# Connecticut State Department of Education and the Connecticut Interscholastic Athletic Conference Sudden Cardiac Arrest Awareness Program & Annual Review 2019-20

NOTE: This document was developed to provide coaches with an annual review of current and relevant information regarding sudden cardiac arrest. A new form is required to be read, signed, dated and kept on file by their associated school district annually to comply with Connecticut General Statutes Chapter 163, Section 10-149f: SUDDEN CARDIAC ARREST AWARENESS EDUCATION PROGRAM.

### Part I - SUDDEN CARDIAC ARREST - What is sudden cardiac arrest?

Sudden cardiac arrest (SCA) is when the heart stops beating, suddenly and unexpectedly. When this happens, blood stops flowing to the brain and other vital organs. SCA doesn't just happen to adults; it takes the lives of students, too. However, the causes of sudden cardiac arrest in students and adults can be different. A student's SCA will likely result from an inherited condition, while an adult's SCA may be caused by either inherited or lifestyle issues. SCA is NOT a heart attack. A heart attack may cause SCA, but they are not the same. A heart attack is caused by a blockage that stops the flow of blood to the heart. SCA is a malfunction in the heart's electrical system, causing the heart to suddenly stop beating.

#### PART II - HOW COMMON IS SUDDEN CARDIAC ARREST IN THE UNITED STATES?

SCA is the #1 cause of death for adults in this country. There are about 300,000 cardiac arrests outside hospitals each year. It is a leading cause of death for student athletes.

According to an April 2014 study for PubMed the incidence was

- 0.63 per 100,000 in all students (6 in one million)
- 1.14 per 100,000 athletes (10 in one million)
- 0.31 per student non-athletes (3 in one million)
- The relative risk of SCA in student athletes vs non-athletes was 0.65
- There is a significantly higher risk of SCA for boys than girls

Leading causes of sudden death among high school and college athletes, according to the National Collegiate Athletic Association (NCAA) (on CBS News, June 28, 2012)\* are heat stroke, heart disease and traits associated with sickle cell anemia. Prevention of sudden death, the same study concludes, is associated with more advanced cardiac screening with attention to medical histories and birth records, improved emergency procedures, and good coaching and conditioning practices. SCA can be prevented if the underlying causes can be diagnosed and treated.

Sudden cardiac arrest is a medical emergency. If not treated immediately, it causes sudden cardiac death. With fast, appropriate medical care, survival is possible. Administering cardiopulmonary resuscitation (CPR) — or even just compressions to the chest — can improve the chances of survival until emergency personnel arrive. (http://www.mayoclinic.org/diseases-conditions/sudden-cardiac-arrest/basics/)

#### PART III - WHAT ARE THE WARNING SIGNS AND SYMPTOMS?

Although SCA happens unexpectedly, some people may have signs or symptoms, such as: fainting or seizures during exercise; unexplained shortness of breath; dizziness; extreme fatigue; chest pains; or racing heart.

These symptoms can be unclear in athletes, since people often confuse these warning signs with physical exhaustion.

### WHAT ARE THE RISKS OF PRACTICING OR PLAYING AFTER EXPERIENCING THESE SYMPTOMS?

There are risks associated with continuing to practice or play after experiencing these symptoms. When the heart stops, so does the blood that flows to the brain and other vital organs. Death or permanent brain damage can occur in just a few minutes. Most people who experience SCA die from it.

# **REMOVAL FROM PLAY**

Any student-athlete who shows signs or symptoms of SCA must be removed from athletic activity and referred to a licensed health care profession trained specifically in the treatment of cardiac care. The symptoms can happen before, during or after activity.

## **RETURN TO PLAY**

Before returning to play, the athlete must be evaluated. Clearance to return to play must be in writing. The evaluation must be performed and written clearance be provided by a licensed medical provider.

### To summarize:

- SCA is, by definition, sudden and unexpected.
- SCA can happen in individuals who appear healthy and have no known heart disease.
- Most people who have SCA die from it, usually within minutes.
- Rapid treatment of SCA with a defibrillator can be lifesaving.
- Training in recognition of signs of cardiac arrest and SCA, and the availability of AEDs and personnel who possess the skills to use one, may save the life of someone who has had an SCA.

(National Heart, Lung, and Blood Institute)

Department of Education Approved Sudden Cardiac Arrest Educational Plan.		
Coach:	School	
(Print Name)		
Coach Signature:	Date	

Simons Fund - http://www.simonsfund.org/

Pennsylvania Department of Health - http://www.simonsfund.org/wp-content/uploads/2012/06/Parent-Handout-SCA.pdf