

# Safety at home



## Poisoning prevention

We store and use many chemicals and medicines in our homes that are potentially harmful to children. Poisoning is the second largest cause of hospitalisation due to accidents, after falls. Most accidental poisonings resulting in hospitalisation occur in the home. The Poisons Information Centres around Australia deal with hundreds of calls each day.

### Victorian Poisons Information Centre

The Victorian Poisons Information Centre (VPIC) is located at the Austin Hospital in Melbourne. VPIC provides members of the Victorian public with emergency telephone advice about:

- First aid in the event of poisoning, suspected poisoning, bites and stings
- The need for medical assessment
- Prevention of poisoning
- Referral to other information sources.

VPIC provides health professionals with information about:

- The ingredients in products involved in poisoning or exposure

- Assessment of the severity of poisoning or exposure
  - Potential toxic effects from a poisoning or exposure
  - Treatment and management advice.
- VPIC aims to prevent unnecessary visits to general practitioners and hospitals and to ensure that patients who are poisoned receive the most effective treatment promptly.

### What is a poison?

Any medicine or household product used incorrectly can be a poison.

Poisons may include:

- Drugs and medicines, e.g. paracetamol, cough and cold preparations, prescription medicines such as heart pills, sleeping tablets, and many more.
- Cleaning products, e.g. automatic dishwasher detergents, bleaches, drain cleaners.
- Cosmetics, e.g. perfume, cologne, aftershave, nail polish remover.
- Other chemicals, e.g. petrol, alcohol, herbicides, pesticides, cigarettes, glues and adhesives, mothballs, rat/mouse bait.
- Poisonous plants, e.g. oleander, datura, deadly nightshade.

Poisoning can occur when a substance is swallowed, inhaled, spilt on the skin, splashed into the eye or injected.

If you or someone else may have been poisoned, do not try to induce vomiting. Do not wait for symptoms to occur. Take the child and container with you to the phone and call the Poisons Information Centre to find out what to do and to obtain correct first aid advice. It will help if you can report what the substance was and how much the child has swallowed.

If someone is poisoned contact the Victorian Poisons Information Centre:

**T** 13 11 26 (24 hours-a-day)

## Key messages for parents

### Prevention of poisoning

Many poisonings occur when products or medicines are not in their usual storage locations, e.g. when they are left on a benchtop or bedside table, during transport from the shop to home.

- Medicines and poisons should never be left within children's reach or unattended. They should be put away immediately after buying or using them.
- Household products and medicines should be stored in a locked or child-resistant cupboard, out of reach and out of sight of children (at least 1.5m high). Locks and lockable cabinets can be bought from hardware stores or the Home Safety Shop at The Royal Children's Hospital.
- Garden sprays, fertilisers, paints, thinners, handyman products etc. should be kept in a locked garage cupboard or shed and out of the reach of children.
- All products should be kept in their original containers with clear labels, never in cups or soft drink bottles.
- Whenever possible, purchase household products and medicines that are in child resistant packaging.
- Food should be kept separate from poisons.
- Labels should be read carefully before use. Always follow the direction for use when painting, spraying or cleaning the oven. Use appropriate protection and ensure there is adequate ventilation.



- Medicines should be referred to by their proper names. Do not confuse children by referring to medicines as lollies.
- Young children tend to imitate adults, so adults should avoid taking medicines in children's presence.
- Medicine cupboards should be cleaned out regularly. Unwanted and out-of-date medicines should be taken to your local pharmacy for disposal.
- Visitors' bags may contain medicines. They should be kept well out of reach of children.
- Errors can occur when medicines are being administered, e.g. incorrect calculation of the dose, doubling-up on doses. Taking more than the recommended dose may be harmful, so take care when giving or taking medicines.
- Do not take other people's medicines.
- Parents and carers should be aware that the incidence of poisoning increases when usual household routines are disrupted, e.g. moving house, being on holiday, and visitors.

#### For further information contact

#### The Victorian Poisons Information Centre

**W** [www.austin.org.au/poisons](http://www.austin.org.au/poisons)

**T** 13 11 26 for advice, brochures, stickers and posters.

#### Safety Victoria

**W** [www.safety.vic.gov.au](http://www.safety.vic.gov.au)

#### The Australian Drug Foundation

**T** 1300 858 584

**W** [www.druginfo.adf.org.au](http://www.druginfo.adf.org.au)

*Our thanks to the Victorian Poisons Information Centre for contributing this section.*

### Bunk beds

The major cause of hospital admission due to injury in young children is falls.

Most of these injuries occur at home, at school and at sport and recreation venues.

