

Town of Chincoteague **2023 Annual Drinking Water Quality Report**

Introduction

This Annual Drinking Water Quality Report for calendar year 2023 is designed to inform you about your drinking water quality. Our goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand the efforts we make to protect your water supply. The quality of your drinking water must meet state and federal requirements administered by the Virginia Department of Health (VDH).

If you want additional information about any aspect of your drinking water or want to know how to participate in decisions that may affect the quality of your drinking water, please contact:

J. Wes Parks, Public Works Director (757) 336-3366

Spanish (Español) – Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

French (Français) – Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

GENERAL INFORMATION

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 human activity.

Contaminants that may be present in source water include:

- 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 stormwater runoff, and septic system;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities

Drinking water, including bottled drinking 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 can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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

MCLs are set at very stringent levels by the U.S. Environmental Protection Agency. In developing the standards EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year lifespan. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one-in-ten-thousand to one-in-a-million chance of having the described health effect for other contaminants.

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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Where does my water come from?

The Town of Chincoteague water system receives its water from wells located on the Mainland. These wells have been determined to be groundwater and not under the influence of surface water. Your water is treated with chlorine to ensure water quality.

Source water assessment and availability:

The Virginia Department of Health conducted a Source Water Assessment of the system in 2014. The report may be viewed by contacting the administration office. The susceptibility to contamination was rated as a low susceptibility to contamination using the criteria developed by the state in its approved Source Water Assessment Program. The assessment report consists of maps showing the Source Water Assessment area, an inventory of known Land Use Activities and Potential Conduits to Groundwater utilized at Land Use Activity sites in Zone 1 and documentation of any known contamination within the last five years, Susceptibility Explanation Chart, and Definitions of Key Terms. The report is available by contacting your waterworks system owner/operator at the phone number or address included in the CCR.

PER-AND POLY-FLUOROALKYL SUBSTANCES (PFAS)

PFAS are manmade compounds used extensively in a wide variety of consumer products and are also components of firefighting foams. NASA conducted training with a commonly used firefighting foam containing PFAS chemicals at a firefighter training area located on the Wallops Main Base, starting in the 1980's. This resulted in PFAS contamination of shallow groundwater in associated area. NASA Wallops has been sampling the drinking water for these compounds since 2017.

NASA will continue to monitor drinking water supplies for the Wallops Flight Facility and the Town of Chincoteague. The agency will continue to share all drinking water sample results with local officials, EPA, Virginia Department of Environmental Quality (DEQ), and the Virginia Department of Health (VDH), and will provide information to the public.

For additional information on PFAS, visit EPA's dedicated website: <https://www.epa.gov/pfas>

DEFINITIONS

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The table included shows the results of our monitoring for the period of **2019 - 2023**. In the table and elsewhere in this report you will find many terms and abbreviations with which you might not be familiar. The following definitions are provided to help you better understand these terms:

- Non-detects (ND) – Lab analysis indicates that the contaminant is not present.
- Parts per million (ppm) or milligrams per liter (mg/L) – One part per million corresponds to one minute in 2 years, or a single penny in \$10,000.
- Parts per billion (ppb) or micrograms per liter (µg/L) – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- 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.
- 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 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 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.
- Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
- Level 1 Assessment – An evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the system triggered the assessment.
- Level 2 Assessment – An evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the system triggered the assessment in a more comprehensive investigation than a Level 1 assessment.
- Sanitary Defect – A defect that could provide a pathway of entry for microbial contamination into the distribution system or that is indicative of a failure or imminent failure in a barrier that is already in place.

Is my water safe?

In 2023, your water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The Town of Chincoteague vigilantly safeguards its water supplies, and we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard.

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water supply 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 change frequently.

Contaminant	MCLG	MCL or AL	Your Water	Range Low-High	Violation	Date of Sample	Typical Source of Contamination
Unregulated Contaminants							
Sodium (ppm)	NA	NA	41.7	NA	No	4/13/2021	Erosion of natural deposits widely distributed in nature, discharge from softeners, human or animal waste disposal, leachate from landfill or seawater intrusion
Contaminant	MCLG	MCL or AL	Your Water	Range Low-High	Violation	Date of Sample	Typical Source of Contamination
Regulated Contaminants							
Arsenic (ppb)	0	10	4	NA	No	1/10/2023	Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production wastes
HAA5 Haloacetic Acids) (ppb)	NA	60	2.2	NA	No	8/1/2023	By-product of drinking water chlorination
TTHMs (Total Trihalomethanes) (ppb)	NA	80	2.2	NA	No	8/1/2023	By-product of drinking water chlorination
Lead (ppb)+	0	AL - 15	3.6	ND-14.9	No	9/14/2021	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)+	1.3	AL-1.3	0.44	0.059 – 0.605	No	9/14/2021	Corrosion of household plumbing systems; Erosion of natural deposits
Chlorine (ppm)	4	4	0.83	0.2 – 1.8	No	2023	Water additive used to control microbes.
Nitrate (ppm)	10	10	0.32	NA	No	7/17/2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Gross Alpha (pCi/L)	0	15	0.5	NA	No	9/20/2023	Erosion of natural deposits.
Gross Beta (pCi/L)	0	50**	9.7***	NA	No	9/20/2023	Erosion of natural deposits.
Combined Radium (226 & 228) (pCi/L)	0	5	0.5*	NA	No	9/20/2023	Erosion of natural deposits.

+0 of the lead and copper samples exceeded the action level.

*If the results of the sample had been above 5 pCi/L, our system would have been required to do additional testing for radium. Because the results were below 5 pCi/L, no testing for radium was required.

**The MCL for Gross Beta is 4 mrem/year however EPA considers 50 pCi/L to be the level of concern.

***Because the beta particle results were below 50 pCi/L, no testing for individual beta particle constituents was required

There is presently no established standard for Sodium in drinking water. However, for the benefit of people who are restricting their sodium intake, lab testing indicates a sodium level of 41.7 ppm. A “severely restricted” sodium diet allows consumption of water with 20 ppm sodium, and a “low” sodium diet allows 270 ppm. For questions or concerns about sodium intake and your tap water, contact your doctor.

Additional information on 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 associate with service lines and home plumbing. Town of Chincoteague 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 or until it becomes cold or reaches a steady temperature 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 (800-426-4791) or online at <http://www.epa.gov/safewater/lead>.

A note about arsenic in drinking water

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and linked to other health effects such as skin damage and circulatory problems.

SYSTEM ASSESSMENTS FOR TC+

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. There were no positive samples during 2023.

LEVEL 1

No level 1 assessments were required for this system during this reporting period.

LEVEL 2

No level 2 assessments were required for this system during this reporting period.

SYSTEM ASSESSMENTS FOR EC+

No assessments were required for this system during this reporting period.

VIOLATIONS

This system did not have any violations during this reporting period.

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 20 gallons of water compared 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 your next water bill!