
How long should you boil water to make it safe to drink?

The recent incidents of contamination of the Sydney water supply with *Cryptosporidium* and *Giardia* have generated considerable interest in the issue of how long water should be boiled to make it safe to drink. *CDI* inadvertently muddied the waters (so to speak) in last month's edition when our 'Advice for travellers' recommended that water be boiled for at least 10 minutes.¹ This information was sourced from the fourth edition of the Commonwealth Department of Human Services and Health's publication *Health information for international travel*.² This reiterates the unreferenced recommendation of earlier editions of the same publication. Our attention has since been drawn to the Centers for Disease Control (CDC) recommendations for boiling water, which were made in September 1994 on the basis of a contemporary literature review.^{3,4} These recommendations have been followed by the New South Wales health authorities in responding to the contamination incidents.

CDC recommends making water microbiologically safe to drink by bringing it to a rolling boil for one (1) minute. This will inactivate all major waterborne bacterial pathogens (for

example, *Vibrio cholerae*, enterotoxigenic *Escherichia coli*, *Salmonella*, *Shigella sonnei*, *Campylobacter jejuni*, *Yersinia enterocolitica* and *Legionella pneumophila*) and waterborne protozoa (for example, *Cryptosporidium parvum*, *Giardia lamblia*, and *Entamoeba histolytica*). It will also be effective for waterborne viral pathogens such as hepatitis A virus, which is considered one of the more heat-resistant viruses. An increase in boiling time to three (3) minutes is recommended if viral pathogens are suspected in drinking water in communities at elevations above 2 km.

1. Anonymous. Advice for travellers. *Commun Dis Intell* 1998;22(8):154.
2. Department of Human Services and Health. Health information for international travel. Fourth edition. Australian Government Publishing Service, 1994.
3. Anonymous. Assessment of inadequately filtered public drinking water - Washington, D.C., December 1993. *MMWR* 1994;43(36):661-668.
4. Anonymous. Assessment of inadequately filtered public drinking water - Washington, D.C., December 1993. *JAMA* 1994;272(18):1401-1402.