



SUDDEN CARDIAC ARREST AWARENESS FORM

Revised February 2014

Name of Student: _____

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 are inherited.
 - **NonInherited (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.