# First Aid/Burns – By the Numbers



## FIRST AID/BURNS

**DID YOU KNOW?**

According to the Center for Disease Control (CDC), 1.1 million people suffer burn injuries that require medical attention every year in the United States. Approximately 50,000 of these burn victims require hospitalization and 20,000 suffer major burns covering 25% of their body surface. Roughly 4,500 burn victims die annually as a result of their injuries and as many as 10,000 people in the United States die each year as a result of burn-related infections.

About 610,000 people die of heart disease in the United States every year – that's 1 in every 4 deaths, according to the Centers for Disease Control and Prevention. Many of these deaths were preventable through knowledge of first hospitalization related to burn injuries: 40,000 including 30,000 at Hospital Burn Centers.

ABA National Burn Respiratory 2015

Over 60% of the estimated U.S. acute hospitalizations related to burn injury were admitted to 128 burn centers. Such centers now average over 200 annual admissions for burn injury and skin disorders requiring similar treatment. The other 4,500 U.S. acute care hospitals average less than 3 burn admissions per year.

**General**

**Burn Injuries Receiving Medical Treatment: 486,000**

This general estimate is derived mainly from federal surveys which provide annual estimates of hospital admissions and visits to hospital emergency departments. The estimate range acknowledges that some burns may have been treated solely at hospital clinics, community health centers, or private medical offices. Such burns are more likely to be minor, and the number of such facilities sampled is too small to provide reliable estimates for burns.

**National Hospital Ambulatory Medical Care Survey: 2011 Emergency Department**

**KEEP IN MIND**

The statistics demonstrate the devastating consequences of burn injuries and the importance of prevention. There are many different types of burns, and it is important to know how each is classified.

OSHA has laid out best practices for designing such a program to treat and deal with burn injuries.

**Training**

The training program should include both instructions and discussions surrounding the following points.

- Have a list of emergency telephone numbers on hand that can be accessible to all contract workers.
- Understand how to administer first-aid care.
- Understand the importance of stress, fear, panic and how they “interfere with performance.”
- Use prevention as a way to reduce illnesses or accidents on site.

**How to Assess the Scene**

Training should also include information on how to act at the scene of an accident or injury. Therefore, you should consider the following.

- Assessing the scene for safety, the number of injuries, and the nature of the event.
- How to prioritize care if you have a number of fatalities or injuries.
- Assessing each victim’s “responsiveness, airway patency (blockage), breathing, circulation, and medical alert tags.”
- Performing overall checks for injuries.

**HOW TO RESPOND TO LIFE-THREATENING EMERGENCIES**

Your first-aid program, in particular, should include the following information.

- Establishing responsiveness
- Establishing and maintaining an open and clear airway
- Performing CPR and rescue breathing.
- Using AED.
- Treating shock and providing first-aid for shock due to illness or injury.

**Fundamentals of first aid for burns**

**1. 1st-degree burns**

- A first-degree burn is the least serious type, involving only the outer layer of skin. It may cause:

- Redness
- Swelling
- Pain
- Hold burned skin under cool (not cold) running water or immerse in cool water until pain subsides.
- Use compresses if running water isn’t available.
- Cover with sterile, non-adhesive bandage or clean cloth.

- Use over-the-counter pain relievers for pain.

**2. 2nd-degree burns.**

- A second-degree burn affects the top 2 layers of skin and may cause:

- Red, white or splotchy skin
- Swelling
- Pain
- Blisters

- Immerse in cool water for 10 or 15 minutes. Use damp compresses if running water isn't available.
- Don't apply ice and don't immerse large severe burns in cold water. Doing so could cause a serious loss of body heat (hypothermia) or a drop in blood pressure and decreased blood flow (shock).
- Call 911 or emergency medical help.
- Protect the burned person from further harm, if you can do so safely.
    - Move the person away from smoldering materials, smoke, and heat.
    - **DO NOT** remove burned clothing stuck to the skin.
    - Cover the burn(s) loosely with sterile, non-stick bandage and secure in place with gauze or tape.
    - Elevate the burned area – raise the wound above heart level, if possible.

**3. 3rd-degree burns**

- A third-degree burn involves all layers of the skin and underlying fat. Muscle and even bone may be affected.
- Call for emergency medical help immediately.
- Burned areas may be charred black or white.
- The person may experience:

- Difficulty breathing.
- Carbon monoxide poisoning.
- Toxic effects of smoke inhalation.

- Unless the person has a head, neck, or leg injury, or it would cause discomfort:

- Lay the person flat.
- Elevate feet about 12 inches.
- Elevate burn area above heart level, if possible.
- Cover the person with coat or blanket.

- Keep the victim calm and treat for any other injuries and shock until medical help arrives.