

# VILLAGE OF WARRENSBURG ANNUAL DRINKING WATER QUALITY REPORT

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Annual Water Quality Report for the period of January 1 to December 31, 2021  
 This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.  
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Este informe contiene informacion muy importante sobre el agua que usted bebe. Traduzcalo a hable con alguien que lo entienda bien.

> **The source of drinking water used by WARRENSBURG is Ground Water** <

Source Water Name:	Well 2 (45131)	Well 3 (45132)	Well 4 (01594)	Type of Water	Type of Water	Type of Water	Status
				GW	GW	GW	Active
				GW	GW	GW	Active
				GW	GW	GW	Active

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

- > 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, production, mining, or farming.
- > Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water run off 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 can be naturally-occurring or be the result of oil and gas production and mining activities.

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 Hot Line at (800) 426-4791. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hot Line (800) - 426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We 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 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, test methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hot Line or at <http://www.epa.gov/safewater/lead>.

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA (IEPA). If you would like a copy of this information, please stop by the City Hall or call our water operator at 217-672-3222. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at: <http://www.epa.state.il.us/cgi-bin/wd/swap-fact-sheets.pl>.

To determine Warrensburg's susceptibility to ground water contamination, a Well Site Survey, published in 1989 by the IEPA, was reviewed. Based on the information contained in this document, six potential sources of ground water contamination are present that could pose a hazard to ground water pumped by the Warrensburg community water supply wells. These include two below ground fuel storages, an above ground hazardous substance storage, a surface impoundment, a warehouse, and a domestic waste water treatment facility. The IEPA has determined that Warrensburg Wells #2, #3 and #4 are not susceptible to VOC, VCC, or SOC contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data for the wells. In anticipation of the U.S. EPA's proposed Ground Water Rule, the IEPA has determined that Warrensburg's community water supply wells are not vulnerable to viral contamination. This determination is based upon the evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper site conditions; there is a hydrogeologic barrier that restricts pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. However, having stated this, the U.S. EPA is proposing to require states to identify systems in karst, gravel and fractured rock aquifer systems as sensitive. Water systems utilizing these aquifer types would be required to perform routine source water monitoring. Because the community's wells are constructed in a confined aquifer, which should provide an adequate degree of protection to prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the vulnerability determination.

**2020 REGULATED CONTAMINANTS DETECTED**

Coliform Bacteria	Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. 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	Fecal Coliform or E. Coli MCL: A Routine Sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive.	0	N	Naturally present in the environment.

**LEAD and COPPER**

Definitions:	>Action Level Goal (ALG) :	The level of contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.	Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
			Copper	06/23/2020	1.3	1.3	1	1	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
			Lead	06/23/2020	0	15	1.8	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

**WATER QUALITY TEST RESULTS**

>Maximum Contaminant Level Goal (MCLG): 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.

>Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

>Maximum Residual Disinfectant Level Goal (MRDLG): 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.

>Maximum Residual Disinfectant Level (MRDL): 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.

- Definitions:** The following tables contain scientific terms and measures, some of which may require explanation.
- >ppb: Micrograms Per Liter or Parts Per Billion - or one ounce in 7,350,000 gallons of water.
  - >na: Not Applicable
  - >Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.
  - >ppm: Milligrams Per Liter or Parts Per Million - or one ounce in 7,350 gallons of water.
  - >ppCl: Picocuries Per Liter

**Level 1 Assessment:** A Level 1 assessment is the study of the water system to identify potential problems and determine (if possible) why total coliform bacteria had been found in our 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 an E. coli MCL violation has occurred and / or why total coliform bacteria had been found in our water system on multiple occasions.

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

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

**REGULATED CONTAMINANTS**

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2021	.4	0.2 - 0.6	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes
Halacetic Acids (HAAS) *	2021	5	4.51 - 4.51	No goal for the total	60	ppb	N	By-product of drinking water chlorination
Total Trihalomethanes (THM) *	2021	12	12.1 - 12.1	No goal for the total	80	ppb	N	By-product of drinking water chlorination.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	01/22/2020	2.7	2.7 - 2.7	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
<p>Arsenic - While your drinking water meets EPA standards, it does contain low levels. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.</p>								
Barium	01/22/2020	0.051	0.051 - 0.051	2	2	ppm	N	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	01/22/2020	0.593	0.593 - 0.593	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	01/22/2020	0.076	0.076 - 0.076		1.0	ppm	N	Erosion of natural deposits.
Manganese	01/22/2020	16	16 - 16	150	150	ppb	N	Erosion of natural deposits
Nitrate [measured as Nitrogen]	2021	0.08	0.08 - 0.08	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.
Sodium	01/22/2020	230	230 - 230			ppm	N	Erosion from naturally occurring deposits; used in water softener regeneration.
Zinc	07/08/2015	1.51	1.51 - 1.51	0	5	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium	07/08/2015	1.51	1.51 - 1.51	0	5	pc/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	07/08/15	0.306	0.306 - 0.306	0	15	pc/L	N	Erosion from natural deposits.

**VIOLATION TABLE**

Violation Type	Violation Begin	Violation Ended	Violation Explanation
None			

**PFAS: (Per- and Polyfluoroalkyl Substance) 18 PFAS compounds were sampled in 2021 as part of the State of Illinois PFAS Statewide Investigation, and none were detected in our finished drinking water. For more information about PFAS health advisories** <https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx>