

# *Crownsville Hospital Center*

## *2023 Drinking Water*

### *Quality Report*

**PWSID: 002-0009**



## **Important Information Concerning Your Drinking Water**

We're pleased to present to you the Annual Water Quality Report for 2023. This report is designed to inform you about the water quality and services we deliver to you every day. Anne Arundel County operates the water treatment facility and distributed this report on behalf of the Crownsville Hospital Center.

The Environmental Protection Agency (EPA) regulates Public Water Systems and the contaminants found in water through the implementation of the Safe Drinking Water Act (SDWA). The SDWA sets regulations and guidelines for how public water systems operate and identifies several hundred drinking water contaminants, establishes monitoring frequencies and limitations. The Maryland Department of the Environment (MDE) is responsible for the enforcement of the SDWA and routinely complete Sanitary Surveys as part of their ongoing inspection and monitoring program. The Crownsville Hospital Center provides safe dependable operations of the water system and is dedicated to consistently providing high quality drinking water that meets or exceeds the SDWA standards.

If you have any questions about this report or have questions concerning your water utility, please contact the Bureau of Utility Operations by phone at 410-222-8114.

### **For More Information:**

For the opportunity to ask more questions or gain insight pertaining to your drinking water quality, please contact Water Operations within the Bureau of Utility Operations by phone at 410-222-8114.

**T**he Crownsville Hospital Center water works consists of two drilled wells in the Upper Patapsco formation, a treatment facility, two 250,000 gallon elevated water storage tanks and a distribution network. After the water is pumped out of the wells, it is aerated, settled, filtered, and passed through an ion exchange unit to reduce contaminants and remove radium. Finally, disinfectant is added to protect against microbial contaminants. The Maryland Department of the Environment has performed an assessment of the source water. A copy of the results is available. Call the Bureau of Utility Operations at 410-222-8114.

**S**ome 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 Safe Drinking Water Hotline (1-800-426-4791)**.

### **Inside This Issue:**

Definitions	2
Special Points of Interest	2
Radon	2
Water Quality Report	3
Water Security	3
Sources of Drinking Water	4
Alpha Emitters	4
Polyfluoroalkyl Substances	5
Lead Prevention	6
Water Conservation	6

# Crownsville Hospital Center Treated Water Quality Report 2023

## Definitions:

- ◆ **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 a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- ◆ **Action Level** - 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
- ◆ **Turbidity** - Relates to a condition where suspended particles are present in the water. Turbidity measurements are a way to describe the level of "cloudiness" of the water.
- ◆ **pCi/l** - Picocuries per liter. A measure of radiation.
- ◆ **ppb** - parts per billion or micrograms per liter
- ◆ **ppm** - parts per million or milligrams per liter
- ◆ **ppt** - parts per trillion or nanograms per liter

## Special Points of Interest:

The Crownsville Hospital Center water is tested for over 120 different compounds. The Crownsville Hospital Center drinking water met all State and Federal drinking water requirements. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some compounds. The presence of these compounds 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's) Safe Drinking Water Act Hotline (1-800-426-4791).

## Radon:

We constantly monitor the water supply for various constituents. We have detected radon in the water supply in a sample collected on September 17, 2008. Currently, there is no Federal Regulation for radon levels in drinking water. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Exposure to air transmitted radon over a long period of time may cause adverse health effects. The radon result of the September 2008 sample was 31.1 pCi/l (pCi/l = picocuries per liter, a measure of radioactivity). For additional information call the EPA radon hotline at 1-800-SOS-RADON.

