

DRINKING WATER CHLORINATION FACT SHEET



January 25, 2012

Benefits

- Chlorine prevents life-threatening diseases like cholera and typhoid fever.
- Chlorine is the most commonly used drinking water disinfectant.
- Chlorine is the disinfectant with the most scientific information.
- Chlorine does not break down quickly, and therefore provides a beneficial 'residual' throughout the water distribution system to prevent any bacterial re-growth.

Risks

Chlorine reacts with organic matter present in water like decaying leaves. This reaction produces by-products, most the common being trihalomethanes (THMs). When the water source is groundwater wells like in Montrose, there is little organic matter in the source water and the THM formation potential is low. The formation of THM's is a much larger concern in surface water sources.

Balance

Benefits of chlorinating our drinking water (less disease) are much greater than any health risks from THMs and other by-products.

Although other disinfectants are available, chlorine remains the choice of water treatment experts.

Prevention

You cannot remove all disinfection by-products, but here are some steps you can take in your home.

- Activated carbon filters can be used to remove chlorine and its by-products (follow the manufacturer's instructions).

Health Canada recommends the use of chlorine products that are certified to health-based standards. The Standards Council of Canada can provide information on the certification process.

References

[Health Canada- Drinking Water Chlorination](#)