

**A PRACTICAL
AT-HOME
GUIDE
TO THE
PREVENTION
AND CARE
OF BURNS**



GETTING THE BETTER OF BURNS

A Practical Guide for Consumers on the Causes, First Aid and Prevention of Burns

Every 17 seconds, someone is burned. In this country, each year more than 2,000,000 people are burned; 200,000 seek medical attention; 120,000 are hospitalized; and 12,000 die. Children and the elderly are among the most frequent burn victims.

As staggering as these statistics are, many burn injuries can be prevented, provided you take the proper precautions. Still, accidents will happen, and when a burn injury occurs, it's vital to know what to do — and what **not** to do. The first few seconds after a burn or scald are crucial, and being prepared makes all the difference.

What Causes Most Burns?

A burn is an injury in which your skin, and sometimes underlying tissue as well, is damaged by extremes of temperature, electrical current or caustic chemicals. Experts classify burns into three major types, depending on their cause:

- **Thermal** – Burns caused by flame, steam, hot liquid or hot metal.
- **Electrical** – Burns caused by direct contact with electrical current, or the passing of electrical current through the body, including lightning.
- **Chemical** – Burns caused by direct bodily contact with acids, lye, strong detergents or chemicals; or by inhalation of chemical fumes.

Each kind of burn has unique characteristics and, as a result, appropriate first aid may vary. As you might expect, most burn injuries occur at home. Burn hazards lurk in and around the home, and some of the most common culprits include hot

liquids; cigarettes, matches, and lighted candles; faulty heaters and electrical appliances; and flammable household chemicals. Nearly 90% of household burn injuries are caused by scalds, contact with a hot object, such as an iron or stove, or clothing that has caught on fire.

Sizing Up Burn Severity

Burns are classified as first-degree (mild); second-degree (moderate); and third-degree (severe), according to the depth of skin damage they cause. Other factors influencing burn severity include the extent of injury, or how much total body surface is damaged; the age of the patient; the location of the burn; and any accompanying medical conditions the victim may have. In a first-degree burn, only the outside layer of skin is injured. The burned skin is red, slightly swollen and painful, but does not blister. First-degree burns usually heal within 2–5 days without scarring. A second-degree burn involves underlying tissue as well as the outer layer of skin. The injured area appears red or mottled, may blister, and often has a moist, “weepy” appearance. This type of burn is extremely painful and swelling is apt to last for several days. Healing may take anywhere from a week to a month, provided no complications occur. A third-degree burn is the most serious because it destroys all layers of skin and possibly damages underlying tissue such as muscle, tendon, joint and bone. The affected area may be charred and dry; often, little pain occurs because nerve endings have been destroyed. Patients with third-degree burns may require months or years for complete rehabilitation.

FIRST AID FOR BURNS

Prompt first aid for burns can minimize severity, facilitate healing, even save a life. To be prepared, become familiar with the proper steps to administer first aid for each type of burn.

Thermal Burns

(Burns caused by flame, steam, hot liquid or hot metal)



- 1.** Immediately move the victim from the source of the burn. If the victim's clothing is still on fire, prevent the burn victim from running, which will only fan the flames. Standing still makes ignition of hair and inhalation of flames more likely. Instead, instruct the victim to stop, drop to the ground, and roll to extinguish the flames.
- 2.** Spray the victim with water or wrap the burned person in a blanket, heavy coat, or rug to smother any residual flames.
- 3.** If the flames were caused by a flammable liquid like gasoline, make sure the burned individual avoids further exposure to heat or fire, which could trigger re-ignition of flames.
- 4.** Spray the fire with water or smother it with a heavy blanket, rug, sand or baking soda. Use baking soda to put out a grease fire: Water will only cause the flaming grease to splatter and will not extinguish the fire.
- 5.** Don't put butter, grease, dry dressings, ointments or salves on a burn; experts contend that they don't cool the burn or relieve the pain, and some may leave behind a greasy residue that must be physically removed if the victim later requires medical attention. Instead, a one-step burn care product such as Water-Jel First Aid Emergency Burn Dressing, a new first aid treatment for use on burns, is recommended. This new first aid burn dressing from Water-Jel Technologies, promptly relieves pain, protects the wound from further contamination, inhibits burn progression and helps promote healing. Water-Jel dressings consist of a sterile fabric saturated with a special cooling water-based gel that is non-toxic,

water-soluble and biodegradable. Water-Jel dressings come in three sizes: 2" x 6" (for the finger or small area burns); 4" x 4" (for the hand or medium-sized burns); 4" x 16" (for the arm, leg or larger area burns). Be sure to read and follow all package directions for proper use.

