



Minneapolis Tap Water

Minneapolis
Public Works



2023 Water Quality Report

DEAR RESIDENT,

This report is issued to educate you about the quality of the drinking water produced by the City of Minneapolis in 2023. We take pride in the water we provide to our residents. We are happy to report that **no contaminants were detected at levels that violated federal drinking water standards during 2023.**

ATTENTION: If you want help translating this information, call 311.

SPANISH-ATENCIÓN: Si desea recibir asistencia gratuita para traducir esta información, llame al 311.

SOMALI-OGOW: Haddii aad dooneyso in lagaa kaalmeeyo tarjamadda macluumaadkani oo lacag la'aan wac 311.

HMONG-CEEB TOOM: Yog koj xav tau kev pab dawb txhais cov xov no, hu 311.

TTY: 612-263-6850

2023 Drinking Water Report

The City of Minneapolis is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2023. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources.

Making Safe Drinking Water

Your drinking water comes from the Mississippi River.

Minneapolis works hard to provide you with safe and reliable drinking water that meets or exceeds federal and state water quality requirements.

Call 612-673-3000 or 311 if you have questions about Minneapolis drinking water.

The U.S. Environmental Protection Agency 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.



View of the recently restored 3rd Avenue bridge over the Mississippi River in Minneapolis. City water crews rehabilitated the water main that runs under the bridge deck as part of this project.

Minneapolis Monitoring Results

This report contains our monitoring results from January 1 to December 31, 2023.

We work with the Minnesota Department of Health 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>

How to Read the Water Quality Data Table

The tables on the following pages show the contaminants we found last year or the most recent time we sampled for that contaminant. They also show the levels of those contaminants and the Environmental Protection Agency's 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 and were not detected. To request a copy of these results, call the Minnesota Department of Health at 651-201-4700 or 1-800-818-9318 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.

Definitions

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

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).

PPT (PARTS PER TRILLION): One part per trillion in water is like one drop in one trillion drops of water, or about one drop in 20 Olympic size swimming pools. 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.

City of Minneapolis 2023 Monitoring Results

Contaminant (units)	MCLG	MCL	Level Found Range (2022) Average or Result*		Typical Source of Contaminant	Meets Standard
Fluoride (ppm)	4.0	4.0	0.67 – 0.75	0.73	The state of Minnesota requires all municipal water systems to add fluoride to the drinking water to promote strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories	✓
Total Haloacetic Acids (HAA) (ppb)	N/A	60	1.50 – 29.30	23.5	By-product of drinking water disinfection	✓
Nitrate (as Nitrogen) (ppm)	10	10.4	.86 – .98	.98	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	✓
TTHM (Total Trihalomethanes) (ppb)	N/A	80	8.70 – 42.60	32.9	By-product of drinking water disinfection	✓
Turbidity (NTU)	N/A	TT	100% in compliance	0.09 NTU highest single measurement	Soil runoff	✓
Chloramine (ppm)	4.0 MRDLG	4.0 MRDL	3.00 – 3.70 lowest and highest monthly average	3.31 highest quarterly average	Water additive used to control microbes	✓
Total Organic Carbon	25% - 30% removal required	Quarters below removal rate=0	48 – 68% removal	59% removal achieved	Naturally present in the environment	✓
Copper (ppm) (August 2021)	1.3	1.3 AL	90% of samples below 0.05	0 out of 63 sites over AL	Corrosion of household plumbing systems; erosion of natural deposits	✓
Lead (ppb) (August 2021)	0	15 AL	90% of samples below 1.6	0 out of 63 sites over AL	Corrosion of household plumbing systems; erosion of natural deposits	✓
Total Coliform Bacteria	0	N/A	2,190 samples collected	0 positive samples	Naturally present in the environment	✓

* This is the value used to determine compliance with federal standards. It sometimes is the highest value detected and sometimes is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.

SOME PEOPLE ARE MORE VULNERABLE TO CONTAMINANTS IN DRINKING WATER.

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 and therefore pregnant women 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.

Potential Health Effects and Corrective Actions (If Applicable)

Total Haloacetic Acids (HAA): Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. Minneapolis is required to collect twelve HAA samples every quarter and we collected and delivered twelve samples to the Minnesota Public Health Laboratory (PHL) in January 2023. One of those samples was analyzed but the result did not conform with the Laboratory's internal quality control standards. In response, the Minnesota Department of Health directed Minneapolis to collect and deliver another sample to the PHL in February 2023. Minneapolis delivered the repeat sample but the PHL failed to analyze the repeat sample. Minneapolis was not notified by the Minnesota Department of Health of the missing analysis until May 26, 2023, after the deadline had passed to provide an additional quarterly sample. All samples collected in the first quarter of 2023 at eleven other locations in the city were in compliance for HAA. Minneapolis has never had a sample out of compliance for HAA or any other disinfection by-product.

Monitoring Results – Unregulated Substances

In addition to testing drinking water for contaminants regulated under the Safe Drinking Water Act, we sometimes also monitor for substances that are not regulated. Unregulated contaminants do not have legal limits for drinking water.

Detection alone of a regulated or unregulated substance should not cause concern. The meaning of a detection should be determined considering current health effects information. We are often still learning about the health effects, so this information can change over time.

The following table shows the unregulated substances we detected in 2023, as well as human-health based guidance values for comparison, where available. The comparison values are based only on potential health impacts and do not consider our ability to measure contaminants at very low concentrations or the cost and technology of prevention and/or treatment. They may be set at levels that are costly, challenging, or impossible for water systems to meet (for example, large-scale treatment technology may not exist for a given contaminant).