Falls are commonly from playground equipment and during sport. But every year in Australia more than 2,000 children are injured from using bunk beds.

Young children falling from the bunk and

head entrapment causing strangulation or limb entrapment, cause the most common and serious injuries.

Bunk beds are not suitable for children under the age of six. Do not let children use bunk beds as a play area. Many injuries occur when children fall from the top bunk while playing. Before you buy:

- Check that there is no gaps sized 95mm to 230mm in any part of the bed, including guardrails, to prevent children trapping their heads.
- Look for guardrails or bed-ends on all sides of the upper bed, ensuring that the tops of the guardrails are at least 160mm (about the length of a ball point pen) above the top of the mattress, to prevent children rolling out.
- Check that there are no protrusions of more than 8mm.
- Check that all tube ends are plugged.
- Check that all nuts and bolts are flush and smooth.
- Check that ladders are firmly fixed and stable.

### **For further information contact Product Safety Policy Section**

Australian Competition & Consumer  
Commission

PO Box 1199, Dickson ACT 2602

**T** (02) 6243 1262

*Our thanks to the Product Safety Policy Section,  
Australian Competition & Consumer Commission for  
contributing this section.*

## Electrical hazards in the home

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Electricity is all too easily taken for granted. Each week 30 Australians are accidentally injured or killed by electricity.

Carelessness, a frayed lead, old appliances, poor maintenance or hazardous conditions can lead to the possibility of 'earth leakage', the most common cause of electrocution. Incredibly, more than 80% of electrical deaths could have been prevented had a safety switch or Clipsal Residual Current Device (RCD) been fitted.

Everyone should be aware of potential electrical hazards. Here are some things you

should and shouldn't do to protect your family in and around the home.

Continually monitor all your electrical appliances and power tools. Inspect the plugs and cords and look for signs of frayed leads and exposed wires. If tools are faulty, stop using them. Have them professionally repaired or replace them.

Be on the lookout for faulty switches, sockets and light fittings. If a switch or socket is arcing every time you flick the switch, switch it off. If a light fitting has worked itself loose from the connection, do not attempt a repair. In these instances, call an electrician and have it repaired or replaced without fail. Never attempt any electrical repairs, modifications or extensions. Do not authorise anyone to attempt such work unless they are licensed to do so otherwise you will put lives, equipment and insurance claims at risk.

## Key messages for parents

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- Prevent dust build up in the elements of electrical appliances particularly with portable heaters and hair dryers. A build up of dust is all it takes to cause an arc to earth and create a potential hazard.
- Avoid leaving electrical appliances near water or allowing them to get wet. Don't hose down garage walls where power points are in close proximity.
- Avoid coiling extension cords when using them as these can heat up and melt.
- Avoid leaving extension cords in situations where people can trip over them.
- Prevent children from using any electrical appliance without adult supervision.
- Insert safety plugs in all power points not in use.
- Do not piggyback adaptors onto power points, purchase a power board instead.
- When you plug in an appliance, make sure it is fully inserted as the exposed pins on the plug are very much live and life-threatening. If your safety switch or circuit breaker keeps tripping, you could be overusing the number of electrical appliances on the one circuit. Disconnect some appliances to eliminate the problem. If the safety switch or circuit breaker

continues to trip, then you may have an earth leakage due to a poor connection or faulty appliance. Contact your electrician immediately. He will have all the correct testing equipment to identify the problem professionally.

If you live in a period home, your mains wiring may utilise cotton covered rubber cable. Be careful! Weak points may occur where the cable is bent. If moisture finds its way through a section of split conduit to that point, then the moisture will short out to the metal conduit causing arcing and a possible fire. Contact an electrician and seriously consider rewiring the home complete with new electrical accessories and switchboard.

The most important thing you can do is to check that you have a safety switch correctly fitted. If you don't have one, get one. Do not put off the decision. Push the test button from time to time to make sure it is working correctly. Contact your electrician if you suspect that it is not operating correctly.

*Our thanks to Clipsal Australia Pty Ltd for contributing this section.*

## Scalds prevention

In August 1998 the Victorian Government passed legislation aimed at eliminating the risk of legionella bacteria forming in storage hot water services and preventing scalding at hot water outlets used for bathing. This means that hot water for domestic use must be stored at a minimum temperature of 60°C to kill legionella bacteria and reduced to 50°C maximum at hot water outlets to prevent scalding.

### Are water burns really a problem?

Each year, hot tap water causes serious scalds to many small children and elderly people around Australia.

More than 90% of these scalds occur in the bathroom where the temperature of water from the hot tap is set too high and a person cannot react quickly enough to avoid a serious scald injury.

