

## WHAT IS SUDDEN CARDIAC ARREST?

Sudden Cardiac Arrest (SCA) is the sudden onset of an abnormal and lethal heart rhythm which causes the heart to stop beating and the individual to collapse.

SCA is the leading cause of death in the U.S. and is the most common medical cause of death in athletes, often occurring during physical activity such as playing a sport.

## WHAT CAUSES SUDDEN CARDIAC ARREST?

SCA in young athletes usually occurs because of a malfunction in the heart's electrical system or structure. Many of these conditions are genetic and can develop as an adolescent or young adult.

SCA is more likely during exercise or physical activity, placing young athletes with undiagnosed heart conditions at greater risk.

SCA can also occur as a result of a direct blow to the chest by a firm projectile (e.g. baseball, softball) or by chest contact from another player.

## WARNING SIGNS AND RISK FACTORS

While a heart condition may have no warning signs, some young athletes may have symptoms but they go unrecognized, unreported, missed, or misdiagnosed.

### POTENTIAL INDICATORS THAT SCA MAY OCCUR

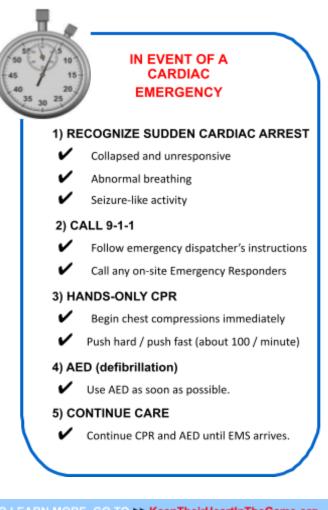
- Fainting or seizure, especially during or right after exercise
- Chest pain or discomfort during exercise
- Excessive shortness of breath with exercise
- Racing or fluttering heart palpitations or irregular heartbeat
- Repeated dizziness or lightheadedness
- Excessive, unexpected fatigue during or after exercise

### FACTORS INCREASING RISK

- Family history of known heart abnormalities or sudden death before the age of 50
- Specific family history of Long QT Syndrome, Brugada Syndrome, Hypertrophic Cardiomyopathy, or Arrhythmogenic Right Ventricular Dysplasia (ARVD)
- Family members with known unexplained fainting, seizures, drowning or near drowning, or car accidents
- Family member with known structural heart abnormality, repaired or unrepaired
- Use of drugs such as cocaine, inhalants, "recreational" drugs, excessive energy drinks, diet pills or performance-enhancing supplements

# WHAT SHOULD BE DONE IF AN ATHLETE EXPERIENCES ANY SUDDEN CARDIAC ARREST WARNING SIGNS

- 1. Athlete should alert an adult.
- 2. Follow up-up care with a physician should be obtained as soon as possible.
- 3. Athletes must be evaluated and cleared by a physician in order to return to play.



TO LEARN MORE, GO TO >> KeepTheirHeartInTheGame.org

ATHLETE NAME PRINTED

## ATHLETE SIGNATURE

DATE

PARENT/GUARDIAN SIGNATURE

DATE



# WHAT ARE THE SIGNS AND SYMPTOMS OF A CONCUSSION?

Athletes who experience one more of the signs and symptoms listed below after a bump, blow or jolt to the head or body may have a concussion.

### SYMPTOMS REPORTED BY ATHLETE

- Headache or "pressure" in head
- Nausea or vomiting
- Double or blurry vision
- Balance problems or dizziness
- Sensitivity to light or noise
- Feeling sluggish, hazy, foggy or groggy
- Concentration or memory problems
- Confusion
- Just not "feeling right" or is "feeling down"

### SIGNS OBSERVED BY COACHING STAFF

- Appears dazed or stunned
- Is confused about assignment or position
- Forgets an instruction
- Is unsure of game, score, or opponent
- Moves clumsily
- Answers questions slowly
- Loses consciousness (even briefly)
- Shows mood, behavior, or personality changes
- Can't recall events prior to hit or fall

### **CONCUSSION DANGER SIGNS**

- One pupil larger than the other
- Is drowsy and cannot be awakened
- A headache that gets worse
- Weakness, numbness, or decreased coordination
- Repeated vomiting or nausea
- Slurred speech
- Convulsions or seizures
- Cannot recognize people or places
- Becomes increasingly confused, restless or agitated
- Has unusual behavior
- Loses consciousness (even a brief loss of consciousness should be taken seriously

# WHAT YOU SHOULD DO IF YOU THINK YOUR ATHLETE HAS A CONCUSSION

- 1. Remove the athlete from play and seek medical attention. Do not try to judge the severity of the injury yourself.
- 2. Keep the athlete out of play the day of the injury and until a health care professional experienced in evaluating for concussion says s/he is symptom-free and that it is OK to return to play.
- 3. Rest is key to helping an athlete recover from a concussion. Exercising or activities involving a lot of concentration, such as studying, working on the computer, and playing video games may cause concussion symptoms to reappear or get worse. After a concussion, returning to sports and school is a gradual process that should be carefully managed and monitored by a health care professional.
- 4. Remember: Concussions affect people differently. While most athletes with a concussion recover quickly and fully, some will have symptoms that last for days, or even weeks. A more serious concussion can last for months or longer.

### DID YOU KNOW?

- Most concussions occur without loss of consciousness.
- Athletes who have, at any point in their lives, had a concussion have an increased risk for another concussion.
- Young children and teens are more likely to get a concussion and take longer to recover than adults.

### **REPORT THEIR SYMPTOMS?**

If an athlete has a concussion, his/her brain needs time to heal. While an athlete's brain is still healing, s/he is much more likely to have another concussion. Repeat concussions can increase the time it takes to recover. In rare cases, repeat concussions in young athletes can result in brain swelling or permanent damage to their brains. They can even be fatal.



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