

# Keep Their Heart in the Game

## A Sudden Cardiac Arrest Information Sheet for Athletes and Parents/Guardians

### What is sudden cardiac arrest?

Sudden cardiac arrest (SCA) is when the heart stops beating, suddenly and unexpectedly. When this happens blood stops flowing to the brain and other vital organs. SCA is NOT a heart attack. A heart attack is caused by a blockage that stops the flow of blood to the heart. SCA is a malfunction in the heart's electrical system, causing the victim to collapse. The malfunction is caused by a congenital or genetic defect in the heart's structure.

#### How common is sudden cardiac arrest in the United States?

As the leading cause of death in the U.S., there are more than 300,000 cardiac arrests outside hospitals each year, with nine out of 10 resulting in death. Thousands of sudden cardiac arrests occur among youth, as it is the #2 cause of death under 25 and the #1 killer of student athletes during exercise.

#### Who is at risk for sudden cardiac arrest?

SCA is more likely to occur during exercise or physical activity, so student-athletes are at greater risk. While a heart condition may have no warning signs, studies show that many young people do have symptoms but neglect to tell an adult. This may be because they are embarrassed, they do not want to jeopardize their playing time, they mistakenly think they're out of shape and need to train harder, or they simply ignore the symptoms, assuming they will "just go away." Additionally, some health history factors increase the risk of SCA.

#### What should you do if your student-athlete is experiencing any of these symptoms?

We need to let student-athletes know that if they experience any SCA-related symptoms it is crucial to alert an adult and get follow-up care as soon as possible with a primary care physician. If the athlete has any of the SCA risk factors, these should also be discussed with a doctor to determine if further testing is needed. Wait for your doctor's feedback before returning to play, and alert your coach, trainer and school nurse about any diagnosed conditions.

### What is an AED?

An automated external defibrillator (AED) is the only way to save a sudden cardiac arrest victim. An AED is a portable, user-friendly device that automatically diagnoses potentially life-threatening heart rhythms and delivers an electric shock to restore normal rhythm. Anyone can operate an AED, regardless of training. Simple audio direction instructs the rescuer when to press a button to deliver the shock, while other AEDs provide an automatic shock if a fatal heart rhythm is detected. A rescuer cannot accidentally hurt a victim with an AED—quick action can only help. AEDs are designed to only shock victims whose hearts need to be restored to a healthy rhythm. Check with your school for locations of on-campus AEDs.



### FAINTING is the #1 SYMPTOM OF A HEART CONDITION

### The Cardiac Chain of Survival

On average it takes EMS teams up to 12 minutes to arrive to a cardiac emergency. Every minute delay in attending to a sudden cardiac arrest victim decreases the chance of survival by 10%. Everyone should be prepared to take action in the first minutes of collapse.

#### Early Recognition of Sudden Cardiac Arrest



Collapsed and unresponsive.  
Gasping, gurgling, snorting, moaning or labored breathing noises.  
Seizure-like activity.

#### Early Access to 9-1-1



Confirm unresponsiveness.  
Call 9-1-1 and follow emergency dispatcher's instructions.  
Call any on-site Emergency Responders.

#### Early CPR



Begin cardiopulmonary resuscitation (CPR) immediately. Hands-only CPR involves fast and continual two-inch chest compressions—about 100 per minute.

#### Early Defibrillation



Immediately retrieve and use an automated external defibrillator (AED) as soon as possible to restore the heart to its normal rhythm. Mobile AED units have step-by-step instructions for a bystander to use in an emergency situation.

#### Early Advanced Care



Emergency Medical Services (EMS) Responders begin advanced life support including additional resuscitative measures and transfer to a hospital.

# Keep Their Heart in the Game

## Recognize the Warning Signs & Risk Factors of Sudden Cardiac Arrest (SCA)

Tell Your Coach and Consult Your Doctor if These Conditions are Present in Your Student-Athlete

### Potential Indicators That SCA May Occur

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

### Factors That Increase the Risk of SCA

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

### What is CIF doing to help protect student-athletes?

CIF amended its bylaws to include language that adds SCA training to coach certification and practice and game protocol that empowers coaches to remove from play a student-athlete who exhibits fainting—the number one warning sign of a potential heart condition. A student-athlete who has been removed from play after displaying signs or symptoms associated with SCA may not return to play until he or she is evaluated and cleared by a licensed health care provider. Parents, guardians and caregivers are urged to dialogue with student-athletes about their heart health and everyone associated with high school sports should be familiar with the cardiac chain of survival so they are prepared in the event of a cardiac emergency.

