



1161 Route 130, P.O. Box 487, Robbinsville, NJ 08691 609-259-2776 609-259-3047-Fax

## NJSIAA PARENT/GUARDIAN CONCUSSION POLICY ACKNOWLEDGMENT FORM

In order to help protect the student athletes of New Jersey, the NJSIAA has mandated that all athletes, parents/guardians and coaches follow the NJSIAA Concussion Policy.

A concussion is a brain injury and all brain injuries are serious. They may be caused by a bump, blow, or jolt to the head, or by a blow to another part of the body with the force transmitted to the head. They can range from mild to severe and can disrupt the way the brain normally works. Even though most concussions are mild, **all concussions are potentially serious and may result in complications including prolonged brain damage and death if not recognized and managed properly.** In other words, even a "ding" or a bump on the head can be serious. You can't see a concussion and most sports concussions occur without loss of consciousness. Signs and symptoms of concussion may show up right after the injury or can take hours or days to fully appear. If your child/player reports any symptoms of concussion, or if you notice the symptoms or signs of concussion yourself, seek medical attention right away.

### Symptoms may include one or more of the following:

1. Headache.
2. Nausea/vomiting.
3. Balance problems or dizziness.
4. Double vision or changes in vision.
5. Sensitivity to light or sound/noise.
6. Feeling of sluggishness or fogginess.
7. Difficulty with concentration, short-term memory, and/or confusion.
8. Irritability or agitation.
9. Depression or anxiety.
10. Sleep disturbance.

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

1. Appears dazed, stunned, or disoriented.
2. Forgets plays or demonstrates short-term memory difficulties (e.g. is unsure of the game, score, or opponent)
3. Exhibits difficulties with balance or coordination.
4. Answers questions slowly or inaccurately.
5. Loses consciousness.
6. Demonstrates behavior or personality changes.
7. Is unable to recall events prior to or after the hit.

**What can happen if my child/player keeps on playing with a concussion or returns too soon?**

Athletes with the signs and symptoms of concussion should be removed from play immediately. Continuing to play with the signs and symptoms of a concussion leaves the young athlete especially vulnerable to greater injury. There is an increased risk of significant damage from a concussion for a period of time after that concussion occurs, particularly if the athlete suffers another concussion before completely recovering from the first one. This can lead to prolonged recovery, or even to severe brain swelling (second impact syndrome) with devastating and even fatal consequences. It is well known that adolescent or teenage athletes will often under report symptoms of injuries. And concussions are no different. As a result, education of administrators, coaches, parents and students is the key for student-athlete's safety.

**If you think your child/player has suffered a concussion**

Any athlete even suspected of suffering a concussion should be removed from the game or practice immediately. No athlete may return to activity after an apparent head injury or concussion, regardless of how mild it seems or how quickly symptoms clear. Close observation of the athlete should continue for several hours.

An athlete who is suspected of sustaining a concussion or head injury in a practice or game shall be removed from competition at that time and may not return to play until the athlete is evaluated by a medical doctor or doctor of Osteopathy, trained in the evaluation and management of concussion and received written clearance to return to play from that health care provider.

You should also inform you child's Coach, Athletic Trainer (ATC), and/or Athletic Director, if you think that your child/player may have a concussion. And when it doubt, the athlete sits out.

For current and up-to-date information on concussions you can go to:

<http://www.cdc.gov/ConcussionInYouthSports/>

[www.nfhslearn.com](http://www.nfhslearn.com)

_____ Signature of Student-Athlete	_____ Print Student-Athlete's Name	_____ Date
_____ Signature of Parent/Guardian	_____ Print Parent/Guardian's Name	_____ Date

Please keep this form on file at the school. Do not return to the NJSIAA. Thank you.

