

November 23, 2020

Dear Water Customer,

I am providing you with two important documents that explain how you can protect yourself and your loved ones from high levels of lead in drinking water. You are receiving these documents because two homes out of the ten homes sampled had elevated lead levels. This warrants further action to investigate the issue.

As your Water Resources Commissioner, my highest priority is protecting the health and safety of the people I serve. I want you to know my office and Royal Oak Township are here for you. We are a resource for you and want to ensure you have all the necessary information to safeguard yourselves and your families. That's why it's critically important for your health and safety that you carefully review these documents.

In addition to valuable tips, this packet contains information about free water filters that are available to qualifying residents.

Free water filters are available to qualifying homes through Oakland County and the State of Michigan. More information on which homes qualify is on the next page.

## Drive-through water filter distribution event

Location: Township's Recreation Center at 21272 Mendota, Ferndale

Date and Time: December 1, 2020 from 2 p.m. to 5 p.m.

If you have questions, please contact my office at 248-452-9158 or wrcwater@oakgov.com. For additional information, visit www.oakgov.com/RoyalOakTwpWater.

Thank you,

Jim Nash





# Royal Oak Township Public Advisory November 23, 2020 Drinking Water Information - Lead Action Level Exceedance

Royal Oak Township and the Oakland County Water Resources Commissioner's Office (WRC) are dedicated to building trust, protecting public health, improving the environment, and delivering quality services.

On behalf of Royal Oak Township, the WRC conducts periodic testing of tap water for lead and copper in some Royal Oak Township homes. We recently collected water samples from 10 homes. Two of the 10 locations sampled exceeded the State's lead action level. The "action level" is not a health-based standard, but it is a level that triggers additional actions including, but not limited to, increased water sampling and educational outreach to customers in accordance with the Michigan Safe Drinking Water Act. There is no safe level of lead in drinking water. The health-based standard for lead is miniscule – zero parts per billion.

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) regulates an action level for lead in drinking water. EGLE's action level for lead is based on the 90th percentile of lead results collected in each round of sampling. Two out of ten homes had elevated lead levels and warrants further action to investigate the issue. Royal Oak Township's lead 90th percentile is 22 parts per billion which exceeds the action level of 15 parts per billion.

We want you to know that both Royal Oak Township and the WRC are here for you. We want to make sure you have all the necessary information to protect yourself and your family. There are a few steps you can take immediately to reduce your exposure to lead. Lead can cause serious health problems if too much gets into your body from drinking water and other sources. Lead can enter drinking water when it comes in contact with pipes, solder, home/building interior plumbing, fittings, and fixtures that contain lead. Homes with lead service lines have an increased risk of having high lead levels in drinking water. The longer water has been sitting in your home's pipes, the more lead it may contain. We have included a comprehensive public education document about lead in drinking water.



**Run your water before drinking.** Run the water for five minutes until it becomes cold or reaches a steady temperature.



**Use cold water for drinking and cooking.** Do not cook with or drink water from the hot water tap. When the lead action level is exceeded, the Oakland County Health Division recommends using a filter (look for filters labeled NSF/ANSI 53 and 42 compliant) or bottled water for pregnant women, children under 18, and especially when preparing baby formula.



**Clean your aerator**. The aerator is that little screen at the tip of the faucet where the water comes out. It should be removed monthly by unscrewing it to rinse out any debris that may include lead.



**Don't boil water to remove lead**. Boiling water is recommended from time-to-time if a major water pipe breaks. Boiling water helps remove bacteria but will **not** reduce lead levels.



**Identify plumbing fixtures that may contain lead.** Older faucets, fittings, and valves sold before 2014 may contain higher levels of lead — even if they are 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.



**Get your water tested**. Call 248-452-9158 to receive a lead testing kit.





#### Free Drive-Through Water Filter Distribution Event

Free water filters are available to qualifying homes through Oakland County and the State of Michigan.

Royal Oak Township will host a drive-through water filter distribution event on December 1, 2020 from 2 p.m. to 5 p.m. at the Township's Recreation Center at 21272 Mendota, Ferndale. If you cannot attend the event, filters will be available by calling the Oakland County Health Division at 248-424-7000.

