

**Ashtabula County Water System #OH400803
2020 Water Quality Report**

About Your Drinking Water – Ashtabula County is pleased to provide you with the 2020 Consumer Confidence Report for the Ashtabula County Water System (ACWS, Public Water Supply ID #OH400803) which contains important information about your drinking water. The ACWS has a current, unconditioned license to operate the water distribution system. The ACWS is coordinated under the direct authority of the Ashtabula County Board of Commissioners by and through the Ashtabula County Dept. of Environmental Services (ACDES). The Commissioners hold public meetings on a regular basis; any customer wishing to express their questions or concerns are first asked to contact ACDES at 440.576.3722. This report summarizes the quality of water provided by Ashtabula County in 2020 - including details about water sources, what the water at your tap contains and how it compares to standards set by regulatory agencies. Although the report lists only those regulated substances that were detected in your water, testing is performed for more than what is required for reporting. This report is only a summary of testing performed in 2020. Should you have any questions about the information in this report please contact ACDES at 440.576.3722.

Sources of Supply - Bulk water is purchased from Aqua Ohio Water Company – Ashtabula Water System, which uses surface water from two intakes in Lake Erie, to serve customers of the Ashtabula County Water System. For the purposes of source water assessments, in Ohio, all surface waters are considered to be susceptible to contamination from a number of sources such as municipal wastewater treatment discharges, industrial wastewater discharges, runoff from residential and urban areas, contaminated river sediments, oil and gas production and transportation and accidental releases and spills from rail and vehicular traffic as well as from commercial shipping operations and recreational boating. By their nature, surface waters are accessible and can be readily contaminated by chemicals and pathogens with relatively short travel times from source to intake. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie. While Aqua and Ashtabula County Water System do not hold regular meetings, customers are encouraged to participate by contacting the ACDES at 440.576.3722.

The Ashtabula County Water System also has an auxiliary/emergency/back-up connection with Lake County Dept. of Utilities (LCDU). During 2020 the ACWS used 2,235,024 gallons from this connection over 365 days. On average this connection is used for approximately 365 days each year. This report does not contain information on the water quality received from the LCDU, but a copy of their consumer confidence report can be obtained by contacting the LCDU at 440.350.2645.

The sources of drinking water both tap water and bottled water includes 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 radioactive material, and can pick up substances resulting from animals or from human activity. Contaminants that may be present in source water include:

- * 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 storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- * Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- * Organic chemical contaminants, including synthetic and volatile organics, which are byproducts of industrial processes and petroleum production, and can also, come from gas stations, urban stormwater runoff and septic systems.
- * 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 that 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 info about contaminants and potential health effects can be obtained at the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 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 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 Drinking Water Hotline at 800.426.4791.

The following table lists contaminants that were detected during 2020 (unless otherwise noted) in your water system. The table provides the level found and the range of detections of regulated contaminants.

Ashtabula County Water System #OH400803							
TABLE OF DETECTED CONTAMINANTS							
Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Residual Disinfectants							
Total Chlorine (ppm)	MRDLG = 4	MRDL	1.7	1.2 - 1.8	No	2020	Water additive used to control microbes
Disinfection Byproducts (a)							
Haloacetic Acids (HAA5) (ppb)	NA	60	48.8	14.3-80.3	No	2020	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	NA	80	83.5	28.8-99.4	Yes	2020	By-product of drinking water disinfection
Total Organic Carbon (TOC) (b) (PROVIDED BY AQUA OHIO-ASHTABULA PWS)							
Minimum Ratio of % removal to required % removal	MCL		Level Found	Range of Ratios	Violation	Sample Year	Typical Source of Contaminants
1	TT		0.8	0.59 - 1.71	No	2020	Naturally present in the environment
Microbiological Contaminants (PROVIDED BY AQUA OHIO-ASHTABULA PWS)							
Turbidity, NTU (c)	NA	TT	0.11	0.06 - 0.11	No	2020	Soil runoff
Turbidity % meeting standards	NA	TT	100%	100% - 100%	No	2020	Soil runoff
Inorganic Contaminants (PROVIDED BY AQUA OHIO-ASHTABULA PWS)							
Fluoride (ppm)	4	4	0.94	0.71 - 1.21	No	2020	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Barium (ppm)	2	2	0.018	NA	No	2020	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate (ppm)	10	10	0.82	0.51 - 0.82	No	2020	Run off from fertilizer use, Leaching from septic tanks, sewage; Erosion of natural deposits
Lead and Copper (d)							
Contaminants (units)	Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical source of Contaminants	
Lead (ppb)	15 ppb	29 ppb, 17 ppb	3.8	No	2020	Corrosion of household plumbing systems; erosion of natural deposits	
						2 samples were found to have lead levels in excess of the lead action level of 15 ppb.	
Copper (ppm)	1.3 ppm	NA	0.2	No	2020	Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing systems	
						0 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.	

