2024 Drinking Water Report

Making Safe Drinking Water

City of Duluth strives to provide you with safe and reliable drinking water that meets federal and state water quality requirements. The purpose of this report is to provide you with information on your drinking water and how to protect our precious water resources.

For questions about water quality, or information about how you can take part in decisions that may affect it, contact Lindsey Seifert-Monson, Water Quality Compliance Officer, at 218-730-4160 or lmonson@duluthmn.gov.

The U.S. Environmental Protection Agency (EPA) sets safe drinking water standards. These standards limit the amounts of specific contaminants allowed in drinking water. This ensures that tap water is safe to drink for most people. The U.S. Food and Drug Administration regulates the amount of certain contaminants in bottled water. Bottled water must provide the same public health protection as public tap water.

Both tap and bottled water may contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at 1-800-426-4791.

Definitions

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

AVG: Average

EPA: Environmental Protection Agency

MCL (Maximum contaminant level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum contaminant level goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum residual disinfectant level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum residual disinfectant level goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A (Not applicable): Does not apply.

NTU (Nephelometric Turbidity Units): A measure of the cloudiness of the water (turbidity).

pCi/l (picocuries per liter): A measure of radioactivity.

ppt (parts per trillion): One part per trillion is like one drop in one trillion drops of water, or about one drop in an Olympic sized swimming pool. ppt is the same as nanograms per liter (ng/l).

ppb (parts per billion): One part per billion in water is like one drop in one billion drops of water, or about one drop in a swimming pool. ppb is the same as micrograms per liter (µg/l).

ppm (parts per million): One part per million is like one drop in one million drops of water, or about one cup in a swimming pool. ppm is the same as milligrams per liter (mg/l).

PWSID: Public water system identification.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

Drinking Water Monitoring

We work with the Minnesota Department of Health (MDH) to test drinking water for more than 100 contaminants. It is not unusual to detect contaminants in small amounts. No water supply is ever completely free of contaminants. Drinking water standards protect Minnesotans from substances that may be harmful to their health.

Learn more by visiting the Minnesota Department of Health's webpage Basics of Monitoring and testing of Drinking Water in Minnesota (https://www.health.state.mn.us/communities/environment/water/factsheet/sampling.html).

Unregulated Substances/Emerging Contaminants

In addition to testing drinking water for contaminants regulated under the Safe Drinking Water Act, we sometimes also monitor for contaminants that are not regulated. Unregulated contaminants do not have legal limits for drinking water. MDH, EPA, and other health agencies may have developed comparison values for some of these compounds. Some of these comparison values are based solely on potential health impacts and do not consider our ability to measure contaminants at very low concentrations nor the cost and technology of prevention and/or treatment. Sample data are listed along with comparison values in the table.

Detection of a regulated or unregulated contaminant should not necessarily cause concern. The significance of a detection should be determined according to current health effects information. We are often still learning about the health effects, so this information can change over time.

A person drinking water with a contaminant at or below the comparison value is at little to no risk for harmful health effects. If the level of a contaminant is above the comparison value, people in certain age groups, such as infants, children, and the elderly, and those with special health conditions, may need to take extra precautions. We are notifying you of the unregulated/emerging contaminants we have detected as a public education opportunity.

Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether the Agency should consider regulating those contaminants in the future.

More information is available:
MDH's A-Z List of Contaminants in Water (https://www.health.state.mn.us/communities/environment/water/contaminants/index.html)

Fourth Unregulated Contaminant Monitoring Rule (UCMR 4) (https://www.health.state.mn.us/communities/environment/water/com/ucmr4.html)

Fifth Unregulated Contaminant Monitoring Rule (https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule)

UCMR5 Program Overview Factsheet (https://www.epa.gov/system/files/documents/2022-02/ucmr5-factsheet.pdf)

In the past year, your drinking water may have tested for additional unregulated contaminants as part of the Fifth Unregulated Contaminant Monitoring Rule. Results are still being processed and will be made available at UCMR 5 analytical results (https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule-data-finder).

How to Read the Water Quality Data Tables

The tables below show the contaminants we found in 2024, or the most recent time we sampled for that contaminant. They also show the levels of those contaminants and the EPA limits. Substances that we tested for but did not find are not included in the tables.

