SUDDEN CARDIAC ARREST

Awareness of the following information is required by law to register for sports programs.

What is Sudden Cardiac Arrest?

Sudden Cardiac Arrest (SCA) is a potentially fatal condition in which the heart suddenly and unexpectedly stops beating. When this happens, blood stops flowing to the brain and other vital organs. Student athletes' risk of SCA is nearly four times that of non-athletes due to increased demands on the heart during exercise. SCA is caused by several structural and electrical diseases of the heart. These conditions predispose an individual to have an abnormal rhythm that can be fatal if not treated within a few minutes. Most conditions responsible for SCA in children are inherited, which means the tendency to have these conditions is passed from parents to children through the genes. Other possible causes of SCA are a sudden blunt non-penetrating blow to the chest and the use of recreational or performance-enhancing drugs and/or energy drinks.

Warning Signs of SCA

- SCA strikes immediately.
- SCA should be suspected in any athlete who has collapsed and is unresponsive. (No response to tapping on shoulders, does nothing when asked if he/she is OK).
- No pulse.

Emergency Response to SCA

- Act immediately; time is most critical to increase survival rates.
- Recognize SCA.
- Call 911 immediately and activate EMS.
- Administer CPR.
- Use Automated External Defibrillator (AED).

Warning Signs of Potential Heart Issues: The following need to be further evaluated by your primary care provider.
Risk of Inaction: Ignoring such symptoms and continuing to play could be catastrophic and result in sudden cardiac death. Taking these warning symptoms seriously and seeking timely appropriate medical care can prevent serious and possibly fatal consequences.

- Family history of heart disease/cardiac arrest
- Fainting, a seizure, or convulsions during physical activity
- Fainting or a seizure from emotional excitement, emotional distress, or being startled
- Dizziness or lightheadedness, especially during exertion
- Exercise-induced chest pain
- Palpitations: awareness of the heart beating, especially if associated with other symptoms such as dizziness
- Extreme tiredness or shortness of breath associated with exercise
- History of high blood pressure

How Can We Minimize The Risk of SCA & Improve Outcomes?

The risk of SCA in student athletes can be minimized by providing appropriate prevention, recognition, and treatment strategies. One way to minimize risk is through an annual pre-participation screening evaluation, often called a sports physical, performed by the athlete's medical provider.

1. There is a "Pre-Participation Physical Evaluation Form"
2. Since the majority of these conditions are inherited, be aware of your family history, especially if any close family member:

    - had sudden unexplained and unexpected death before the age of 50.
    - was diagnosed with any of the heart conditions listed above.
    - died suddenly/unexpectedly during physical activity, during a seizure, from Sudden Infant Death Syndrome (SIDS) or from drowning.
3. Take seriously the warning signs and symptoms of SCA. Athletes should notify their parents, coaches, or school nurses if they experience any of these warning signs or symptoms.
4. Schools in Maryland have AED policies and emergency preparedness plans to address SCA and other emergencies in schools. Be aware of your school's various preventive measures.
5. If a cardiovascular disorder is suspected or diagnosed based on the comprehensive pre-participation screening evaluation, a referral to a child heart specialist or pediatric cardiologist is crucial. Such athletes should stop playing sports pending further evaluation and clearance by their medical providers.