Free water filters are available to qualifying homes. To qualify, you must be

- connected to Royal Oak Township's water supply,
- have a pregnant woman and/or child(ren) under the age of 18 living or spending considerable time in the home, and
- be on WIC, Medicaid, or be willing to say that you cannot afford the cost of a water filter.

## **Ongoing Testing and Outreach Action Plan**

- We will test the water every six months.
- We are increasing the number of required samples from 10 to 20 homes.
- We will be sending a comprehensive public education document about lead in drinking water.

#### **Non-Residential Locations**

If you are operating a food establishment such as a store, restaurant, bar, or food processing establishment please visit this page <a href="https://www.michigan.gov/mdardleadinfo">www.michigan.gov/mdardleadinfo</a> for specific information.

#### Questions?

If you have questions, please contact us at 248-452-9158 or <a href="wrcwater@oakgov.com">wrcwater@oakgov.com</a>. Our top priority is the safety and wellbeing of you and your families. For additional information and resources, visit <a href="www.oakgov.com/RoyalOakTwpWater">www.oakgov.com/RoyalOakTwpWater</a>.

# Is it OK to use lead-containing water to wash my hands?

**Yes!** Human skin does not easily absorb lead from water.



Even if you have lead in your drinking water, you can wash your hands with water that is not filtered or flushed.

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).

You can use water that has not been filtered or flushed for:

- 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





#### IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

ROYAL OAK TOWNSHIP 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 on behalf of Royal Oak Township by the Oakland County Water Resources Commissioner's Office (WRC).

Water Supply Serial Number: 5840

Distribution Date: 11/23/20

## **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, Royal Oak Township 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 248-474-7000.

#### 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 <sup>th</sup> Percentile Value	Range of results (minimum-maximum)	# of samples used for 90 <sup>th</sup> Percentile
Lead 15 parts per billion (ppb)	22 ppb	0 - 39 ppb	10
Copper 1.3 parts per million (ppm)	0.1 ppm	0 – 0.2 ppm	10

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 248-474-7000.

#### 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 WRC 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 water. Look for



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

filters that are tested and certified to NSF/ANSI Standard 53 for lead reduction. Some filter options include a pour-through pitcher or faucetmount 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 (248-474-7000) 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?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. Call us at 248-452-9158 to find out how to get your water tested for lead.

# What Happened? What is Being Done?

On behalf of Royal Oak Township, WRC conducts testing of tap water in homes for lead and copper.

This summer, we collected samples from 10 homes. Two homes were above the Action Level for lead.

Royal Oak Township does have lead in its service lines. Lead can enter drinking water when it is in contact with pipes, solder, home/building interior plumbing, fittings and fixtures that contain lead. Royal Oak Township





receives its water from the Great Lakes Water Authority, and they employ corrosion control treatment to reduce lead leaching.

If you are a Royal Oak Township water customer and would like your service line inspected or would like to have your drinking water tested for lead, contact WRC at 248-452-9158.

This is the first of several informational notices you will receive about lead in drinking water. We will be collecting 20 samples every six months and reviewing the results to determine if corrective actions are necessary to reduce corrosion in household plumbing.

#### For More Information

Call us at 248-452-9158 or visit our website at <a href="www.oakgov.com/RoyalOakTwpWater">www.michigan.gov/deqleadpublicadvisory</a>. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at <a href="www.epa.gov/lead">www.epa.gov/lead</a>, call the National Lead Information Center at 800-424-LEAD, or contact your healthcare provider.

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# CONCERNED ABOUT LEAD IN YOUR DRINKING WATER?

# Sources of **LEAD** in Drinking Water

Copper Pipe with Lead Solder: Solder made or installed before 1988 contained high lead levels.

Lead Service Line: The service line is the pipe that runs from the plumbing. Lead service lines can be a major source of lead contamination in water

Faucets: Fixtures and fittings inside your home contain varying lead content depending on the age of the fixture.

Galvanized Pipe: Lead particles can attach to the surface of galvanized pipes and service lines. Over time, the particles can enter your drinking water, causing elevated lead levels.

#### Lead Goose Necks:

Goose necks and pigtails are shorter lead pipes that connect the lead, copper or galvanized service lines to the water main.

WATER MAIN

WATER O