

Storage of Treated Drinking Water

Containers for treated water should, if possible:

- be clean
- have covers
- be stored above ground
- be in a cool place
- be cleaned periodically
- be mosquito proof.



Disinfection of Large Quantities Of Drinking Water

Swimming pool chlorine can be used to treat large quantities of water in containers such as rainwater tanks and vehicle mounted water tanks.

The initial dose of chlorine required to treat any potential contamination is:

- 14 grams (1 level teaspoon + 1 level dessertspoon) of calcium hypochlorite (60-70%) per 2000 litres; or
- 40mL (8 teaspoons) of sodium hypochlorite (12%) per 1000 litres.

The water should be stirred then left to stand for at least 24 hours to allow the chlorine taste and smell to dissipate.



To maintain a safe water supply after the initial dosage, each week add:

- 5 grams (1 level teaspoon) of calcium hypochlorite (60-70%) per 5000 litres; or
- 8mL (1 dessertspoon) of sodium hypochlorite (12.5%) per 2000 litres

and allow to stand for a minimum of two hours before drinking.

**Do not pour water onto chlorine.
Always add chlorine to water.
Always mix chlorine in the open air.**

Summary

When you are not sure of the quality of drinking water you should always:

- Regard all drinking water with suspicion.
- Boil it for at least one minute; or
- Add chlorine; and store it carefully in a sealed clean container.

Other leaflets available are:

Is the water in your rainwater tank safe to drink?

Water filters

Cryptosporidiosis

Giardia infection

Monitoring drinking water in Western Australia

Further information

For further information contact your Local Government Environmental Health Officer

or

Environmental Health Service
PO Box 8172

Perth Business Centre WA 6849

Telephone (08) 388 4999

Facsimile (08) 9388 4955

or

Water provider in your district

or

State Emergency Services

To order more brochures please contact

HealthInfo: 1300 135 030

Online: www.public.health.wa.gov.au

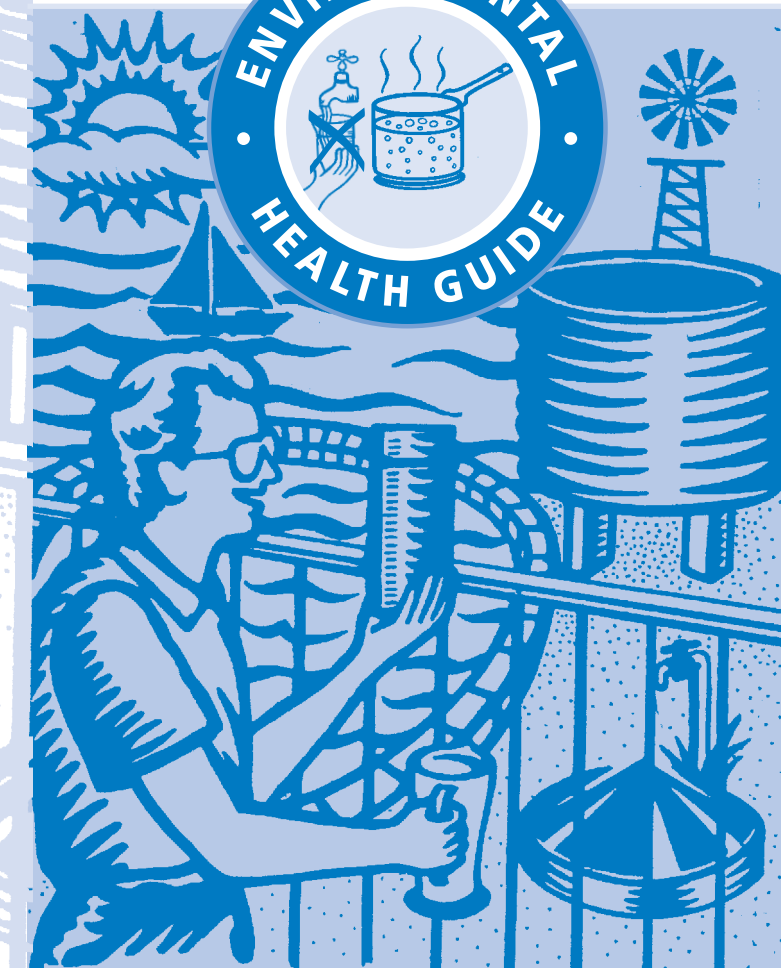


Produced by Environmental Health Service with assistance from Marketing and Communications, Public Health Division.

