

contamination. When a notice is issued drinking water should be brought to a rolling boil, and allowed to cool before drinking.

When a 'boil water notice' is in place, householders in affected areas should use boiled water for drinking, cleaning teeth or gargling, washing uncooked foods (such as salads or seafood) and making ice. Children should take boiled or bottled water to school. Dishes should be washed in hot soapy water or in a dishwasher.

People should be careful when boiling water and be aware of the dangers of scalding.

Using water in the home

Use water taken straight from the cold water tap for drinking and cooking. Hot water systems generally contain more dissolved minerals and metals, due to the heating process.

When water has not been used in the house for extended periods of time, it is a good idea to flush several litres of water through the tap, before using the water for drinking. This is because water that has been standing in pipework for a long time can dissolve metals such as copper and lead from the pipework. This 'first-flush' of water can be used for washing up, watering plants, or other uses.

What about filtering tap water?

There is generally no need to filter tap water that has already been treated – it should be safe to drink. However, if filters are used to improve taste, it is important to maintain and replace them regularly otherwise they will become ineffective. It is important to follow the manufacturer's instructions.

Not all filters remove or inactivate harmful microorganisms. If a filter is used it should be certified against an appropriate standard (such as AS/NZS 4348 or ANSI/NSF 53). An absolute 1 micron (or smaller) filter is necessary to remove *Cryptosporidium* and *Giardia*. Units that incorporate boiling, distillation or reverse osmosis processes are also satisfactory. An additional disinfection unit may be necessary to inactivate bacteria and viruses.

Who can I contact for additional information?

- Your local council and Public Health Unit can provide information on water quality and health Tel. under 'H' in the *Telstra White Pages* or www.health.nsw.gov.au/public-health/phus/phus.html
- **NSW Health** website has information on a range of water quality and health issues; including drinking water, rainwater tanks, recreational water and effluent management and reuse. A copy of this brochure can be down-loaded from: www.health.nsw.gov.au/public-health/ehb/water/
- **Sydney Water Corporation:**
Tel. 13 20 92 or www.sydneywater.com.au
- **Hunter Water Corporation:**
Tel. 1300 657 657 or www.hunterwater.com.au

NSW HealthWeb/Net site:
www.health.nsw.gov.au

Drinking water and public health

Access to safe drinking water is essential for maintaining good public health.

Why drink water?

Drinking plenty of water is very important for general health, especially for bladder and kidney function. Most people in NSW receive good quality drinking water that is safe to drink. Although some variation in the quality of drinking water will occur because of the different sources of water used and different forms of treatment, drinking water that meets the Australian Drinking Water Guidelines is considered safe to drink.

Public drinking water supplies in NSW are routinely monitored. In regional areas, local councils supply the drinking water and monitor in proportion to the size of the population and the area supplied, as outlined in the Guidelines. NSW Health has a comprehensive Drinking Water Monitoring Program for local councils in regional areas.

Bottled water is not necessarily any safer than your local drinking water. There are many more tests conducted on tap water than bottled water.

Can I find out about test results?

Yes. In regional areas, your local council or town water supplier will be able to provide water testing results.

Drinking water monitoring results for both Sydney and Hunter Water are available on the internet, and summaries are published each year.

What are the Australian Drinking Water Guidelines?

In 1996 the National Health and Medical Research Council (NHMRC) and the Agriculture &

Resource Management Council of Australia & New Zealand (ARMCANZ) published the *1996 Australian Drinking Water Guidelines*. These Guidelines are an authoritative Australian reference on good quality drinking water. In revising the guidelines they consulted with the general community, health bodies, water suppliers and regulators. There is ongoing revision of the guidelines on an annual basis.

A copy of the guidelines can be accessed through the NHMRC web-site:
www.health.gov.au/nhmrc/publications/pdf/eh19.pdf

What substances are found in water?

There is no such thing as naturally pure water, all water contains some impurities. As water flows in rivers, is captured in dams and filters through layers of soil and rock in the ground, it dissolves or absorbs a range of substances. Most of these substances are harmless. However at certain levels, minerals are considered contaminants that can make water unpalatable or even unsafe.

What chemicals are added to the water and why?

Water authorities disinfect drinking water with chlorine to kill microorganisms which could cause disease. Chlorine is a very effective disinfectant that has been used for many years. Many water authorities also fluoridate the water to protect against tooth decay. Both of these chemicals are added in carefully controlled amounts and their levels are monitored to ensure they meet health guidelines.

The chemicals used as part of the filtration treatment process, such as alum and ferric chloride, are reduced

to very low levels before leaving the treatment plant. To remove the chlorine taste from the drinking water, allow a jug of water to stand for a few hours before drinking.

Cryptosporidium & Giardia

The Australian Drinking Water Guidelines do not recommend routine monitoring of *Cryptosporidium* and *Giardia* in treated water, but instead recommend appropriate management practices for a water supply from catchment to tap. NSW Health and Sydney Water have protocols for follow-up action when these organisms are detected in the Sydney water supply system. The NSW Department of Land & Water Conservation has also produced *The Management of Giardia & Cryptosporidium in Town Water Supplies* which include comprehensive protocols for rural water supply authorities.

Cryptosporidiosis and giardiasis are notifiable diseases and must be reported to NSW Health by law. It is important to note that the common routes for the transmission of the diseases caused by *Cryptosporidium* and *Giardia* are through:

- person-to-person spread, particularly at child care facilities
- recreation in swimming pools
- contact with domestic and farm animals.

Boil water notices

Occasionally there may be a need to issue a notice advising a community to boil their drinking water. If NSW Health or your water supplier has issued a boil water notice, it is likely to be due to microbiological