

DRINKING WATER TESTS

These water tests are available at our Environmental Health Division office. Sample bottles must be picked up from our office, filled at the water source, and then delivered back to our office. Other tests are also available; this list contains the tests most commonly performed in Washtenaw County. Call 734-222-3800 with questions.

Test	Cost	Possible Source & Problems	Should I test for it?	Recommended Level
Arsenic	\$15	Occurs naturally in some areas of Washtenaw County. Long-term exposure can cause cancer, thickening and discoloration of the skin, problems with blood vessels, high blood pressure, heart disease, nerve effects including numbness and/or pain, and interference with some important cell functions. Short-term exposure to very high levels may cause stomach pain, nausea, vomiting, diarrhea, headaches, and weakness.	Required testing for all new and replacement wells, and for all residential wells of homes being sold in Washtenaw County. Recommend testing annually if a home has an arsenic treatment unit, or if previous tests showed any level of detection.	Less than 0.010 mg/L (Less than 10 ppb)
Coliform, total (Bacteria)	\$15	Can indicate the water source or the water supply piping system has been contaminated. Coliform bacteria occur naturally in the environment and in the feces of humans and animals. Most coliform bacteria do not cause illness, but they can indicate that other disease-causing organisms may be present in the water. Contaminated drinking water can cause diarrhea, cramps, nausea, headaches, or other symptoms. These pathogens may pose a special health risk for infants, young children, and people with severely compromised immune systems.	Required testing for all new and replacement wells, and for all residential wells of homes being sold in Washtenaw County. Recommend testing annually. Also test if you notice a sudden change in water taste, odor, or appearance; water is cloudy after rain; top of well is flooded; contamination is near well (sewage system, barnyard, etc.); water supply system was repaired or serviced; or, if household members have unexplained stomach flu-like symptoms.	Coliform bacteria absent (0 or non-detect)
Hardness, total	\$11	Occurs naturally from dissolved limestone. Decreases the lather formation of soap. Can cause scaling of water fixtures. High levels cause soap scum and low levels cause corrosion. Aesthetic concern; not a health risk.	Consider testing if you are thinking about installing a water softening or treatment system. This information can be helpful for the treatment company.	Less than 250 mg/L
Iron	\$13	Occurs naturally as a mineral from sediment and rocks. Causes water to taste bitter. Causes brownish stains on laundry and plumbing fixtures. Aesthetic concern; not a health risk.	Consider testing if you are thinking about installing a water softening or treatment system. This information can be helpful for the treatment company.	Less than 0.3 mg/L
Lead	\$15	Drinking water sources in Washtenaw County do not have high levels of naturally occurring lead. However, lead can leach into water supplies through lead pipe and lead-based solder. Lead products were phased out over time and are more likely in homes built before 1986. In children, lead can cause behavior and learning issues, lower IQ, hyperactivity and slowed growth. In adults, it can cause high blood pressure and kidney problems.	Consider testing if you have concerns that your plumbing may contain lead pipes or solder, or if a member of the household has elevated blood lead levels.	Less than 0.015 mg/L
Manganese	\$11	Occurs naturally as a mineral from sediment and rocks. Often associated with high iron. Causes dark brown or black stains on plumbing fixtures and brownish stains on laundry. Can make water filter look black, or black flecks to appear in water. Impacts taste of water. Relatively non-toxic to animals but toxic to plants at high levels.	Consider testing if you are thinking about installing a water softening or treatment system. This information can be helpful for the treatment company.	Less than 0.05 mg/L
Nitrate	\$14	Usually associated with manmade sources, including fertilizer, feedlots, and sewage. In Washtenaw County, most often found in areas of denser development (likely from septic systems), or rural areas with heavy agricultural activity (likely from fertilizer and feedlots). More likely to be found in shallower or sandy (“unprotected”) aquifers. Can cause blue baby syndrome (methemoglobinemia) in infants under six months, pregnant women, and certain sensitive people.	Required testing for all new and replacement wells, and for all residential wells of homes being sold in Washtenaw County. Consider testing if you have a concern about well vulnerability to contamination. Testing for nitrates is a good, inexpensive first step.	Less than 10 mg/L

Test	Cost	Possible Source & Problems	Should I test for it?	Recommended Level
Sodium	\$11	Can be naturally occurring from leaching of salt deposits. Water softeners can add sodium to drinking water. Sodium-free softener salts are available. High levels of sodium can be a health risk for some people.	Consider testing if a member of the household is on low-sodium diet.	For low-sodium diet, less than 20 mg/L For taste, less than 30-60 mg/L

