

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 percent of Minnesota's drinking water. Surface water comes from lakes, rivers, and streams. Surface water supplies 25 percent 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 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 a source water assessment.

Find your source water assessment at www.health.state.mn.us/communities/environment/water/swp/swa or call 1-800-818-9318 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 at least 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 from 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.

www.epa.gov/safewater

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.

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

Let the water run for 30-60 seconds before using it for drinking or cooking. If you have a lead service line, allow additional time for the water to clear the service line.

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.

Treat your water if testing shows high levels of lead after you let the water run.

For more information, visit www.comfortsystemsduluth.com/media/504346/Lead-education_edited.pdf

<https://www.health.state.mn.us/communities/environment/water/contaminants/lead.html>

<http://www.epa.gov/safewater/lead>



2019 Drinking Water Quality Report



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 considering current health effects information, which can evolve over time.

The following table shows the regulated and unregulated contaminants we detected in 2018, 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/factsheet/sampling.html>

DULUTH DRINKING WATER TABLE FOR 2019

Regulated Substance	Highest Average or Single Result	Range of Results	MCL or MRDL	MCLG or MRDLG	Violation?	Typical Sources
Total Trihalomethanes (TTHM), ppb	13.3	8.7-18.0	80	N/A	No	Byproduct of drinking water disinfection
Total Haloacetic Acids (HAA), ppb	10.7	6.0-14.5	60	N/A	No	Byproduct of drinking water disinfection
Total Chlorine, ppm	0.95	0.67-1.16	4.0	4.0	No	Additive used to control microbes
Total Organic Carbon	90% removal	23-100 % removal	variable	N/A	No	Natural sources
Nitrate, ppm	0.39	N/A	10.4	10.0	No	Fertilizers, septic tanks, runoff, natural sources
Fluoride, ppm	0.72	0.71-0.72	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	0 of 30	0.10	1.3	0	No	Corrosion of household plumbing
Lead, ppb	1 of 30	12	15	0	No	Corrosion of household plumbing

Regulated Substance	Highest Result	Lowest Monthly Compliance Rate	Removal Required	Violation?	Typical Sources
Turbidity, NTU	0.26	100%	TT	No	Runoff

Unregulated Substance	Highest Average or Single Result	Range of Results	Comparison Value
Manganese, ppb	0.4	0.00-1.07	100
Group of 6 Haloacetic Acids (HAA6Br), ppb	1.58	1.20-2.56	N/A
Group of 9 Haloacetic Acids (HAA9), ppb	11.4	8.12-17.23	N/A

HOW TO READ THE WATER QUALITY DATA TABLES

This table shows the concentration of substances we detected in 2019 (or the most recent result), along with EPA limits. Substances that we tested for but did not find are not included in the table.

MDH may have done additional monitoring for unregulated contaminants. To request a copy of these results, call MDH at 1-800-818-9318 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; also expressed as micrograms per liter (µg/l)

ppm

parts per million; also expressed as milligrams per liter (mg/l).

TT (Treatment Technique)

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