

# Prevention of childhood burns and scalds

Information for parents and caregivers

In South Australia every year, several hundred young children need medical care for burns and scalds. Whereas all children are at risk of being burned or scalded, children 0–2 years of age are the most vulnerable, with more children in this age group admitted to hospital for burns or scalds.

- Burns are caused by contact with hot objects or flames.
- A scald is caused by hot liquid or steam.

Burns and scalds are among the most distressing injuries that a young child can receive. Although it is rare for young children to die from burns or scalds, they cause intense pain, with children often needing long-term treatment, and having lifelong disfigurement through scarring. The parts of the body most often burned and scalded are:

- Head, face and neck.
- Arms and hands.
- Chest and legs.

## Why are younger children more likely to be burned or scalded?

Young children are more at risk of being burned and scalded, because they:

- Have thinner skin than adults, so their skin burns more deeply in less time.
- Like to climb and are naturally curious.
- Can move quickly.
- Are more awkward.
- Do not understand or react to danger.
- Are reliant on adults to control their environment and keep it safe.

## What are the most common causes of burns?

- Contact burns in young children are generally due to contact with hot stoves/ovens/grillers, irons, hot heating appliances e.g. hair straightener, radiators, BBQ's and hot exhaust pipes on motor bikes.
- Burns can also be caused by contact with flames. For example, this can be from house fires, falling or walking in to camp fires, playing with matches or lighters, petrol and other explosive liquids catching alight, or their clothes catching on fire.

## What are the most common causes of scalds?

- For young children less than two years of age, scalds are commonly associated with
  - hot drinks (usually tea or coffee),
  - water from the jug or kettle,
  - food being heated or cooked in a microwave oven (a common problem is two-minute noodles),
  - hot water bottles,
  - hot oil,
  - hot food on plates,
  - and hot water in a bath.
- Scalds are most commonly caused from spills from hot drinks. They can happen quickly, often with adults nearby who do not realise the child is reaching for the hot drink until it is too late.

## When are children most likely to be burned or scalded?

The majority of burns and scalds occur in the home. The peak times of day for burns and scalds are late morning, when domestic tasks are being done, and early evening when the evening meal is being prepared.

## Prevention of childhood burns and scalds

### How hot does liquid have to be to scald a young child?

Hot water can keep scalding a child's skin for up to 30 minutes after it has boiled. It is important to remember that hot water can burn like fire and can scar for life.

Liquid type	Temperature °C	Time
Boiling water from a kettle	100°C	Under 1 second
Cup of hot tea/coffee	70-95°C	Under 1 second
Hot water from the tap	60°C	1 second
Hot water from a kettle 5–10 minutes after boiling	55°C	10 seconds
Hot water from a tap with a temperature regulator	50°C	5 minutes

### How to prevent flame burns

- Install smoke alarms, which will give you warning of fires early enough to get out of the house safely. The SA Metropolitan Fire Service recommends smoke alarms in all bedrooms, hallways, stairwells, and living areas of the house.
- Have a home fire escape plan that you practice with your child at least twice a year.
- Have fire extinguishers and/or fire blankets on hand and up to date.
- Practice 'Get down low and go, go, go' and
  - 'Stop (immediately where you are),
  - Cover (your face with your hands),
  - Drop (to the ground),
  - and Roll (back and forth on the ground to put the flames out)'.
- Do not let young children play with lighted candles or sparklers.
- Use child-resistant lighters.
- Store matches in a locked cupboard.
- Use 'low fire danger' nightwear. Look for the fire risk label.
- Ensure heaters are away from curtains, furniture, clothing, bedding and other flammable material. Check heaters are turned off before you go to bed, or leave the house.
- Petrol and other flammable liquids should not be used to light fires.
- Always supervise young children around camp fires and beware of sites where camp fires have been as there may still be burning embers underneath.

## How to prevent contact burns

- Install guards around fires and heaters, and stoves, to keep your young child away from hot surfaces.
- Keep irons and cords out of reach, so that your young child can't pull it down onto them.
- On hot days, check play equipment (particularly sliding surfaces), car seat belts, and any metal object before placing your child on it. The sun can heat objects quickly and these can burn your child.
- If letting your child sit on a motor bike, check that they don't burn themselves on a hot exhaust.
- Closely supervise children at BBQ's.

## How to prevent your child being scalded

You can prevent your child from being scalded by watching them, by making some simple changes in the home, and not holding your child whilst handling hot drinks and food.

### Hot drinks

**Children can grab hot drinks.**

- Put your child down before having a hot drink.
- Put hot drinks in the centre of the dining table or somewhere out of reach.
- Use non-slip place mats instead of table cloths.
- Use broad-based mugs.
- Give toddlers their own special mug so they do not drink from yours.

### Jugs and kettles

**Children may grab jug or kettle cords.**

- Keep kettles, jugs, teapots, coffee plungers and cords away from the edge of the bench.
- Use a cordless kettle or buy a curly electric cord or tie your kettle cord out of reach of your child.

### Pots and pans

**Children can grab the handles of pots and pans.**

- Keep your child out of the kitchen while cooking. If not possible, place your child in a playpen or highchair.
- Put your child down before handling hot pots and pans.
- Fit a stove guard around your stove top.
- Turn pot handles away from the front of the stove and cupboard benchtops.

### Bathroom

- Control the temperature to your bathroom hot water tap to a maximum of 50°C. Your licensed plumber can tell you how best to achieve this.
- Always test the bath water's temperature before putting your child into the bath. Use the inside of your wrist. It should be comfortable warm, not hot. The recommended temperature for bath water is 38°C.
- Child resistant taps/tap covers can help reduce the risk of your child turning on the hot water, but they won't stop your child falling into a bath of hot water.
- Always put cold water in the bath first, and then add hot water into the mix. Turn off the cold water last so the spout won't be hot.
- Always stay with your child when they are in the bath. Never leave them alone in the bath, not even for a minute. Take them with you if you have to leave the room. Never leave them in the care of an older child.
- Turn taps off tightly, and keep the bath empty of water when not in use.

### Hot water bottles

Hot water bottles should not be used with young children. If used for older children, they should never be filled with boiling water, only hot water from the tap.

## First aid for burns and scalds

- Immediately put all burns or scalds under cool running water for 20 minutes. It takes this long to cool the skin under the burned/scalded area. If you don't leave it for 20 minutes the skin will keep 'cooking' and can burn deeper in to the skin.
- Remove any clothing and jewellery as soon as possible. Clothes can hold the heat in and cause more damage. Jewellery can become a problem when the damaged skin starts to swell.
- Once you have cooled the burn, cover it with cling wrap or a clean damp cloth.
- Seek medical attention if the burn is bigger than a 20 cent coin or the burn is on the face, hands, feet, or genital area.
- In an emergency call 000 while you are cooling your child's burned/scalded skin.

For more information, contact:

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