

**Otterbein Portage Valley Retirement Center
Drinking Water Consumer Confidence Report
For 2016**

In 2016 Otterbein Portage Valley Retirement Center and the Northwestern Water & Sewer District had an unconditioned license to operate our water system. Together, Otterbein Portage Valley Retirement Center and the Northwestern Water & Sewer District have 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.

Source Water Information

Otterbein Portage Valley Retirement Center receives its drinking water from two, 8-in wells, located on the property. These wells are located approximately 1630 feet south of our north boundary, State Route 582. Each well is approximately 180 feet deep, and the water is pumped from a depth of 47 feet. All of our water flows through our Water Softening System, is treated by our chlorinator and stored in a 25,000-gallon fiberglass tank. From there, it is alternatively pumped by two high-speed pumps into two 528-gallon steel pneumatic tanks. From there it is pressurized & maintained between 45-62 psi as it is delivered into the distribution system for your use.

Susceptibility of your drinking water source to contamination

The aquifer that supplies drinking water to Otterbein Portage Valley Retirement Center has a high susceptibility to contamination because of:

- The shallow depth (less than 20 feet below ground surface) of the aquifer,
- The presence of a relatively thin protective layer of clay overlying the aquifer,
- The wells are located in a sensitive potential karst area
- The presence of significant potential contaminant sources in the protection area
- The presence of manmade contaminants in the treated water

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is relatively high. This likelihood can be minimized by implementing appropriate protective measures.

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, 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.

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 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).

About your drinking water.

The EPA requires regular sampling to ensure drinking water safety. The Otterbein Portage Valley Retirement Center conducted sampling for bacteria; inorganic; radiological; volatile organic; and disinfection byproducts during 2016. Samples were collected for a total of 88 different contaminants most of which were not detected in the Otterbein Portage Valley Retirement Center 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 Otterbein Portage Valley Retirement Center drinking water.

TABLE OF DETECTED CONTAMINANTS: Otterbein Portage Valley Retirement Center

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Inorganic Contaminants							
Barium (ppm)	2	2	0.058	0.058 – 0.058	NO	2016	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride (ppm)	4	4	0.76	0.76 – 0.76	NO	2016	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Unregulated Contaminants							
Bromo-dichloromethane (ppb)	NA	NA	5.7	5.7 – 5.7	NO	2016	Presently, there are no MCL or Action Levels for these contaminants. Unregulated contaminants monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.
Bromoform (ppb)	NA	NA	0.6	0.6 – 0.6	NO	2016	
Chloroform (ppb)	NA	NA	4.4	4.4 – 4.4	NO	2016	

Dibromo-chloromethane (ppb)	NA	NA	4.5	4.5 – 4.5	NO	2016	
Residual Disinfectants							
Total Chlorine (ppm)	4	4	1.4	1.3 – 1.4	NO	2016	Water additive used to control microbes.
Disinfection Byproducts							
Total Trihalomethanes TTHMs (ppb)	0	80	21	21.2 – 21.2	NO	2016	By-product of drinking water chlorination.
Haloacetic Acids HAA5 (ppb)	0	60	5	4.6 – 4.6	NO	2016	
Lead and Copper							
Contaminants (Units)	Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Violation	Sample Year	Typical Source of Contaminants	
Lead (ppb)	15 ppb	0	6.5 ppb	NO	2016	Corrosion of household plumbing systems.	
	Zero out of 5 samples was found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ppm)	1.3 ppm	0	0.403 ppm	NO	2016	Corrosion of household plumbing systems.	
	Zero out of 5 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.						

Lead Educational Information

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. Otterbein Portage Valley Retirement Center 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>.

Revised Total Coliform Rule (RTCR) Information

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems were required to comply with the Total Coliform Rule from 1989 to March 31, 2016, and begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the PWS.

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of the Board of Trustees which meets at 7:30 am every 2nd and 4th Thursday of each month. Meetings are held at the District's Operations facility located at 12560 Middleton Pike, Bowling Green, OH 43402. For more information on your drinking water contact Customer Service at 419-354-9090.

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.
- 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 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.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- Contact Time (CT) means the mathematical product of a "residual disinfectant concentration" (C), which is determined before or at the first customer, and the corresponding "disinfectant contact time" (T).
- 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".
- 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 ($\mu\text{g/L}$) 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 that could be detected was 5 and the contaminant in that sample was not detected.