

## General Information: Drinking Water

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).



## 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).

## For more information:

Public participation and comments are encouraged. To participate or for more information on your drinking water contact the Knox County Water Department at:

Contact Person: Jeff Pickrell  
Phone Number: 740-397-7041  
Mailing Address: 17602 Coshocton Rd  
Mount Vernon, OH 43050

Website:  
<https://co.knox.oh.us/water-wastewater/>

Direct Link to Consumer Confidence Report:  
<https://co.knox.oh.us/wp-content/uploads/2023/06/CCR-2022.pdf>

PWSID: OH4202012  
Facility ID: DS1

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.



# Drinking Water Consumer Confidence Report for 2022

## Knox County Water Department



Published: June 2023

## Water Quality Report 2022

- The Knox County Water Department 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.
- Our source of water is withdrawn from 5 ground water wells, located approximately one half mile off County Rd. 35, southeast of Howard. Chemicals are added to ensure public health & safety. Those chemicals are: chlorine for disinfection, fluoride to strengthen tooth enamel and a polyphosphate to sequester iron & manganese to prevent staining of plumbing fixtures.



## Susceptibility of the Howard Wellfield

Knox County Water Department Wellhead Protection Plan for the Howard Wellfield indicates the aquifer (water-rich zone) that supplies water to the Howard Wellfield has a high susceptibility to contamination. This determination is based on the following: Lack of a protective layer of clay overlying the aquifer, shallow depth (less than 15 feet below the ground surface) of the aquifer, and the presence of significant potential contaminant sources in the protection area. This susceptibility rating means that under existing conditions, the likelihood of the aquifer becoming contaminated is high. Implementing appropriate protective measures can minimize this likelihood. The County has posted signs in and around the wellhead protection area. A retaining wall composed of rock was placed along the Kokosing River, next to the wellfield, to prevent erosion and protect the Howard Wellfield. These are just two examples of the strategies currently being implemented. The full Wellhead Protection Plan is available on the Water Department's website. More information about the source water assessment or what consumers can do to help protect the aquifer is available by calling: Jeff Pickrell at Knox County Water 740-397-7041



Well Head Protection Plan:

<https://co.knox.oh.us/water-wastewater/>

## Sources of Contamination

- 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. It can also pick up substances resulting from the presence of animals or from human activity.
- In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottle water, which must provide the same protection for public health.

## About YOUR Drinking Water

The Ohio EPA requires regular sampling to ensure drinking water safety. The Knox County Water Department has a current unconditional license to operate. 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. Although it's accurate, some of our data is more than one year old. Listed on the following page shows the concentrations of detected substances in comparison to regulatory limits in the Knox County water supply. Substances that were tested for, but not detected are not included in the table.



# Contaminants in Drinking Water

- 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 water 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, urban storm water runoff, 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.

Contaminants	MCLG	MCL	Level Found	Range Of Detections	Violations	Sample Year	Typical Source Of Contaminants
<b>Inorganic Contaminants</b>							
Barium (ppm)	2	2	0.04	NA	NO	2021	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cyanide (ppb)	200	200	2	NA	NO	2021	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)	4	4	1.08	0.85-1.26	NO	2022	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	1.62	NA	NO	2022	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm)	1	1	0.02	NA	NO	2021	
<b>Disinfection Byproducts</b>							
Total Trihalomethanes (TTHM) (ppb)	N/A	80	20.3	16.9-23.7	NO	2022	By-product of drinking water chlorination
Total Haloacetic Acid (HAA5) (ppb)	N/A	60	6.6	5.1-8.1	NO	2022	
<b>Residual Disinfectants</b>							
Chlorine (ppm)	MRDLG=4	MRDL=4	1.29	0.99-1.29	NO	2022	Water additive used to control microbes

## About BACKFLOW Prevention in Drinking Water

- Backflow is a flow of water from a source of possible contamination back into the drinking water system. As a consumer, you are legally responsible for protecting your water supply plumbing from backflow that may contaminate drinking water. This includes complying with plumbing code and not creating cross connections.

For additional information on backflow prevention, please visit: <https://co.knox.oh.us/water-wastewater/backflow-prevention/>



## Lead and Drinking Water:

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. Knox County 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 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>.

Substance	Action Level	Individual Results over the AL	90% of test levels were less than	Minimum Detected	Maximum Detected	Violation	Year Sample	Typical Source
Copper (ppm)	1.3	0	0.669	0.054	0.885	NO	2022	Corrosion of household plumbing systems; erosion of natural deposits
0 out of 20 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.								
Lead (ppb)	15	0	0.9	0	2.5	NO	2022	Corrosion of household plumbing systems; erosion of natural deposits
0 out of 20 samples were found to have lead levels in excess of the lead action level of 15 ppb.								

For additional information on primary regulated contaminants, please visit: <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>

## Unregulated Contaminants- Monitoring Required



Contaminant	Average	Range Detected	Sample Year
Bromoform (ppb)	1.25	1.0-1.5	2022
Bromodichloromethane (ppb)	7.0	5.8-8.2	2022
Chloroform (ppb)	7.05	6.1-8.0	2022
Dibromoacetic Acid (ppb)	1.95	1.6-2.3	2022
Dibromochloromethane (ppb)	5.0	4.0-6.0	2022
Dichloroacetic Acid (ppb)	3.35	2.2-4.5	2022
Trichloroacetic Acid (ppb)	1.3	1.3-1.3	2022



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 additional information on unregulated contaminants, please visit: <https://www.epa.gov/dwucmr> or contact Jeff Pickrell at 740-397-7041 for a copy of Knox County Water unregulated contaminant results.

# polyfluoroalkyl substances (PFAS)

## Information

In 2020, Knox County 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](http://pfas.ohio.gov).

PFAS: Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still ongoing.

# Definitions and Terms

- **Action Level (AL):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
- **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 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 residual disinfectant level allowed.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** the level of residual disinfectant below which there is no known or expected risk to health.
- **NA:** The “NA” symbol means non-applicable.
- **Parts per Billion (ppb):** are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
- **Parts per Million (ppm):** are units of measure for concentration of a contaminant. A part per million corresponds to one second in 11.6 days.
- **Treatment Technique (TT):** a required process intended to reduce the level of contaminant in drinking water.
- **“<” symbol:** the “<” symbol means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in the sample was not detected.



## License to Operate (LTO) Status Information:

Green Status: In 2022 we had an unconditional license to operate our water system.

