

DRINKING WATER SOURCES

Minnesota's primary drinking water sources are groundwater and surface water. Groundwater is found in aquifers beneath the land's surface and supplies 75% of Minnesota's drinking water. Surface water comes from lakes, rivers, and streams. Surface water supplies 25% of Minnesota's drinking water. This includes the City of Duluth, which draws its supply from Lake Superior.

Contaminants can enter drinking water sources from both natural and anthropogenic sources. The five main types of contaminants include:

Microbial contaminants such as viruses, bacteria, and parasites. Sources include sewage treatment, plants, septic systems, livestock, pets, and wildlife.

Inorganic contaminants include salts and metals from natural sources, oil and gas production, mining and farming operations, stormwater runoff, and wastewater discharges.

Pesticides and herbicides are chemicals used to reduce unwanted plants and pests. Sources include agriculture, 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, stormwater runoff, and septic systems.

Radioactive contaminants such as radium, thorium, and uranium isotopes come from natural sources, mining operations, and oil and gas production.

The Minnesota Department of Health (MDH) provides information about your drinking water source(s) in its Source Water Assessment.

Find your Source Water Assessment at

<https://www.health.state.mn.us/communities/environment/water/swp/swa.html>
or call 651-201-4700 during business hours.

MAKING SAFE DRINKING WATER

The U.S. Environmental Protection Agency (EPA) sets standards limiting the amount 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 similarly regulates contaminants in bottled water, which is required to 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's Safe Drinking Water Hotline at 1-800-426-4791.



SPECIAL HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Infants and people who are immunocompromised, elderly, or pregnant can be particularly at risk for infections. These people or their caregivers should seek advice about drinking water from their health care providers. Guidelines from EPA and Centers for Disease Control (CDC) to limit the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

LEAD IN DRINKING WATER

You may be in contact with lead through paint, water, dust, soil, food, hobbies, or your job. There is no safe level of lead. Exposure can cause serious health problems, including developmental delays in children and kidney and blood pressure problems in adults. Babies, children under six years, and pregnant women are at the highest risk.

Lead is rarely in a drinking water source, but it can enter your drinking water as it passes through lead service lines and household plumbing. Duluth provides high quality drinking water, but cannot control the plumbing materials used in private buildings.

To find out if you have a lead service line, please call City of Duluth Engineering at 218-730-5200.

You can take steps to minimize your exposure to lead through drinking water:

Treat your water

To learn about home treatment, visit <https://www.health.state.mn.us/communities/environment/water/factsheet/poulead.html>

To request a free water filter from the City of Duluth, please email LeadRemoval@duluthmn.gov.

Let the water run before using it for drinking or cooking. If you have a lead service line, run until you feel a temperature change. Then run an additional 30 seconds to 3 minutes. The time depends on the length of your service line. When in doubt flush it out.

Use cold water

For drinking, cooking, and making baby formula.

Test your water

Contact a Minnesota Department of Health accredited laboratory for information on collecting and submitting a sample. <https://eldo.web.health.state.mn.us/public/accreditedlabs/labsearch.seam>

For more information, visit

- [duluthmn.gov/public-works-utilities/lead-water-education/lead-water](https://www.duluthmn.gov/public-works-utilities/lead-water-education/lead-water)
- <https://www.health.state.mn.us/communities/environment/water/contaminants/lead.html>
- <http://www.epa.gov/safewater/lead>



2023

DRINKING WATER

The City of Duluth strives to provide safe and reliable drinking water that meets state and federal quality requirements. This report provides 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, please contact Duluth Public Works and Utilities Chemist, Lindsey Seifert-Monson at 218-730-4160 or lmonson@duluthmn.gov.

PWSID: 169001



RESULTS OF MONITORING

The City of Duluth works with the Minnesota Department of Health (MDH) to test drinking water for more than 100 contaminants regulated under the Safe Drinking Water Act. These standards protect Minnesotans from substances that may be harmful to their health. In addition to testing drinking water for regulated contaminants, we may monitor for additional contaminants. These unregulated contaminants do not have legal limits for drinking water.

