SAFETY SERVICES COMPANY

Tailgate/Toolbox Safety Training

Safety Services Company-Safety Meeting Division, PO Box 6408 Yuma, AZ 85366-6408 Toll Free (866) 204-4786

Company Name: _____ Job Site Location: _____

Date: _____ Start Time: _____ Finish Time: _____ Foreman/Supervisor: _____

Topic 587: First Aid for Heart Attacks/Cardiac Arrest

Introduction: Commonly referred to as a heart attack, a myocardial infarction results from constriction or obstruction in the coronary arteries. Typically a person experiencing a myocardial infarction has severe chest pain, described as crushing, squeezing, or heavy, that is unremitting for 30 to 60 minutes and sometimes is experienced for longer periods. Other common symptoms include shortness of breath, sweating, nausea, rapid heartbeat, often complicated by one or more arrhythmias (irregular heartbeats), reduced blood pressure, and a sense of impending doom. The intensity of the symptoms depends on the size of the area of muscle affected by the infarction. A minority of individuals do not experience pain. Cardiac arrest (heart arrest) is an abrupt cessation of the heart. Waiting for the arrival of emergency medical system personnel results in only 5-7% survival. Seconds count when an otherwise healthy worker collapses and appears lifeless. Life and death is defined within six minutes. Blood in the brain and other vital organs still has oxygen that was picked up when it last passed through the lungs before the heart stopped. Following are guidelines for maintaining oxygen until medical personnel arrive:

Simplified CPR: Avoids mouth-to-mouth breathing and keeps the blood moving through the victim's body during the critical moments.

- Turn the victim onto their back.
- Scream into the ear and give a sturdy nudge.
- A hard rub of the knuckles against the breastbone will determine whether the victim is really out.
- Make sure the head is on the floor, with no pillows or folded clothing underneath.
- Put one hand on the forehead, another under the neck, and tilt.

Kneel and put your face down next to the victim's nose and mouth to listen for moving air and feel the warmth of the breath.

Begin compressions on the chest:

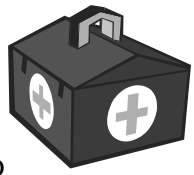
- Place the heel of your hand on the breastbone in the center of the chest (right between the nipples).
- Keep the elbows locked and the arms straight.
- Push down firmly 11/2-2 inches with only the heel of your hand touching the chest, then release.
- Repeat without stopping (every second) until help arrives.

Sudden cardiac arrest: Sudden cardiac arrest occurs when ventricular fibrillation takes place, or when the heart stops beating altogether. Without medical attention, the victim collapses, loses consciousness, becomes unresponsive, and dies.

Causes of sudden cardiac arrest: Heart attack, electrocution, asphyxiation (loss of consciousness and death caused by inadequate oxygen in the work environment, such as in a confined space).

Automated external defibrillators: Studies with immediate defibrillation have shown up to a 60% survival rate one year after sudden cardiac arrest. An automated external defibrillator (AED) is a medical device designed to analyze the heart rhythm and deliver an electric shock to victims of ventricular fibrillation to restore the heart rhythm to normal. Ventricular fibrillation is the uncoordinated heart rhythm most often responsible for sudden cardiac arrest.

Reasons for AEDs in the workplace: Workers may suffer sudden cardiac arrest while on the job. Onsite AEDs save precious treatment time, and can improve survival odds because they can be used before emergency medical service (EMS) personnel arrive. A heart rhythm in ventricular fibrillation may only be restored to normal by an electric shock. The AED is compact, lightweight, portable, battery operated, safe, and easy to use.



Placement of AEDs: AEDs should be conveniently installed to ensure response within 3-5 minutes. Keep the AED close to a confined space, areas where electric-powered devices are used, outdoor worksites where lightning may occur, and remote sites, such as construction projects, power transmission lines, and energy pipe lines.

AED training Your workers can easily be trained to:

- Recognize sudden cardiac arrest and notify EMS personnel.
- Perform simplified cardiopulmonary resuscitation (CPR).
- Provide early defibrillation with an AED.
- Care for the victim and provide comfort until EMS personnel arrive.

Remember: Never exceed your levels of First Aid, CPR, or AED training.

Work Site Review

Work-Site Hazards and Safety Suggestions: _____

Personnel Safety Violations: _____

Employee Signatures: ***(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)***

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Foreman/Supervisor's Signature: _____

These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations. The first aid information provided is intended to be general in nature and is based upon the "best available" guidelines. No results either general or specific are represented or guaranteed.