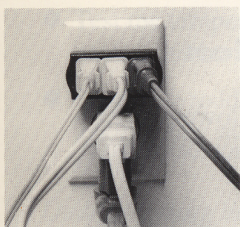
6. If burned on a clothed area, apply the Water-Jel dressing directly over the burned clothing. The gel will soak through the clothing to cool the burn, relieve the pain and allow easy removal of clothing prior to treatment by medical personnel. If Water-Jel dressings are not easily accessible, quickly remove all burned clothing as it can continue to be a source of heat even after the fire has been extinguished.

7. Seek medical attention. Consult your physician if burn is severe, covers an area larger than your palm, or involves the face.

8. Be sure to elevate the burned extremity above the level of the heart while waiting for medical attention.

Electrical Burns

(Burns caused by direct contact with electrical current or the passing of an electrical current through the body, including lightning)



1. Before touching the victim, stop the source of the current, if possible, by closing the main power switch or deactivating a circuit breaker.

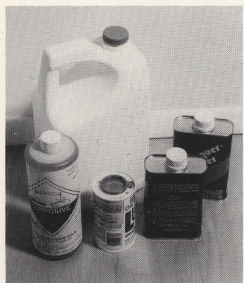
2. Use a nonconductive item, such as a wooden broom handle, rope, dry towel, or wooden chair to disengage the victim from the current source.

3. Cool the burned area with a Water-Jel dressing.

4. Seek prompt medical attention.

Chemical Burns

(Burns caused by direct bodily contact with acids, lye, strong detergents or chemicals, or by inhalation of chemical fumes)



- 1.** Immediately flush the affected areas with large quantities of water. Do not waste time looking for specific antidotes to the chemical which caused the burn and do not take time to remove the patient's clothing until the flushing process is well underway.
- 2.** For a known acid burn, irrigate the area for at least 15 minutes; for a known lye burn, irrigate for one hour.
- 3.** Apply a Water-Jel dressing to the burn wound.
- 4.** Summon medical help.

For Minor Burns

Many burns are only minor or cover a very small area (spot burns)—but they hurt. For these burns a topical burn care product with lidocaine—like Water-Jel's Burn Jel[®]—will quickly relieve the pain of minor burns.

Burn Prevention

Only you can prevent burns. The following precautions may help you to prevent burn accidents from happening at home.

- Install heat and smoke detectors in your home and make sure they're operating properly. Be sure to change batteries as often as necessary.
- Have a fire escape plan for all family members with a place to meet outside the home. Practice it regularly.
- Keep fire department telephone numbers by the phone.

- If you smell gas or suspect a gas leak, open a window or door, leave the house, and then call the gas company or fire department for help immediately.
- Don't misuse or overload extension cords. If you have a toddler, avoid using extension cords.
- Unplug electrical appliances when not in use and keep them away from water.
- Cover electrical outlets to prevent small children from playing with them.
- Never leave a hot iron unattended. Unplug it when you've finished using it.
- Do not allow candles to burn unattended.
- Keep your fireplace screened.
- Never smoke in bed.
- Never store gasoline or other combustibles. Buy a one-time use quantity and replenish it as needed.
- Never squirt lighter fluid on burning or smoldering fires.
- Keep children away from barbecue fires.
- Use fire-retardant sleepwear for infants, toddlers and young children.
- Set the temperature of your hot water heater at 124 degrees (F); a water temperature of 140 degrees (F) can scald.
- Test the temperature of bath water before bathing babies and invalids.
- Supervise toddlers in the bathtub. If left unattended, they may turn on the hot water and be scalded.

Understanding how burn accidents happen, taking proper steps to prevent them, and being prepared to administer appropriate first aid—for those injuries that just can't be avoided—will help protect you and your family against burns. Getting the better of burns is often a matter of being prepared. Your life and health may depend on it.