

2019 City of Edina Drinking Water Report



Making Your Water Safe

Your drinking water comes from a groundwater source: 17 wells ranging from 381 to 1080 feet deep, that draw water from the Prairie Du Chien-Jordan, Mt. Simon and Jordan aquifers.

Edina works hard to provide safe and reliable drinking water that meets federal and state water quality requirements. The purpose of this report is to provide information on your drinking water and how to protect our precious water resources.

Contact Dave Goergen, Public Works Coordinator, at 952-826-0312 or dgoergen@EdinaMN.gov if you have questions about Edina's drinking water. You can also ask how you can take part in decisions that may affect water quality.

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. 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.

Drinking water, including bottled water, may reasonably be expected to 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1 800-426-4791.

Edina Monitoring Results

This report contains our monitoring results from Jan. 1 to Dec. 31, 2019.

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 MDH's webpage Basics of Monitoring and Testing of Drinking Water in Minnesota (www.health.state.mn.us/communities/environment/water/factsheet/sampling.html).

How to Read the Water Quality Data Tables

The tables below show 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 following tables 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 or 1-800-818-9318.

Definitions

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

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.
 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 (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.

Monitoring Results - Regulated Substances

LEAD AND COPPER – Tested at customer taps

Contaminant (Date, if sampled in previous year)	EPA's Ideal Goal (MCLG)	EPA's Action Level	90% of Results Were Less Than	Number of Homes with High Levels	Violation	Typical Sources
Lead	0 ppb	90% of homes less than 15 ppb	1 ppb	0 out of 31	NO	Corrosion of household plumbing.
Copper	0 ppm	90% of homes less than 1.3 ppm	0.93 ppm	0 out of 31	NO	Corrosion of household plumbing.

INORGANIC & ORGANIC CONTAMINANTS – Tested in drinking water

Contaminant (Date, if sampled in previous year)	EPA's Ideal Goal (MCLG)	EPA's Limit (MCL)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Sources
Picloram (2018)	500 ppb	500 ppb	0.11 ppb	N/A	NO	Herbicide runoff.
Barium	2 ppm	2 ppm	0.2 ppm	0.1410 - 0.1990 ppm	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Benzene	0 ppb	5 ppb	0.1 ppb	0.00 - 0.38 ppb	NO	Discharge from factories; Leaching from gas storage tanks and landfills.
Trichloroethylene (TCE)	0 ppb	5 ppb	0.18 ppb	0.00 - 0.18 ppb	NO	Discharge from metal degreasing sites and other factories.
trans-1,2-Dichloroethene (trans-1,2-dichloroethylene)	100 ppb	100 ppb	0.2 ppb	0.00 - 0.20 ppb	NO	Discharge from chemical and agricultural chemical factories.
cis-1,2-Dichloroethene (cis-1,2-dichloroethylene)	70 ppb	70 ppb	4.2 ppb	0.00 - 4.30 ppb	NO	Discharge from chemical and agricultural chemical factories.
Vinyl chloride	0 ppb	2 ppb	0.35 ppb	0.00 - 0.35 ppb	NO	Leaching from PVC piping; Discharge from plastics factories.
Gross Alpha	0 pCi/l	15.4 pCi/l	7.8 pCi/l	0.0 - 7.8 pCi/l	NO	Erosion of natural deposits.
Combined Radium	0 pCi/l	5.4 pCi/l	4.5 pCi/l	1.5 - 4.5 pCi/l	NO	Erosion of natural deposits.

CONTAMINANTS RELATED TO DISINFECTION – Tested in drinking water

Substance (Date, if sampled in previous year)	EPA's Ideal Goal (MCLG or MRDLG)	EPA's Limit (MCL or MRDL)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Sources
Total Trihalomethanes (TTHMs)	N/A	80 ppb	3.1 ppb	2.30 - 3.10 ppb	NO	Byproduct of drinking water disinfection.
Total Haloacetic Acids (HAA)	N/A	60 ppb	2.1 ppb	1.20 - 2.10 ppb	NO	Byproduct of drinking water disinfection.
Total Chlorine	4.0 ppm	4.0 ppm	1.35 ppm	1.07 - 1.40 ppm	NO	Water additive used to control microbes.

Total HAA refers to HAA5

OTHER SUBSTANCES – Tested in drinking water

Substance (Date, if sampled in previous year)	EPA's Ideal Goal (MCLG)	EPA's Limit (MCL)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Sources
Fluoride	4.0 ppm	4.0 ppm	0.67 ppm	0.63 - 0.70 ppm	NO	Erosion of natural deposits; Water additive to promote strong teeth.

Potential Health Effects and Corrective Actions (If Applicable)

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 a concentration between 0.5 to 1.5 parts per million (ppm), with an optimal fluoridation goal between 0.7 and 1.2 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.

Monitoring Results – Unregulated Substances

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.

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. We are often still learning about the health effects, so this information can change over time.

The following table shows the unregulated contaminants we detected last year, as well as human-health based guidance

values for comparison, where available. The comparison values are based only on potential health impacts to people 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 - pregnant

women, 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. We are notifying you of the unregulated contaminants we have detected as a public education opportunity.

More information is available on MDH's A-Z List of Contaminants in Water (www.health.state.mn.us/communities/environment/water/contaminants/index.html) and Fourth Unregulated Contaminant Monitoring Rule (UCMR 4) (www.health.state.mn.us/communities/environment/water/com/ucmr4.html).

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 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 and Prevention (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 800-426-4791.

