

Burns and scalds in young children

Young children who are naturally curious and like to explore are at a higher risk of burns and scalds.

The most common cause of burns and scalds in young children is from contact with hot drinks and food, hot tap water, and hot surfaces.

Why are young children at risk?

- Young children are increasingly curious and mobile as they develop
- Infants and toddlers have thinner skin than adults (the top layer of a child's skin gets thicker as they develop), so burns and scalds can occur faster and may be more severe
- Young children are small and still growing, so complications can be worse than in older individuals

What are the potential consequences of a burn or scald for young children?

- Hospitalization for painful burn treatment, which can require surgery
- Pressure garments and splints that have to be worn for up to two years following the injury
- Prominent, raised scars
- Tight scarred skin as the child grows, restricting movement. Surgery is usually required to restore normal function
- Increased rates of mental health disorders such as anxiety and depression
- Contractures (also known as immovable, scar tissue) which can limit future movement and growth

What increases the risk of burns in young children?

Personal risk factors:

- Age: Younger children (0 to 4 years) are at higher risk than older children (5 years and up)

Environmental risk factors:

- Kitchen hazards:
 - Hot drinks left unattended
 - Tripping over a child while transporting food
 - Appliance cords on kettles and slow cookers that children can pull
 - Pot handles turned outward
 - Hot stove elements or oven doors
- Bathroom hazards:
 - Very hot bath and tap water
 - Access to appliances, such as hair straighteners or curling irons
- Other hazards:
 - The glass of a gas fireplace
 - Open fireplaces
 - Household appliances, such as irons, space heaters and bottle warmers

How can burns be prevented?

Burns and scalds are preventable. By implementing a mix of passive and active strategies, injuries can be prevented.

Passive strategies:

- The hot water temperature of the bathroom taps should be set to 49°C to reduce the potential severity of a scald
- **Note:** Gas hot water tanks have different minimum temperature requirements than electric hot water tanks
- Childproof bathroom doors to prevent children from entering and turning on the hot water taps
- Install tap guards and anti-scald devices on faucets and shower heads to help regulate water temperature

- Place a fence or safety screen around fireplaces and other heaters to prevent contact burns
- Install external mixing valve taps in bathrooms and kitchens to regulate temperature and prevent bursts of hot water

Active strategies:

- Provide constant, close supervision, especially when the child is bathing or in the kitchen. Older children should not be relied on to supervise younger children
- Check your child's bath water with your elbow prior to placing them in the water. It should not feel hot
- Use a travel mug with a screw-on-lid for hot drinks
- Keep appliance cords out of reach and appliances away from the edge of the counter
- Turn pot handles inward on the stove and cook on back elements whenever possible
- Place young children in a highchair or play pen while you are cooking
- Teach older children that the kitchen is a "no play zone"
- Share safety tips with those who are caring for your children (grandparents, daycare staff, friends or babysitters)

What do I do if my child is burned?*

1. Remove any hot and wet clothing, unless it is stuck to your child's skin
2. Cool the burn immediately with cool running water.
Every second counts
3. You may also use a cold damp cloth or cold compress
4. Cool the burn for one minute. Continue cooling, even if the skin peels or blisters. Cooling reduces pain and injury
5. Keep your child warm. Only cool the skin that has been burned
6. If the burn is smaller than a \$1 (loonie) coin, about 2.5cm in diameter, after cooling, apply an antiseptic ointment like Polysporin and a Band-Aid. Change the

band aid and apply new ointment every day until the burn is healed. If the damaged skin does not start to heal over the next 3 days, seek medical attention

7. If the burn is the size of 7 of your child's handprint or bigger, cool the burn for one minute, then cover with a clean, dry sheet and call **9-1-1**. Cool longer if your child is still in pain

Never put home remedies, such as oil, butter, cream or ice on a burn.

**Content and wording provided with permission from the Child Safety Too Hot for Tots! Fact Sheet, City of Delta, 2020.*

When to visit a doctor?

- If the burn is bigger than a loonie (2.5cm in diameter)
- If the burn is on your child's face, hands, feet or groin
- If blisters develop
- If the burn becomes red or swollen, you see pus, or your child develops a fever

Ask someone else to drive you to the doctor's office or hospital so you can give your child your full attention. If no one is available, call an ambulance.

Always cool the burn first before calling **9-1-1** or before driving your child to the doctor's office or hospital.

For more information

- BC Injury Research and Prevention Unit
<https://www.injuryresearch.bc.ca/injury-priorities/fire-burn-safety>
- BC Professional Fire Fighters' Burn Fund: Prevention – Too Hot for Tots Course
<https://burnfund.org/prevention>
- Parachute – Burns and scalds
<https://parachute.ca/en/injury-topic/burns-and-scalds>

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