For Your Records Only

# SUDDEN CARDIAC DEATH IN YOUNG ATHLETES

## The Basic Facts on Sudden Cardiac Death in Young Athletes



American Heart Association

Learn and Live

### Website Resources

- Sudden Death in Athletes [www.cardiachealth.org/sudden-death-in-athletes](http://www.cardiachealth.org/sudden-death-in-athletes)
- Hypertrophic Cardiomyopathy Association [www.4hcm.org](http://www.4hcm.org)
- American Heart Association [www.heart.org](http://www.heart.org)

### Collaborating Agencies:

**American Academy of Pediatrics  
New Jersey Chapter**  
3836 Quakerbridge Road, Suite 108  
Hamilton, NJ 08619  
(p) 609-842-0014  
(f) 609-842-0015  
[www.aapnj.org](http://www.aapnj.org)



**American Heart Association**  
1 Union Street, Suite 301  
Robbinsville, NJ, 08691  
(p) 609-208-0020  
[www.heart.org](http://www.heart.org)



**New Jersey Department of Education**  
PO Box 500  
Trenton, NJ 08625-0500  
(p) 609-292-5935  
[www.state.nj.us/education/](http://www.state.nj.us/education/)



**New Jersey Department of Health**  
P. O. Box 360  
Trenton, NJ 08625-0360  
(p) 609-292-7837  
[www.state.nj.us/health](http://www.state.nj.us/health)

Lead Author: American Academy of Pediatrics, New Jersey Chapter

Written by: Initial draft by Sushma Raman Hebbar, MD & Stephen G. Rice, MD PhD

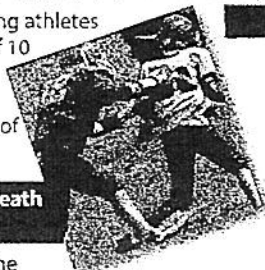
Additional Reviewers: NJ Department of Education, NJ Department of Health and Senior Services, American Heart Association/New Jersey Chapter, NJ Academy of Family Practice, Pediatric Cardiologists, New Jersey State School Nurses

Revised 2014: Christene DeWitt-Parker, MSN, CSN, RN; Lakota Kruse, MD, MPH; Susan Martz, EdM; Stephen G. Rice, MD; Jeffrey Rosenberg, MD; Louis Teichholz, MD; Perry Weinstock, MD



### SUDDEN CARDIAC DEATH IN YOUNG ATHLETES

**S**udden death in young athletes between the ages of 10 and 19 is very rare. What, if anything, can be done to prevent this kind of tragedy?



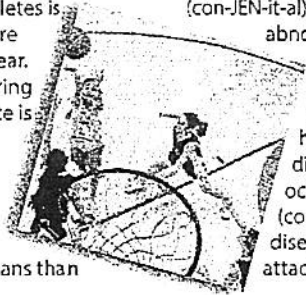
#### What is sudden cardiac death in the young athlete?

Sudden cardiac death is the result of an unexpected failure of proper heart function, usually (about 60% of the time) during or immediately after exercise without trauma. Since the heart stops pumping adequately, the athlete quickly collapses, loses consciousness, and ultimately dies unless normal heart rhythm is restored using an automated external defibrillator (AED).

#### How common is sudden death in young athletes?

Sudden cardiac death in young athletes is very rare. About 100 such deaths are reported in the United States per year. The chance of sudden death occurring to any individual high school athlete is about one in 200,000 per year.

Sudden cardiac death is more common: in males than in females; in football and basketball than in other sports; and in African-Americans than in other races and ethnic groups.



#### What are the most common causes?

Research suggests that the main cause is a loss of proper heart rhythm, causing the heart to quiver instead of pumping blood to the brain and body. This is called ventricular fibrillation (ven-TRICK-you-lar fib-roo-LAY-shun). The problem is usually caused by one of several cardiovascular abnormalities and electrical diseases of the heart that go unnoticed in healthy-appearing athletes.

The most common cause of sudden death in an athlete is hypertrophic cardiomyopathy (hi-per-TRO-fic CAR-dee-oh-my-OP-a-thee) also called HCM. HCM is a disease of the heart, with abnormal thickening of the heart muscle, which can cause serious heart rhythm problems and blockages to blood flow. This genetic disease runs in families and usually develops gradually over many years.

The second most likely cause is congenital (con-JEN-it-al) (i.e., present from birth) abnormalities of the coronary arteries. This means that these blood vessels are connected to the main blood vessel of the heart in an abnormal way. This differs from blockages that may occur when people get older (commonly called "coronary artery disease," which may lead to a heart attack).