UNREGULATED CONTAMINANTS – Tested in drinking water

Contaminant	Comparison Value	Highest Average Result or Highest Single Test Result	Range of Detected Test Results
Sodium*	20 ppm	29 ppm	14.90 - 29.00 ppm
Sulfate	500 ppm	25.3 ppm	5.17 - 25.30 ppm

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

2019 City of Minneapolis Drinking Water Report

Making Safe Drinking Water

Drinking water for the Morningside Neighborhood comes from a surface water source: surface water drawn from the Mississippi River.

Minneapolis works hard to provide safe and reliable drinking water that meets federal and state water quality requirements. Call 612-673-3000 if you have questions about Minneapolis's drinking water. You can also ask for information about how you can take part in decisions that may affect water quality.

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. 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.

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How to Read the Water Quality Data Tables

The tables below show the contaminants Minneapolis found last year or the most recent time there was sampling 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.

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The City of Minneapolis 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 or 1-800-818-9318 between 8 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.

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.

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

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

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

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.

Monitoring Results – Regulated Substances

LEAD AND COPPER – Tested at customer taps

Contaminant (Date, if sampled in previous year)	EPA's Ideal Goal (MCLG)	EPA's Action Level	90% of Results Were Less Than	Number of Homes with High Levels	Violation	Typical Sources
Lead (10/15/18)	0 ppb	90% of homes less than 15 ppb	3.8 ppb	2 out of 50*	NO	Corrosion of household plumbing.
Copper (10/15/18)	0 ppm	90% of homes less than 1.3 ppm	0.06 ppm	0 out of 50	NO	Corrosion of household plumbing.

*Follow-up testing revealed the source of lead to be localized at the faucet.

CONTAMINANTS RELATED TO DISINFECTION – Tested in drinking water

Substance (Date, if sampled in previous year)	EPA's Ideal Goal (MCLG or MRDLG)	EPA's Limit (MCL or MRDL)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Sources
Total Trihalomethanes (TTHMs)	N/A	80 ppb	29.2 ppb	6.90 - 44.00 ppb	NO	Byproduct of drinking water disinfection.
Total Haloacetic Acids (HAA)	N/A	60 ppb	29.7 ppb	1.10 - 49.00 ppb	NO	Byproduct of drinking water disinfection.
Chloramine	4.0 ppm	4.0 ppm	3.22 ppm	2.70 - 3.50 ppm	NO	Water additive used to control microbes.

Total HAA refers to HAA5

OTHER SUBSTANCES – Tested in drinking water

Substance (Date, if sampled in previous year)	EPA's Ideal Goal (MCLG)	EPA's Limit (MCL)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Sources
Fluoride	4.0 ppm	4.0 ppm	0.7 ppm	0.60 - 0.69 ppm	NO	Erosion of natural deposits; Water additive to promote strong teeth.

TREATMENT INDICATOR – Tested during treatment

Substance	Removal Required	Lowest Monthly Percent of Results in Compliance	Highest Test Result	Violation	Typical Sources
Turbidity	Treatment Technique	99.4	0.31 NTU	NO	Soil runoff.

DISINFECTION BYPRODUCT INDICATOR – Tested in source water and in drinking water

Substance	Percent Removal Required	Range of Percent Removal Achieved	Average of Percent Removal Achieved	Violation	Typical Sources
Total Organic Carbon	25-30	53 - 67	61	NO	N/A

The percentage of Total Organic Carbon (TOC) removal was measured each month. The system met all TOC removal requirements, unless there is a “YES” in the Violation column.

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The following table shows the unregulated contaminants we detected last year, as well as guidance values for comparison,

where available. The comparison values are based only on potential health impacts to people 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 pregnant women, 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 A-Z List of Contaminants in Water (www.health.state.mn.us/communities/environment/water/contaminants/index.html) and Fourth Unregulated Contaminant Monitoring Rule (UCMR 4) (www.health.state.mn.us/communities/environment/water/com/ucmr4.html)

UNREGULATED CONTAMINANTS – Tested in drinking water

Contaminant	Comparison Value	Highest Average Result or Highest Single Test Result	Range of Detected Test Results
Manganese	100 ppb	0.61 ppb	0.00 - 1.31 ppb
Group of 6 Haloacetic Acids (HAA6Br)	N/A	1.09 ppb	0.00 - 2.73 ppb
Group of 9 Haloacetic Acids (HAA9)	N/A	20.38 ppb	2.18 - 41.80 ppb

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 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 800-426-4791.

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.

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 Edina 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 (www.health.state.mn.us/communities/environment/water/swp/swa) or call 651-201-4700 or 1-800-818-9318.

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 6 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. Edina is responsible for providing high-quality drinking water, but it cannot control the plumbing materials used in private buildings.

Ways to 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 main water pipe under the street to your home.
 - You can find out if you have a lead service line by contacting your public water system or you can check by following the steps at: www.mprnews.org/story/2016/06/24/npr-find-lead-pipes-in-your-home
 - 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. If you are still concerned about lead, arrange with 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 get a sample container and instructions on how to submit a sample:
Environmental Laboratory
Accreditation Program
(eldo.web.health.state.mn.us/public/accreditedlabs/labsearch.seam)
MDH can help you understand your test results.
- 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 (www.health.state.mn.us/communities/environment/water/factsheet/poulead.html)

Learn more:

- Visit Lead in Drinking Water (www.health.state.mn.us/communities/environment/water/contaminants/lead.html)
- Visit Basic Information about Lead in Drinking Water (www.epa.gov/safewater/lead)
- Call the EPA Safe Drinking Water Hotline at 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 (www.health.state.mn.us/communities/environment/lead/sources.html).