

# WATER QUALITY REPORT

## 2020

This report contains our monitoring results from January 1 to December 31, 2020.

**We are pleased to share the news that 2020 monitoring again detected no contaminants at levels that violated federal drinking water standards.**

Our drinking water is a vital resource that impacts our quality of life. We invite you to give attention to the information contained in this report to learn about Richfield's water and the steps we take to provide you and the entire community with a reliable and trustworthy water supply.

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 webpage "Basics of Monitoring and Testing Drinking Water in Minnesota"

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

Contact Russell Lupkes, Utilities Superintendent, at 612-861-9175 or [rlupkes@richfieldmn.gov](mailto:rlupkes@richfieldmn.gov) if you have questions about Richfield's drinking water. You can also ask for information about how you can take part in decisions that may affect water quality.



-Aesthetic Water Quality- Hardness: 5-6 grains pH: 8.5

**This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.**

**Spanish: Información importante. Si no la entiende, haga que alguien se la traduzca ahora.**

**Somali: Warbixintan waxay wadataa macluumaad muhiim ah ee la xiriira biyaha aad cabtid. Cid ha kuu tarjunto ama la hadl cid fahmaysa.**

**Hmong: Daim ntauv teev num no muaj cov ntaub ntauv tseem ceeb hais txog koj cov dej haus. Nrhiav ib tug neeg pab txhais cov ntaub ntauv no rau koj, lossis tham nrog ib tug neeg uas paub cov lus no.**

**Tibetan:** འདི་འགྲོར་ཐོན་པའི་ཉུ་གལ་ཆེ་བ་གནས་ཚུལ་ཡོད།  
རྒྱ་ལྗོངས་གནང་རྟོགས་ཡང་ན་གནས་ཚུལ་ཤེས་མཁན་ཞིག་ལ་བཀའ་འདྲི་ཞུ་རྟོགས་གནང།

## 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 and 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.

Your drinking water comes from a groundwater source: seven wells ranging from 405 to 1066 feet deep, that draw water from the Prairie Du Chien-Jordan, Jordan and Wonewoc-Mt. Simon aquifers.

The MDH provides information about your drinking water source in a source water assessment, including:

- How Richfield is protecting your drinking water source;
- Nearby threats to your drinking water source;
- 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 online:

[www.health.state.mn.us/communities/  
environment/water/swp/swa](http://www.health.state.mn.us/communities/environment/water/swp/swa)

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

## What You Should Know About Contaminants

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.

## Meeting Safe Drinking Water Standards

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

The U.S. Environmental Protection Agency (EPA) sets safe drinking water standards. These standards limit the amounts of regulated 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 EPA's Safe Drinking Water Hotline at 1-800-426-4791.

The table that follows shows the contaminants we found last year or the most recent time we sampled for that contaminant. It also shows the levels of those contaminants and the EPA's limits. Substances that were tested for but not found 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 table below with the detection date.

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 table includes the unregulated contaminants we detected last year (Sodium and Sulfate), as well as human-health based guidance values for comparison. 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).

In addition to the results in this report, 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 between 8:00 a.m. and 4:30 p.m., Monday through Friday.



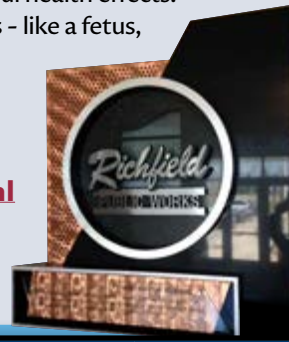
A person drinking water with a contaminant at or below the comparison value would be at little or no risk for harmful health effects. If the level of a contaminant is above the comparison value, people of a certain age or with special health conditions - like a fetus, infants, children, elderly, and 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 notify you of the unregulated contaminants we have detected as a public education opportunity.

