



SUDDEN CARDIAC ARREST



Sudden Cardiac Arrest (SCA)

Sudden cardiac arrest (SCA) is when the heart suddenly fails to pump blood. This means the heart's normal rhythmic action stops and a chaotic, random action begins. As a result, the heart stops pumping oxygenated blood to the body. A person experiencing a sudden cardiac arrest will suddenly collapse, lose consciousness, stop breathing, and will not have a pulse (circulation). Cardiopulmonary resuscitation (CPR) should begin immediately. Most often SCA is caused by ventricular fibrillation.

What is Ventricular Fibrillation?

Ventricular fibrillation is a life-threatening condition of the heart. Normally, the heart beats rhythmically at a rate of 60 to 100 times per minute. The pumping action of the heart circulates blood and oxygen to the brain and body. This rhythmic pumping is controlled by a unique electrical system of the heart. During a sudden cardiac arrest, this electrical system malfunctions. The heart muscles begin to quiver and shake. This condition is called ventricular fibrillation. The heart is no longer able to pump blood and oxygen to the body. The victim loses consciousness and collapses. Ventricular fibrillation can only be corrected by defibrillation.

Signs of SCA

- ▶ Unconscious
- ▶ Not breathing
- ▶ Has no circulation (No pulse)

What is an AED?

An automated external defibrillator (AED) is a simple-to-use medical device that can save the life of a SCA victim. An AED automatically analyzes an unconscious victim's heart rhythm; in a matter of seconds, it determines if the heart's electrical system is malfunctioning and if it requires a shock. If needed, the AED charges and instructs the user to deliver a life saving shock. AEDs employ voice and visual instructions to guide the rescuer during use.

AEDs are very accurate and when used properly, will only shock a patient that requires it. Although they are simple to use, AEDs should only be operated by trained CPR/AED rescuers. Certified CPR/AED training can be obtained through nationally recognized training centers, such as the American Heart Association or the American Red Cross. These courses will give a potential rescuer the skills needed to perform CPR and use an AED to save a life of a SCA victim.

Although there are different manufacturers of AEDs, they all follow the same 3 simple steps.

1. Turn on AED.
2. Follow instructions. Apply pads to patient's bare chest.
3. Stand clear. If advised, press shock button.



Life-Saving Steps:

1. Phone for help and get the AED.



2. Start CPR.



3. Early defibrillation.



4. Paramedics arrive.



In an emergency **CALL 911**