Sudden Cardiac Arrest—LCPS Guidelines for Parents, Athletes, & Staff

IMPORTANT INFORMATION—READ CAREFULLY

Loudoun County School Board/Loudoun County Public Schools – Sudden Cardiac Arrest Guidelines:

The Code of Virginia has added section 22.1-271.8 directing Virginia school divisions to develop and distribute guidelines on policies to inform and educate coaches, student-athletes, and student-athletes’ parents or guardians about the nature and risk of sudden cardiac arrest, procedures for removal from and return to play, and the risks of not reporting symptoms. The guidelines shall also be posted on the Athletic Department’s website.

Sudden Cardiac Arrest Facts:

- Sudden cardiac arrest (SCA) is a rare, but tragic event that claims the lives of approximately 7,000 children each year in the United States, according to the American Heart Association.
- Sudden cardiac arrest (SCA) is not a heart attack. It is an abnormality in the heart’s electrical system that abruptly stops the heartbeat. Sudden cardiac arrest (SCA) affects all students, in all sports or activities, and in all age levels.
- Sudden cardiac arrest in young athletes is usually caused by a structural or electrical abnormality of the heart. Most of these abnormalities are inherited but remain undiagnosed and may be unknown to the athlete.
- Exercise can be a trigger for sudden cardiac arrest in individuals with an abnormal heart condition.
- The majority of activity-related cardiac arrests are due to congenital (inherited) heart defects. However, SCA may also occur after a person experiences an illness which has caused inflammation to the heart or after a direct blow to the chest.
- In some cases, a hard blow to the chest, for example from a baseball or hockey puck or from contact with another player, can trigger sudden cardiac arrest. When this happens, it is called “commotio cordis.” Commotio cordis accounts for approximately 20 percent of sudden cardiac deaths in young athletes.

Education Course Requirement: All student-athletes must complete the NFHS Sudden Cardiac Arrest Course. This course will help student-athletes learn and recognize the warning signs and symptoms of Sudden Cardiac Arrest. Also included are guidelines for what to do in the critical moments after an individual suddenly collapses in order to save their life, such as calling 9-1-1, starting chest compressions and sending for an AED. Course: https://nfhslearn.com/courses/sudden-cardiac-arrest

1. **Assessing Risk:**

   Health care providers may use several tests to help detect risk factors for SCA. One such test is an electrocardiogram (ECG). An ECG is a simple, painless test that detects and records the heart's electrical activity. It is used to detect heart problems and monitor a person’s heart health. There are no serious risks to a person having an ECG test. ECG’s are able to detect a majority of heart conditions more effectively than a physical exam and health history alone. However, it’s not a universal standard right now because of cost, physician infrastructure, and sensitivity and specificity concerns.

2. **Warning Signs and Symptoms may include:**

   - Fainting or passing out during exercise
   - Chest pain with exercise
   - Excessive shortness of breath with exercise
   - Palpitations (heart racing) for no reason
   - Unexplained seizures
   - NOTE: Many young cardiac arrest victims have no symptoms until the cardiac arrest occurs
### Signs and Symptoms in Male Athletes
- Chest, ear, neck pain.
- Severe headache
- Excessive breathlessness
- Vague discomfort
- Dizziness, palpitations
- Abnormal fatigue
- Indigestion, heartburn

### Signs and Symptoms in Female Athletes
- Center chest pain that comes and goes.
- Lightheadedness
- Shortness of breath with or without discomfort
- Pressure, squeezing, fullness
- Nausea, vomiting
- Cold sweat
- Pain or discomfort in arms, back, neck, jaw or stomach

Any student-athlete who is experiencing symptoms that may lead to sudden cardiac arrest be immediately removed from play. A student-athlete who is removed from play shall not return to play until he is evaluated by and receives written clearance to return to physical activity by an appropriate licensed health care provider as determined by the Board of Education.

3. **Recognize and Respond: 911, CPR and AED**

If an athlete collapses, assume it is a sudden cardiac arrest until proven otherwise. The most important factor determining whether a person survives sudden cardiac arrest is how quickly he or she receives a shock from an *Automated External Defibrillators* (AED). A few minutes’ delay can be the difference between life and death.

- Immediate activation of EMS
- Early CPR with an emphasis on chest compressions
- Immediate use of the onsite AED
- Integrated post-cardiac arrest care

4. **Risks of Practicing or playing after experiencing warning symptoms**

There are risks associated with continuing to practice or play after experiencing warning symptoms of sudden cardiac arrest. When the heart stops, so does blood flow to the brain and other vital organs. Death or permanent brain damage follows in just a few minutes. When CPR is provided and an AED shock is administered within the first 3-5 minutes after a collapse, reported survival rates from cardiac arrest are as high as 74%. Most people who experience SCA die from it. However, when SCA is witnessed and an onsite automatic defibrillator (AED) is deployed in a timely manner, survival rates approach 50%

5. **Preventive measures from experiencing Sudden Cardiac Arrest**

Daily physical activity, proper nutrition, and adequate sleep are all important aspects of lifelong health. Additionally, parents can assist students prevent death from SCA by:

- Ensuring your child has a thorough preseason screening exam prior to participation in an organized athletic activity
- Asking if your school and the site of competition have automated external defibrillators (AED’s) that are close by and properly maintained
- Asking if your child’s coach is CPR/AED certified
- Becoming CPR/AED certified yourself
- Ensuring your child is not using any non-prescribed stimulants or performance-enhancing drugs
- Being aware that the inappropriate use of prescription medications, energy drinks, or vaping increases risk
- Encouraging your child to be honest and report symptoms of chest discomfort, unusual shortness of breath, racing or irregular heartbeat, or feeling faint

**Indicate your acknowledgment by signing below and returning the signed form to your student’s school.**

**Keep a copy for your records.**

<table>
<thead>
<tr>
<th>I have received and read the Loudoun County School Board/Loudoun County Public Schools Student Sudden Cardiac Arrest Information and guidelines and have completed the NFHS Sudden Cardiac Arrest Course</th>
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