I have reviewed and understand the symptoms and warning signs of SCA and the new CIF protocol to incorporate SCA prevention strategies into my student's sports program.

STUDENT-ATHLETE SIGNATURE

PRINT STUDENT-ATHLETE'S NAME

DATE

PARENT/GUARDIAN SIGNATURE

PRINT PARENT/GUARDIAN'S NAME

DATE

For more information about Sudden Cardiac Arrest visit

California Interscholastic Federation  
<http://www.cifstate.org>

Eric Paredes Save A Life Foundation  
<http://www.epsavealife.org>

National Federation of High Schools  
(20-minute training video)  
<https://nfhlslearn.com/courses/61032>





## CIF Concussion Information Sheet



### Why am I getting this information sheet?

You are receiving this information sheet about concussions because of California state law AB 25 (effective January 1, 2012), now Education Code § 49475:

1. *The law requires a student-athlete who may have a concussion during a practice or game to be removed from the activity for the remainder of the day.*
2. *Any student-athlete removed for this reason must receive a written note from a physician trained in the management of concussion before returning to practice.*
3. *Before a student-athlete can start the season and begin practice in a sport, a concussion information sheet must be signed and returned to the school by the student-athlete and the parent or guardian.*

Every 2 years all coaches are required to receive training about concussions (AB 1451), as well as certification in First Aid training, CPR, and AEDs (life-saving electrical devices that can be used during CPR).

### What is a concussion and how would I recognize one?

A concussion is a kind of brain injury. It can be caused by a bump or hit to the head, or by a blow to another part of the body with the force that shakes the head. Concussions can appear in any sport, and can look differently in each person.

*Most concussions get better with rest and over 90% of athletes fully recover.* However, all concussions should be considered serious. If not recognized and managed the right way, they may result in problems including brain damage and even death.

*Most concussions occur without being knocked out.* Signs and symptoms of concussion (see back of this page) may show up right after the injury or can take hours to appear. If your child reports any symptoms of concussion or if you notice some symptoms and signs, seek medical evaluation from your team's athletic trainer and a physician trained in the evaluation and management of concussion. If your child is vomiting, has a severe headache, or is having difficulty staying awake or answering simple questions, call 911 for immediate transport to the emergency department of your local hospital.

On the CIF website is a **Graded Concussion Symptom Checklist**. If your child fills this out after having had a concussion, it helps the physician, athletic trainer or coach understand how they are feeling and hopefully will show improvement over time. You may have your child fill out the checklist at the start of the season even before a concussion has occurred so that we can understand if some symptoms such as headache might be a part of their everyday life. We call this a "baseline" so that we know what symptoms are normal and common for your child. Keep a copy for your records, and turn in the original. If a concussion occurs, your child can fill out this checklist again. This Graded Symptom Checklist provides a list of symptoms to compare over time to follow your child's recovery from the concussion.

### What can happen if my child keeps playing with concussion symptoms or returns too soon after getting a concussion?

*Athletes with the signs and symptoms of concussion should be removed from play immediately. There is NO same day return to play for a youth with a suspected concussion.* Youth athletes may take more time to recover from concussion and are more prone to long-term serious problems from a concussion.

Even though a traditional brain scan (e.g., MRI or CT) may be "normal", the brain has still been injured. Animal and human research studies show that a second blow before the brain has recovered can result in serious damage to the brain. If your athlete suffers another concussion before completely recovering from the first one, this can lead to prolonged recovery (weeks to months), or even to severe brain swelling (Second Impact Syndrome) with devastating consequences.

There is an increasing concern that head impact exposure and recurrent concussions may contribute to long-term neurological problems. One goal of concussion education is to prevent a too early return to play so that serious brain damage can be prevented.



