

Chain of Survival



Timing is Everything

Over 20 years ago, the American Heart Association developed the "Chain of Survival" concept in order to illustrate the steps that must be taken to provide the best opportunity for survival from sudden cardiac arrest. For the chain to be effective, quick action must occur in each step of the chain. With each minute that passes, the chance of survival decreases by 7 - 10%.

The 1st Link in the Chain - **CALL 9-1-1**

When someone collapses, an immediate call to 9-1-1 is crucial. By acting quickly, you *can* save a life.

The 2nd Link in the Chain - **CPR**

Cardiopulmonary resuscitation (CPR) buys life-saving time between the moment of collapse and the moment the heart is "shocked" back into a normal rhythm. CPR can sustain life for a short time by pumping oxygenated blood flow to the person's brain and heart.

The 3rd Link in the Chain - **Defibrillation**

CPR alone cannot fully resuscitate a person in sudden cardiac arrest. In sudden cardiac arrest, the heart is in a quivering rhythm called ventricular fibrillation (VF). The only way to "fix" VF is to shock the heart back into a normal rhythm. Quickly applying an Automated external defibrillator (AED) can greatly increase a person's chance of survival.



The 4th Link in the Chain - **Advanced Care**

Paramedics and other highly trained medical help will provide this care, first in response to the 9-1-1 call, and then later in the hospital after the patient has been transported.

The Chain is Strong

Patients who receive no care after collapsing from a sudden cardiac arrest have a 0% chance of survival. In certain environments, when 9-1-1 is called quickly, CPR is performed quickly, and when defibrillation occurs within the first few minutes of cardiac arrest, survival rates can be as high as 80% to 100%.