



# 2025 Drinking Water Report

## Making Safe Drinking Water

The City of Duluth is committed to providing safe, reliable drinking water that meets all federal and state quality standards. This report offers information about your drinking water and ways you can help protect our water resources.

The U.S. Environmental Protection Agency sets standards that limit the amount of specific contaminants in drinking water to ensure it is safe for most people. The U.S. Food and Drug Administration applies similar standards to bottled water to provide equivalent public health protection.

Drinking water, including bottled water, may contain small amounts of contaminants. Their presence does not necessarily indicate a health risk. For more information on contaminants and potential health effects, visit [epa.gov/safewater](https://epa.gov/safewater).

For questions about Duluth's drinking water or opportunities to participate in decisions that may affect water quality, contact Lindsey Seifert-Monson, Water Quality Compliance Officer, at [lmonson@duluthmn.gov](mailto:lmonson@duluthmn.gov) or 218-730-4160.

## Monitoring of Regulated Contaminants

This report contains our monitoring results from January 1 to December 31, 2025.

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

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).

(<https://www.health.state.mn.us/communities/environment/water/factsheet/sampling.html>)

## How to Read the Water Quality Tables

The tables below list the contaminants detected either during the past year or at the most recent sampling event. They include the measured levels and the Environmental Protection Agency's regulatory limits. Contaminants that were tested for but not detected are not shown.

Some contaminants are sampled less frequently because their levels are not expected to change. If any of these were detected in a previous year, they are included in the tables along with the date of detection.

Certain contaminants are monitored throughout the year, and compliance is based on rolling annual averages. Because of this, the Range of Detected Test Results for the calendar year may be lower than the Highest Average or Highest Single Test Result if the higher value occurred during the previous year.

We also conduct monitoring for some contaminants that are not regulated under the Safe Drinking Water Act. To request these results, contact the Minnesota Department of Health at 651-201-4700 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

## Definitions

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

**Contaminant:** Any physical, chemical, biological, or radiological substance or matter in water.

**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.

**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 ( $\mu\text{g/l}$ ).

**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 ( $\text{mg/l}$ ).

**ppt (parts per trillion):** One part per trillion is like one drop in one trillion drops of water, or about one drop in 20 Olympic sized swimming pools. ppt is the same as nanograms per liter ( $\text{ng/l}$ ).

**PWSID:** Public water system identification.

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

**Table 1: Regulated Substances: Lead and Copper** (tested at customer taps)

Contaminant	EPA MCLG	EPA AL	90 <sup>th</sup> percentile	Homes with High Levels	Range of Results	Violation?	Typical Sources
Lead	0 ppb	90% of homes less than 15 ppb	8.34 ppb	0 of 30	0 – 9.0 ppb	No	Corrosion of household plumbing
Copper	1.3 ppm	90% of homes less than 1.3 ppm	0.04 ppm	0 of 30	0 – 0.14 ppm	No	Corrosion of household plumbing

**Table 2: Inorganic Contaminants** (tested in drinking water)

Contaminant (date if sampled in a previous year)	EPA MCLG	EPA MCL	Highest Average or Single Result	Range of Results	Violation?	Typical Sources
Nitrate	10 ppm	10 ppm	0.39 ppm	N/A	No	Runoff, septic tank leaching, sewage, erosion of natural deposits
Combined Radium (2024)	0 pCi/L	5pCi/L	1 pCi/L	N/A	No	Erosion of natural deposits

**Table 3: Contaminants Related to Disinfection** (tested in drinking water)

Substance	EPA MCLG or MRDLG	EPA MCL or MRDL	Highest Average or Single Result	Range of Results	Violation?	Typical Sources
Total Trihalomethanes (TTHMs)	N/A	80 ppb	15.5 ppb	9.10 – 17.00 ppb	No	Byproduct of drinking water disinfection
Total Haloacetic Acids (HAA/HAA5)	N/A	60 ppb	11.7 ppb	6.20 – 15.10 ppb	No	Byproduct of drinking water disinfection
Total Chlorine	4.0 ppm	4.0 ppm	1.71 ppm	1.50 – 1.84 ppm	No	Additive used to control microbial growth

