

## Water tanks and dams - safety tips

Most Victorians obtain their drinking water directly from a water authority. However, some people obtain their own water from:

- Rainwater tanks
- Rivers and creeks
- Dams
- Bores
- Irrigation channels.

The highest quality water available should be used for drinking, however some treatment may still be required. Individuals will need to carry out an assessment to determine the best quality water source available to them. Rainwater tanks are often the safest source as they are the easiest way to control and assess the quality of water entering the tank.

### Contaminated water can make you ill

Contaminated water supplies have been responsible for major outbreaks of severe gastric illnesses such as gastroenteritis and infections caused by the *Cryptosporidium* and *Giardia* organisms. These illnesses are particularly dangerous to the very young, the elderly, and people with poor immune systems. Water can also be contaminated by various chemicals or metals which at elevated levels can be harmful to your health.

### Different things can contaminate your water

Your private water supply can be contaminated by a variety of things:

- **Animal faeces (poo)** – such as bird or possum droppings on the roof, or from farm run-off into rivers and creeks.
- **Human faeces** – leaking from septic systems or wastewater drainage.
- **Pesticides** – in runoff from farms, or blown onto roofs.
- **Arsenic and heavy metals** – in soil from old industrial or mining sites, or in some bore water supplies.
- **Dust** – containing chemicals blown onto your roof.
- **Air pollution** – run-off from roofs in urban and industrial areas may contain chemicals.
- **Lead** – from old paint or flashing on roofs can flake and end up in tanks.
- **Algae** – including toxic blue-green algae which is not destroyed by boiling or disinfection.
- **Nitrates** – in some bore water supplies are particularly dangerous to infants.
- **Ash and debris** – bushfires produce large amounts of smoke and ash, which can contaminate your water supply. Additional information is available on Water Tanks & Bushfires.
- **Fire retardants** – chemicals used to slow the spread of fire can contaminate water with ammonia and sulphate, making it unsuitable for humans and animals to drink.

There are laboratories that can test your water for these things. Look them up under **A** for **Analyst** in the Yellow Pages.

### Collect and store your water carefully

If you collect and store your drinking water carefully, you can reduce the risk of contamination. You should:

- Seal your water storage so animals, birds and sunlight cannot get in.
- Collect water only from clean roofs - not from those painted recently or painted with lead-based paints or coated with tar.
- Install fine mesh screens on inlets to prevent mosquitoes entering.
- Clean your roof, gutters and water tanks regularly.

- Install screens or filters between the supply and storage.
- Install a 'first flush' diversion - the first rain after a dry period contains most of the contaminants.
- Make sure surface runoff and leakage from sewage pipes and other drainage cannot enter your water storage.

Disinfect your water supply if you suspect it has become contaminated with sewage or animal faeces.

**Some water supplies will need to be disinfected**

In most rural areas of Victoria, rainwater collected from a clean roof and securely piped into a well-maintained above-ground tank should not need to be disinfected.

Groundwater from a shallow bore should be disinfected in case the water has been contaminated with farm waste or leaking effluent from a septic tank. If your water is dirty or cloudy, you should filter it first because dirt particles can make disinfection ineffective.

People with suppressed immune systems should only consume water that has been boiled.

**What to do if there's a dead animal in the tank**

A dead animal in your tank will not necessarily cause illness if you drink the water. As a precaution, you should:

- Take the dead animal out.
- Drain all water from the tank.
- Clean inside the tank with household bleach.
- Refill your tank with good quality water.
- Disinfect the water with chlorine.
- Remember to maintain good ventilation when you clean out any tank and always work with an assistant outside the tank.

If it is not possible to drain the water, disinfect or boil the water before drinking and arrange to have the water tested.

**Protect your drinking water supply**

The Department of Health has produced a brochure – *Your private drinking water supply* – with more information about keeping your supply of drinking water safe and healthy. Copies of this brochure are available from Department of Health regional offices, your local council, community centres and bushfire recovery centres, or from the Environmental Health Unit website.

**Where to get help**

- The Environmental Health Officer at your local council
- The Department of Health, Environmental Health Unit Tel.1300 761 874

**Things to remember**

- Determine the best quality water source available to you
- A range of things can contaminate your water supply
- Contaminated water can cause severe gastric illnesses
- There are laboratories that can test the quality of your water

**This page has been produced in consultation with, and approved by:**

Department of Health - Environmental Health Unit

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