# CIF Concussion Information Sheet



## ***Signs observed by teammates, parents and coaches include:***

<ul style="list-style-type: none"> <li>• Looks dizzy</li> <li>• Looks spaced out</li> <li>• Confused about plays</li> <li>• Forgets plays</li> <li>• Is unsure of game, score, or opponent</li> <li>• Moves clumsily or awkwardly</li> <li>• Answers questions slowly</li> </ul>	<ul style="list-style-type: none"> <li>• Slurred speech</li> <li>• Shows a change in personality or way of acting</li> <li>• Can't recall events before or after the injury</li> <li>• Seizures or "has a fit"</li> <li>• Any change in typical behavior or personality</li> <li>• Passes out</li> </ul>
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## ***Symptoms may include one or more of the following:***

<ul style="list-style-type: none"> <li>• Headaches</li> <li>• "Pressure in head"</li> <li>• Nausea or throws up</li> <li>• Neck pain</li> <li>• Has trouble standing or walking</li> <li>• Blurred, double, or fuzzy vision</li> <li>• Bothered by light or noise</li> <li>• Feeling sluggish or slowed down</li> <li>• Feeling foggy or groggy</li> <li>• Drowsiness</li> <li>• Change in sleep patterns</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of memory</li> <li>• "Don't feel right"</li> <li>• Tired or low energy</li> <li>• Sadness</li> <li>• Nervousness or feeling on edge</li> <li>• Irritability</li> <li>• More emotional</li> <li>• Confused</li> <li>• Concentration or memory problems</li> <li>• Repeating the same question/comment</li> </ul>
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## **What is Return to Learn?**

Following a concussion, students may have difficulties with short- and long-term memory, concentration and organization. They will require rest while recovering from injury (e.g., avoid or limit reading, texting, video games, loud movies), or may even need to limit school attendance for a few days. As they return to school, the schedule might need to start with a few classes or a half-day. If recovery from a concussion is taking longer than expected, they may also benefit from a reduced class schedule and/or limited homework; a formal school assessment may also be necessary. Your school or physician can help suggest and make these changes. Students should complete the Return to Learn guidelines and return to complete school before beginning Return to Play, unless your physician makes other recommendations. Go to the CIF website ([cifstate.org](http://cifstate.org)) for more information on Return to Learn.

## **How is Return to Play (RTP) determined?**

Concussion symptoms should be completely gone before **returning to competition**. A RTP progression is a gradual, step-wise increase in physical effort, sports-specific activities and then finally unrestricted activities. If symptoms occur with activity, the progression should be stopped. If there are no symptoms the next day, exercise can be restarted at the previous stage.

RTP after concussion should occur only with medical clearance from a physician trained in the evaluation and management of concussions, and a step-wise progression program monitored by an athletic trainer, coach, or other identified school administrator. Please see [cifstate.org](http://cifstate.org) for a graduated return to play plan. [AB 2127, a California state law effective 1/1/15, states that *return to play (i.e., full competition) must be no sooner than 7 days after the concussion diagnosis has been made by a physician.*]

## **Final Thoughts for Parents and Guardians:**

*It is well known that students will often not talk about signs of concussions, which is why this information sheet is so important to review with them.* Teach your child to tell the coaching staff if they experience such symptoms, or if they suspect that a teammate has had a concussion. You should also feel comfortable talking to the coaches or athletic trainer about possible concussion signs and symptoms that you may be seeing in your child.

### **References:**

- American Medical Society for Sports Medicine position statement: *concussion in sport* (2013)
- Consensus statement on *concussion in sport: the 5th International Conference on Concussion in Sport held in Berlin, October 2016*
- <http://www.cdc.gov/concussion/HeadsUp/youth.html>



## CIF Concussion Information Sheet



School: \_\_\_\_\_

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Every 2 years all coaches are required to receive training about concussions (AB 1451), as well as certification in First Aid training, CPR, and AEDs (life-saving electrical devices that can be used during CPR).

For current and up-to-date information on concussions you can visit:  
<http://www.cdc.gov/concussion/HeadsUp/youth.html>

I acknowledge that I have received and read the CIF Concussion Information Sheet.

Student-Athlete Name <i>Printed</i>	Student-Athlete <i>Signature</i>	Date
Parent or Legal Guardian Name <i>Printed</i>	Parent or Legal Guardian <i>Signature</i>	Date