



Burn Safety and Awareness

According to National Institute of Health, roughly a half-million Americans seek medical attention for burns each year. What's more, 7 out of 10 admissions to burn centers are for burns that happened in the home. Educating yourself about the nature, care, and prevention of burns is one important way you can help keep your family safe.

Determining Burn Severity

The skin is made up of three different layers. The surface layer is the epidermis. Next is the dermis layer, a thick layer of collagen containing sensory nerves, oil glands, sweat glands, and hair follicles. The deepest layer of skin is the subcutaneous layer, made up of soft and fatty tissues.

- First-degree burns stop at the epidermis. They cause pain, redness, and swelling — but no blistering.
- Second-degree burns affect both the epidermis and underlying dermis. They cause pain, redness, swelling, and blistering.
- Third-degree burns affect the deepest, subcutaneous layer of skin. They cause white, blackened, peeling, or leathery looking skin. A person with third-degree burns may have difficulty breathing and is at risk for shock. Signs of shock include pale, clammy (unburned) skin, weakness, loss of alertness, and blue lips and fingernails.
- Burned airways can occur from breathing smoke, steam, superheated air, or chemical fumes. Indications of burned airways include burns on the head, face and neck, burned nose hairs, coughing, difficulty breathing, dark mucous, voice changes, and wheezing.
- Pain is not a good indicator of burn severity because the most serious burns can be painless.

FIRST AID

You can usually treat a first-degree burn using basic first aid. A second-degree burn is more serious. If the second-degree burn is no larger than 3 inches (7.6 centimeters) in diameter, treat it as a minor burn. If it is larger or covers the hands, feet, face, groin, buttocks or a major joint, get medical help immediately. Third-degree burns require emergency medical attention. People with second- or third-degree burns should be current on their tetanus shots. Doctors recommend a booster every ten years.

WHEN TO CALL 911

- The burn is the size of your palm or larger
- The burn is severe (third-degree) or you aren't sure how serious it is
- The burn is caused by chemicals or electricity
- The person may be in shock
- The person inhaled smoke
- Physical abuse is suspected
- There are other symptoms associated with the burn

WHAT TO DO FOR MINOR BURNS

- Ease the pain with cool (not cold) water by wrapping the burn in a wet towel, running tap water on it, or soaking it.
- Gently remove rings and other tight items from the burn area, before swelling begins. Ibuprofen or acetaminophen can help with pain and swelling.
- Avoid breaking blisters. If they break, gently clean the area with mild soap and water and apply an antibiotic ointment.
- Cover the burn with a dry, sterile bandage and protect it from pressure or friction.

See a healthcare provider for any of the following:

- Pain persists after 48 hours.
- Signs of infection appear, such as drainage or pus, fever, increased pain, swollen lymph nodes, or red streaks around the burn.
- Symptoms of dehydration occur, including decreased urination, dizziness, headache, dry skin, light-headedness, nausea, and thirst.

MAJOR BURNS

If someone is on fire, make them stop, drop, and roll. If the person has been electrocuted by a live wire, **DO NOT** touch them directly. Use a non-metallic object to pull them away from exposed wires before starting first aid. Wrap the person in thick material such as a wool coat, rug, or blanket to put out the flames. Pour water on them. Once you are certain the victim is no longer touching any burning or smoking materials, **CALL 911 IMMEDIATELY. DO NOT** remove clothing that is stuck to the skin. If the person is not breathing, begin CPR. Cover the burn with a dry sterile bandage. A sheet will do if the burned area is large. Take care not to break blisters. If fingers or toes have been burned, separate them with a dry, sterile, non-sticky bandage. If possible, elevate the burned body part above the level of the heart. Protect the area from pressure and friction.

DO NOT apply ANY ointment of any sort to a severe burn.

DO NOT breathe, blow, or cough on the burn.

DO NOT disturb blistered or dead skin.

DO NOT remove clothing that is stuck to the skin.

DO NOT give the person anything by mouth.

DO NOT place a severe burn in cold water.

DO NOT place a pillow under the person's head, which can close the airways if the person has suffered smoke inhalation.



Safety Tips

Accidents happen, and you can't prevent them all. However, there are some common sense things you can do to reduce the risk of getting burned.

- Make sure your home has smoke alarms. Check and change their batteries regularly.
- Teach children about fire safety. Don't leave matches or lighters where children can find them.
- Watch young children, especially when you are cooking or ironing.
- Turn pot handles toward the back of the stove.
- Keep fire extinguishers handy.
- Remove electrical cords from the floor and keep them out of reach. Use child proof plugs on open outlets.
- Determine the best fire escape routes in advance and discuss them with your family.
- Set the water heater temperature at 120°F (48.8°C) or less.
- Keep current on tetanus shots.