# Crownsville Hospital Center Treated Water Quality Report 2023

Contaminant	Highest Level Allowed (EPA's MCL)	Highest Level Detected	Ideal Goal (EPA's MCLG)
<b>Regulated at the Treatment Plant</b>			
Combined Radium (226 & 228) (2023 Testing) Typical Source of Contamination: Erosion of natural deposits * Radium 226 is not required to be sampled when Gross Alpha is below 3 pCi/l.	5 pCi/l	2.0 pCi/l (Range 2.0 pCi/l - 2.0 pCi/l)	n/a
Gross Alpha (2023 Testing) Typical Source of Contamination: Erosion of natural deposits *Annual Rolling Average   ** Please read page 4 of the Consumer Confidence report for more information on Gross Alpha Emitters	15 pCi/l	4.7 pCi/l* (Range 4.7 pCi/l - 4.7 pCi/l)	0.0 pCi/l
Gross Beta (2022 Testing) Typical Source of Contamination: Erosion of natural deposits *EPA considers 50 pCi/L to be the level of concern for beta particles. The MCL is 4 mrem/year ** Because the beta particle results were below 50 pCi/l, no testing for individual beta particle constituents was required	50 pCi/l*	6.6 pCi/l* (Range 6.6 pCi/l - 6.6 pCi/l)	0.0 pCi/l
<b>Regulated in the Distribution System</b>			
Total Trihalomethane (TTHM) (2023 Testing) Typical Source of Contamination: By-product of drinking water disinfection *Locational Annual Rolling Average	80 ppb	12.1 ppb* (Range: 8.1 to 12.1 ppb)	n/a
Haloacetic Acids (HAA5) (2023 Testing) Typical Source of Contamination: By-product of drinking water disinfection *Locational Annual Rolling Average	60 ppb	3.4 ppb* (Range: 1.6 to 3.4 ppb)	n/a
Chlorine Water additive used to control microbes * Annual Rolling Average	4 ppm	1.47 ppm* Range (0.82 -2.10)	4 ppm
<b>Regulated in the Distribution System</b>			
	Action Level	90th percentile	Ideal Goal
Copper (2023 Testing) Typical Source of Contamination: Corrosion of household plumbing fixtures and systems	1300 ppb	380 ppb	1300 ppb
Lead (2023 Testing) Typical Source of Contamination: Corrosion of household plumbing fixtures and systems	15 ppb	6.3 ppb	0 ppb

**T**he table above lists all the drinking water contaminants that were detected during the 2023 calendar year. The presence of these compounds in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in the table is from testing done January 1 – December 31, 2023. The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

## Water Security is Everyone's Responsibility

Water system security continues to be an enormously important issue. If you notice suspicious activities in or around local water utilities, such as persons cutting or climbing facility fencing, loitering, tampering with equipment or other similar activities, please contact your local law enforcement agency immediately by dialing 911.

# Crownsville Hospital Center Treated Water Quality Report 2023

## Sources of 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.

*In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain compounds in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.*



## Important Information Regarding Gross Alpha Emitters:

Alpha emitters are naturally occurring radiations in soil, air and water. These emitters generally occur when certain elements decay or break down in the environment. The emitters enter drinking water through various methods including the erosion of natural deposits. There are no immediate health risks from consuming water that contains gross alpha, however some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer. Currently, the highest level of gross alpha detected is 4.7 pCi/L which is below the 15 pCi/L MCL.

## Contaminants That May Be Present in Source Water:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. Inorganic Contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming. 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 stormwater runoff, and septic systems. Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

***If you have any questions about this report or your drinking water, please call the Bureau of Utility Operations by phone at 410-222-8114.***



# Crownsville Hospital Center Treated Water Quality Report 2023

## Polyfluoroalkyl Substances

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>. No PFAS sampling was conducted for the Crownsville Water Treatment System during 2023.

The Environmental Protection Agency (EPA) proposed regulations for 6 PFAS compounds in drinking water in March 2023. The MCLs for PFOA and PFOS are proposed to be 4.0 parts per trillion (ppt). The proposal for HFPO-DA (GenX), PFBS, PFNA and PFHxS is to use a Hazard Index of 1.0 (unitless) to determine if the combined levels of these PFAS pose a risk and require action.

The 5<sup>th</sup> 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.

## 2022 PFAS Sample Results

PFAS parameters	Result	Proposed limit	PFAS parameters	Result	Proposed Limit (*Unitless number used to calculate Hazard Index)
PFOS	<1.0 ppt	4.0 ppt	PFHxS	<1.0 ppt	9 ppt
PFOA	<1.0 ppt	4.0 ppt	GenX Chemicals	<1.0 ppt	10 ppt
			PFNA	<1.5 ppt	10 ppt
			PFBS	<1.0 ppt	2000 ppt
			Hazard Index	0.00 *	1.0 *



# Crownsville Hospital Center Treated Water Quality Report 2023

## Lead Prevention

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. The Crownsville Hospital Center Water Treatment Plant 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, please contact the Bureau of Utility Operations for a list of laboratories in your area that provide drinking water testing. 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>.

## Water Conservation

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference—try one today and soon it will become second nature.

- ❖ Check for water leaks by the reading your water meter before and after a two-hour period when no water is being used in your home. If the reading changes, then there is probably a leak in your home.
- ❖ Take a shower! Filling up a bathtub can use up to 70 gallons of water while a shower generally uses 10 to 25 gallons. Taking shorter showers saves even more water.
- ❖ Make sure your washing machine and dishwasher are fully loaded before running.
- ❖ Are you in the market for a new water fixture such as a faucet, showerhead or toilet? Consider a WaterSense labeled fixture and reduce your water use by 30% or more versus standard flow fixtures. Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information on water efficiency products and methods.

Sources: <http://www.epa.gov/watersense> & <http://eartheasy.com>