

## **Correction to Public Notice- 'Notification Total Trihalomethanes'**

**On 10/19/22 the Town of Canandaigua mailed residents a public notice regarding the presence of total trihalomethanes that were present in the towns water supply at that time.**

**The level stated in the notification that our office received from the EPA as '696' was incorrect, the actual level was only '86' which is significantly lower. The maximum contaminant level (MCL) allowed in a public water supply as regulated by the EPA is 80. The EPA has now provided the town with a corrected notification for residents.**

At this time the level has been corrected and there is no risk to public health or safety. The Town of Canandaigua is in full EPA compliance. All water mains and hydrants throughout the town have been thoroughly flushed as directed. There is no boil advisory in effect and there are no restrictions of water usage. The water is safe for drinking, cooking, and bathing on a regular basis.

We encourage our residents to contact the Department of Health or the Town of Canandaigua Water Department (585) 394-3300 with any questions or concerns. We apologize for any inconvenience this may have caused and thank you for your patience and understanding.

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Sincerely,  
James Fletcher  
Highway & Water Superintendent

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**CORRECTION TO NOTIFICATION DATED 10/19/22:**

**NOTIFICATION  
TOTAL TRIHALOMETHANES**

Date: 11/4/22

To: Customers/Residents of: Canandaigua Consolidated Water District

From: Jim Fletcher-Town of Canandaigua Water Superintendent

Required water quality tests conducted quarterly and averaged as a locational running annual average for the previous twelve months indicated the presence of total trihalomethanes at **86** micrograms per liter (ug/l), which is above the maximum contaminant level (MCL) allowed in a public water supply of **80** micrograms per liter (ug/l). This is a maximum contaminant level violation of the State Sanitary Code Section 5-1.52 Table 3. This violation requires public notice be provided to all customers on a quarterly basis for as long as the violation exists.

The New York State Department of Health sets drinking water standards and has determined that the presence of total trihalomethanes is a possible health concern. Trihalomethanes are a group of chemicals that includes chloroform, bromoform, bromodichloromethane, and chlorodibromomethane. Trihalomethanes are formed in drinking water during treatment by chlorine, which is the most commonly used disinfectant in New York State. Chlorine reacts with certain acids that are in naturally occurring organic material (e.g., decomposing vegetation such as tree leaves, algae or other aquatic plants) in surface water sources such as rivers and lakes. The amount of trihalomethanes formed in drinking water during disinfection can change from day to day, depending on the temperature, the amount of organic material in the water, the amount of chlorine added, and a variety of other factors. Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses. For this reason, disinfection of drinking water by chlorination is beneficial to public health.

Some studies suggest that people who drink chlorinated water (which contains trihalomethanes) or water containing elevated levels of trihalomethanes for long periods of time may have an increased risk for certain health effects. For example, some studies of people who drank chlorinated drinking water for 20 to 30 years show that long term exposure to disinfection by-products (including trihalomethanes) is associated with an increased risk for certain types of cancer. A few studies of women who drank water containing trihalomethanes during pregnancy show an association between exposure to elevated levels of trihalomethanes and small increased risks for low birth weights, miscarriages and birth defects. However, in each of the studies, how long and how frequently people actually drank the water, as well as how much trihalomethanes the water contained is not known for certain. Therefore, we do not know for sure if the observed increases in risk for cancer and other health effects are due to trihalomethanes or some other factor. The individual trihalomethanes chloroform, bromodichloromethane and dibromochloromethane cause cancer in laboratory animals exposed to high levels over their lifetimes. Chloroform, bromodichloromethane and dibromochloromethane are also known to cause effects in laboratory animals after high levels of exposure, primarily on the liver, kidney, nervous system and on their ability to bear healthy offspring. Chemicals that cause adverse health effects in laboratory animals after high levels of exposure may pose a risk for adverse health effects in humans exposed to lower levels over long periods of time.

The following areas have been affected: Canandaigua Consolidated Water District

The following steps are being taken to correct this violation:  
Flushing of all water mains and hydrants throughout the town

At this time no additional precautions by customers/residents are necessary. If you have any questions, please contact:

Kendall Larsen  
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Or the Town of Canandaigua Water Department – (585) 394-3300



## Drinking Water Facts:

# Disinfection By-Products

### Introduction

A major accomplishment in public health during the past century has been the disinfection of public drinking water supplies. The disinfection of water to kill harmful microorganisms has greatly reduced serious illnesses and deaths associated with many waterborne diseases, such as cholera and typhoid. However, chemical disinfection leads to the formation of disinfection by-products (DBPs). Since the identification of DBPs in drinking water in the 1970s, many steps have been taken to reduce levels of harmful DBPs in drinking water.