## SUDDEN CARDIAC DEATH IN YOUNG ATHLETES

Other diseases of the heart that can lead to sudden death in young people include:

- Myocarditis (my-oh-car-DIE-tis), an acute inflammation of the heart muscle (usually due to a virus).
- Dilated cardiomyopathy, an enlargement of the heart for unknown reasons.
- Long QT syndrome and other electrical abnormalities of the heart which cause abnormal fast heart rhythms that can also run in families.
- Marfan syndrome, an inherited disorder that affects heart valves, walls of major arteries, eyes and the skeleton. It is generally seen in unusually tall athletes, especially if being tall is not common in other family members.

### Are there warning signs to watch for?

In more than a third of these sudden cardiac deaths, there were warning signs that were not reported or taken seriously. Warning signs are:

- Fainting, a seizure or convulsions during physical activity;
- Fainting or a seizure from emotional excitement, emotional distress or being startled;
- Dizziness or lightheadedness, especially during exertion;
- Chest pains, at rest or during exertion;

- Palpitations - awareness of the heart beating unusually (skipping, irregular or extra beats) during athletics or during cool down periods after athletic participation;
- Fatigue or tiring more quickly than peers; or
- Being unable to keep up with friends due to shortness of breath.

### What are the current recommendations for screening young athletes?

New Jersey requires all school athletes to be examined by their primary care physician ("medical home") or school physician at least once per year. The New Jersey Department of Education requires use of the specific Annual Athletic Pre-Participation Physical Examination Form.

This process begins with the parents and student-athletes answering questions about symptoms during exercise (such as chest pain, dizziness, fainting, palpitations or shortness of breath); and questions about family health history.

The primary healthcare provider needs to know if any family member died suddenly during physical activity or during a seizure. They also need to know if anyone in the family under the age of 50 had an unexplained sudden death such as drowning or car accidents. This information must be provided annually for each exam because it is so essential to identify those at risk for sudden cardiac death.

The required physical exam includes measurement of blood pressure and a careful listening examination of the heart, especially for murmurs and rhythm abnormalities. If there are no warning signs reported on the health history and no abnormalities discovered on exam, no further evaluation or testing is recommended.

### When should a student athlete see a heart specialist?

If the primary healthcare provider or school physician has concerns, a referral to a child heart specialist, a pediatric cardiologist, is recommended. This specialist will perform a more thorough evaluation, including an electrocardiogram (ECG), which is a graph of the electrical activity of the heart. An echocardiogram, which is an ultrasound test to allow for direct visualization of the heart structure, will likely also be done. The specialist may also order a treadmill exercise test and a monitor to enable a longer recording of the heart rhythm. None of the testing is invasive or uncomfortable.

### Can sudden cardiac death be prevented just through proper screening?

A proper evaluation should find most, but not all, conditions that would cause sudden death in the athlete. This is because some diseases are difficult to uncover and may only develop later in life. Others can develop following a normal screening evaluation, such as an infection of the heart muscle from a virus.

This is why screening evaluations and a review of the family health history need to be performed on a yearly basis by the athlete's primary healthcare provider. With proper screening and evaluation, most cases can be identified and prevented.

### Why have an AED on site during sporting events?

The only effective treatment for ventricular fibrillation is immediate use of an automated external defibrillator (AED). An AED can restore the heart back into a normal rhythm. An AED is also life-saving for ventricular fibrillation caused by a blow to the chest over the heart (commotio cordis).

Effective September 1, 2014, the New Jersey Department of Education requires that all public and nonpublic schools grades K through 12 shall:

- Have an AED available at every sports event (three minutes total time to reach and return with the AED);
- Have adequate personnel who are trained in AED use present at practices and games;
- Have coaches and athletic trainers trained in basic life support techniques (CPR); and
- Call 911 immediately while someone is retrieving the AED.

## Sudden Cardiac Death Pamphlet Sign-Off Sheet

Name of School District: \_\_\_\_\_

Name of Local School: \_\_\_\_\_

I/We acknowledge that we received and reviewed the Sudden Cardiac Death in Young Athletes pamphlet.

Student Signature: \_\_\_\_\_

Parent or Guardian  
Signature: \_\_\_\_\_

Date: \_\_\_\_\_