

What You May Not Know About Childhood Burns

Causes of Burns

- The number one cause is scalds from steam, hot liquids or hot water.
- Other causes include contact from hot objects such as the stove, curling iron or space heaters; chemical burns from bleach being spilled on the skin or swallowing substances such as drain cleaner or watch batteries; electrical burns from sticking fingers in electrical outlets or biting on electric cords; and overexposure to the sun.

(Kids Health)

First Degree Burns

- First degree burns are the mildest of all three burns and affect the top layer of the skin. These burns produce redness, swelling, and minor pain. The skin is dry and without blisters.
- Healing time is about three to six days. The superficial skin layer could peel off as early as one to two days.
- First degree burns can be treated by running cool (not cold) water over the burned area. If water is not available, any cold, drinkable liquid will do. A cold, clean compress can also be held over the burned area for three to five minutes. Using ice could damage the affected area and cause the healing time to be longer.
- Butter, grease or powder that is applied to the burn can increase risks of infection.
- If the burned area is small, it can be loosely covered with a sterile gauze pad or bandage.
- Children can be given acetaminophen or ibuprofen for pain.
- If the area affected is small (the size of a quarter or smaller), the area should be kept clean. Cool compresses and a loose dressing should be used over the next 24 hours.

(Kids Health)

Second and Third Degree Burns

- Second degree burns involve skin layers below the top skin layer. These burns produce blisters, severe pain and redness. The blisters can break open.
- Healing time will vary depending on the severity of the burn.
- Third Degree burns are the most serious burn involving all layers of the skin and the tissue below the skin.
- Skin can look dry and can look waxy white, leathery, brown or charred. There may be little or no pain or the area may feel numb at first, because of nerve damage.
- Healing time varies depending on severity.
- Medical attention should be sought immediately if a child has second or third degree burns.

(Kids Health)

When to Seek Medical Help

- The burned area is large or if the burn comes from an electrical wire or socket, chemicals or fire.
- The burn appears to cover more than 10% of the body. Don't use wet compresses because they can cause the child's body temperature to drop. Instead, cover the area with a clean, soft cloth or towel.
- The burn is on the face, scalp, hands, joint surfaces or genitals.

- The burn looks infected (with swelling, pus, increasing redness or red streaking of the skin near the wound).

Before emergency personnel arrive, follow these steps:

- Keep the child lying down with the burned area elevated.
- The instructions for treating first degree burns should be followed in this situation too.
- Remove all jewelry and clothing from around the burn (in case there's any swelling after the injury), except for clothing that's stuck to the skin. Clothing may need to be cut off.
- Do not break any blisters.
- Apply cool water over the area for at least 3 to 5 minutes, then cover the area with a clean white cloth or sheet until help arrives.

(Kids Health)

Treating Flame Burns

Kids Health suggests the following guidelines in treating a child who has been burned by fire:

- Extinguish the flames by having the child roll on the ground.
- Cover him or her with a blanket or jacket.
- Remove smoldering clothing and any jewelry around the burned area.
- Call for medical assistance, then follow instructions for second- and third-degree burns.

Treating Electrical and Chemical Burns

- Make sure the child is not in contact with the electrical source before touching him or her, or you may also get shocked.
- Flush the burned area with lots of running water for 5 minutes or more. If the burned area is large, use a tub, shower, buckets of water or a garden hose.
- Do not remove any of the child's clothing before flushing the burn with water. As the burn is flushed, clothing can be removed from the burned area.
- If the burned area is small, flush for another 10 to 20 minutes, apply a sterile gauze pad or bandage, and call the child's doctor.
- Chemical burns to the mouth or eyes require immediate medical evaluation after thorough flushing with water.
- Although both chemical and electrical burns might not always be visible, they can be serious, because of potential damage to the child's internal organs. Symptoms may vary, depending on the type and severity of the burn and what caused it, and may include abdominal pain.
- If a child has swallowed a chemical substance or an object that could be harmful (for instance, a watch battery) Poison Control should be called first and then the emergency department. It is helpful to know what chemical product the child has swallowed or has been exposed to. The substance may need to be taken to the hospital. It's a good idea to have the number for poison control, (800) 222-1222, in an easily accessible place, such as on the refrigerator.

(Kids Health)

Preventing Burns

- Thermostats on hot water heaters should be set at 120° Fahrenheit or lower. A child's bath water should not be set at higher than 100° Fahrenheit. Children should be supervised around water faucets, as they could turn these on and burn themselves.

- Avoid spills by not drinking hot liquids while holding a child. Pan handles should be turned inward on the stove. Tablecloths should be avoided with toddlers, as they could pull on them and drop hot food on themselves.
- A 'No Zone' should be established in front of the stove. It can be marked by using yellow tape on your stove or putting a bright colored rug in front of it. Avoid storing cookies near the stove, as children can climb on the stove to get them.
- Keep hot objects such as irons and curling irons unplugged, when not in use. Make sure electrical cords are not accessible to little hands.
- Food heated in the microwave should be tested before giving it to a child. The jelly inside a doughnut can scald a young child's mouth, if overheated. Liquids may be hotter than their containers. Bottles should **never** be microwaved.
- Use a cool mist humidifier versus a steam vaporizer. The steam can be so hot that it can burn a child, if they get too close.
- Plastic plugs should be placed on electrical outlets, so children can not stick metal objects such as forks in the outlets. This can cause electrical burns. Exposed electrical cords should not be used.
- Never leave children unattended around barbeque grills.
- Before children are placed in car seats, the car seat should be checked to make sure it is not too hot. Straps or buckles that become too hot can cause burns. If you park in direct sunlight, cover the car seat with a towel or blanket.
- Fireworks, sparklers and rockets can cause burns. A sparkler burns at 1,000° Fahrenheit. The safest way to enjoy fireworks is to leave them to professionals.
- Children have a natural curiosity about fire. Lighters and matches should be stored out of the reach of children, preferably in a locked cabinet.
- Lighters should not be used as amusement for a child. Children should be instructed to tell an adult if they find a lighter or matches.
- Check under beds for burned matches to make sure your child is not experimenting setting fires. (*Mayo Clinic*)

Resources

Safe Kids USA, http://www.usa.safekids.org/content_documents/Burn_tips.pdf

Mayo Clinic, <http://www.mayoclinic.com/health/child-safety/CC00044>

KidsHealth.org, http://www.kidshealth.org/parent/firstaid_safe/emergencies/burns.html