



2024 Water Quality Report – Sample Results for Calendar Year 2023



The City of Warrenville has developed and published this report, as per the requirements of the *Federal Safe Drinking Water Act*, to inform our customers as to the source and safety of Warrenville’s drinking water.

This year, as in years past, Warrenville tap water met all United States Environmental Protection Act (USEPA) drinking water health standards. The City vigilantly safeguards the system and groundwater supply and had no violation of a contaminant level in 2023. This report summarizes the quality of water provided last year, including details about the water source, what is contained in the water, and how it compares to standards set by regulatory agencies.

If you have any questions concerning this report, or concerning Warrenville’s water system, please contact Zachary Jardine, Utility Maintenance Superintendent, at 630-836-3051, Monday through Friday, 7:00 a.m. to 3:00 p.m. A Committee of the Whole meeting, concerning Public Works and Infrastructure issues, is held bi-monthly at 7:00 p.m., in City Hall Council Chambers, located at 28W701 Stafford Place, Warrenville, Illinois. Meetings

are posted on the bulletin boards inside both main entrances to the City Hall, and also online at <http://www.warrenville.il.us/>. You can call City Hall at 630-836-3050 to obtain the meeting dates. Water issues are discussed in open forums on an “as needed” basis.

The City uses groundwater provided by four wells drilled into the Silurian–Devonian aquifer. An aquifer is a geological formation that contains water. The wells are drilled to an average depth of 300 feet. The location of the wells are as follows: Well 9 is located at 27W601 Warrenville Road, Well 10 is located at 30W194 Batavia Road, Well 11 is located at 4S255 River Road, and Well 12 is located at 2S900 Timber Drive.

Warrenville homes normally receive a mixture of water from Wells 9, 10, 11, and 12 that utilize iron removal equipment in the production process, thus removing iron from the water before it enters the distribution system. The City has implemented a corrosion control program that uses blended phosphates to coat the interior pipe lining. Chlorine is added for disinfection, and fluoride is added to help promote oral health.

A source-water assessment conducted by the Illinois Environmental Protection Agency (IEPA) indicated the ground water is not vulnerable to any contaminants. The assessment is available for public viewing at the City Hall, or online at <http://il-warrenville.civicplus.com/DocumentCenter/View/2141>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA’s Safe Drinking Water Hotline (1-800-426-4791).

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 USEPA Safe Drinking Water Hotline at 1-800-426-4791 or <http://www.epa.gov/safewater>



If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing. The City cannot control the variety of materials used in plumbing components.

When water has been sitting in the pipes for several hours, it is possible to minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the water for drinking or cooking. If you are concerned about lead in your water, you can have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, and wells. All of Warrenville's tap water is obtained from wells. As water travels over the surface or through the ground, it can dissolve naturally occurring minerals and pick up substances resulting from the presence of animal or human activity. Possible contaminants consist of: **Microbial contaminants** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban runoff, industrial or domestic wastewater discharges, oil and gas production, or farming; **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water, and residential uses; **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff, and septic systems; **Radioactive contaminants**, which may be naturally occurring.

In order to ensure that tap water is safe to drink, the USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water supplies. Federal Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Definitions and Abbreviations

- AL:** Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- AVG:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in a water system.
- Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why E. coli MCL violation has occurred and/or why total coliform bacteria have been found in a water system on multiple occasions.
- MCL:** Maximum Contaminant Level, or 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, or 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 disinfectant allowed in the water.
- MRDLG:** Maximum residual disinfectant level goal.



BETA/PHOTON EMITTERS: The MCL for beta particles is 4 milligrams/year. EPA considers 50 pCi/l to be a level of concern for Beta particles.
DF: Dilution factor.

FLUORIDE: Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride Level of 0.6 To 0.8 ppm.

MREM: Millirems per year (a measure of radiation absorbed by the body).

MFL: Million fibers per liter, used to measure asbestos concentration.

N/A: Not applicable.

ND: Not detectable at testing limits.

NITRATE: Nitrates in drinking water at levels above 10 ppm are a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should consult your health care provider.

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

PCI/L: Picocuries per liter, used to measure radioactivity

PPM: Parts per million or milligrams per liter.

PPB: Parts per billion or micrograms per liter.

PPT: Parts per trillion or Nano grams per liter.

RDL: Report detection limit.

