

ANYONE CAN

SAVE A LIFE

Sudden Cardiac Arrest (SCA)

- Sudden Cardiac Arrest (SCA) kills more than 250,000 people in the U.S. each year, **more than the most common cancers combined.**
- SCA occurs when the heart suddenly and unexpectedly stops beating.
- In children and adolescents, the causes of SCA are varied and include heart conditions that result from abnormal heart structure or function, primarily electrical abnormalities, and outside factors such as a sudden blow to the chest or drug use.
- An estimated 100-150 deaths occur in high school athletes from roughly three million participants each year in the U.S.
- Victims of SCA can be brought back to life by providing chest compressions and early defibrillation with an automated external defibrillator (AED).
- **Every second counts.** When SCA occurs, chest compressions and the use of an AED need to start immediately.
- Survival rates decrease by 10% with each minute of delay.
- There is a five to six minute window before death or irreparable brain damage occurs.
- Applying the AED will only help. **The AED can't hurt anyone.** Once the pads are in place, it will look for a "shockable" heart rhythm and will only deliver a shock if it is needed.
- The AED is very easy to use. Just turn it on and follow the voice prompts.
- A victim of sudden cardiac arrest will often complain of feeling "faint" or dizzy, usually during or just after exercise. They will rapidly become unconscious and may gasp for breath for a short time.
- Since anyone might witness a collapse, it is important for all staff members, parents, and athletes to have some general awareness of what a sudden cardiac arrest looks like and what the action steps are to help:
 - 1. Call 911**
 - 2. Start chest compressions**
 - 3. Get an AED**
 - 4. Turn it on and follow the voice prompts**
- *Don't waste precious time trying to figure out what may have happened—you need to recognize SCA when it happens and take action.*

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Sudden Cardiac Arrest: **Symptoms and Risk Factors**

Educating children and teenagers about the symptoms and risk factors of sudden cardiac arrest is one way to help prevent it. In more than half of the cases of SCA in children, death is the first sign of a problem. **Young people are often unaware of the risk factors and don't tell adults if they experience the symptoms.** They may be frightened, embarrassed, or simply unaware that what they are feeling indicates a potentially fatal condition.

Athletes don't want to jeopardize their playing time, so they may also avoid telling their parents or coaches in hopes that the symptoms will 'just go away' on their own. Let student athletes know that if they experience any of the symptoms below, it is crucial to get follow-up care right away with a primary care physician.

The symptoms below indicate that SCA may be about to happen:

- Racing heart, palpitations
- Dizziness or lightheadedness
- Fainting or seizure, especially during or right after exercise
- Fainting repeatedly or with excitement or startle
- Chest pain or discomfort with exercise
- Excessive, unexpected fatigue during or after exercise
- Excessive shortness of breath during exercise

The following factors increase risk of SCA:

- Family history of known heart abnormalities or sudden death before age 50
- Specific family history of Long QT Syndrome, Brugada Syndrome, Hypertrophic Cardiomyopathy, or Arrhythmogenic Right Ventricular Dysplasia (ARVD)
- Family members with unexplained fainting, seizures, drowning or near drowning, or car accidents
- Known structural heart abnormality, repaired or unrepaired
- Use of drugs such as cocaine, inhalants, or "recreational" drugs