### What are disinfection by-products?

- **DBPs** are chemicals that form when disinfectants react with organic matter such as algae and decaying plants and leaves and other materials naturally present in drinking water.
- The most common types of disinfectants include chlorine, ozone, chlorine dioxide and chloramines. Each type of disinfectant forms different types of DBPs.
- The two most common classes of DBPs are **trihalomethanes (THMs)** and **haloacetic acids (HAAs)** formed in chlorinated drinking water. These can also form at lower levels with other types of disinfectants.

### How can I be exposed to DBPs?

- **By drinking tap water:** Ingestion of chlorinated drinking water is the most common exposure route.
- **Inhalation:** Some DBPs can evaporate or “volatilize” into the air in your home when you are taking a shower or washing dishes. The hotter the water the more likely it is that DBPs will be released into the air.
- **Dermal:** Only very small amounts of DBPs get into the body through the skin and is not a significant risk of exposure.

### Which DBPs have drinking water regulations in public water?

The United States Environmental Protection Agency (USEPA) regulates the following DBPs:

- **Total trihalomethanes (TTHMs)** which is the sum of four compounds: chloroform, bromodichloromethane, dibromochloromethane, and bromoform.
- The five most common HAAs are referred to as **HAA5** and include chloroacetic acid, bromoacetic acid, dichloroacetic acid, dibromoacetic acid, trichloroacetic acid.
- **Bromate** is formed primarily during ozone disinfection.
- **Chlorite** is formed with chlorine dioxide disinfection.

### Are DBPs harmful to my health?

Some people who drink water containing TTHM in excess of the maximum contaminant level (MCL) over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. Some people who drink water containing HAA5 in excess of the MCL over many years may have an increased risk of getting cancer.

### Is there a safe level of DBPs in my drinking water?

In order to prevent or reduce the chances of health effects occurring due to contaminants in drinking water “Maximum Contaminant Levels” (MCLs) have been established by the USEPA, the New York Department of Environmental Protection (NYDEP), and the New York Department of Health (NYDOH). MCLs are legal limits that public water systems must meet.

The following table provides the MCLs for the regulated DBPs. Water systems monitor for these DBPs each quarter based on a running annual average. Additionally, to reduce DBPs, water systems are required to reduce the amount of organic materials, measured as total organic carbon.

MCLs	
<b>TTHMs</b>	<b>80 µg/L</b>
<b>HAA5</b>	<b>60 µg/L</b>
<b>Bromate</b>	<b>10 µg/L</b>
<b>Chlorite</b>	<b>1,000 µg/L</b>

### Are DBPs present in my drinking water?

Your public water supplier is required to test for regulated DBPs in your drinking water and are required to send information about the quality of their water to customers each year. You can find out the results of these tests on our website at <http://www.townofcanandaigua.org/page.asp?id=88&name=Water>

### What should I do if DBP levels in my drinking water are elevated?

If the MCL is exceeded, the water provider must lower the levels to below the MCL within a time period sufficient to protect your health.

The EPA requires that all water mains and fire hydrants are thoroughly flushed throughout the town and requires that to be done within a specific time period. Flushing the lines helps to push out and remove DBP's.

### Can private well water contain DBPs?

Private well water is often sourced from groundwater, which is unlikely to contain the organic material needed to form DBPs. DBPs can be present in private well water from the following:

- **If chlorine is added:** Flush out your well after if chlorine is added to kill harmful bacteria or following installation or repair work. If the chlorine is not properly flushed out of the system, DBPs can form in well water if organic material is present.
- **From a septic system:** DBPs can form in household septic systems when organic material reacts with chlorine-based cleaning products. Water discharged from the septic system can enter into the underground water supply and nearby wells.
- **From a leaking in-ground pool:** Chlorine can get into groundwater from leaking in-ground swimming pools. DBPs can form in the underground water supply when chlorine reacts with organic material discharges from a nearby septic system and can enter a nearby well.