At 60°C it takes only one second to cause a full thickness scald. At 50°C it takes five minutes. It may not seem a big difference in

temperature, but it can mean the difference between scarring for life, agonising pain, hospitalisation and skin grafts on the one hand, or a relatively minor injury on the other.

This is why plumbing regulations require a maximum temperature of 50°C at the hot taps used for bathing purposes. This is hot enough for a bath or shower, but not hot enough to cause severe scalding.

### How hot is too hot?

Before the latest temperature regulations, the hot water temperature in most Victorian homes was generally set between 65°C and 75°C. In some homes, the hot water temperature was even higher.

The table below shows you how long it takes for skin to receive a major scald burn from water at a range of different temperatures.

Water temperature	Major burn in
49°C	5 minutes
52°C	1.5 – 2 minutes
54°C	30 seconds
57°C	10 seconds
60°C	less than 5 seconds
63°C	less than 3 seconds
66°C	1.5 seconds
68°C	1 second

### How can I prevent scalds?

The best way of preventing scalds in the bathroom is to reduce the temperature of the hot tap water at the basin, bath and shower to 50°C. By law, all new hot water systems now have this setting. (The only exceptions to this are premises intended for children and the elderly – such as early childhood centres, schools, nursing homes, and so on. These now have a temperature limit of 45°C.)

The above settings are not bathing temperature. Cold water still needs to be mixed with hot water. The maximum bathing temperature recommended for young children is 37–38°C.

If you have had a hot water system installed before 5 August 1998, there are various ways of reducing the temperature of the hot tap water in the bathroom, depending on the type of system.

For the best advice, talk to a licensed plumber, who may recommend:

- Installing a tempering valve, which reduces the hot water temperature in the bathroom, but does not affect the temperature in the kitchen.
- Installing a thermostatic mixing valve, which can be set to deliver hot water at a precise, safe temperature.

### What else can I do to reduce the risk of burns in the bathroom?

- Always run cold water first.
- Never leave a small child in the care of an older child, who may be able to turn on the hot water tap.
- Take the child with you, if you have to answer the door or the telephone.
- Never leave your child alone in the bathroom.
- Keep the bathroom door closed if not in use.

### What features do I look for when I'm buying a new hot water system?

If you are buying a gas continuous flow hot water system, there are two types available.

One is factory set to a maximum of 50°C, which can be installed to supply bathroom fixtures without the need to install a tempering valve. These models have a sticker attached, which specifies the temperature limitation, and they are generally not suitable for kitchen and laundry taps, as consumers generally prefer hotter temperatures at these points.

The other type is generally available with a higher default temperature setting of 55°C or 60°C, which may be increased if required. When installing these units the plumber must also install a tempering device to ensure the bathroom fixtures are tempered to 50°C. Both models may have remote temperature control touch pads available as an option.

If you are buying a storage hot water service, many energy source options are available including gas, electric and solar. They all store hot water and need to be set to at least 60°C to prevent legionella growth and be tempered to 50°C at bathroom taps to prevent scalding.

### What else should I watch out for?

Other than tap water, the most common causes of scalds are hot drinks and hot liquids from kettles, pots and saucepans.

You can prevent your child from being scalded by taking special care to supervise them in the kitchen.

In particular:

- Always keep hot drinks, kettles and jugs away from the edge of the bench.
- Use a curly cord or buy a cordless jug.
- Use non-slip placemats instead of tablecloths.
- Always keep hot drinks away from children.
- Always turn pot handles away from the front of the stove or bench.
- Use rear hot plates first.
- Fit a safety guard around your stove or hot plates.

### If you or your child is scalded you should:

- 1 Remove clothing quickly. This helps the heat escape from the skin. Leave clothes on, however, if stuck to the skin.
- 2 Immediately pour lots of cold water gently over the scald for 15 – 20 minutes. This will stop further burning. It also helps to relieve the pain. Never use ice, oil, butter or ointment, as these can further damage the skin.
- 3 Cover the scald with a clean cloth, and keep the person warm.
- 4 See a doctor if the scald is on the face, hands, feet, genitals or buttocks, or is blistered or is larger than a 20 cent coin.

In an emergency:

**T** 000 for an ambulance.

### For further information contact The Plumbing Industry Commission

450 Burke Road, Camberwell VIC 3124

**T** (03) 9889 2211

**T** Toll free 1800 015 129

**E** mail@pic.vic.gov.au

Our thanks to the Plumbing Industry Commission for contributing this section.

*We gratefully acknowledge the advice and guidance of Kidsafe, and its 'Hot Water Burns Like Fire' campaign.*