What is sudden cardiac arrest?

Sudden Cardiac Arrest (SCA) is the sudden onset of an abnormal and lethal heart rhythm, causing the heart to stop beating and the individual to collapse. SCA is the leading cause of death in the U.S. afflicting over 300,000 individuals per year.

*SCA is also the leading cause of sudden death in young athletes during sports*

What causes sudden cardiac arrest?

SCA in young athletes is usually caused by a structural or electrical disorder of the heart. Many of these conditions are inherited (genetic) and can develop as an adolescent or young adult. SCA is more likely during exercise or physical activity, placing student-athletes with undiagnosed heart conditions at greater risk. SCA also can occur from a direct blow to the chest by a firm projectile (baseball, softball, lacrosse ball, or hockey puck) or by chest contact from another player (called "commotio cordis").

While a heart condition may have no warning signs, some young athletes may have symptoms but neglect to tell an adult. If any of the following symptoms are present, a cardiac evaluation by a physician is recommended:

- Passing out during exercise
- Chest pain with exercise
- Excessive shortness of breath with exercise
- Palpitations (heart racing for no reason)
- Unexplained seizures
- A family member with early onset heart disease or sudden death from a heart condition before the age of 40

How to prevent and treat sudden cardiac arrest?

Some heart conditions at risk for SCA can be detected by a thorough heart screening evaluation. However, all schools and teams should be prepared to respond to a cardiac emergency. Young athletes who suffer SCA are collapsed and unresponsive and may appear to have brief seizure-like activity or abnormal breathing (gasping). SCA can be effectively treated by immediate recognition, prompt CPR, and quick access to a defibrillator (AED). AEDs are safe, portable devices that read and analyze the heart rhythm and provide an electric shock (if necessary) to restore a normal heart rhythm.

*Remember, to save a life: recognize SCA, call 9-1-1, begin CPR, and use an AED as soon as possible!*
SCA Helpful Tips

1. RECOGNIZE
   • Collapsed and unresponsive
   • Abnormal breathing
   • Seizure-like activity

2. CALL 9-1-1
   • Call for help and for an AED

3. CPR
   • Begin chest compressions
   • Push hard/push fast
     (100 per minute)

4. AED
   • Use AED as soon as possible

5. CONTINUE CARE
   • Continue CPR and AED until EMS arrives