We sample for some contaminants less than once a year because their levels in water are not expected to change from year to year. If we found any of these contaminants the last time we sampled for them, we included them in the tables below with the detection date.

We may have done additional monitoring for contaminants that are not included in the Safe Drinking Water Act. To request a copy of these results, call the Minnesota Department of Health at 651-201-4700 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

Some contaminants are monitored regularly throughout the year, and rolling (or moving) annual averages are used to manage compliance. Because of this averaging, there are times where the Range of Detected Test Results for the calendar year is lower than the Highest Average or Highest Single Test Result, because it occurred in the previous calendar year.

Some People Are More Vulnerable to Contaminants in Drinking Water

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. The developing fetus may also be more vulnerable to contaminants in drinking water. These people or their caregivers should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

2024 Monitoring Results

Regulated Substance	EPA MCLG	EPA MCL	Highest Avg or Singe Result	Range of Results	Violation	Typical Sources
Nitrate	10 ppm	10 ppm	0.36 ppm	N/A	No	Runoff, septic tanks, natural sources
Combined Radium	0 pCi/L	5 pCi/L	1 pCi/L	N/A	No	Erosion of natural deposits
Total Trihalomethanes	N/A	80 ppb	17.6 ppb	8.50-27.60 ppb	No	By-product of drinking water disinfection
Total Haloacetic Acids	N/A	60 ppb	14.2 ppb	5.80-22.60 ppb	No	By-product of drinking water disinfection
Total Chlorine	4.0 ppm	4.0 ppm	1.73 ppm	1.62-1.79 ppm	No	Additive for disinfection
Total Organic Carbon	N/A	Variable removal required	42% Removal	13-100 % Removal	No	Natural sources
Fluoride*	4.0 ppm	4.0 ppm	0.73 ppm	0.69-0.71 ppm	No	Natural sources, additive for dental

Regulated Substance	EPA MCLG	EPA 90th Percen-tile AL	90th Percentile	Homes Exceed-ing AL	Range of Results	Violation	Typical Sources
Lead (8/4/22)	0 ppb	15 ppb	9.63 ppb	0 of 30	0-12.5 ppb	No	Corrosion of household plumbing
Copper (8/4/22)	0 ppm	1.3 ppm	0.04 ppm	0 of 30	0-0.07 ppm	No	Corrosion of household plumbing

Regulated Substance	Removal Required	Lowest Monthly Compliance	Highest Result	Violation	Typical Sources
Turbidity	Treatment technique	96%	0.975 NTU	No	Soil runoff

Unregulated Substance	Comparison Value	Highest Avg or Single Result	Range of Results	Note
Sodium	20 ppm	8.32 ppm	N/A	Home water softening may increase sodium levels
Sulfate	500 ppm	9.62 ppm	N/A	

*Fluoride is nature's cavity fighter, with small amounts present naturally in many drinking water sources. Peer-reviewed scientific evidence shows that fluoridation reduces tooth decay and cavities in children and adults, even when there is availability of fluoride from other sources, such as fluoride toothpaste and mouth rinses. Since studies show that optimal fluoride levels in drinking water benefit public health, municipal community water systems adjust the level of fluoride in the water to an optimal concentration between 0.5 to 0.9 ppm to protect your teeth. Fluoride levels below 2.0 ppm are not expected to increase the risk of a cosmetic condition known as enamel fluorosis.

Drinking Water Sources

Groundwater, found in aquifers beneath the surface of the land, supplies 75% of Minnesota's drinking water. Surface water from lakes, rivers, and stream supplies the remaining 25%. City of Duluth draws your drinking water from Lake Superior.

Contaminants can get in drinking water sources from the natural environment and from people's daily activities. There are five main types of contaminants in drinking water sources.

Microbial contaminants, such as viruses, bacteria, and parasites. Sources include sewage treatment plants, septic systems, agricultural livestock operations, pets, and wildlife.
Inorganic contaminants include salts and metals from natural sources (e.g. rock and soil), oil and gas production, mining and farming operations, urban stormwater runoff, and wastewater discharges.
Pesticides and herbicides are chemicals used to reduce or kill unwanted plants and pests. Sources include agriculture, urban stormwater runoff, and commercial and residential properties.
Organic chemical contaminants include synthetic and volatile organic compounds. Sources include industrial processes and petroleum production, gas stations, urban stormwater runoff, and septic systems.
Radioactive contaminants such as radium, thorium, and uranium isotopes come from natural sources (e.g. radon gas from soils and rock), mining operations, and oil and gas production.