How to read the Water Quality Data 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 this table.

Notes:

- a) The Ashtabula County Water System failed to comply with disinfection byproducts regulations and exceeded the MCL for Total Trihalomethanes (TTHM's) in the second quarter of 2020. 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 systems and may have an increased risk of getting cancer. In order to maintain compliance, the Ashtabula County Water system has increased routine flushing of water lines and is evaluating the distribution system by means of a hydraulic model to determine and implement methods to reduce water age, lower disinfection byproduct levels, and improve water quality in the system.
- b) The value reported under "Level Found" is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. A value greater than or equal to 1.0 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1.0 indicates a violation of TOC requirements. The Aqua Ohio - Ashtabula PWS has maintained alternative TOC compliance in 2020. Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THM) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
- c) Turbidity is a measure of the cloudiness of the water and is an indication of the effectiveness of the filtration process. The turbidity limit set by EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. Per the table, the highest recorded turbidity measurement for 2020 was 0.11 NTU and the lowest monthly percentage of samples meeting the turbidity limits was 100%.
- d) 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. Ashtabula County 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 cold water 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>.

Source Water Assessment

The state of Ohio performed an assessment of the Aqua Ohio - Ashtabula PWS source water in 2003. Based on information compiled for this assessment, the Ashtabula drinking water source protection area is susceptible to contamination from municipal wastewater treatment discharges, industrial waste water discharges, air contamination deposition, runoff from residential and urban areas, contaminated river sediments, oil and gas production and transportation, and accidental releases and spills from rail and vehicular traffic as well as from commercial shipping operations and recreational boating.

It is important to note that this assessment is based on available data, and therefore may not reflect current conditions in all cases. Water quality, land uses and other activities that are potential sources of contamination may change with time. Although the source water (Lake Erie) for the Aqua Ohio - Ashtabula Public Water System was determined to be susceptible to contamination, historically, the treatment plant has effectively treated this source water to meet drinking water quality standards.

Please contact The Ashtabula County Water System at 440.576.3722 if you would like more information about the assessment. Should you need to find your Source Water Assessment Information, contact Ohio EPA.

Cryptosporidium Testing

The Aqua Ohio-Ashtabula Water Treatment Plant also monitored for Cryptosporidium in the source water during 2018. Cryptosporidium was detected in one out of nine samples collected from the raw water. It was not detected in the finished water. Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Monitoring of source water indicates the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinkg water.

PFAS Testing

In 2020, the Aqua Ohio - Ashtabula PWS was sampled as part of the State of Ohio's Drinking Water Per- and Polyfluoroalkyl Substances (PFAS) Sampling Initiative. Six PFAS compounds were sampled, and none were detected in our finished drinking water. For more information about PFAS, please visit pfas.ohio.gov

DEFINITIONS:

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

Maximum Contaminant Level (MCL): 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. Some levels are based on a running annual average.

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 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.

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.

NA: Not applicable. **ND:** Not detected.

ppb: A unit of concentration equal to one part per billion.

ppm: A unit of concentration equal to one part per million.

PWSID: Public water supply identification number.

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