

SUDDEN CARDIAC ARREST

What it is

Sudden cardiac arrest (SCA) is a sudden, abrupt loss of heart function. Most sudden cardiac arrest episodes are caused by the rapid and/or chaotic activity of the heart known as ventricular tachycardia (VT) or ventricular fibrillation (VF). These are abnormalities of the heart's electrical conduction system.

What it isn't

Sudden cardiac arrest is not a heart attack (myocardial infarction), which is caused by a blocked vessel leading to loss of blood supply to a portion of the heart muscle. However, some people may experience SCA during a heart attack and a previous heart attack can be a predictor of future risk.

Prevalence of Sudden Cardiac Arrest

Sudden cardiac arrest is a major health problem. According to the American Heart Association, SCA kills more than 325,000 people each year in the United States.

- SCA kills more Americans than lung cancer, breast cancer and HIV/AIDS combined.
- Almost 95 percent of all people who suffer SCA die before reaching the hospital.
- Early defibrillation is the only definitive treatment for SCA, and survival decreases 7-10 percent for every minute without it.
- SCA victims range from young children to the elderly.
- The average response time to an emergency call is six to 12 minutes.

What Makes Someone Susceptible to Sudden Cardiac Arrest?

People with heart disease are at varying risks for dying suddenly, but there are ways to markedly decrease that risk. Anyone with heart disease should discuss the risk of sudden cardiac arrest with their physician and talk about whether or not a referral to a heart rhythm specialist is appropriate for them. SCA risk factors include:

- Survival of a previous SCA episode
- Previous heart attack
- Family history of SCA or other heart disease
- Heart failure
- Fast rhythm in the lower chambers of the heart (ventricles)

Treatment Options for Sudden Cardiac Arrest

Cardiac arrest is reversible in most victims if it's treated within minutes, but the only effective treatment is the delivery of an electrical shock, either with an automated external defibrillator (AED), or with a stop watch-sized implantable defibrillator. ICDs have been proven to be 98 percent effective in treating dangerously fast ventricular arrhythmias that can lead to SCA. Many patients at risk of SCA are also on drug therapies to slow the heart's pace.

The Sudden Cardiac Arrest Association's mission is to prevent loss of life from sudden cardiac arrest. We seek to increase awareness, encourage training for immediate bystander action, increase public access to defibrillation and promote the use of available medical devices and therapies, principally, implantable cardioverter defibrillators (ICD). SCAA members are the beneficiaries of improved science and medical technology, coupled with the wisdom and caring of thousands of physicians. For more information, please visit us at www.suddencardiacarrest.org