The Minnesota Department of Health provides information about your drinking water source(s) in a source water assessment. For more information, visit Source Water Assessments (https://www.health.state.mn.us/communities/environment/water/swp/swa) or call 651-201-4700 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

Lead in Drinking Water

Lead can cause serious health problems. Children under six and pregnant women are at the highest risk. You may be in contact with lead through paint, water, dust, soil, food, hobbies, or your job. There is no safe level of lead.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Our water system is responsible for providing high quality drinking water and removing lead pipes from service lines but cannot control the variety of materials used in plumbing components in your home. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk.

Read below to learn how you can protect yourself from lead in drinking water.

Know your service line materials. City of Duluth has completed and submitted its service line materials inventory to the Minnesota Department of Health. Document reviews, inspections, and testing were used to compete this inventory. The service line inventory is publicly available, and you can check the materials for your service line by calling 218-730-4673, or visiting the Lead Inventory Tracking Tool (LITT) (https://maps.umn.edu/LSL/). As of February 24, 2025, our inventory contains 6,930 lead and galvanized lines requiring replacement, 4904 lines of unknown material, and 18,865 non-lead service lines. The City has completed 901 service line replacements.

Protect Your Tap: A quick check for lead (https://www.epa.gov/ground-water-and-drinking-water/protect-your-tap-quick-check-lead) is EPA's step by step guide to learn how to find lead pipes in your home.

Treat your water with a filter certified with ANSI/NSF standards 53 and 42 for lead reduction.
City of Duluth encourages all residents with a lead service line to consume filtered water and provides free pitchers for this purpose. To request your filter, call City of Duluth's Lead Program office at 218-730-4673, or visit https://duluthmn.gov/public-works-utilities/lead-water-education/water-pitcher-program/

Read about water treatment units at Point-of-Use Water Treatment Units for Lead Reduction (https://www.health.state.mn.us/communities/environment/water/factsheet/poulead.html)

Use cold water for drinking, making food, and making baby formula. Hot water releases more lead from pipes than cold water.

Let the water run before drinking tap water flush your pipes for several minutes by running your tap. If you have a lead service line to connect to city water, you may need to let the water run longer. When in doubt, flush it out.

Activities such as taking a shower, doing laundry or dishes help keep water moving in your home system but are not a replacement for running the tap before you drink if it has not been used for a long period of time.

The only way to know if lead has been reduced by letting it run is to check with a test. If letting the water run does not reduce lead, consider other options to reduce your exposure.

Test your water. In most cases, letting the water run and using cold water for drinking and cooking will reduce the amount of lead in your drinking water. If you are still concerned about lead, contact a laboratory to test your tap water. Testing your water is important if young children or pregnant women drink your tap water.

Contact a Minnesota Department of Health accredited laboratory to purchase a sample container and instructions on how to submit a sample. The Minnesota Department of Health can help you understand your test results.
Environmental Laboratory Accreditation Program (https://eldo.web.health.state.mn.us/public/accreditedlabs/labsearch.seam)

Be Aware: Head Start Programs, Child Care Centers, Public and Charter Schools all have requirements to test for lead in drinking water. These programs can learn more about requirements and resources for testing and remediation at MDH Drinking Water in Schools and Child Cares (https://www.web.health.state.mn.us/communities/environment/water/schools/index.html)

Information on lead in drinking water, testing methods, and other steps you can take to minimize exposure are available:
City of Duluth's Lead Program page at https://duluthmn.gov/public-works-utilities/lead-water-education/lead-water/
EPA Basic Information about Lead in Drinking Water (http://www.epa.gov/safewater/lead)
Minnesota Department of Health Lead in Drinking Water (https://www.health.state.mn.us/communities/environment/water/contaminants/lead.html)

To learn about how to reduce your contact with lead from sources other than your drinking water, visit
Lead Poisoning Prevention: Common Sources (https://www.health.state.mn.us/communities/environment/lead/fs/common.html)