

## Chlorine in Drinking Water

### Frequently Asked Questions

We have received requests from many customers wanting to know more about chlorine in their drinking water. Why is it used, how can the taste of chlorine be removed from tap water, what are the health concerns associated with chlorinated drinking water, and what are the alternatives to chlorine?

#### **Why is chlorine added to water supplies?**

Chlorine is a naturally existing element that is used to disinfect drinking water supplies to prevent waterborne diseases such as cholera, typhoid fever, and dysentery. The Connecticut Public Health Code requires that chlorine be added to all reservoir water supplies. Groundwater supplies may also be chlorinated. Chlorine has residual properties that allow it to continue disinfecting as water travels from the treatment facility to your home. Chlorine has been added to disinfect drinking water in America since about 1900.

#### **How can I remove the taste and smell of chlorine from my water?**

We add as little chlorine as possible to our water while still maintaining an adequate level for disinfection. We work to maintain a chlorine level in our distribution system of one part per million. However, we understand that some customers object to the taste and smell of chlorine even in small amounts. Fortunately, the taste and smell of chlorine can easily be removed by refrigerating tap water in a sealed container, preferably glass. Some plastic bottles can add their own taste to the water. Having a bottle of ice water in the fridge also helps conserve water because you don't have to let the tap run for the water to get cold.

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## Are there health concerns related to chlorine in drinking water?

Chlorine reacts with organic material naturally present in water supplies and creates new compounds known as disinfection by-products “DBPs”. The U.S. Environmental Protection Agency (EPA) currently regulates a group of DBPs known as Trihalomethanes. Animal research using high concentration of DBPs suggests a link to a high risk of certain types of cancer. The EPA has **not** been able to link exposure to DBPs at low concentration levels with the health risks associated with concentration level exposure.

**The water we provide to you has very low concentrations of DBPs and does not represent a significant risk of exposure to these compounds.** Research on the relationship between DBPs and cancer and other health risks is ongoing. However, the disease prevention benefits far outweigh the risks associated with chlorinated drinking water.

## Are there alternatives to chlorine?

Some alternatives to chlorine are being used, but there are concerns associated with them. Chloramine, a chlorine related compound, is a weak disinfectant, so greater concentrations of it are needed to do the job. Ozone is popular in Europe, but it doesn't have the same residual properties to disinfect all the way to the tap that chlorine does. Ultraviolet light disinfects without chemicals, but it is not effective for killing the organisms that cause Giardiasis and Cryptosporidiosis. There is no perfect alternative to chlorine.



If you need additional information on this topic or have specific questions, please feel free to contact Connecticut Water Company Customer Service staff at 1.800.286.5700.

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