

**WILLIAMSON COUNTY PARKS & RECREATION  
SUDDEN CARDIAC ARREST AWARENESS FORM**

Name of Athlete: \_\_\_\_\_

**All Youth athletes and their parents or guardians must read and sign the form. It must be signed and returned to the Parks and Recreation Department before participation in any athletic activity. A new form must be signed and returned to the Williamson County Parks and Recreation Department each year.**

**What is Sudden Cardiac Arrest?**

- Occurs suddenly and often without warning.
- An electrical malfunction (short-circuit) causes the bottom chambers of the heart (ventricles) to beat dangerously fast (ventricular tachycardia or fibrillation) and disrupts the pumping ability of the heart.
- The heart cannot pump blood to the brain, lungs and other organs of the body. The person loses consciousness (passes out) and has no pulse.
- Death occurs within minutes if not treated immediately.

**What causes Sudden Cardiac Arrest?**

1. Conditions present at birth
  - Inherited (passed on from parents/relatives) conditions of the heart muscle:
    - Hypertrophic Cardiomyopathy – hypertrophy (thickening) of the left ventricle; the most common cause of sudden cardiac arrest in athletes in the U.S.
    - Arrhythmogenic Right Ventricular Cardiomyopathy – replacement of part of the right ventricle by fat and scar tissue.
    - Marfan Syndrome -a disorder of the structure of blood vessels that makes them prone to rupture; often associated with very long arms and unusually flexible joints.
  - Inherited conditions of the electrical system
    - Long QT Syndrome – abnormality in the ion channels (electrical system) of the heart.
    - Catecholaminergic Polymorphic Ventricular Tachycardia and Brugada Syndrome – other types of electrical abnormalities that are rare but are inherited.
  - Non-Inherited (not passed on from the family, but still present at birth) conditions

- Coronary Artery Abnormalities – abnormality of the blood vessels that supply blood to the heart muscle; the second most common cause of sudden cardiac arrest in athletes in the U.S.
  - Aortic valve abnormalities – failure of the aortic valve (the valve between the heart and the aorta) to develop properly; usually causes a loud heart murmur.
  - Non-compaction Cardiomyopathy - a condition where the heart muscle does not develop normally.
  - Wolff-Parkinson-White Syndrome – an extra conducting fiber is present in the heart’s electrical system and can increase the risk of arrhythmias.
2. Conditions not present at birth but acquired later in life
- Commotio Cordis – concussion of the heart that can occur from being hit in the chest by a ball, puck, or fist.
  - Myocarditis - infection/inflammation of the heart, usually caused by a virus.
  - Recreational/Performance-Enhancing drug use.
3. Idiopathic: Sometimes the underlying cause of the Sudden Cardiac Arrest is unknown, even after autopsy.

**What are the symptoms/warning signs of Sudden Cardiac Arrest?** Although sudden cardiac arrest happens unexpectedly, some people may have signs or symptoms, such as:

- Fainting/blackouts (especially during exercise)
- Dizziness
- Unusual fatigue/weakness
- Chest pain
- Shortness of breath
- Nausea/vomiting
- Palpitations (heart is beating unusually fast or skipping beats)
- Family history of sudden cardiac arrest at age < 50

ANY of these symptoms/warning signs that occur while exercising, may necessitate further evaluation from your physician before returning to practice or a game.

**What is the treatment for Sudden Cardiac Arrest?**

- Time is critical and an immediate response is vital.
- CALL 911
- Begin CPR
- Use an Automated External Defibrillator (AED)

**What are ways to screen for Sudden Cardiac Arrest?**

- The American Heart Association recommends a pre-participation history and physical including 12 important cardiac elements.
- Ask your Doctor about additional screening using an electrocardiogram and/or an echocardiogram.

**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 sudden cardiac arrest die from it.

**Occurrence of Sudden Cardiac Arrest.**

- Any youth athlete who exhibits any of the symptoms of sudden cardiac arrest while participating in an athletic activity shall be immediately removed from participating in any athletic activity.
- A youth athlete who has been removed from participating in any athletic activity shall not return to practice or competition during which the youth athlete experienced systems consistent with sudden cardiac arrest.
- Before returning to practice or play in an athletic activity, the athlete must be evaluated by a Tennessee licensed medical doctor or an osteopathic physician. Clearance to full or graduated return to practice or play must be in writing.

**Where can one find information on additional screening?**

- Check the Williamson County Medical Center's Chest Pain and Cardiology page on the website (<http://williamsonmedicalcenter.org/medical-services/accredited-chest-pain-centercardiology/>) or do an internet search for "Sudden Cardiac Arrest".

*I have reviewed and understand the symptoms and warning signs of sudden cardiac arrest.*

Parent/Guardian Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent/Guardian Name (Print): \_\_\_\_\_

Athlete Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Athlete Name (Print): \_\_\_\_\_