



Project Cardiac Health – Cardiac Screenings

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The Official Healthcare Champion of Volusia County Schools



CHRONIC ABSENTEEISM

HEALTH ACADEMIES

ATHLETE HEALTH & SAFETY





The Official Healthcare Champion of Volusia County Schools



GOAL:
To implement best practices in sports medicine through evidence based preventative protocols that ultimately could save the life of a student athlete.





Sudden Cardiac Arrest (SCA)

- Sudden, unexpected loss of heart function, breathing, and consciousness.
- Cardiac arrest usually results from an electrical disturbance in the heart. It's not the same as a heart attack.
- The main symptom is loss of consciousness and unresponsiveness.
- This medical emergency needs immediate CPR (Cardiopulmonary Resuscitation) or use of a defibrillator. Hospital care includes drugs, an implantable device, or other procedures.
- SCAs are commonly related to undetected cardiac abnormalities missed in student athletes.

SCA Rates

SCA kills more people than most “high profile” diseases and accidents **COMBINED**

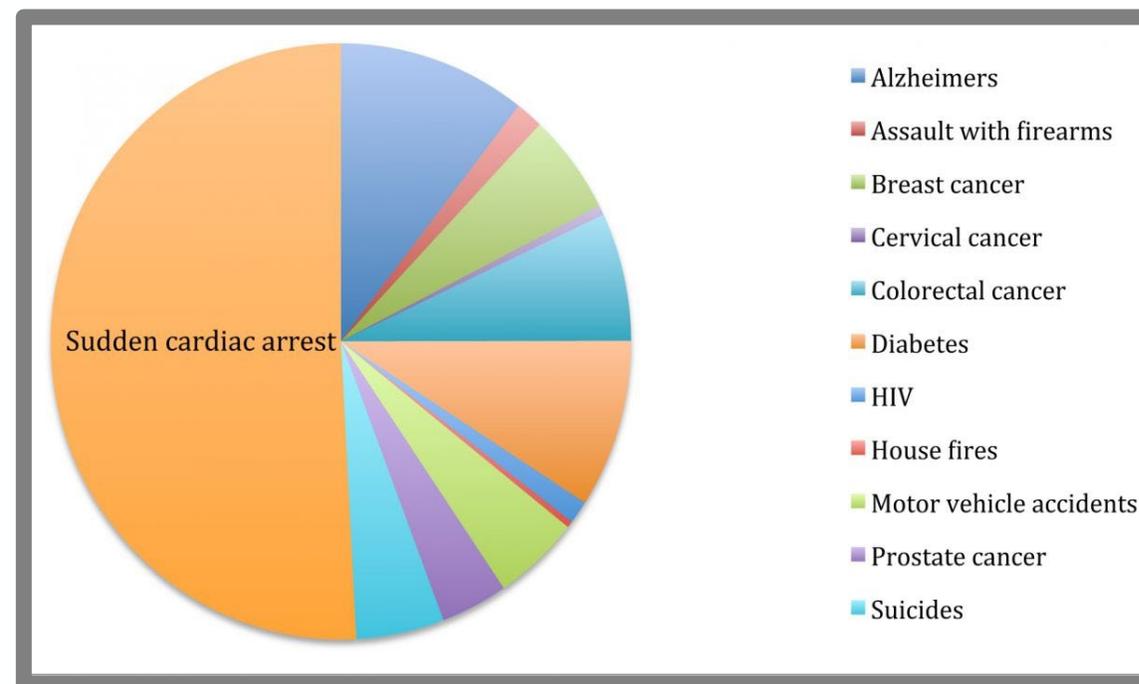
Annual Rates:

- Motor vehicle accidents 36,560
- Firearms 15,208
- Breast Cancer 41,760
- Colon Cancer 52,000
- House fires 3,655
- Suicide 47,173
- Prostate cancer 31,620
- Drug Overdose Deaths 68,500
- HIV 16,350
- Cervical Cancer 4,250

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TOTAL: 316,816

Sudden Cardiac Arrest 325,000





SCA Rates

- **1 in 300** student athletes, have an undetected heart condition that puts them at risk of sudden cardiac arrest
- **72% of SCA** are preceded by symptoms
- **SCA is the leading cause of death** in young athletes – claiming more than 250,000 lives annually
- On avg, **8500 young people die** each year from SCA



Best Practice Recommendations

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consensus statement

The Inter-Association Task Force for Preventing Sudden Death in Secondary School Athletics Programs: Best-Practices Recommendations

- Athletes should undergo **cardiovascular screenings before participation** in competitive activities.
- An automated external defibrillator (**AED**) **should be on-site and readily available within three minutes** (with one minute being ideal) for all organized sports activities.
- School staff, medical professionals, coaches and athletes should be **educated annually about location and use of AEDs**.
- Any athlete who has collapsed and is unresponsive should be **assumed to be in SCA** until proven otherwise.
- **Proper management** includes: prompt recognition of SCA (brief seizure-like activity occurs in 50 percent of young athletes with SCA and should not be mistaken for a seizure); early activation of the EMS (Emergency Medical System) system (call 9-1-1); early CPR beginning with chest compressions; early use of an AED; and transport of the patient with SCA to a hospital capable of advanced cardiac care.

