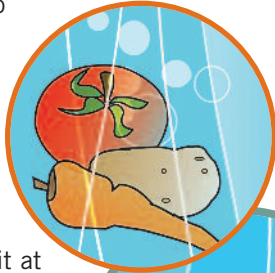


## Is there any problem in using that water?

Tap water can be used without risking significant THM exposure to

- Brush your teeth
- Wash fruits and vegetables



When using water to prepare infant formula, boil it at least one minute—as recommended to ensure that it is free of bacteria or viruses—which also reduces THM concentrations.



## What can the municipality or person in charge of the water distribution system do?

Those who operate drinking water distribution systems must comply with the requirements and standards of the Regulation respecting the quality of drinking water. Should a violation of THM standards occur, water system officials are required to take all measures necessary to resolve the situation.

## For more information

You can contact the Info-Santé service at 8-1-1 to find out more about the health effects of trihalomethanes.

For any additional information on the quality of your drinking water, you can contact your municipality or the person in charge of your water distribution system.

## USEFUL LINKS

Institut national de santé publique du Québec.  
Fact sheet on trihalomethanes (information taken from summary fact sheets on drinking water and human health):

[www.inspq.qc.ca/pdf/publications/198-CartableEau/Trihalomethanes.pdf](http://www.inspq.qc.ca/pdf/publications/198-CartableEau/Trihalomethanes.pdf)

Health Canada. It's Your Health.  
Drinking Water Chlorination:

[www.hc-sc.gc.ca/iyh-vsv/environ/chlor\\_e.html](http://www.hc-sc.gc.ca/iyh-vsv/environ/chlor_e.html)

[www.msss.gouv.qc.ca/eau](http://www.msss.gouv.qc.ca/eau)

# Trihalomethanes in drinking water



**SIMPLE  
PRECAUTIONS  
TO REDUCE  
THEIR EFFECTS**



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## Background

The water distributed to the public in your area contains levels of trihalomethanes (THMs) above the level recommended to protect health. This pamphlet is designed to inform you about THMs in drinking water, their potential effects on health and the way to reduce your exposure to them.



## What are THMs?

The term “trihalomethanes” designates a group of chemical substances formed when chlorine used to disinfect water reacts with naturally occurring organic matter (vegetation, decaying leaves, etc.) in the source water. This happens particularly in distribution systems supplied by surface water (from lakes or rivers). THM levels tend to increase in summer and early fall when conditions are conducive to their formation.

## Why is chlorine added to the water?

*Without adequate water disinfection, the health risks associated with these microorganisms are much greater than those caused by THMs.*

Chlorine is used to disinfect water and is very effective in destroying bacteria and viruses. The product is essential in preventing diseases, some of which can be very serious and even life-threatening.

It is therefore vital to ensure effective, on-going disinfection of the water distributed in drinking water systems.

## What are the effects of THM on health?

A high concentration of THMs in the water may slightly increase the risk of bladder cancer. But the risk is uncertain and is said to arise only after a very long period of exposure, of at least 20 years.

A number of studies have found that THMs may affect pregnancy by causing the birth of low-weight babies, for example. However, proof of this is meager.

*These health risks have not been wholly proven. Research is continuing in order to confirm whether they really exist.*



## How can I be exposed to THMs?

You can be exposed to THMs in tap water in several ways:

- By drinking the water
- By breathing the water vapour or by contact with your skin when taking a bath or shower



## What can I do to reduce my exposure to THMs?

You don't have to stop drinking tap water. But, as a precautionary measure, it is nevertheless a good idea for those who drink a lot of water, as well as pregnant women, to use the following means to reduce their exposure. These measures should be applied in particular during the summer, when THM concentrations are higher.

- Use an activated charcoal water treatment unit, such as a filter pitcher. The unit must be ANSI/NSF-certified. This type of unit requires regular maintenance because it can become contaminated by bacteria in the water.
- Be sure the bathroom is well ventilated when you take a bath or shower, by opening a window or turning the fan on. Note that there is less risk of exposure to THMs if you take a short bath rather than a shower. The use of colder water reduces skin absorption of THMs.
- Keep water in the refrigerator in an uncovered pitcher for a period of 24 hours. This allows the THMs to partly evaporate into the air.
- Drinking bottled water can be an alternative to drinking tap water.