

Sudden Cardiac Arrest (SCA) Information for Parents and Student Athletes

Definition: Sudden Cardiac Arrest (SCA) is a potential fatal condition where the heart unexpectedly stops beating. Because the heart stops beating blood will no longer be supplied to the brain and organs.

Thankfully SCA is not common in student athletes. The chances are about 1:100,000. Because of increased demands of the heart during exercise student athletes' risk for SCA is four times that on non-athletes.

Cause: Structural and electrical ailments of the heart will cause SCA. One of the conditions will cause an athlete to have an abnormal heart beat that can become fatal if not treated in a timely manner. Most illnesses responsible for SCA are passed from parents to children through genes. Common other causes of SCA can be blunt non-penetrating blows to the chest and/or use of recreational/performance enhancing drugs or energy drinks.

Warning Signs:

- SCA strikes immediately
- With any collapsed and unresponsive athlete SCA should be suspected
- No pulse

Emergency Response:

- Act quickly; seconds can be critical
- Recognize warning signs
- Activate 911/EMS
- Provide CPR
- Utilize Automated External Defibrillator (AED)

Risk Factors: The following need to be further evaluated by your primary care provider.

- Family history of heart disease/cardiac arrest
- Fainting, seizures, or convulsions during physical activity
- Fainting or seizure from emotional excitement, distress, or being startled
- Dizziness or lightheadedness (especially during exertion)
- Chest pain (especially during exertion)
- Palpitations: awareness of the heart beating
- Extreme or unusual tiredness or shortness of breath (especially during exertion)
- High blood pressure

How to reduce risk of SCA: Appropriate prevention, recognition, and treatment are vital to prevent SCA. One important step in prevention is a yearly pre-participation screening evaluation performed by a medical provider.

- Read and accurately complete the personal history and family history section of the pre-participation physical
- Be aware of any family history
 - Family member who dies unexpectedly before age 50
 - Family member diagnosed with heart conditions
 - Family member who suddenly died during physical activity, seizures, Sudden Infant Death Syndrome (SIDS) or drowning
- Take the warning signs seriously
- Be aware of schools preventative measures
- If cardiovascular disorder is expected have your child evaluated by a heart specialist or cardiologist.

Information used in this document was obtained from the American Heart Association (www.heart.org), Parent Heart Watch (www.parentheartwatch.org), Sudden Cardiac Arrest Foundation (www.sca.aware.org), and the Maryland Department of Public Education (<http://marylandpublicschools.org/>). Visit these sites for more information.