

CPR & AED AWARENESS

CPR

CPR stands for Cardio Pulmonary Resuscitation. CPR is done only when someone is unconscious, is not responding, and has stopped breathing. CPR is never done on anyone unless these conditions are met. There are many causes of these circumstances, such as heart attacks, strokes, drowning, electrocution, poisoning, severe injuries, etc. But, regardless of the cause the treatment is the same.

A person who stops breathing may die or suffer brain damage in minutes without prompt, proper help.

- Know emergency contact if someone stops breathing.
- Make the call quickly.
- Have help come to the victim; don't move the person unless they are in dire peril of further injury, and then use extreme care.
- Avoid actions that could further harm the victim.
- Don't provide medication without medical supervision.
- If you're not sure what to do, don't do anything until medical help arrives.

CPR involves two main things;

1. Blowing air into the casualty (because they are not breathing on their own)
2. Compressing their chest to squeeze the heart. When the heart is squeezed blood will circulate. By circulating blood we also circulate oxygen that is in the blood stream.

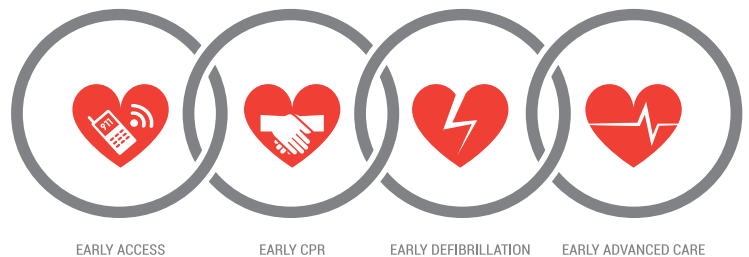
The main purpose of CPR is to keep organs alive by supplying them with oxygen.

AED

AED stands for Automated External Defibrillator. AED is a portable device that checks the heart rhythm and can send an electric shock to the heart to try to restore a normal rhythm. AEDs are used to treat sudden cardiac arrest (SCA).

What is sudden cardiac arrest? A normal heart beat is caused by rhythmic electrical impulses. An SCA (sudden cardiac arrest) is usually caused by arrhythmias or abnormal heart rhythms. The majority of SCAs are caused by ventricular fibrillation, which is a condition where the electrical impulses of the lower heart chambers suddenly become chaotic, causing the heart

THE SURVIVAL CHAIN



to stop pumping blood. Unless the heart returns to its normal rhythm, death occurs in a matter of minutes. SCAs are not predictable, with many victims showing no history of heart problem; they strike anyone, anytime, anywhere.

What is the most recent treatment for SCA? There are 4 critical steps, the "Cardiac Chain of Survival" that should be used to treat SCA.

The steps are:

1. Early access to care- call 911 or EMS immediately
2. Start CPR as soon as possible
3. Defibrillate as soon as possible (AED)
4. Early advanced cardiac life support

What is defibrillation? It's an external electrical current that "resets" and returns an irregular heart beat to the normal rhythm. Defibrillation is most successful when done within 4 minutes of the collapse. An AED is a portable device used to defibrillate.

Why not wait for EMS? A victim's best chance for survival is if CPR and defibrillation occurs within 4 minutes of the collapse. Many times an EMS crew's response time is longer. Also, not all emergency medical agencies are equipped with AEDs.

Could I give an unnecessary shock while using an AED? No, AEDs are designed to only allow a shock to be given if an arrhythmia is detected. If it doesn't detect the need for a shock, it will instruct you to perform CPR.

Do I need to be trained? Proper training in CPR and AED are two crucial parts of successfully helping someone survive an SCA. Having well trained people in the workplace can help save lives.

