

# PROVIDENCE

## Providence Catholic School – Athletics

### PARENT AND STUDENT NOTIFICATION SUDDEN CARDIAC ARREST

#### 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?

##### 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; the most common cause of sudden cardiac arrest in Italy.
- **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 run in families.

##### ***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.

##### 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.**

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?

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

The American Heart Association recommends a pre-participation history and physical including 12 important cardiac elements. For this reason, these elements are included on the Medical History form provided by Providence Catholic School and required for each student prior to participation in athletic activities each year. As parents and student-athletes, your truthful answers to these simple questions will assist your medical practitioner when performing the annual physical examination.

While TAPPS or AIAL do not mandate Cardiac Screening prior to participation, TAPPS and the TAPPS member schools recognize the importance of our students' health and highly recommend discussing screening options with your health care provider. Any student who shows signs of SCA should be removed by the parents from play. This includes all athletic activity, practices or contests. Before returning to play, the student should be examined and receive clearance by a licensed health care professional of the parents' choosing.

Additional screening using an electrocardiogram and/or an echocardiogram is readily available to all athletes, but is not mandatory.

### **Where can I find information on additional screening?**

- American Heart Association ([www.heart.org](http://www.heart.org))
- AugustHeart ( [www.augustheart.org](http://www.augustheart.org))
- Championship Hearts Foundation ([www.championshipheartsfoundation.org](http://www.championshipheartsfoundation.org))
- Cypress ECG Project ([www.cypressecgproject.org](http://www.cypressecgproject.org))
- Parent Heart Watch ([www.parentheartwatch.com](http://www.parentheartwatch.com))

### **What are the risks of participation and playing with these symptoms?**

Continued participation brings with it increased risk. This includes playing in practices and games.

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 minutes. Most people who experience a SCA die from the event.

### **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)

Adapted from TAPPS & UIL forms.

**Both Student-Athlete and Parent/Guardian must sign acknowledgement of reading this notification annually. Acknowledgement may be submitted online or print the Acknowledgement Form and turn into the Athletic Trainer prior to participating in any sport.**

\*Updated June 2015