No water supply is ever completely free of contaminants and it is not unusual to detect them in small amounts. Detection alone of a regulated or unregulated contaminant should not cause concern. The meaning of a detection should be determined by considering current health effects information, which can evolve over time.

The following table shows the regulated contaminants we detected in 2023, as well as human health-based guidance values where available.

For more information on monitoring and testing, please visit the MDH website:

- <https://www.health.state.mn.us/communities/environment/water/contaminants/index.html>
- <https://www.health.state.mn.us/communities/environment/water/com/ucmr4.html>
- <https://www.health.state.mn.us/communities/environment/water/factsheet/sampling.html>

DULUTH DRINKING WATER TABLE FOR 2023

Regulated Substance	Highest Average or Single Result	Range of Results	MCL or MRDL	MCLG or MRDLG	Violation?	Typical Sources
Total Trihalomethanes (TTHM), ppb	17.3	9.40-20.90	80	N/A	No	Byproduct of drinking water disinfection
Total Haloacetic Acids (HAA), ppb	15.8	7.10-17.00	60	N/A	No	Byproduct of drinking water disinfection
Total Chlorine, ppm	1.72	1.62 - 1.79	4.0	4.0	No	Additive used to control microbes
Total Organic Carbon	100% removal	100% removal	variable	N/A	No	Natural sources
Nitrate, ppm	0.37	N/A	10.4	10.0	No	Fertilizers, septic tanks, runoff, natural sources
Fluoride, ppm*	0.74	0.73 - 0.75	4.0	4.0	No	Additive to promote dental health, natural sources
Regulated Substance	Homes exceeding AL	90 th Percentile	90 th Percentile AL	MCLG	Violation?	Typical Sources
Copper, ppm (8/4/2022)	0 of 30	0.04	1.3	0	No	Corrosion of household plumbing
Lead, ppb (8/4/2022)	0 of 30	9.63	15	0	No	Corrosion of household plumbing
Regulated Substance	Highest Result	Lowest Monthly Compliance Rate	Removal Required	Violation?	Typical Sources	
Turbidity, NTU	2.476	98%	TT	No	Runoff	

*Fluoride is nature's cavity fighter with small amounts present naturally in many drinking water sources. Peer-reviewed scientific literature shows that fluoridation reduces tooth decay in children and adults, even when fluoride is available from other sources, such as toothpaste. Municipal water systems treat with fluoride to an optimal concentration of 0.5-0.9 ppm; levels below 2.0 ppm are not expected to increase the risk of a cosmetic condition known as enamel fluorosis.

HOW TO READ THE WATER QUALITY DATA TABLES

This table shows the concentration of substances we detected in 2023 (or the most recent result), along with EPA limits. Substances that we tested for but did not find are not included in the table.

Some contaminants are monitored regularly throughout the year with rolling averages used for compliance. For this reason, the range of detected values (averaged over the previous four quarters) may be lower than the highest single test result (from calendar year 2023).

MDH may have done additional monitoring for unregulated contaminants. To request a copy of these results, call MDH at 651-201-4700 during business hours.

OTHER DEFINITIONS

AL (Action Level)

The concentration of a contaminant which, if exceeded, triggers corrective action by the water system

MCL (Maximum contaminant level)

The highest level of a contaminant that is allowed in drinking water

MCLG (Maximum contaminant level goal)

The level of a contaminant in drinking water below which there is no known or expected risk to health

MRDL (Maximum residual disinfectant level)

The highest level of a disinfectant allowed in drinking water

MRDLG (Maximum residual disinfectant level goal)

The level of a drinking water disinfectant below which there is no known or expected risk to health

NA (Not applicable) Does not apply

NTU (Nephelometric Turbidity Units)

A measure of the cloudiness, or turbidity, of the water. Indicates effectiveness of filtration

PPB (Parts Per Billion)

Equivalent to micrograms per liter (µg/L)

PPM (Parts Per Million)

Equivalent to milligrams per liter (mg/L).

TT (Treatment Technique)

A required process intended to reduce the level of a contaminant in drinking water