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

[www.health.state.mn.us/communities/environment/water/contaminants/index.html](http://www.health.state.mn.us/communities/environment/water/contaminants/index.html)

**Fourth Unregulated Contaminant Monitoring Rule (UCMR 4)**

[www.health.state.mn.us/communities/environment/water/com/ucmr4.html](http://www.health.state.mn.us/communities/environment/water/com/ucmr4.html)



Regulated Substance (monitored at plant) (units)	MCL	MCLG	Level Detected	Range	Major Source of Contaminant	Meets Standard
<b>Fluoride</b> (ppm)	4	4	0.63	0.57-0.67	Erosion of natural deposits; Water additive to promote strong teeth.	✓
<b>Gross Alpha</b> (pCi/l)	15.4	0	3.5	N/A	Erosion of natural deposits.	✓
<b>Total Chlorine</b> (ppm)	4 (MRDL)	4 (MRDLG)	1.05*	0.53-1.05**	Water additive used to control microbes.	✓
Regulated Substance (monitored at tap) (units)	AL	MCLG	90% Level	Sites Over AL	Major Source of Contaminant	Meets Standard
<b>Copper</b> (ppm) 11/25/2019	1.3	0	0.07	0 of 30 sites	Corrosion of household plumbing.	✓
<b>Lead</b> (ppb) 11/25/2019	15	0	1.5	0 of 30 sites	Corrosion of household plumbing.	✓
Unregulated Substance (units)	Comparison Value		Level Detected	Range		
<b>Manganese</b> (ppb)	100		0.52	0.43-0.6		
<b>Haloacetic Acids (HAA9)</b> (ppb)	N/A		0.52	0.47-0.58		

**Level Detected** - This is the value used to determine compliance with federal standards. In some cases, it is the highest value detected and in other cases it is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.

**ppm** - Parts per million or milligrams per liter. One ppm 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).

**ppb** - Parts per billion or micrograms per liter. One ppb 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).

**pCi/l** - Picocuries per liter. A measure of radioactivity.

**MCL** - Maximum Contaminant Level. This is 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 where there is no known or expected risk to health. MCLGs allow for a margin of safety.

\*Highest Quarterly average. \*\*Monthly averages.

**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.

**AL** - Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.

**90% Level** - This is the value obtained after disregarding 10 percent of the samples taken that had the highest levels. For example, in a situation in which 10 samples were taken, the 90th percentile level is determined by disregarding the highest result, which represents 10 percent of the samples.

**N/A** - Not applicable. Does not apply.

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 1-800-426-4791.

## 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.

If your drinking water fluoride levels are below the optimal concentration range of 0.7 to 1.2 ppm, please talk with your dentist about how you can protect your teeth and your family's teeth from tooth decay and cavities. For more information, visit: MDH Drinking Water Fluoridation.

[www.health.state.mn.us/communities/environment/water/com/fluoride.html](http://www.health.state.mn.us/communities/environment/water/com/fluoride.html)

## Lead

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. Richfield provides high quality drinking water, but it cannot control the plumbing materials used in private buildings.

***There are no lead service lines in the Richfield Public Water System.***

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. 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 MDH-accredited laboratory to get a sample container and instructions on how to submit a sample. MDH can help you understand your test results. Search accredited labs here:

<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.

Read about water treatment units at this page:

[www.health.state.mn.us/communities/environment/water/factsheet/hometreatment.html](http://www.health.state.mn.us/communities/environment/water/factsheet/hometreatment.html)

To learn more, call the EPA Safe Drinking Water Hotline at (800) 426-4791 or visit these pages:

[www.health.state.mn.us/communities/environment/water/contaminants/lead.html](http://www.health.state.mn.us/communities/environment/water/contaminants/lead.html)

[www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)

[www.health.state.mn.us/communities/environment/lead/sources.html](http://www.health.state.mn.us/communities/environment/lead/sources.html)

## Stormwater Protection

Yard debris, including leaves and other organic plant material like shrubbery trimmings and grass clippings, are a significant source of stormwater pollution. When you blow your lawn waste into the street it can clog storm drains and cause drainage and flooding issues. Storm drains are not connected to the wastewater treatment plant. There is no treatment to remove the debris from the water before it reaches nearby lakes, streams.

Why are grass clippings and leaf litter harmful? As this waste breaks down in our local waterways, it adds excess nutrients like nitrogen and phosphorus to the water. This leads to unwanted and uncontrolled growth of algae and native and non-native aquatic weeds.

What can you do to protect water quality while keeping your yard maintained?

- Mow your lawn often enough so no more than one-third the length of the grass is removed. Taller grass has deeper roots - that prevents soil loss & helps the rain soak into the ground.
- Leave the clippings on the lawn or compost them. Be sure to sweep or blow clippings off paved surfaces and back onto the lawn.
- Fertilize only when, and amount necessary, or not at all if it might rain in the next day or two.
- Clean up after your pets. Scoop up pet waste and put it in the trash.
- Only use dry cleanup methods (broom and dustpan or absorbent material) for spills of chemicals or fuels.

