



Prevention of Food and Water Borne Diseases

Many illnesses, including [travellers' diarrhoea](#), [hepatitis A](#), [typhoid](#) and [cholera](#) are contracted through contaminated food and water. Travellers' diarrhoea is the most common illness contracted abroad, affecting 20% to 60% of overseas travellers.

Travellers can reduce their risk of such diseases by following basic guidelines.

Water

In countries where sanitation is poor it is advisable not to drink tap water or use it to clean teeth unless it has been treated. Ice should also be avoided.

Bottled carbonated drinks with an intact seal are usually safe, as are boiled water and hot drinks made with boiled water.

Water can be disinfected by bringing it to a rolling boil [1, 2]. Although boiling is a reliable method of disinfection, it may not always be convenient. Chemical disinfectants such as the halogen chlorine, will usually kill bacteria and viruses. However, some parasites such as *Giardia* and *Cryptosporidium* are not reliably killed by chlorine preparations [3]. In this instance combining halogenation with filtration using a filter $\leq 0.2\text{-}1.0\ \mu\text{m}$ in size, should be effective [1, 2]. Manufacturer's instructions should be followed when using chlorine preparations.

Iodine has been routinely used by travellers to disinfect water; however a recent [European Union \(EU\) directive](#) has announced that iodine will no longer be sold or supplied for use in disinfecting drinking water after October 25, 2009 [1].

Portable, battery-operated devices utilising UV light can also be used to purify water. Water must be free of particulate material before treating.

Food

Certain foods are prone to contamination and should usually be avoided:

- Salads, as foods growing close to the ground, such as lettuce, are often contaminated
- Uncooked fruits and vegetables, unless they have been washed in safe water and peeled by the traveller
- Fresh or cooked food that has been allowed to stand at room temperature in warm environments, or that has been exposed to flies, such as may happen at open buffets
- Unpasteurised milk, cheese, ice cream and other dairy products
- Raw or undercooked shellfish
- Food from street traders, unless it has been recently prepared and is served hot on clean crockery

Do not assume that food served in good standard hotels will always be safe, as it may have been contaminated during preparation.

Travellers should be advised to eat only recently prepared food that is thoroughly cooked and served piping hot.

Hands should be washed after visiting the toilet, and always before preparing or eating food.

Boil it, cook it, peel it or forget it!



Reference

1. World Health Organization. Preventing Travellers' Diarrhoea: How to Make Drinking Water Safe. WHO/SDE/WSH/05.07. Geneva 2005. Available at: http://www.who.int/water_sanitation_health/hygiene/envsan/sdwtravel.pdf
2. Backer H. Water disinfection for international travellers. Ch.6. In: Keystone JS, Kozarsky PE, Freedman DO, Nothdurft HD, Connor BA Eds. Travel Medicine. 2nd Edition 2008; Section 2: 47-58. Elsevier.
3. Carpenter C, Fayer R, Trout J, Beach MJ. Chlorine disinfection of recreational water for *Cryptosporidium parvum*. Emerg Infect Dis 1999; 5:579-584