Other Common Water Tests (not available through our Environmental Health Division office)

Test
<p>Partial Chemistry (Chloride, Fluoride, Hardness, Iron, Nitrates, Nitrites, Sodium and Sulfate)</p> <p>Partial Chemistry tests are run through the State of Michigan Drinking Water Laboratory. You must order the test bottle from the lab, and then mail the sample to Lansing with your payment. Partial chemistry test cost is \$18. The box includes a cold pack that you must freeze and then include with the bottle when mailing to keep the water sample cold. Call the lab at 517-335-8184 with questions or to order.</p>
<p>1,4-Dioxane</p> <p>There is an area in Washtenaw County, which includes parts of Scio Township and western Ann Arbor, where the chemical 1,4-dioxane is in an underground contamination plume. This contamination is a concern because 1,4-dioxane is a possible human carcinogen, and wells near the area draw groundwater for use in homes and businesses. Many homes and businesses are already tested for 1,4-dioxane. If your water is not currently being tested and you would like to test your water at your own expense, 1,4-dioxane tests are available through three laboratories. Please contact the laboratories for information about pricing, detection limits, obtaining bottles, and sampling procedures. Only the EGLE Drinking Water Laboratory provides copies of results to the Washtenaw County Health Department. If you use any other laboratory and you would like your results to be kept on file with Washtenaw County, please contact Jennifer Conn at connj@washtenaw.org or 734-222-3855.</p> <ul style="list-style-type: none"> Ann Arbor Technical Services, 290 S. Wagner, Ann Arbor, MI 48103, 734-995-0995, info@AnnArborTechnicalServices.com EGLE Drinking Water Laboratory, Lansing, MI 48909, 517-335-8184, EGLE-RRD-DW-BOTTLES@michigan.gov SimpleLab, gosimplelab.com/test-search, hello@gosimplelab.com, specify Method 522 in notes section when ordering
<p>PFAS</p> <p>Perfluoroalkyl and polyfluoroalkyl substances (PFAS), such as perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), are part of a group of chemicals used globally during the past century in manufacturing, firefighting, and thousands of common household and other consumer products. In recent years, experts have become increasingly concerned by the potential effects of high concentrations of PFAS on human health. Residents who wish to test their drinking water for PFAS should use a lab certified for Method 537. Three EPA certified laboratories have provided information on test kits available to homeowners. Please contact the laboratories for information about obtaining bottles and sampling procedures.</p> <ul style="list-style-type: none"> EGLE Drinking Water Laboratory in Lansing, Michigan offers an 18-analyte test kit. Kit can be ordered by calling 517-335-8184. South Central Connecticut Regional Water Authority in New Haven, Connecticut offers a 6-analyte kit and a 14-analyte kit. Kits can be ordered by calling 203-401-6743. Anatek Labs in Moscow, Idaho offers a 6-analyte test kit. Kit can be ordered by calling 208-883-2839. Northern Lake Service in Crandon, Wisconsin offers a 12-analyte PFAS kit. Kit can be ordered by calling 715-478-2777.

Common Drinking Water Issues

Issue
<p>Color</p> <p>Can be caused by decaying leaves, plants, organic matter, copper, iron, and manganese. Not typically health concerns. Aesthetically displeasing. Water treatment systems can generally greatly improve color or staining issues.</p>
<p>Insects</p> <p>Old, broken, or missing well caps can allow insects like earwigs to enter the well casing. Insects can bring bacteria into the well, possibly contaminating the water. Insect parts can show up in water or be trapped in faucet screens.</p>
<p>Odor</p> <p>Certain odors may indicate organic or non-organic contaminants that originate from municipal or industrial waste discharges or from natural sources. Diesel or gas odor indicates that water should be tested for volatile organic compounds (VOCs). Rotten-egg odor often indicates iron bacteria in the water. Rotten-egg odor could also indicate that the water is high in hydrogen sulfide gas, which can be an issue with some wells in the southeast part of Washtenaw County.</p>
<p>Taste</p> <p>Some substances such as certain organic salts produce a taste without an odor. Iron and manganese can alter the taste of water. Can cause bitter taste in brewed beverages like tea and coffee. Water treatment systems can generally greatly improve taste.</p>
<p>Grit/Sand</p> <p>Can indicate that well is failing and has started to pull materials into the well.</p>

Please contact our Environmental Health Division office at 734-222-3800 with questions or concerns about your drinking water.