

First Aid for Burns

A burn involves the destruction of skin cells, and sometimes the underlying structures of muscle, fascia and bone. It occurs when these structures absorb more heat than they can dissipate. What you do for a burn in the first few minutes after it occurs CAN make a difference in the severity of the injury!

SAFETY TIPS:

- **STOP THE BURNING PROCESS.** Remove the source of heat...if clothing catches fire, “STOP, DROP AND ROLL” to smother the flames.
- **REMOVE ALL BURNED CLOTHING.** Clothing may keep in the heat and cause a deeper injury. If clothing sticks to the skin, cool the material or cut or tear around the area to preserve good skin tissue.
- **POUR COOL WATER OVER THE BURNED AREA.** Keep pouring the cool water for at least 3-5 minutes. Never put ice or cold water on a burn as it lowers body temperature and can make the burn worse.
- **REMOVE ALL JEWELRY, BELTS, TIGHT CLOTHING, METAL, ETC.** Remove from burned areas and around the victim’s neck – swelling of burned areas occurs immediately.
- **DO NOT APPLY OINTMENTS, CREAMS OR SALVES TO WOUNDS.** These things may cause infection due to their oil base and can convert wounds to deeper injury; hold in heat and worsen the burn, and have to be washed off by a physician causing the patient additional discomfort.
- **COVER BURNS WITH A SOFT, CLEAN, DRY DRESSING, BANDAGE OR SHEET.**
- **COVER VICTIM TO KEEP HIM/HER WARM.**
- **SEEK MEDICAL ATTENTION AS SOON AS POSSIBLE.**

SPECIAL CONSIDERATIONS:

- **FOR MINOR BURN INJURY:** Keep clean, gently wash with a mild soap. Use an antiseptic spray or cream to help relieve pain and prevent infection before covering with a clean dry dressing. If wounds are not healing, appear weepy, or smell bad, seek medical help.
- **ELECTRICAL INJURIES: DO NO TOUCH** the person who is in contact with electricity. **YOU WILL BE INJURED.** Disconnect the source of power or call for assistance for the power company... then begin first aid. Primary concerns are clear airways, breathing, circulation and cervical spine immobilization...then look for other injuries.
- **CHEMICAL INJURIES:** Protect yourself from contact with the chemical. Read the container label information or consult with a Poison Control Center before administering first aid for specific chemical reactions. Dry chemicals: brush as much a of the dry chemical off as possible and remove it from the affected area from a minimum of 20-30 minutes or until a medical professional tells you to stop. Remove patient’s clothing, including shoes, before flushing with water. If chemical is near or is in the patient’s eye, check for contact lenses, which should be removed before irrigation of the eye. Don’t flush parts of body that are not contaminated.

FACTS AND FIGURES:

- A burn involves the destruction of skin cells, and sometimes the underlying structures of muscle, fascia and bone. It occurs when these structures absorb more heat than they can dissipate.
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- Children and older adults, because they have thinner skin, get severe burns at lower temperatures and in less time than an adult.
- Exposure for thus three seconds to water, which is 140 degrees F., can result in a full thickness or third degree burn on a child or an older adult. This type of burn would require hospitalization and skin grafts.
- People with **MINOR to MODERATE** injury according to depth and percentage can be treated in a specialty Burn Center or Unit, a local community hospital with a surgeon who knows state-of-the-art burn care, or on an outpatient basis.
- Burns are considered **MINOR, MODERATE or MAJOR** according to the depth and percentage of burn, but also the area of the body burned.
- Burns covering more body surface area than an arm of the victim, or if burns are on the face, hands, neck, perineum or feet are considered **MAJOR** and should be cared for in a special Burn Unit or Center.

“RULE OF NINES” BURN SIZE

Burns are judged by the size of the burn in relation to the whole body and by the depth of the burn injury. Different methods exist to calculate the extent or size of a burn injury. The most common method, which provides a quick estimate of burn size, uses the “Rule of Nines,” where the body is divided into areas equaling multiples of nine percent of the total body surface area. The palm of your hand, for example, is equal to about one percent of your body’s surface area. The head and arms are each equal to nine percent of the body surface. The chest and back are each 18 percent (two nine percent). Each leg is 18 percent (two X nine percent). This totals 11 nine, or 99 percent. The heads of infants and small children are in relatively larger proportion to the total body surface area, and the limbs are in smaller proportion than adults limbs. The total body surface area of a burn is referred to as TBSA. A patient might have the diagnosis of a 45 percent TBSA thermal burn, for example. The TBSA and burn depth analysis are recorded on a hospital chart known as a “burn diagram.” Determining the percent of body surface area burned is important for correct fluid replacement.