



Photo courtesy of Royal Childrens Hospital Burns Research Group.



## First Aid

Call triple zero (000) for any serious scald, especially one involving young children.

Scalds are serious if they involve the face, neck, hands, feet, genitals, buttocks (bottom) or if the burnt area is blistered or bigger than a 20 cent piece.

- Apply cool running water to the scalded area for at least 20 minutes (even up to three hours after the burn). Keep the person warm. Do not use ice, butter or ointments.
- Do not break blisters, or touch the injured area.
- Remove all clothing, including nappies, at once if you can. Clothes hold in heat, often causing a deeper burn.
- Remove any watches, rings or bracelets as scalded areas can swell very quickly
- After cooling the skin, cover the scald with a clean plastic bag or kitchen cling wrap.
- See a Doctor immediately or phone triple zero (000) for an ambulance.



## For more information

- Kidsafe – (07) 3854 1829 – for information, demonstrations and sales/rental of a wide range of safety equipment for parents and carers. Kidsafe Queensland is at: <http://www.kidsafeqld.com.au>
- The Department of Infrastructure and Planning – (07) 3227 8548 – information about the law is at: <http://www.dip.qld.gov.au> Search for 'Building Codes'.
- The Master Plumbers Association – (07) 3252 1266 – for help with contact details about your local registered plumbers.
- The Plumbers Union – (07) 3844 8433 – another organisation that can help you find properly qualified and registered plumbers.
- Child safety at home an important issue for all Queensland families. Visit: <http://www.health.qld.gov.au/chipp/documents/32461.pdf> and download your copy of the *Home Safety Checklist*.

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**Queensland Government**

Queensland **Health**  
Department of **Infrastructure & Planning**



# Hot water burns like fire





## Did you know?

Every day more than three children under 5 years of age present to a hospital Emergency Department in Queensland for the treatment of scalds, mainly caused by hot tap water and spilt food and drinks in the family home.

Scalds are one of the most serious, painful and long-term injuries for young children and can happen very quickly, depending on the temperature of the water.

At 60°C a serious burn can happen in 1 second

At 55°C a serious burn would take 10 seconds

At 50°C a serious burn would happen after 5 minutes

The risk of children and their families suffering traumatic scalds in the home can be reduced by installing hot water tempering devices, and following the tips in this leaflet.

## What does the law say?

In Queensland, the law specifies that hot tap water be regulated so that it is delivered to taps in the bathroom and ensuite at no more than 50°C in domestic dwellings and 45°C for early childhood centres, schools and nursing homes. If preferred, kitchen sinks and laundry tubs can be set at 60°C.

In 1995 the laws were changed requiring temperature devices to be installed on new hot water system installations covering new homes, non like for like replacements or when moving an existing hot water system to a new location on the property. However people living in older homes built before 1995 will also find this leaflet useful.

## Scalds prevention tips

The following tips will assist reduce the risk of scalds from hot water.

- Keep the hot water tap temperature set at no more than 50°C throughout your entire home. To do this, don't try and adjust the thermostat yourself — call your local plumber for a check-up of your hot water system. Hot water is required to be stored at a minimum 60°C+, so some sort of tempering device between the tank and the tap is always required. There are a range of devices that can be used to reduce the risk of scalds in your home. See the **Devices** section later in this leaflet for more information.
- Always run the cold water first before turning on the hot tap and check the temperature with a bath thermometer or your elbow.
- Always turn the cold water tap off last.
- Don't ever leave your child alone *for any reason* while they are in the bath. If you need to leave the bathroom (such as if the doorbell or phone rings), always take your child with you.
- Turn hot taps off tightly and use child resistant tap covers.

Remember, scalds can also be caused by spills of tea, coffee, soups and noodles so keep all hot foods and drinks out of the reach of young children and never have a hot drink while nursing a young child.

## Devices

### Tempering devices

There are a number of devices that can be installed, depending on the type of hot water system in your house. The law requires a tempering device to be installed if you are building a new domestic dwelling, or installing a new hot water service in an existing domestic dwelling.

**Tempering valve** – these devices are installed by plumbers and blend hot and cold water to reduce the hot water temperature to 50°C throughout the whole house, or alternatively only in bathrooms. Tempering valves usually need to be replaced every five years. New models are now available to cope with the specific demands of solar water heaters.



**Thermostatic mixing valve** – this device costs more than a tempering valve but can be set to deliver hot water at 50°C or below throughout the home. It's able to be serviced over time, and does not have a limited life.



**Continuous Flow Hot Water System** – this system is a more expensive option. It uses a gas heater and has a temperature control panel in the bathroom which allows the user to set the temperature themselves. Some models have a maximum setting of 50°C.



Recent litigation has placed a 'duty of care' onus on the plumber to ensure the safe application of hot water in domestic situations and therefore these devices, which are available from hardware and bathroom suppliers, can only be installed by a qualified and licensed plumber.

### Tap Covers

Simple devices such as hot water tap covers are a cheap and effective way of limiting access by young children to hot water.

**Tap covers** – these inexpensive covers make it much more difficult for young hands to turn on the hot water tap.

