University of Colorado Hospital
ANSCHUTZ MEDICAL CAMPUS

Burn Prevention in Children

GENERAL INFORMATION:

What is a burn injury? Burn injuries occur when skin is damaged after being exposed to too much heat. Burn injuries are very common among children. Burns are very painful. Large burns are even more painful, and very hard for children to cope with. Children who are burned may need to stay in the hospital for a long time. They may need several months or longer in rehabilitation, which can be very painful. A burn can have long lasting effects on a child. A child who has been burned may never be able to do the same things that other children do. A child may look different from others after having been burned. These factors can change a child's thoughts, feelings, and the way he acts. If a child is badly burned, there is a chance that he will not live. Learn what you can do to prevent burn injuries and make your home safer.

What may cause a burn injury? Touching hot objects such as an iron, a skillet (pan), cigarettes, flames or fireworks are the most common causes of burns. Children (often boys) get burned after making fires from playing with matches or lighters. Contact burns often happen when children reach for objects without knowing that they are hot. These burns usually occur on your child's hands, arms, and face. The following may also cause burn injuries:

- Harsh chemicals, such as cleaning products, chlorine, car battery acid, or fires from ignited (lit) gasoline.
- Lightning, or touching electrical outlets, or worn cords or wires.
- Steam, hot food, grease spills, boiling water, or other hot liquids.
- Being out in the sun too long.

What increases my child's risk of getting a burn injury?

- **Risks related to the child:**
  - Curiosity. Children like to know what things are and how they work.
  - Having a physical or mental disability (problem).
  - Not knowing what is dangerous, and being unable to escape dangerous places.
  - Thin skin. A child's skin gets burned at a lower temperature than the skin of an adult.
- **Risks related to the parent and home:**
  - Absent or lack of smoke detectors or anti-scald devices. Anti-scald devices can be put on water faucets to control the water temperature.
  - Crowded housing or poor living conditions.
  - Not knowing how to take care of a child.
  - Parents with a low education level, and low income families.
  - Physical abuse of a child, or child neglect.
  - Single, young, or stay-at-home mothers.

What are the signs and symptoms of a burn injury? Skin is made up of layers called the epidermis, dermis, and subcutaneous. Signs and symptoms of a burn depend on how deep the burn went down into the skin. A single burn injury can affect any or all of the skin layers. If your child has more than one area that has been burned, one burn may be superficial, while another is a partial-thickness or full-thickness burn. Your child may have any of the following:

- **Superficial burn:** This is also called a first-degree burn. With this burn, skin is usually red, dry, tender, and painful. The burned area may also swell, turn white when it is touched, and have blisters.
- **Partial thickness burn:** This is also called a second-degree burn. With this burn, skin is red, moist, painful, and develops blisters. Areas of skin may also be waxy white.
- **Full thickness burn:** This is also called a third-degree burn. With this burn, skin may be charred, black, or leathery. This type of burn is often painless because the nerves that sense pain have been destroyed.

How can I prevent my child from having a burn injury? Keeping your child safe from burns is a very important part of being a parent. Education is the best way to prevent burns. The more you know about preventing burns, the better you will be able to help yourself and your child. Meet with other people who are active with teaching and sharing information on burn prevention.

How can I prevent contact burns?

- Do not eat, drink, or carry anything hot near your baby, or while you hold him.
- Do not heat your baby's bottle in the microwave oven. Always test the temperature of the liquid before you give it to your baby to hold or drink.
- Keep irons, curling irons and other hot devices in an area away from where children can get to them.
- Use protective screens or child safety guards around fireplaces, ovens, space heaters, and radiators.

How can I prevent burns caused by hot liquids or steam?

- Check the water temperature before putting your child into the bathtub. Do **not** let your child touch the faucet handles in the bathtub. He could turn on the hot water and burn himself. **Never** leave your child alone in the bathtub.
- Do **not** leave cups, mugs, or bowls that have hot liquids in them at the edge of a table. Turn pot handles away from the front of the stove. Children can reach up and pull cups or pots of hot liquids down onto themselves.
- Use testing cards or anti-scald devices to check the temperature of water coming from your faucets. Decrease your hot water heater setting to low or medium (90 to 120 degrees Fahrenheit).
- Keep your children out of the kitchen when you are cooking. Kitchen spills can splatter or fall on your child and cause serious burns. Keep your child away from an open oven door. Put younger children in a playpen, high chair, or crib while you are cooking.

How can I prevent sunburns?

- Put sunscreen lotion on your child's skin before he goes outside. Do **not** wait for your child's skin to turn red before applying sunscreen lotion.
- Set time limits when allowing your child to stay out in the sun.

What else can I do to protect my child from burns?

- Do **not** leave lit cigarettes alone. Keep cigarette lighters and matches in a safe place where children cannot reach them. Teach your child that these things are not toys.
- Do **not** let your child play with firecrackers or sparklers. These can cause serious injuries or burns.
- Keep your child away from electrical cords. Cover unused electrical outlets with childproof covers, and replace torn or worn cords.
- Have your child wear pajamas made of flame-resistant fabric. Do not let him wear clothing with fuzzy or napped surfaces, or clothing that is loosely-woven, or loose-fitting. Most costumes worn at Halloween can catch fire easily since they have loose, flowing material. Choose clothing for your child that fits snugly next to his skin.
- Teach your child how to stop, drop, and roll. Children will often run if their clothes are on fire. This can make the fire spread. Teach your child how to stop, drop to the ground and roll around if his clothing catches on fire. Doing this helps protect his face from flames, and will help the fire go out.

What can I do to protect my family from fires in the home?

- Have a working fire extinguisher in your home. Teach family members how and when to use it.
- Lock up liquids that may catch on fire, like gasoline or kerosene. Leave them in the container that they came in and label them.
- Plan how to quickly get out of each room of your house if there is a fire. Teach your children how to get out and where to go. Have practice fire drills.
- Use smoke detectors in the house and check them regularly to make sure they are working. Replace the batteries twice a year to make sure that these devices are working correctly.

When should I call my child's caregiver? Call caregivers if:

- Your child has a high body temperature (fever).
- You have questions or concerns about your child's burn, treatment, or care.

When should I seek immediate help? Call 911 or get your child to the nearest emergency room if:

- He is dizzy and unable to stand up.
- He is weak, with pale, moist skin.
- He suddenly has trouble breathing.
- His lips or fingernails turn blue.
- The burned area of your child's skin looks like it is more red than before, he has lost feeling in the area, or the swelling has increased.
- Your child's pain has not gone away, or is getting worse even after taking medicine.
- Your child's wound has pus (drainage) or a bad smell coming from it.
- Your child tells you that he has chest pain, and his heart beat feels faster than usual.