**Table 4: Treatment Indicator** (tested during treatment)

Substance	Removal Required	Lowest Monthly Percentage of Results in Compliance	Highest Test Result	Violation?	Typical Sources
Turbidity	Treatment Technique	99%	3.26	No	Soil runoff

**Table 5: Disinfection Byproduct Indicator** (tested in source water and in drinking water)

Substance	Removal Required	Range of % Removal Achieved	Average % Removal Achieved	Violation?	Typical Sources
Total Organic Carbon*	Variable	17 – 100	60	No	Natural organic material, runoff, wastewater

\* The percentage of Total Organic Carbon (TOC) removal was measured each month. All TOC removal requirements were met.

**Table 6: Other Substances** (tested in drinking water)

Substance	EPA MCLG	EPA MCL	Highest Average or Single Result	Range of Results	Violation?	Typical Sources
Fluoride*	4.0 ppm	4.0 ppm	0.75 ppm	0.72 – 0.77 ppm	No	Erosion of natural deposits, additive to promote dental health

\*Fluoride occurs naturally in many water sources and is widely recognized for its role in preventing tooth decay. Extensive peer-reviewed research shows that fluoridation reduces cavities in both children and adults, even when other fluoride sources, such as toothpaste and mouth rinses, are available. Because optimal fluoride levels support public health, municipal water systems adjust fluoride concentrations to between 0.5 and 0.9 parts per million (ppm). Levels below 2.0 ppm are not expected to increase the risk of enamel fluorosis, a cosmetic condition.

## Monitoring of Unregulated Contaminants

In addition to testing drinking water for contaminants regulated under the Safe Drinking Water Act, we also monitor for some 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. These values may be set at levels that are costly, challenging, or impractical for a water system to meet. The table below lists our sample results alongside these non-enforceable comparison values.

Detection of a contaminant—regulated or unregulated—should not automatically cause concern. Its significance depends on current health information, which continues to evolve as we learn more about potential health effects.

Exposure to a contaminant at or below its comparison value is expected to pose little to no health risk. When levels exceed the comparison value, certain individuals—such as fetuses, infants, children, older adults, and

those with compromised immune systems—may need to take additional precautions. We are providing information on the unregulated or emerging contaminants detected in our system to support public awareness.

Monitoring unregulated contaminants helps EPA determine how frequently these substances occur and whether future regulation may be warranted.

More information is available at:

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

(<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)

(<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)

(<https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule>)

EPA has developed a [UCMR5 Program Overview Factsheet](https://www.epa.gov/system/files/documents/2022-02/ucmr5-factsheet.pdf) describing UCMR 5 contaminants and standards.

(<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](https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule) (<https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule>). These results are still being processed. The Unregulated Contaminant Monitoring Rule 5 (UCMR 5) Data finder allows people to easily search for, summarize, and download the available [UCMR 5 analytical results](https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule-data-finder) (<https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule-data-finder>).

**Table 7: Unregulated Contaminants (tested in drinking water)**

Contaminant (date if sampled in a previous year)	Comparison Value	Highest Average or Single Result	Range of Results
Sodium* (2024)	20 ppm	8.32 ppm	N/A
Sulfate (2024)	500 ppm	9.62 ppm	N/A
Perfluorobutanoic acid (PFBA; 2024)	7000 ppt	0.74 ppt	0.00 – 2.22 ppt

\*Note that home water softening can increase the level of sodium in your water.

## Some People Are More Vulnerable to Contaminants in Drinking Water

Individuals with weakened immune systems may be more susceptible to contaminants in drinking water. This includes people undergoing chemotherapy, organ transplant recipients, individuals with HIV/AIDS or other immune disorders, as well as some elderly individuals and infants. These groups should consult their health care providers for guidance on safe drinking water practices. EPA and CDC recommendations for reducing the risk of infection from *Cryptosporidium* and other microbial contaminants are available at [EPA's website](https://www.epa.gov/safewater) (epa.gov/safewater)

## Learn More About Your Drinking Water: Drinking Water Sources

Groundwater provides 75 percent of Minnesota's drinking water and is stored in aquifers underground. Surface water supplies the remaining 25 percent and includes lakes, rivers, and streams. Your drinking water comes from a surface water source: Lake Superior.

