



Children's Hospital
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Children's burns are different than adults

We all have been careless at one time or another. Perhaps we've touched a hot iron to check its temperature or grabbed a hot pan without oven mitts. Usually, this carelessness leads to a small blister that goes away in a short time. However, children exposed to the same dangers can suffer far worse injuries (see chart).

According to Andrea Winthrop, MD, medical director of Trauma and Injury Prevention at Children's Hospital of Wisconsin, children burn more quickly and easily than adults because their skin is thinner and more delicate. Winthrop also is an associate professor of Surgery at the Medical College of Wisconsin.

"The same temperature or contact, for the same amount of time, will cause a much deeper burn on a child than an adult," Winthrop said.

According to Winthrop, nationwide, more than 80,000 children 4 years old and younger suffered burn injuries, many of which cause lifetime disfigurement. In Wisconsin, children die as often from burn injuries as drownings, which tie for the No. 1 reason for injury-related death in children ages 1 to 4 years old.

The causes of children's burns differ from those in adults. According to Winthrop, the most common burns in children are thermal burns caused by scalds (hot liquid burns) and fire. Other types of burns include:

- Electrical burns.
- Inhalation burns.
- Chemical burns.

Children also respond to fire and danger differently. "While adults know that fire is dangerous and help is needed immediately, children often are scared of fire and attempt to hide from it by crawling under beds or in closets," Winthrop said. "Most children do not awaken to the sound of a smoke detector, or do not know what it sounds like or means."

Parents can help by developing an escape plan and practicing it often with their children. "Teach your children not to play with fire, but that if a fire starts, they need to get help right away. Tell them they will not be punished for going to get help," Winthrop said.

In addition, make sure to check the smoke alarms and change the batteries every six months. Coordinate this routine with daylight savings time to help you remember.

To help prevent pediatric burns, Children's Hospital of Wisconsin suggests parents follow the tips below:

Inside the home

Kitchen:

Cook on the rear burners only, if possible, and never cook while holding a child. Children easily and quickly can pull boiling pots onto themselves or others. Keep cords for Crock-Pots and other appliances hidden on the counter top and out of children's reach.

Teach older children to cook safely and with supervision. Alert them to the dangers of the kitchen. Do not forget the microwave. Liquid and containers heated in the microwave can be very hot and cause burns quickly.

Bathroom:

A hot curling iron is a very common cause of pediatric burns in the bathroom. Make sure the cord is out of reach of children, placed far back on the counter.

In addition, keep water heaters no hotter than 120°F and always test the water before placing a child in the bathtub. Nearly a quarter of all scald burns occur because bath water is too hot for young children.

Outdoors

Campfires:

Campfires are a frequent cause of burn injury in the summer. Constantly watch children and do not let them play or run around the campfire.

Motorcycles:

In addition to motor vehicle and falling injuries, many burns are caused by the exhaust and other pipes. Always help children on and off the motorcycle and teach them never to touch the pipes.

Fireworks:

Children never should handle fireworks. Even a sparkler can start clothing on fire, causing devastating burns.

Children burn quicker than adults			
<u>Age</u>	<u>Temperature</u>	<u>Time</u>	<u>Result</u>
Adults	130°F	30 seconds	Burn injury
Kids	130°F	10 seconds	Burn injury
Kids	140°F	5 seconds	Burn injury
Kids	160°F	Instantaneous	Third-degree burn