

City of Crisfield Annual Drinking Water Quality Report



2025

MD0190001

Is my water safe?

Last year, as in years past, your tap water met all EPA and state drinking water health standards. City of Crisfield is pleased to provide this annual water quality report for calendar year 2024. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. City of Crisfield routinely monitors for contaminants in your drinking water and we are pleased to report we met all federal and state guidelines established for drinking water last year.

Do I need 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 infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from and what are the potential sources of contamination?

Your drinking water is supplied by five ground water wells. The susceptibility analysis for City of Crisfield's water supply is based on a review of the water quality data, potential sources of contamination, aquifer characteristics, and well integrity. For more information on the source of your water, the significant potential sources of contamination, and susceptibility analysis, contact the Maryland Source Water Assessment Program at the Maryland Department of the Environment at (410) 537-3714 or visit on the web at: https://mde.maryland.gov/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/by_county.aspx

Why may there be contaminants in my 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 (EPA) Safe Drinking Water Hotline (800-426-4791). 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:

1. Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
2. 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.
3. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

4. 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.
5. 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Important Drinking Water Definitions:

MCLG: Maximum Contaminant Level Goal. The level of a contaminant in drinking water below which there is no known or expected risks for safety. MCLG allows for margin of safety.

MCL: Maximum Contaminant Level. 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.

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

MRDLG: Maximum Residual Disinfectant Level Goal. 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 microbe contaminants.

MRDL: Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbe contaminants.

ALG: Action Level Goal. The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

LCR: Lead and Copper Rule. A United States federal regulation which limits the concentration of lead and copper allowed in public drinking water at the consumer's tap, as well as limiting the permissible amount of pipe corrosion occurring due to the water itself.

M/R: Monitoring and Reporting

TT: Treatment Technique – a required process intended to reduce the level of a contaminant in drinking water

Level 1 Assessment: A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

RAA: Regulatory compliance where some MCLs are based on running annual average of monthly samples.

Units of Measurement & Conversions:

NA: Not applicable

pCi/L: picocuries per liter (a measure of radioactivity)

ppm: parts per million, or milligrams per liter (mg/L)

mrem/yr: millirems per year

(a measure of radiation absorbed by the body)

ND: Not Detected

ppt: parts per trillion, or nanograms per liter (ng/L)

ppb: parts per billion, or micrograms per liter (µg/L)

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected in your water. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, may be up to five years old.

Disinfectants and Disinfection By-Products:

Our water system tested a minimum of 3 sample(s) per month in accordance with the Total Coliform Rule for microbiological contaminants. With the microbiological samples collected, the water system collects disinfectant residuals to ensure control of microbial growth.

Disinfectant (Units)	Date	Highest RAA	MRDL	MRDLG	Range Low High		Violation	Typical Source
Chlorine (ppm)	2023	0.5	4	4	0.2	1.02	No	Water additive used to control microbes

Contaminants (Units)	Date Sampled	MCLG	MCL	Highest Level Detected	Range		Violation	Typical Source
					Low	High		

Inorganic Contaminants:

Fluoride (ppm)	02/08/2023	4	4	1.9	1.9	1.9	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
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Radioactive Contaminants:

GROSS BETA PARTICLE ACTIVITY (pCi/L)	7/17/2024	0	50	5	4	5	No	Decay of natural and man-made deposits
RADIUM-228	7/17/2024	0	5	0.4	0.3	0.4	No	Erosion of natural deposits
Combined Radium 226/228 (pCi/L)	03/25/2020	0	5	0.8	0	0.8	No	Erosion of natural deposits

Contaminant	Period	Action Level (AL)	90 th Percentile	# Sites over AL	Range of Tap Sampling	Units	Violation	Typical Source
COPPER, FREE	2020-2023	1.3	<0.05	0	<0.05-0.11	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
LEAD	2020-2023	15	1	0	<1.0-1.0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits

Definitions

Lead: 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 Crisfield is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact City of Crisfield at 410 968 1333 Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

An initial inventory of service line pipe materials located within our service area was required to be submitted to the Maryland Department of the Environment (MDE) by October 16, 2024. Our initial inventory was submitted to MDE on time and is available upon request.

Chlorine: Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Fluoride: Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease including pain and tenderness of the bones. Fluoride in water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.

Beta/photon Emitters: Certain minerals are radioactive and may emit a form of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Combined Radium: Some people who drink water containing radium 226 or radium 228 in excess of the MCL over many years may have an increases risk of getting cancer.

PFAS: PFAS – short for per- and polyfluoroalkyl substances – refers to a large group of more than 4,000 human-made chemicals that have been used since the 1940s in a range of products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams. These uses of PFAS have led to PFAS entering our environment, where they have been measured by several states in soil, surface water, groundwater, and seafood. Some PFAS can last a long time in the environment and in the human body and can accumulate in the food chain.

The Maryland Department of the Environment (MDE) conducted a PFAS monitoring program for Community Water Systems from 2020 to 2022. The results are available on MDE's website: <https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx>.

The Environmental Protection Agency (EPA) finalized regulations for 6 PFAS compounds in drinking water in April 2024. The MCLs for PFOA and PFOS are each 4.0 parts per trillion (ppt). The MCLs for PFNA, PFHxS, and HFPO-DA (GenX chemicals) are each 10 ppt. Additionally, a mixture of two or more of the following chemicals (PFNA, PFHxS, HFPO-DA, and PFBS) will be regulated with a Hazard Index of 1 (unitless) to determine if the combined levels of these PFAS pose a risk and require action.

The 5th Unregulated Contaminant Monitoring Rule (UCMR5) began testing for 29 PFAS compounds and lithium in 2023, and testing will run through 2025. The UCMR5 should test all community water systems with populations of at least 3300 people. Three randomly selected systems in Maryland with populations less than 3300 people will also be tested under the UCMR5. Detections greater than the minimum reporting levels for each constituent should be reported in the CCR.

City of Crisfield
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