



## **City of Cortland Drinking Water Consumer Confidence Report For 2016**

The City of Cortland has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water, and water system contacts. We have a current, unconditioned license to operate our water system. Currently our only treatment is fluoridation and chlorination.

The City of Cortland receives its drinking water from seven wells. Four of the wells are located in Willow Park, two behind City Hall and one on Bradley-Brownlee Road. We draw our water from a limestone aquifer approximately 300 feet deep.

Ohio EPA completed a study of Cortland City's source of drinking water, to identify potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the aquifer that supplies our water has a LOW susceptibility to contamination. This determination is based on the presence of a thick protective layer of clay overlying the aquifer, the significant depth of the aquifer, the absence of significant levels of chemical contaminants in the ground water from human activities, and no apparent significant potential contaminant sources in the protection area. This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is low. This likelihood can be minimized by implementing appropriate protective measures.

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.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which 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.

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 (1-800-426-4791).

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 infection. 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 (1-800-426-4791).

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 line and home plumbing. The City of Cortland is responsible for providing high quality drinking water, but cannot control the variety of material used in plumbing components. When 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 (1-800-426-4791) or at <http://www.epa.gov/lead>.

The EPA requires regular sampling to ensure drinking water safety. The City of Cortland conducted sampling for inorganic compounds, nitrates, radiological compounds, volatile organic compounds, and bacterial presence 2013 through 2016. Samples were collected for a total of 76 different contaminants, most of which were not detected in the City of Cortland water supply. 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, are more than one year old. Listed below is information on those contaminants that were found in the City of Cortland drinking water:

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contamination
Antimony (ppb)	6	6	<2	<2	NO	2016	Erosion of natural deposits.
Arsenic (ppb)	10	10	<3	<3	NO	2016	Erosion of natural deposits, Runoff.
Asbestos (MFL)	7	7	.16	.16	NO	2013	Erosion of natural deposits.
Barium (ppb)	N/A	2000	195	153-243	NO	2016	Erosion of natural deposits.
Beryllium (ppb)	4	4	<2	<2	NO	2016	Erosion of natural deposits.
Cadmium (ppb)	5	5	<2	<2	NO	2016	Erosion of natural deposits.
Chromium (ppb)	100	100	<2	<2	NO	2016	Erosion of natural deposits.
Cyanide (ppb)	200	200	<.02	<.02	NO	2016	Discharge from manufacturing.
Mercury (ppb)	2	2	<0.2	<0.2	NO	2016	Erosion of natural deposits.
Nickel (ppb)	N/A	N/A	<5	<5	NO	2016	Erosion of natural deposits.
Selenium (ppb)	50	50	<5	<5	NO	2016	Erosion of natural deposits.
Thalium (ppb)	0.5	2	<2	<2	NO	2016	Leaching from ore process sites.
Alachlor (ppb)	N/A	2	<0.2	<0.2	NO	2015	Runoff from pesticides and herbicides
Atrazine (ppb)	N/A	3	<0.3	<0.3	NO	2015	Runoff from pesticides and herbicides
Simazine (ppb)	N/A	4	<0.35	<0.35	NO	2015	Runoff from pesticides and herbicides
TTHM(ppb)	N/A	80	3.35	2.14-4.56	NO	2016	By-product of disinfection.
Haloacetic Acid 5 (ppb)	N/A	60	1.05	1.05	NO	2016	By-product of disinfection.
Gross Alpha (pCi/L)	0	15	4.03	4.03	NO	2016	Erosion of natural deposits.
Radium (pCi/L)	0	5	<1	<1	NO	2016	Erosion of natural deposits.
Nitrate (ppm)	10	10	<0.5	<0.5	NO	2016	Runoff from fertilizer use and erosion of natural deposits.
Lead (ppb)	0	AL=15	<5	<5	NO	2016	Corrosion of household plumbing systems.
Copper (ppb)	1300	1300	104	7-240	NO	2016	Corrosion of household plumbing systems.
Fluoride (ppm)	1	4	0.91	.76-1.23	NO	2016	Water additive that promotes strong teeth and erosion of natural deposits.
Total Chlorine (ppm)	4	4	2.3	1.2-3.6	NO	2016	Water additive to control microbes.

**Definitions of some terms contained within this report:**

- 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.
- 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 a little over 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.
- Million Fibers per Liter (MFL): A Fiber is 10 micrometers or larger.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Picocuries per litre (pCi/L): A measure of radioactivity.

In addition to the primary drinking water standards, the City had an occasion to monitor the level of naturally occurring sodium in the water supply. Although a drinking water standard does not presently exist for sodium, the level was monitored so that the general public and local physicians may be informed of the sodium content of available drinking water and may take appropriate action if necessary. The source is from naturally occurring salt deposits in the ground.

Contaminant (Units)	Health Based Value*	Taste Threshold	Level Found	Sample Year	Typical Source of Contamination
Sodium (mg/L)	20 mg/L	30-60 mg/L	195	2013	Erosion of natural deposits.

\*for individuals on a 500 mg/day restricted sodium diet.

**For more information** on your drinking water or the source water assessment, call City Hall or contact Operator in Charge Russell Masaitis or Utility Operator Chris Minor at (330) 637-9986. Public participation and comment are encouraged at regular meetings of Cortland City Council which meets the first and third Monday of the month at city hall at 7:00 PM.