

# Burn Severity Meeting Kit

## WHAT'S AT STAKE

### Burn Severity

Burn injuries are common both at home and in the workplace. The American Burn Association states that there are over 40,000 hospitalizations each year due to burns. There are a few different types of burn injuries and the severity of burns is classified into three different levels. These levels are first degree, second degree, third degree and fourth degree.

## WHAT'S THE DANGER

### SPECIFIC TYPES

**There are four specific types of burns a person may experience:**

- 1st degree burns damage the first layer of the skin and are often referred to as superficial burns.
- 2nd degree burns damage the first and second layer of the skin. These burns may be referred to as superficial or deep depending on how deep the burn goes.
- 3rd degree burns damage all the layers of the skin and the tissue under the skin, these burns require medical treatment.
- 4th degree burns are also possible and these types of burn injuries damage the muscles, ligaments, bones, tendons, and more. The seriousness of a burn can all depend on the health of the victim, their age, the size and depth of the burn, and the location of the injury.

### THE ORIGINS OF THE FOUR TYPES OF BURNS

1. HEAT/Thermal
2. Electrical
3. Chemical

- 4. Radiation
- 5. Inhalation

## **HOW TO PROTECT YOURSELF**

Employees under OSHA law, must have access and provision of the following in order to have a safe workplace.

### **1. INITIAL TRAINING**

Training should cover not only the hazards that the employee might face on their worksite, but also an overview of OSHA standards and how to identify hazards that may not have been covered. Employers should make sure that the employees are trained on their specific job functions, including in-depth safety training with any machinery, chemicals or other worksite hazards specific to their job.

### **2. REFRESHER TRAINING**

In addition to training before ever even starting a job, employers should regularly update training so that employees are kept up-to-date with standard changes and so that important concepts are kept at top-of-mind.

### **3. HAZARD COMMUNICATION**

Color codes, posters, labels or signs to warn employees of potential hazards are an employer requirement under the OSH Act, and these vital pieces of Hazard Communication are extremely important in burn prevention. Workers should be trained on how to recognize symbols and other hazard communication codes, and GHS communication standards should be used to identify material hazards in a consistent and easily recognizable way. When hazardous chemicals are found in the workplace, employers are also required to produce and provide a written Hazard Communication plan.

### **4. NUTRITION FOR BURN SURVIVORS**

**Proper nutrition** is essential to a healthy, full recovery for

severe burn survivors. Burns lose proteins through wounds, break down muscles for energy while healing and increase the body's metabolic response more than any other disease state.

- **HIGH-CALORIE DIET:** While the average healthy adult needs around 2,000 calories per day, a burn victim requires at least 2,500 per day on average. Any liquid dietary supplements should be consumed separately for meals to make sure their appetite is not suppressed.
- **HIGH-PROTEIN DIET:** Proteins are essential to healing wounds and regaining and retaining muscle strength. The average burn victim uses more than 150 grams of protein per day. If the body doesn't have enough protein, the patient may suffer from a loss of muscle mass, slower healing of wounds and a weakened immune system. Healthy high protein foods include: meat, eggs, beans, milk, yogurt, nuts, peanut butter, tofu, etc.
- **CARBOHYDRATES:** The body uses glucose for energy to heal wounds- eating enough carbs will ensure there's enough glucose. Healthy carbs should be the main source of energy for burn victims, therefore reserving the proteins to promote healing. Whole grains, beans, fruit and vegetables are all great options to fulfill this need.
- **MONITOR FAT INTAKE:** Fats are a double edged sword for burn survivors; they are essential to upping calories and the healing process but too much fatty acid consumption can weaken the immune system.

## **NUTRITIONAL NEEDS**

Dietitians follow two main formulas to determine a burn patient's diet. For adults, the Harris-Benedict equation finds a patient's base metabolic rate and then applies an "activity factor" to determine the amount of calories used per day. The Galveston formula, used for children, focuses more on body surface area as opposed to weight.

# FINAL WORD

It is important to understand the different levels of burn severity and the necessary treatments. Sometimes third degree burns are less painful than first and second degree burns due to nerve ending loss. A person needs to be able to recognize when they have suffered a serious burn. If a severe burn does not get treated promptly it could result in permanent scarring or disfigurement.