SAFE WATER FOR TRAVELLERS

In Canada, we are used to drinking safe water. In developing countries, water is often not properly treated or not treated at all.

What you can do:
- Use sealed bottled water that has been distilled or sterilized with ozone or by boiling; or chemically treated, filtered, or boiled water for drinking and brushing teeth.
- Drink beverages made only with safe water whenever possible, (such as hot tea and coffee). Water boiled for one minute, at any altitude, is safe to drink.
- Drink canned, boxed, or commercially bottled carbonated water and drinks. International brands are safest. Beware of unsealed containers that may have been re-filled.
- You can safely drink beer and wine; however, alcohol added to beverages does not make them safe.
- Drink coconut juice directly from the shell.
- Purify your own water if necessary (see methods below). Decide which method to use for water purification and bring along the appropriate equipment.
- Carry safe water with you if you are going out for the day and where availability of safe water is not assured.
- Breastfeeding is the safest food source for infants who are still nursing. If formula is used, it must be prepared with boiled water and sterilized containers.

Travellers should NOT:
- Drink tap water.
- Rinse toothbrush in tap water.
- Use ice unless it is made from boiled, bottled, or purified water. Freezing does not kill the organisms that cause diarrhea.
- Drink from wet cans or bottles – the water on them may be contaminated. Dry wet cans and bottles before opening and clean all surfaces that will have contact with your mouth.
- Drink fruit juice unless it comes directly from a sealed container; otherwise it may have been diluted with tap water.

Water can be made safer for drinking by using either heat or chemicals to kill the harmful microorganisms.

1. Boiling
   Boiling is the best water treatment method. Water should be brought to a rigorous rolling boil for one minute. Allow water to cool to room temperature in a clean, covered container. Use this clean water for brushing teeth and drinking. Urban travellers may choose an immersion coil for boiling water (a plug adapter and current converter might be necessary).
2. **Purification**

“Pristine”, available from camping stores, is chlorine dioxide and so contains no iodine and leaves no aftertaste. When used correctly, chlorine dioxide is proven effective against bacteria, viruses, and protozoa, including Giardia and Cryptosporidium. See www.pristine.ca for more info.

Most diarrhea pathogens are susceptible to being killed by iodine, which can be used to disinfect water, leafy vegetables, and fruits. Add 5 drops of 2% iodine to 1 liter of water and let stand for 30 minutes.

- Travellers who have thyroid problems or iodine allergies or who are pregnant should NOT use iodine for water purification.
- For those travellers who wish to avoid the taste and smell of iodine in their disinfected water, vitamin C (ascorbic acid) can be added to the water after the iodine has been in contact with the water for 30 minutes or more. Add about 50 mg of vitamin C to a litre of water and shake briefly to eliminate the iodine taste and odor.
- Tetragnesium hydroperiodide tablets (e.g., Globaline, Potable-Aqua, Coghlan's) are available from pharmacies and sporting goods stores. The manufacturer's instructions should be followed.
- Filters will take out floating particles in the water, but will not remove the harmful microorganisms. Filtration improves the disinfection of iodine and chlorine. Many different filter systems are available at camping stores.

**You can become ill from swimming in unsafe water.**

- Ask local residents for advice before swimming in lakes, rivers or seas.
- When you have been advised that schistosomiasis, a parasitic larvae, is present, avoid freshwater exposure, stay away from the shoreline and slow moving waters of rivers, ponds and lakes, where you could develop “swimmers itch”. Towel off vigorously to help prevent penetration of the parasitic larvae. Salt or brackish waters are safe.
- Check for factory drainage and sewage outlets, which may expose you to serious diseases such as Cholera or Hepatitis A.
- Swimming pools are usually safe if the water is chlorinated and the filters are maintained.