

Sudden Cardiac Arrest

Sudden cardiac death (SCD) is one of the leading causes of death in exercising young athletes. The state of Virginia, in accordance to section 22.1-271.8 requires schools 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.

Important Facts Regarding Sudden Cardiac Arrest

- Sudden Cardiac Arrest is not a heart attack. It is an electrical problem in the heart where the heart abruptly and unexpectedly stops beating. This results in no blood flow to the rest of the body
- Sudden Cardiac Arrest is more common in:
 - Males rather than Females
 - Football and Basketball players
 - Black Athletes vs. Other Races or Ethnic Groups
- Survival Rates decrease by 10% for every 1 minute that care is delayed (CPR and use of an AED)
- 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 that has caused inflammation to the heart or after a direct blow to the chest (known as Commotio Cordis).
- Exercise can be a trigger for sudden cardiac arrest in individuals with an abnormal heart condition. This is one of the important reasons why athletes are required to have an physical examination on file prior to trying out for sport.

Warning Signs and Risk Factors for Sudden Cardiac Arrest

Warning Signs	Factors That Increase the Risk of Cardiac Arrest
• Repeated dizziness or lightheadedness when exercising • Fainting or seizure, especially during or right after exercise • Fainting repeatedly or with excitement or startle • Excessive shortness of breath during exercise not related to asthma • Racing, or fluttering heart palpitations or irregular heartbeat with exertion • Repeated dizziness or lightheadedness • Chest pain or discomfort during or after exercise • Excessive, unexpected fatigue during or after exercise • Sudden weakness	• Family history of known heart abnormalities or sudden death before the age of 40 • Specific family history of long QT Syndrome, Brugada Syndrome, hypertrophic cardiomyopathy or arrhythmogenic right ventricular dysplasia • 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, recreational drugs, excessive energy drinks or performance-enhancing supplements

Rocktown High School and the VHSL require that all athletes who are trying out for a sport need to have a Pre-Participation Examination on file with the Athletic Trainer. This physical examination allows for a medical provider (MD, DO, PA, or NP) to screen for any abnormalities or reported previous histories within the athlete or their families. However, SCD can occur asymptomatic until the event of a sudden cardiac arrest

To be prepared for an SCD event, Rocktown High School requires its Athletic Trainer, as well as all coaches, to become and maintain their First Aid/CPR/AED certifications. During the coaches' meetings, the AT will go over the EAPs of each venue as well as overall general information needed about the EAPs to ensure the coaching staff has a basic understanding of what to do in the event of an emergency. The AT will also make sure to go to each team during the season to educate all members of the team to ensure everyone understands their role during an emergency situation. Coaches will also have the opportunity to complete the [NFHS Sudden Cardiac Arrest Course](#).

The Athletic Trainer will be responsible for transporting the AED to and from all events and practices. The AED should be able to be ready to go as soon as possible following the collapse of an athlete. Early use of AED allows for greater chances of survival for the athlete. In the event of a collapse of an athlete and is unresponsive, Sudden Cardiac Arrest should be suspected. If no pulse and/or no breathing is observed, CPR needs to be administered by a CPR trained individual until the AT or EMS arrives to assist. Coaches that are off campus or that are spread out during the spring season are required to carry an AED with them to help with the earliest arrival of an AED during an SCA event.

What to do if it happens around you?

1. Recognize the Emergency: No breathing and no pulse
2. Call 911 and start CPR immediately focusing more on chest compressions
3. Use an AED

Cardiac Emergency Response Plan at RHS



A cardiac emergency response plan establishes specific steps to reduce death from Sudden Cardiac Arrest (SCA). SCA is one of the leading causes of death during or resulting from sport participation. A strategic and orchestrated plan in response to cardiac emergencies will reduce deaths and ensure that each athlete will receive timely and definitive care they need. **This response plan does not replace the Emergency Action Plan for each venue.**

Signs and Symptoms of SCA:

1. Collapse of athlete + Unresponsiveness
2. Not breathing + no pulse
3. Myoclonic jerking or seizure-like activity

AED Locations - School Map

The Athletic Trainer will have an AED with them at all times when out covering practices and game. The AED will be kept in the Athletic Training Room (ATR) in the Red Emergency Backpack when AT is in the ATR.

- 3 additional AEDs are located in the ATR and should be with any coach off campus
- During the Spring Season, baseball, softball, and tennis will all have an AED
- Coaches conducting off-season workouts should also have an AED if not working out in the Main Gym

Immediate Steps Following Athlete Collapse and SCA is Confirmed

1. Check to make sure the scene is safe
2. Direct Someone to **call 911**
 - a. If Athletic Trainer not on campus, call AT while someone else is calling 911 or after 911 is called if you are the only person
 - b. If not enough people, call Athletic Trainer **after** calling 911.
****If using school landline, press (*) first before calling 911.****
3. Grab the closest AED as quickly as possible (This can be done while another person is calling for EMS)
 - a. At this time, the trainer can have someone remove clothing covering the chest. Chest needs to be as dry as possible
4. CPR Trained personnel start performing CPR until AED arrives. Apply AED as directed by pictures and cues given. Follow directions of AED
 - a. Pocket Masks will be included in all coaches' travel med kits for securing airway