© Health Department of Western Australia April 2001

HP 9809

Emergency Treatment of Drinking Water Supplies



Emergency Treatment of Drinking Water Supplies

People can live for days without food but cannot live for long without drinking water, especially in the Western Australian Summer. To avoid illness, drinking water

must be safe to drink. On average at least 20 litres of water per person per day is required for drinking, washing and cooking. At least 2.5 litres is required for drinking.

What Happens When Disaster Strikes?

In times of natural and other forms of disaster it is possible that the normal supply of water will be affected.

When the integrity of a scheme water supply cannot be guaranteed, the Health Department of Western Australia may issue advice to boil it or treat it with chemicals.

However, your Local or District Emergency Management Committee and/or your Local Government are usually best placed to advise you about the availability of emergency drinking water and other essential services. This information is usually given out on the radio, television or printed material.

Extreme caution should be exercised before consuming water from bores, wells and dams as it is likely that contamination may have occurred especially during times of flooding.

If unsure, disinfect all water to be used for drinking, cooking, making any prepared drink, baby food and for brushing teeth.

Short-Term Action You Can Take

Where a secure source of drinking water is not immediately available it is possible to obtain limited amounts of safe drinking water by draining your hot water tank or melting ice cubes you might have in the freezer.

Disinfection of Small Quantities Of Drinking Water

Two methods to disinfect small quantities of water can be used. The simplest and best method is boiling, the other is chemical treatment.



Boil Water

Vigorous boiling for one minute will kill any disease-causing micro-organism present in water.

The flat taste of boiled water can be improved by pouring it back and forth from one clean container to another or by allowing it to stand for a few hours with a loose fitting cover.

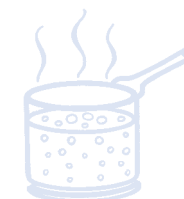
Chemical Treatment

When boiling is not practical chemical disinfection can be used. The simplest, most effective chemicals are Chlorine and Iodine. Chlorine is generally more effective than Iodine. However, while they are both effective against most micro-organisms, including Giardia, they may not be effective against Cryptosporidium.

Chlorine Disinfection

Water may be disinfected using common household bleach containing chlorine. Look for the percentage of available chlorine on the label and use the information in the following table as a guide to disinfect the water.

Available Chlorine	Drops per Litre of Clear Water
1%	10
4% - 6%	2
7% - 10%	1



The treated water should be mixed thoroughly and allowed to stand for thirty minutes. The water should have a slight chlorine odour. If not, repeat the dosage and allow the water to stand for an additional 15 minutes. Where the chlorine taste is objectionable in treated water, it can be made more pleasing by allowing the water to stand exposed to the air for a few hours or by pouring it several times from one clean container to another.

Granular Calcium Hypochlorite

Another option is to use swimming pool grade granular calcium hypochlorite.

Add and completely dissolve one heaped teaspoon of granular calcium hypochlorite in seven and a half litres of water. This mixture will produce a concentrated chlorine solution of approximately 500 milligrams per litre. This concentrated chlorine solution can then be used to disinfect water in the ratio 1 part concentrated chlorine solution to 100 parts of water to be treated.

Chlorine Tablets

Chlorine tablets containing the necessary dosage for drinking water disinfection can be purchased from pharmacies and sporting goods stores and should be used in accordance with the manufacturer's instructions.

Tincture Of Iodine

Common household iodine from a First Aid Kit may be used to disinfect water. Add five drops of 2% Tincture of Iodine to a litre of clear water. If the water is cloudy add 10 drops. Let the solution stand for at least 30 minutes before drinking.

Iodine Tablets

Commercially prepared iodine tablets containing the necessary dosage to treat drinking water can be purchased at a pharmacy or sporting goods store. Use only in accordance with the manufacturer's instructions.

Iodine is only suitable for short-term emergency use. It should not be used repetitively, nor for longer than a week in any single emergency situation.

