home) with copper, at DWSD's expense, and the department is doing so during planned water main replacement projects.

How do I know if I have a lead service line?

Service lines can be made of plastic, copper, lead or galvanized steel. Most lead is found at single family or duplex homes because the service line is under two-inches in diameter. To find out if you have a lead service line, get a magnet and a coin, and then follow these steps:

1. Locate where the service line comes into your home, near the water meter and your shut-off valve. Look for the pipe running between your shut-off valve and either the wall or the floor.
2. If the magnet sticks to the pipe, it's galvanized steel. If the galvanized pipe was or is connected to lead, it does need to be replaced.
3. Gently scratch the surface of the pipe with the coin. If the scraped area is shiny, is silver in color and the magnet doesn't stick, it's made of lead. It may have a bulge near the valve. If so, it is a lead pipe.
4. If it is copper in color and the magnet doesn't stick, it's a copper pipe and does not need to be replaced.
5. If the pipe is white or grey and the piping is joined with a clamp, screw or glue, it's plastic and does not need to be replaced.

PLEASE NOTE: Homes may have a partial lead service line or other lead components between the water main and the house that cannot be identified inside the house.

When can I get my lead service line replaced?

DWSD is committed to complying with the revised Michigan Lead and Copper Rule. The lead service lines will be replaced in coordination with DWSD's scheduled water main replacement projects. Each neighborhood will be notified in advance before work begins and will be asked to sign an agreement allowing DWSD to replace the portion of the service line on your private property. Until your lead service line is replaced, please follow the recommendations below for reducing lead in your drinking water.

How can I reduce lead in my drinking water?

- Run the tap (flush your pipes). If water has gone unused in the home for six hours or more, run the water for 30 seconds to 2 minutes before drinking. If you have a lead service line, let the water run 3-5 minutes to flush water from both the interior building plumbing and the lead service line. Lead levels are likely at their highest when water has been sitting in the pipe for several hours. Flushing allows you to draw fresh water from the main. You can also flush your pipes by running the dishwasher or washing a load of clothes, then running the water at the tap until it is cold.
 - Running a faucet for up to five minutes for flushing uses approximately 10 gallons of water – based on current DWSD rates this flushing costs the customer \$3.30, on average, per month on their bill.
- The most reliable method is to use a water filter certified to reduce lead in the water. If you have a lead service line or if there is a pregnant woman or children age 6 and under in your home, use a filter that meets NSF standard 53 for lead removal for drinking and cooking.

Filter Label Examples:



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

- Always use a filter or bottled water if you are preparing formula for an infant.
- Clean your aerators monthly. Aerators are small attachments at the tips of faucets which regulate the flow of water. They can accumulate small particles of lead in their screens.
- Use cold water for cooking and drinking because hot water dissolves lead more quickly, resulting in higher levels in water.
- Do not boil your water to remove lead. Boiling water will increase the amount of lead in the water that's left. In the event DWSD issues a boil water advisory due to low water pressure (such as caused by a large water main break), water users in the designated advisory area will be advised to boil water before using for cooking, drinking and brushing your teeth. Residents with lead service lines should only boil filtered water — not water directly from the tap.

Does DWSD provide free filters?

Residents will receive a free pitcher filter with a replacement cartridge (sufficient for six months) when DWSD begins water main replacement construction on their street, and during compliance sampling if it's discovered that the drinking water in the house exceeds the action level for lead.

When should I use filtered or unfiltered water?

- Use only cold filtered or flushed water for drinking, cooking, and for rinsing fruits and vegetables. Do not use hot water for these activities.
- Use cold filtered or bottled water for making powdered baby formula.
- Use cold filtered or flushed water for brushing teeth.
- You can use unfiltered or unflushed water for showering or bathing. Avoid swallowing the water.
- You can use unfiltered or unflushed water for washing your hands, dishes, clothes, floors, and countertops.

Is it safe to shower in water that contains lead?

Yes, your water is safe for showering and bathing. Because lead is not absorbed through the skin, bathing or showering in water containing lead is not considered a health risk. However, avoid swallowing the water.

Can my pets drink water with lead?

Lead can impact animals the same way it does humans. Because domestic animals consume a relatively high volume of water relative to their body weight, pet owners with lead in their home plumbing may want to take precautions.

How do I know if lead is in my drinking water?

If you have a lead service line, you should assume there is a risk of lead in your drinking water and always take precautions when drinking or cooking with water. Because lead is present in most household plumbing fittings and fixtures, you may still want to have your water tested for lead even if you do not have a lead service line.

How can I get my water tested?

To request for your water to be tested, please visit www.detroitmi.gov/leadsafe and search "lead and copper sample request form." If you do not have Internet access, please call the Detroit Lead Safe Resource Line.

**DETROIT LEAD SAFE RESOURCE LINE:
313-964-9300**

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