A person drinking water with a contaminant at or below the comparison value would be at little or no risk for harmful health effects. If the level of a contaminant is above the comparison value, people of a certain age or with special health conditions - like a fetus, infants, children, elderly, and people with impaired immunity – may need to take extra precautions. Because these contaminants are unregulated, EPA and MDH require no particular action based on detection of an unregulated contaminant. We are notifying you of the unregulated contaminants we have detected as a public education opportunity.

More information is available on MDH's website:

- 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>
- EPA UCMR 5 Data Finder: The Unregulated Contaminant Monitoring Rule 5 (UCMR5) Data finder allows people to easily search for, summarize, and download the available UCMR 5 analytical results.
- 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.

Unregulated Substances

Substance	2023 Highest Single Test Result	Comparison/Guidance Value
Sodium	22.4 ppm	20 ppm
Sulfate	29 ppm	250 ppm
PFBA	6.20 ppt	7000 ppt

Sodium levels change seasonally based on river conditions. People on a sodium-restricted diet should be aware of the sodium level in their drinking water.

Sulfate levels above 250 ppm may result in a noticeable salty taste in the water.

PFBA (perfluorobutanoic acid) is breakdown product of other per- and polyfluoroalkyl substances. Minnesota's health-based guidance value is 7,000 ppt.

Enjoy our tap water, but use water wisely

The City has plenty of tap water for everyone to use. However, it's important to use this water wisely. You can find links to helpful resources at: https://www.dnr.state.mn.us/waters/watermgmt_section/appropriations/conservation.html

SWITCH TO LOW-FLOW PLUMBING: Newer toilets can save two gallons or more of water per flush, and low-flow shower heads can use 2.5 fewer gallons per minute than ordinary ones.

LEAKS AND DRIPS ADD UP QUICKLY: A slow drip from a tap can waste 15–20 gallons of water per day, and a leaky toilet can waste hundreds of gallons a day.

SMARTER APPLIANCES USE LESS WATER: When shopping for a new washing machine, pay attention to the water factor - the number of gallons of water needed for each cubic foot of laundry. The lower the number, the more water it saves.

WASH WISELY: Consider how appliances use water. A washing machine takes 27 to 51 gallons per cycle, so make sure you use the right load-size setting. A dishwasher uses 7 to 14 gallons no matter how many dishes are inside, so only run yours when it's full.

LAWN LESSONS: A rain gauge can help you determine whether and how much your lawn, garden and trees need to be watered. A good rain can eliminate the need to water for a week. If you do need to water, doing so at night will reduce evaporation. And make sure the sprinkler isn't watering the streets or sidewalks.

Learn More About Your Drinking Water

Drinking Water Sources

Minnesota's primary drinking water sources are groundwater and surface water. Groundwater is the water found in aquifers beneath the surface of the land. Groundwater supplies 75 percent of Minnesota's drinking water. Surface water is the water in lakes, rivers, and streams above the surface of the land. Surface water supplies 25 percent of Minnesota's drinking water. Minneapolis' source water is the Mississippi River, a surface water.

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, INCLUDING:

- How Minneapolis is protecting your drinking water source(s);
- Nearby threats to your drinking water sources; and
- 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>

or call 651-201-4700 or 1-800-818-9318 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

Fluoride

Fluoride is nature's cavity fighter, with small amounts present naturally in many drinking water sources. There is an overwhelming weight of credible, peer-reviewed, scientific evidence 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 parts per million (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.

Lead in Drinking Water

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

Lead is rarely in a drinking water source, but it can get in your drinking water as it passes through lead service lines and your household plumbing system. Minneapolis is responsible for providing high quality drinking water, but it cannot control the plumbing materials used in private buildings.

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

- 1. Let the water run** for 30-60 seconds before using it for drinking or cooking if the water has not been turned on in over six hours. 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 water main under the street to your home. See information below about how to find if you have a lead service line.
 - 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. Use cold water** for drinking, making food, and making baby formula. Hot water releases more lead from pipes than cold water.
- 3. 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. Testing your water is important if young children or pregnant women drink your tap water.
 - The City of Minneapolis offers voluntary lead in drinking water testing to all residents. To request a free test kit, go to: <https://www.minneapolismn.gov/lead-testing> or call 311.
- 4. Treat your water** if a test shows your water has high levels of lead after you let the water run.
 - 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>

LEAD SERVICE LINES

The City of Minneapolis has developed an interactive map that shows properties with lead service lines, it can be found at: www.minneapolismn.gov/lead-service-line-map. Minnesota recently passed legislation to help homeowners pay to replace lead service lines. This summer, the City will begin replacing several lead service lines in the City designated "Green Zones". Learn more about Green Zones at: <https://www.minneapolismn.gov/government/programs-initiatives/green-zones/>. The City of Minneapolis is implementing an ongoing program to work with property owners to proactively replace their private lead service lines throughout the City.

LEARN MORE:

- Visit Lead Fact Sheet: <https://www.minneapolismn.gov/resident-services/utility-services/water/water-quality/water-quality-lead/lead-facts/>
- Visit Lead in Drinking Water: <https://www.health.state.mn.us/communities/environment/water/contaminants/lead.html>
- Visit Basic Information about Lead in Drinking Water: <http://www.epa.gov/safewater/lead>
- Call the EPA Safe Drinking Water Hotline at 1-800-426-4791. 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>

Embark on a fulfilling and enjoyable career in the public water industry



Saint Paul College's Water Utility Treatment Technology (WUTT) program provides you with the skills you need to land a great job in this rapidly growing industry. Complete nine modules (5 weeks each) to be eligible to test for the MN Water and Wastewater Operator Certification. There are many benefits to this program:
▶ Hybrid format ▶ High job placement rate ▶ Convenient online and evening courses

For information: Contact Andrew Hamilton at andrew.hamilton@saintpaul.edu