American Medical Society for Sports Medicine

AMSSM Position Statement on Cardiovascular Preparticipation Screening in Athletes: Current Evidence, Knowledge Gaps, Recommendations, and Future Directions

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Karl B. Fields, MD,‡ Chad A. Asplund, MD,§ Irfan M. Asif, MD,¶ David E. Price, MD,||
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- The current PPE history and physical examination, although pragmatic and widely practiced, **is limited in its ability to identify athletes with conditions at risk for SCA/D.**
- Results from centers with considerable experience in athlete Electrocardiogram (ECG or EKG) screening have **demonstrated improved detection of cardiac conditions** with potential risk for SCA/D and decreased false-positive rates.
- The primary goal of CV screening of athletes is to **identify underlying cardiac disorders predisposing to SCA/D** with the intent to reduce morbidity and mortality by mitigating risk through individualized, patient-centered, and disease-specific medical management.
- **No screening program provides absolute protection against SCA/D**; an EAP and access to an AED are essential to improve outcomes from SCA in athletes



FHSAA – Physical Form

This completed form must be kept on file by the school. This form is valid for 365 calendar days from the date of the evaluation as written on page 2. This form is non-transferable; a change of schools during the validity period of this form will require page 1 of this form to be re-submitted.

Part 1. Student Information (to be completed by student or parent)

Student's Name: _____ Sex: _____ Age: _____ Date of Birth: ____/____/____
 School: _____ Grade in School: _____ Sport(s): _____
 Home Address: _____ Home Phone: (____) _____
 Name of Parent/Guardian: _____ E-mail: _____
 Person to Contact in Case of Emergency: _____
 Relationship to Student: _____ Home Phone: (____) _____ Work Phone: (____) _____ Cell Phone: (____) _____
 Personal/Family Physician: _____ City/State: _____ Office Phone: (____) _____

24. Have you ever had numbness or tingling in your arms, hands, legs or feet? _____
25. Have you ever had a stinger, burner or pinched nerve? _____

- the start of another? _____
45. How many periods have you had in the last year? _____
46. What was the longest time between periods in the last year? _____

Explain "Yes" answers here: _____

We hereby state, to the best of our knowledge, that our answers to the above questions are complete and correct. In addition to the routine medical evaluation required by s.1006.20, Florida Statutes, and FHSAA Bylaw 9.7, we understand and acknowledge that we are hereby advised that the student should undergo a cardiovascular assessment, which may include such diagnostic tests as electrocardiogram (EKG), echocardiogram (ECG) and/or cardio stress test.

Signature of Student: _____ Date: ____/____/____ Signature of Parent/Guardian: _____ Date: ____/____/____

23. Do you have frequent or severe headaches? _____
24. Have you ever had numbness or tingling in your arms, hands, legs or feet? _____
25. Have you ever had a stinger, burner or pinched nerve? _____
44. How much time do you usually have from the start of one period to the start of another? _____
45. How many periods have you had in the last year? _____
46. What was the longest time between periods in the last year? _____

Explain "Yes" answers here: _____

We hereby state, to the best of our knowledge, that our answers to the above questions are complete and correct. In addition to the routine medical evaluation required by s.1006.20, Florida Statutes, and FHSAA Bylaw 9.7, we understand and acknowledge that we are hereby advised that the student should undergo a cardiovascular assessment, which may include such diagnostic tests as electrocardiogram (EKG), echocardiogram (ECG) and/or cardio stress test.

Signature of Student: _____ Date: ____/____/____ Signature of Parent/Guardian: _____ Date: ____/____/____



Proposal



- Based on best practice standards and advanced screenings, Required EKG screenings for all VCS student athletes as part of their Pre-Participation Physicals

- Phased approach

- **Year 1 (2021/22)** – *Optional* – signed waiver to opt out
- **Year 2 and beyond** – *Required* EKG screening for all athletes

Proposal



- AdventHealth will be partnering with **Who We Play For**
- AdventHealth will provide **FREE** EKG screenings during our annual **FREE PPE** event
- WWPF will provide **multiple onsite EKG screening events** at each high school for small fee – approx. \$20
- Athletes can also go to their personal **physician or cardiologist** for screenings.



WHO WE PLAY FOR

5 MINUTES

Amount of time it takes to screen 1 student

80-95% vs 1%

ECGs are statistically proven to be **80-90x** more effective than a stethoscope

~1%

The false positive rate since the **implementation of the international criteria**

\$20 vs ~\$150

The cost to screen with **Who We Play For** compared to typical cost



LIVES
SAVED
130+



Project Cardiac Health Timeline

- **June 1st, 2021** – Required EKG Screening Protocol goes into effect (Opt-out option – school year 2021/22).
- **June 1st, 2022** – Required EKG Screenings Protocol (no opt out).
- **June 1st, 2021** – all practices, conditioning events, competitions require a CPR/AED certified individual to be on the the sideline.
- **June 3-5th, 2021** – Free PPE event with Free EKG Screenings at the Daytona International Speedway – provided by WWPF
- **WWPF** will coordinate with each HS school for multiple onsite EKG screening events.



Thank You