SODIUM: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If the level is greater than 20 mg/l, and you are on a sodium restricted diet, you should consult your health care provider.

Volatile Organic Compounds: Volatile Organic Chemicals (VOCs) are solvents that have been widely used as cleaning agents, De-greasers, and as intermediate chemicals in manufacturing. There are 21 regulated VOCs.

The “**Range of Detections**” column represents a range of individual sample results, from lowest to highest, that were collected during the CCR calendar year.

Treatment Technique or TT – A required process intended to reduce the level of a contaminant in drinking water.



2023 Water Quality Data

Note: The state requires monitoring for certain contaminants less than once per year, as concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest number of positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 Positive monthly sample.	1		0	NO	Naturally present in the environment.

Lead- If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing. The City of Warrentville is responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

	Date Sampled	MCLG	Action Level (AL)	Units	90 th Percentile	Number of Sites Over AL	Violation	Likely Source of Contamination
Lead & Copper								
Copper	2023	1.3 ppm	1.3 ppm	ppm	0.323 ppm	0	NO	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing.
Lead	2023	0 ppb	15 ppb	ppb	0 ppb	1	NO	Corrosion of household plumbing systems; Erosion of natural deposits.

National Secondary Standards – Non-enforceable guidelines regulating contaminants that may cause cosmetic effects or aesthetic effects in drinking water. USEPA recommends secondary standards to water systems but does not require systems to comply.



	Collection Date	Highest Level Detected	Range of Levels Detected	Unit of Measurement	MCLG	MCL	Violation	Likely Source of Contamination
Disinfectants & Disinfections Byproducts								
Haloacetic Acids (HAA5)	2023	5	4.9-5.0	ppb	No goal for total	60	NO	By-product of drinking water chlorination.
Chlorine	2023	2.2	2.0-2.4	ppm	MRDLG=4	MRDLG=4	NO	Water additive used to control microbes.
Total Trihalomethanes	2023	5	2.8-5.0	ppb	No goal for total	80	NO	By-product of drinking water disinfection.

	Collection Date	Highest Level Detected	Range of Levels Detected	Unit of Measurement	MCLG	MCL	Violation	Likely Source of Contamination
Inorganic Contaminants								
Sulfate	2018	247	118 - 247	ppm	N/A	250	NO	Erosion of natural deposits
Total Dissolved Solids	2018	918	530 -918	ppm	N/A	500	NO	Erosion of natural deposits
Barium	09/16/2021	0.132	.0862 - 0.132	ppm	2	2	NO	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits.
Chromium	09/16/2021	5.65	0 - 5.65	ppb	100	100	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	09/16/2021	0.81	0.57 - 0.81	ppm	4	4.0	NO	Erosion of naturally occurring deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Sodium	09/16/2021	61.5	28.5 – 61.5	ppm			NO	Erosion from naturally occurring deposits; Used in water softener regeneration. There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions.
Radioactive Contaminants								
Combined Radium	2023	2.21	2.21-2.21	pCi/L	4	5	NO	Erosion of natural deposits.



Unregulated Contaminants: The USEPA required water systems to monitor for new unregulated contaminants in 2018, and a second set of samples were analyzed in 2019. Water systems are required to publish the analytical results of all detections of contaminants. The City of Warrenville only had three contaminants detected, which are listed in the following table. If you would like to view the entire report for the 2018–2019 data, please contact Public Works at 630-836-3050.

	Collection Date	Highest Level Detected	Range of Levels Detected	Unit of Measurement	MCLG	MCL	Violation	Likely Source of Contamination
Unregulated Contaminants UCMR4								
Bromide	09/24/2019	.09	.05-.09	ppm	N/A	N/A	NO	Bromide is commonly found in nature. Mandatory health effects language has not been established.
Germanium	09/24/2019	.048	0.0-.048	ppm	N/A	N/A	NO	Naturally occurring element; commercially available in combination with other elements and minerals; a byproduct of zinc ore processing; used in infrared optics, fiber-optic systems, electronics, and solar applications. Mandatory health effects language has not been established. Possible health concerns include kidney or liver function, anemia, muscle weakness, and harm to the peripheral nervous system.
Manganese	09/24/2019	.0064	.0047-.0064	ppm	N/A	N/A	NO	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits. Excessive manganese in the water may cause staining of plumbing fixtures and laundry. It may also produce an unpleasant taste in beverages, including coffee and tea.