

2025 Drinking Water Consumer Confidence Report

City of Warren Utility Services

This brochure explains the quality of drinking water provided by the City of Warren Utility Services. Included is a listing of results from water quality tests as well as an explanation of where our water comes from and tips on how to interpret the data. We're proud to share our results with you. Additionally, in 2025 the City of Warren had also been issued a current, unconditioned license to operate by the Ohio Environmental Protection Agency.

Water Source Protection

The City of Warren public water system uses surface water drawn from the Mosquito Creek Reservoir. For the purposes of source water assessments in Ohio, all surface waters are considered to be susceptible to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemicals and pathogens which may rapidly arrive at the public drinking water intake with little warning or time to prepare.

The City of Warren's drinking water source protection area is susceptible to wastewater treatment discharges, home sewage disposal system discharges, runoff from construction sites, residential, agricultural and urban areas, oil and gas production and transportation, and accidental releases and spills from vehicular traffic as well as from recreational boating.

The City of Warren public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Mosquito Creek Reservoir and its watershed. The State performed an assessment of our source water in 2003. Please call Patrick King at 330-841-2578 if you would like more information about the source water assessment with any questions and/or concerns.

The City of Warren public water system also has an emergency connection with the City of Niles. This connection was not used in 2025.

What are sources of contamination to drinking water?

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.

Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

(B) Inorganic contaminants, such as salts and metals, which can be naturally- occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

(D) 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.

(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA 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.

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 Federal Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Who needs to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people 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 Hotline (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. City of Warren public water

system 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 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Per the Lead and Copper Rules, Public Water Systems were required to develop and maintain a Service Line Inventory. A service line is the underground pipe that supplies your home or building with water. To view the Service Line Inventory, which lists the material type(s) for your location, you can visit:
https://warren.org/water_department/service_line.php

The EPA requires regular sampling to ensure drinking water safety. The City of Warren Water Quality Laboratory conducted sampling for bacteria, inorganic, synthetic organic, volatile organic, lead and copper, disinfection byproducts, microcystins, and cyanobacteria.

Microcystins: Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.

Cyanobacteria: Photosynthesizing bacteria, also called blue-green algae, which naturally occur in marine and freshwater ecosystems, and may produce cyanotoxins which at sufficiently high concentrations can pose a risk to public health.

Cyanotoxin: Toxin produced by cyanobacteria. These toxins include liver toxins, nerve toxins and skin toxins. Also sometimes referred to as "algal toxin."

The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

For a copy of the results, contact our Water Quality Lab at 330-841-2578 or 330-841-2963.

are presented in the table. EPA establishes the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The table shows the concentrations of detected substances in comparison to regulatory limits. Substances that were tested for, but not detected, are not included in the table. Terms used in the Water Quality Table and in other parts of this report are defined here:

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

Maximum Contaminant Level Goal or MCLG: The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Detected Level: The highest level detected of contaminant for comparison against the acceptance levels for each parameter. These levels could be the highest single measurement, or an average of values depending on the contaminant.

Range: The lowest to the highest values for all samples tested for each contaminant. If only one sample is tested, or no range is required for this report, then no range is listed for that contaminant in the table.

Treatment Technique (TT): A required process intended to reduce the level of contaminant in drinking water.

Maximum Residual Disinfectant Level (MRDL): The highest residual disinfectant allowed.

Maximum Residual Disinfectant Level Goal: The level of residual disinfectant below which there is no known or expected risk to health.

Action Level (AL): means the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

We encourage public interest and participation in our community's decisions affecting drinking water. Regular meetings are held twice monthly at Council Chambers at 5:00 pm. Please call 330-841-2578 for specific dates. The public is welcome.
PWSID #: 7803811

How to Read the Water Quality Table

The results of tests performed in 2025

City of Warren Water Quality Table 2025

Inorganic Contaminants	DateTested	Units	MCLG	MCL	Detected Level	Range	Violation	Major Sources
Barium	2025	ppm	2	2	0.029	na	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2025	ppm	4	4	1.14	0.79-1.14	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate	2025	ppm	10	10	0.35	<0.10-0.35	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Lead and Copper	Date Tested	Units	MCLG	Action Level	Individual Results over the AL	90% of test levels were below	Violation	Major Sources
Lead	2025	ppb	0	15	na	3.7	No	Corrosion of household plumbing systems; erosion of natural deposits
	0 out of 30 samples were found to be in excess of the lead action level of 15 ppb							
Copper	2025	ppm	1.3	1.3		0.034	No	Corrosion of household plumbing systems; erosion of natural deposits
	0 out of 30 samples were found to be in excess of the copper action level of 1.3 ppm							
Microbiological Contaminants	Date Tested	Units	MCLG	MCL	Detected Level	Range	Violation	Major Sources
Turbidity (1)	2025	NTU	na	TT	0.29	0.02-0.29	No	Soil runoff
Lowest monthly % meeting turbidity limits	2025	%	na		100.00			
TOC (Total Organic Carbon) (2)	2025	ratio	na	TT	0.837	0.755-1.290	No (3)	Naturally present in the environment
Volatile Organic Contaminants	Date Tested	Units	MCLG	MCL	Detected Level	Range	Violation	Major Sources
TTHMs (Total Trihalomethanes)	2025	ppb	na	80	78.7	38-126	No	Byproduct of drinking water disinfection
HHAs (Total Haleoacetic Acids)	2025	ppb	na	60	44.4	24.6-74.3	No	Byproduct of drinking water disinfection
Synthetic Organic Contaminants	Date Tested	Units	MCLG	MCL	Detected Level	Range	Violation	Major Sources
Atrazine	2024	ppb	3	3	0.11	na	No	Runoff from herbicide used on row crops
Residual Disinfectants	Date Tested	Units	MRDLG	MRDL	Detected Level	Range	Violation	Major Sources
Total Chlorine	2025	ppm	4	4	1.64	1.39-1.79	No	Water additive used to control microbes.

Water Quality Table Footnotes

(1)Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the Ohio EPA is 0.3NTU in 95% of the samples analyzed each month and shall not exceed 1NTU at any time. As reported above, the Warren Water Department's highest recorded turbidity result for 2025 was 0.29 NTU and the lowest monthly percentage of samples meeting the turbidity limits was 100%.

(2) The value reported under 'Detected Level' for Total Organic Carbon (TOC) is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. A value greater than one indicates that the water system is in compliance with TOC removal requirements.

(3) The city is not in violation for TOC because we are currently using an alternate method (SUVA value) to meet TOC requirement. All SUVA values are within the required range.

Health Effects Language for Total Trihalomethanes

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. The result represented in this table does not indicate a violation. For more information, call our chemist with the City of Warren Utility Services at 330-841-2578.

Health Effects Language for Lead

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. The Warren Water Department 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 your 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 at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

Key to Table

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.

Nephelometric Turbidity Unit(NTU): A measurement of the clarity of water. It is used to assess water quality by indicating the cloudiness of the water, which can be an indicator of the presence of contaminants.

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

Not Detected(nd): Abbreviation meaning a contaminant was not detected in drinking water sample(s).

Not Applicable(na): Abbreviation meaning that this does not apply to our report.

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

Parts per Million (ppm) or milligrams per liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in approximately 11.5 days.

Parts per Billion (ppb) or micrograms per liter (µg/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

The “<” symbol: A symbol which means ‘less than’. A result of “<5” means that the lowest level detected was 5 and the contaminant in that sample was not detected.

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.