



## Burns and Scalds

Burns and scalds are a significant problem in Western Australia. Almost 500 children a year are treated for a burn or scald at the Perth Children's Hospital Emergency Department.

More than half of the children admitted to hospital for a burn or scald are under the age of five. Young children are particularly at risk as they are becoming increasingly mobile but do not have the skills to assess dangers.

Severe burns and scalds can be extremely devastating to a child and their family, often requiring multiple hospital visits and leaving lifelong scarring. Most of these injuries are preventable. Common causes of burns and scalds to children include:

- Hot food and drink (e.g. hot tea and coffee).
- Hot water, often from bath water.
- Heaters and fires.
- Household and kitchen appliances (e.g. irons, ovens, stoves, microwaves, kettles and toasters).
- Lack of supervision around potential burn and scald hazards.
- Lack of working smoke alarms.



### Burns

Burns are the result of contact with flames and hot objects.

#### Preventing burns

- Install guards around fires, heaters and on top of stoves. Teach children why these are in place.
- Keep children out of dangerous areas such as the kitchen while preparing meals.
- Choose low fire-risk children's nightwear that is close fitting and made of less flammable material. Look for the fire risk label.

- Closely supervise children at BBQ's.
- Keep appliance cords out of reach of children.

#### House fires

- The majority of fire and burn deaths to children occur in private dwellings such as houses, flats or caravans.
- Young children are at risk in house fires as they have a small lung capacity, are easily disoriented, and may try to hide. Older children are also at risk as they may try and put out the fire when it is not safe to do so.
- Older, poorer quality housing is at greater risk of fire. These homes are also less likely to have smoke alarms.
- The most common reasons for house fires are flammable items being too close to heaters, open fires, candles, careless smoking, unattended cooking and electric blankets<sup>1</sup>.

#### Prevention priorities

##### Surviving fires

- Install smoke alarms, test their batteries regularly and replace them on the 1<sup>st</sup> of April every year.
- Develop a home fire escape plan and practice it with your family.
- Have fire extinguishers or fire blankets on hand to help deal with small fires.
- Practice "GET DOWN LOW and GO GO GO" and "STOP, DROP COVER AND ROLL" with your children.

##### Preventing fires

- Keep matches and lighters out of reach of children.
- Teach children fire safety rules and skills.
- Ensure heaters are away from curtains, furniture, clothing and other flammable material. Check you have turned them off when you go to bed.
- Install electrical safety switches to protect against faulty wiring or products. Check electrical appliances for frayed cords and that electrical power boards are not overloaded.



## Scalds

Scalds are burn injuries caused by hot liquid, vapor or steam. For young children, scalds are commonly associated with hot food or drinks and hot tap water. Injuries are most commonly to the head, face, chest and hands.

### Hot tap water scalds

Contact with hot liquid or steam is the most common cause of a burn or scald. The bathroom is the most common place for hot tap water scalds.

**At 50°C hot water takes 5 minutes to cause a full thickness burn, at 60°C it takes less than a second!**

### Safety with hot tap water:

- Use a hot water tempering device to control the temperature of your tap water to a maximum of 50°C. A licensed plumber can install this for you.
- Always test the bath water temperature before bathing your child. The maximum recommended temperature for bathing your child is 38°C<sup>2</sup>.
- Child resistant taps/tap covers can help to stop your child from turning on taps.
- Always run the cold water first and last when filling up a bath and never leave a hot running bath unattended.

### Current legislation

It is now law in Western Australia (National Plumbing and Drainage Code AS 3500.4 2003) that the delivery of hot water be controlled for all sanitary fixtures like baths, basins and showers.

Hot water temperature should not exceed:

- 45°C for early childhood centres, primary and secondary schools and nursing homes or similar facilities for young, aged, sick or disabled persons.
- 50°C in all other buildings<sup>3</sup>.

Compliance with these temperatures is optional for kitchen sinks and laundry tubs.

## Hot food and drink scalds

Scalds from hot food and drink commonly occur due to young children pulling items down on themselves, running into or being held by someone who has a hot drink and spills it.

### Safety with hot food and drink:

- Keep appliance cords out of reach of children and hot items at the back of the bench.
- Use rear hot plates first, turn pot handles to the back of the stove or bench.
- Put hot food and drink in the centre of the table or somewhere out of reach of children.
- Use non-slip place mats instead of tablecloths.
- Use a commuter mug with a lid.
- Put your child down before consuming hot drinks, and before using hot pots, pans and kettles.
- Ensure your microwave is at a suitable height and that you don't have to take items out from above you.

### First aid for burns and scalds

1. Remove any nappies or wet clothes
2. Immediately apply **cool running water for 20 minutes**
3. Keep the child warm, to prevent them from going into shock
4. See a doctor if the burn or scald is on the face, hands, feet, genitals or buttocks, if it is larger than a 20 cent coin or blistered
5. In an emergency, phone 000 for an ambulance

**Never use ice, oils, butters, ointments or creams.**

### References:

<sup>1</sup> Department of Fire and Emergency Services. Media Release: Firefighters concerned about house fire trends. August 2012.

<sup>2</sup> Victorian Building Authority. About... hot water safety. April 2014.

<sup>3</sup> National Plumbing Regulators Forum. National Plumbing and Drainage Code Australia AS 3500.4 2003 Clause 1.9. 2003.

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