

**Annual Drinking Water Quality Report**  
**Town of Charlestown, Maryland (PWSID: 0070029)**  
**Consumer Confidence Report for 2021**

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**Spanish (Español)**

Este informe contiene información muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información.

**Is my water safe?**

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. Charlestown vigilantly safeguards its water supplies and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard.

**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?**

The source of our drinking water is two wells into the upper Potomac aquifer, which lies about 200 feet below the earth's surface. An aquifer is an underground body of water, which is tapped by drilling wells and pumping the water to the surface for distribution. The 200 feet of earth between surface sources and this aquifer helps to purify the water before it actually reaches the aquifer, making it easier for us to treat before we pump it into your water distribution system.

**Source water assessment and its availability**

There are several sources of potential contamination to Charlestown's water supply. There is an underground heating oil tank at the elementary school. The tank at the school was installed in August 1995, tested and passed on 9/19/08. Additional testing will be done within the next five years. There was a potential water well site as well as a MDE (Maryland Department of the Environment) monitoring well that could lead to contamination. Also of concern is rail traffic utilizing the Amtrak lines. It was determined through a Wellhead Protection (WHP) study that Charlestown's water supply is susceptible to volatile organic compounds (e.g. solvents and gasoline), but is not susceptible to inorganic compounds, synthetic organic compounds, radionuclides, or microbiological contaminants. We have a Source Water Assessment report on file at the Town Hall. This report may be reviewed during regular business hours which are 9:00 a.m. to 12:00 p.m. and 1:00 p.m. to 5:00 p.m. Monday through Friday.

**Why are there contaminants in my drinking water?**

The Charlestown water department routinely monitors for over (90) regulated contaminants in your drinking water according to Federal and State laws. A list of the contaminants tested is available at Town Hall. As water travels over the surface of the land or through the ground it can pick up substances or contaminants such as microbes, inorganic chemicals and radioactive substances. 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).

**Are there any new contaminants being monitored?**

PFAS, short for per- and polyfluoroalkyl substances, refers to a large group of more than 4,000 human-made chemicals including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams. The use of PFAS have led to them entering our environment, where they have been detected in soil, surface water, groundwater and seafood.

Currently, there are no federal regulations for PFAS in drinking water. However, the U.S. Environmental Protection Agency (EPA) has issued a Health Advisory Level (HAL) of 70 parts per trillion (ppt) for the sum of PFOA and PFOS concentrations in drinking water which to provide a margin of protection from lifetime exposure.

In 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. The highest combined PFOA and PFAS concentration from samples taken from our water system was 2.76 ppt (below the HAL). Additional information about PFAS can be found on the MDE website: [mde.maryland.gov](http://mde.maryland.gov).

**How can I get involved?**

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled board meetings. They are held on the 2nd Tuesday at 6:30 p.m. and 4th Tuesday at 6:30 p.m. of each month.

**Conservation Tips**

Did you know that the average U.S. household uses approximately 350 gallons of water per day? Luckily, there are many low-cost or no-cost ways to conserve water. Water your lawn at the least sunny times of the day. Fix toilet and faucet leaks. Take short showers - a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath. Turn the faucet off while brushing your teeth and shaving; 3-5 gallons go down the drain per minute. Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

**For Additional Information please contact:**

Bryan Lightner, Town Administrator  
241 Market Street, P.O. Box 154  
Charlestown, MD 21914  
410-287-6173

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**Water Quality Data Table**

The table below lists all of the drinking water contaminants that we detected during the calendar year of the report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. 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 frequently change. This covers the January 1<sup>st</sup> – December 31<sup>st</sup> 2021 monitoring period.

Detected Contaminants							
Contaminant	Year Sample Collected	Highest Level Detected	MCLG or MRDLG	MCL, MRDL or AL	Units	Violation	Likely Source of Contamination
Lead	2020	2	0	15 (AL)	ppb	N	Corrosion of household plumbing; erosion of natural deposits.
Copper	2020	0.263	1.3	1.3 (AL)	ppm	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing.
Chlorine	2021	1.4	4 (MRDLG)	4 (MRDL)	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2021	1.29	No goal	60	ppb	N	By-product of drinking water chlorination.
Total Trihalomethanes (TTHM)	2021	9.3	No goal	80	ppb	N	By-product of drinking water chlorination.
Chromium	2017	5.0	100	100	ppb	N	Discharge from steel and pulp mills; erosion of natural deposits.
Combined Radium 226/228	2019	0.9	0	5	pCi/L	N	Erosion of natural deposits.
Gross Alpha excluding Radon and Uranium	2019	0.9	0	15	pCi/L	N	Erosion of natural deposits.

**Violations**

For 2021, we received a violation for the failure to test our drinking water for nitrate during the designated testing period and cannot be sure of the quality of our drinking water at that time. Two nitrate samples were collected on April 5, 2022. No nitrate was detected in either of those samples and the violation was closed.

**Additional Information for Lead**

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. Town of Charlestown, Maryland 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>

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Unit Descriptions	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (ug/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: not detected
NR	NR: Monitoring not required, but recommended

Important Drinking Water Definitions	
MCLG	MCLG: Maximum Contaminant Level Goal: 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
MCL	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	AL: Action Level: the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
MRDLG	MRDLG: Maximum residual disinfection 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 microbial contaminants.
MRDL	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 microbial contaminants.



**The Commissioners of Charlestown are dedicated to providing top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.**

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