Contaminants can get in drinking water sources from the natural environment and from people's daily activities. There are six 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.

**Pesticide:** Generally, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.

**Herbicide:** Any chemical(s) used to control undesirable vegetation.

**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, including:

- How Duluth is protecting your drinking water source(s)
- Nearby threats to your drinking water sources
- How easily water and pollution can move from the surface of the land into drinking water sources, based on natural geology and the way wells are constructed

Find your source water assessment at [Source Water Assessments](https://www.health.state.mn.us/communities/environment/water/swp/swa.html)

(<https://www.health.state.mn.us/communities/environment/water/swp/swa.html>) 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, babies, children under six years, 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 these steps to reduce your family's risk:

1. **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, you may need to let the water run longer. A service line is the underground pipe that brings water from the main water pipe under the street to your home.
  - 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.
2. **Know your service line materials** by contacting your public water system, or you can search for your address online at the [Minnesota Lead Inventory Tracking Tool](https://maps.umn.edu/LSL/) (<https://maps.umn.edu/LSL/>)
  - [Protect Your Tap: A quick check for lead](https://www.epa.gov/ground-water-and-drinking-water/protect-your-tap-quick-check-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.
3. **Use cold water** for drinking, making food, and making baby formula. Hot water releases more lead from pipes than cold water.
  - **Test your water.** In most cases, letting the water run and using cold water for drinking and cooking should keep lead levels low in your drinking water. If you are still concerned about lead, make arrangements with a laboratory to test your tap water. Testing your water is important if young children or pregnant women drink your tap water. The Minnesota Department of Health can help you understand your test results.

Contact a Minnesota Department of Health accredited laboratory to purchase a sample container and instructions on how to submit a sample. A list of labs can be found at [Environmental Laboratory Accreditation Program](https://eldo.web.health.state.mn.us/public/accreditedlabs/labsearch.seam) (<https://eldo.web.health.state.mn.us/public/accreditedlabs/labsearch.seam>)

4. **Treat your water** if a test shows your water has high levels of lead after you let the water run. You can use a filter certified with ANSI/NSF standards 53 and 42 for lead reduction.
  - Read about water treatment units:  
[Point-of-Use Water Treatment Units for Lead Reduction](https://www.health.state.mn.us/communities/environment/water/factsheet/poulead.html)  
(<https://www.health.state.mn.us/communities/environment/water/factsheet/poulead.html>)
  - Residents with a lead service line can request a free filter here:  
<https://duluthmn.gov/public-works-utilities/lead-water-education/water-pitcher-program/>
5. **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)  
(<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 at:

- Visit EPA [Basic Information about Lead in Drinking Water](http://www.epa.gov/safewater/lead) (<http://www.epa.gov/safewater/lead>)
- Visit the Minnesota department of Health [Lead in Drinking Water](https://www.health.state.mn.us/communities/environment/water/contaminants/lead.html)  
(<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)  
(<https://www.health.state.mn.us/communities/environment/lead/fs/common.html>)

## Service Line Material Inventory

Duluth has completed and submitted our service line materials inventory to the Minnesota Department of Health. The service line inventory is publicly available, and you can check the materials for your service line by visiting the [Lead Inventory Tracking Tool \(LITT\)](https://maps.umn.edu/LSL/) (<https://maps.umn.edu/LSL/>). This information is also available by contacting our Lead Removal Program at [leadremoval@duluthmn.gov](mailto:leadremoval@duluthmn.gov) or 218-730-4673.

To complete the service line inventory, our system reviewed all available data including installation records, plan records, visual inspections, water sampling results, and potholing. We continue to update and verify the inventory as new information is acquired. As of 11/17/2025, our inventory contains 5382 lead, 251 galvanized requiring replacement, 2609 unknown material, and 20487 non-lead service lines. Additional information is available on our website at <https://duluthmn.gov/public-works-utilities/lead-water-education/lead-service-line-identification/>.