Sports-Related Concussion and Head Injury Fact Sheet and Parent/Guardian Acknowledgement Form

A concussion is a brain injury that can be caused by a blow to the head or body that disrupts normal functioning of the brain. Concussions are a type of Traumatic Brain Injury (TBI), which can range from mild to severe and can disrupt the way the brain normally functions. Concussions can cause significant and sustained neuropsychological impairment affecting problem solving, planning, memory, attention, concentration, and behavior.

The Centers for Disease Control and Prevention estimates that 300,000 concussions are sustained during sports related activities nationwide, and more than 62,000 concussions are sustained each year in high school contact sports. Second-impact syndrome occurs when a person sustains a second concussion while still experiencing symptoms of a previous concussion. It can lead to severe impairment and even death of the victim.

Legislation (P.L. 2010, Chapter 94) signed on December 7, 2010, mandated measures to be taken in order to ensure the safety of K-12 student-athletes involved in interscholastic sports in New Jersey. It is imperative that athletes, coaches, and parent/guardians are educated about the nature and treatment of sports related concussions and other head injuries. The legislation states that:

- All Coaches, Athletic Trainers, School Nurses, and School/Team Physicians shall complete an Interscholastic Head Injury Safety Training Program by the 2011-2012 school year.
- All school districts, charter, and non-public schools that participate in interscholastic sports will distribute annually this educational fact to all student athletes and obtain a signed acknowledgement from each parent/guardian and student-athlete.
- Each school district, charter, and non-public school shall develop a written policy describing the prevention and treatment of sports-related concussion and other head injuries sustained by interscholastic student-athletes.
- Any student-athlete who participates in an interscholastic sports program and is suspected of sustaining a concussion will be immediately removed from competition or practice. The student-athlete will not be allowed to return to competition or practice until he/she has written clearance from a physician trained in concussion treatment and has completed his/her district's graduated return-to-play protocol.

Quick Facts

- Most concussions do not involve loss of consciousness
- You can sustain a concussion even if you do not hit your head
- A blow elsewhere on the body can transmit an "impulsive" force to the brain and cause a concussion

Signs of Concussions (Observed by Coach, Athletic Trainer, Parent/Guardian)

- Appears dazed or stunned
- Forgets plays or demonstrates short term memory difficulties (e.g. unsure of game, opponent)
- Exhibits difficulties with balance, coordination, concentration, and attention
- Answers questions slowly or inaccurately
- Demonstrates behavior or personality changes
- Is unable to recall events prior to or after the hit or fall

Symptoms of Concussion (Reported by Student-Athlete)

- Headache
- Nausea/vomiting
- Balance problems or dizziness
- Double vision or changes in vision
- Sensitivity to light/sound
- Feeling of sluggishness or fogginess
- Difficulty with concentration, short term memory, and/or confusion

What Should a Student-Athlete do if they think they have a concussion?

- **Don't hide it.** Tell your Athletic Trainer, Coach, School Nurse, or Parent/Guardian.
- **Report it.** Don't return to competition or practice with symptoms of a concussion or head injury. The sooner you report it, the sooner you may return-to-play.
- **Take time to recover.** If you have a concussion your brain needs time to heal. While your brain is healing you are much more likely to sustain a second concussion. Repeat concussions can cause permanent brain injury.

What can happen if a student-athlete continues to play with a concussion or returns to play to soon?

- Continuing to play with the signs and symptoms of a concussion leaves the student-athlete vulnerable to second impact syndrome.
- Second impact syndrome is when a student-athlete sustains a second concussion while still having symptoms from a previous concussion or head injury.
- Second impact syndrome can lead to severe impairment and even death in extreme cases.

Should there be any temporary academic accommodations made for Student-Athletes who have suffered a concussion?

- To recover cognitive rest is just as important as physical rest. Reading, texting, testing-even watching movies can slow down a student-athletes recovery.
- Stay home from school with minimal mental and social stimulation until all symptoms have resolved.
- Students may need to take rest breaks, spend fewer hours at school, be given extra time to complete assignments, as well as being offered other instructional strategies and classroom accommodations.

Student-Athletes who have sustained a concussion should complete a graduated return-to-play before they may resume competition or practice, according to the following protocol:

- **Step 1:** Completion of a full day of normal cognitive activities (school day, studying for tests, watching practice, interacting with peers) without reemergence of any signs or symptoms. If no return of symptoms, next day advance.
- **Step 2:** Light Aerobic exercise, which includes walking, swimming, and stationary cycling, keeping the intensity below 70% maximum heart rate. No resistance training. The objective of this step is increased heart rate.
- **Step 3:** Sport-specific exercise including skating, and/or running: no head impact activities. The objective of this step is to add movement.
- **Step 4:** Non contact training drills (e.g. passing drills). Student-athlete may initiate resistance training.
- **Step 5:** Following medical clearance (consultation between school health care personnel and student-athlete's physician), participation in normal training activities. The objective of this step is to restore confidence and assess functional skills by coaching and medical staff.
- **Step 6:** Return to play involving normal exertion or game activity.

For further information on Sports-Related Concussions and other Head Injuries, please visit:

www.cdc.gov/concussion/sports/index.html www.nfhs.com
www.ncaa.org/health-safety www.bianj.org www.atsnj.org

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

SPORTS-RELATED EYE INJURIES:

AN EDUCATIONAL FACT SHEET FOR PARENTS

Participating in sports and recreational activities is an important part of a healthy, physically active lifestyle for children. Unfortunately, injuries can, and do, occur. Children are at particular risk for sustaining a sports-related eye injury and most of these injuries can be prevented. Every year, more than 30,000 children sustain serious sports-related eye injuries. Every 13 minutes, an emergency room in the United States treats a sports-related eye injury.[1] According to the National Eye Institute, the sports with the highest rate of eye injuries are: baseball/softball, ice hockey, racquet sports, and basketball, followed by fencing, lacrosse, paintball and boxing.

Thankfully, there are steps that parents can take to ensure their children's safety on the field, the court, or wherever they play or participate in sports and recreational activities.

Prevention of Sports-Related Eye Injuries

Approximately 90% of sports-related eye injuries can be prevented with simple precautions, such as using protective eyewear.[2] **Each sport has a certain type of recommended protective eyewear, as determined by the American Society for Testing and Materials (ASTM). Protective eyewear should sit comfortably on the face. Poorly fitted equipment may be uncomfortable, and may not offer the best eye protection. Protective eyewear for sports includes, among other things, safety goggles and eye guards, and it should be made of polycarbonate lenses, a strong, shatterproof plastic. Polycarbonate lenses are much stronger than regular lenses.**[3]

Health care providers (HCP), including family physicians, ophthalmologists, optometrists, and others, play a critical role in advising students, parents and guardians about the proper use of protective eyewear. To find out what kind of eye protection is recommended, and permitted for your child's sport, visit the National Eye Institute at http://www.nei.nih.gov/sports/findingprotection.asp. Prevent Blindness America also offers tips for choosing and buying protective eyewear at http://www.preventblindness.org/tips buying-sports-eye-protectors,and http://www.preventblindness.org/ recommended-sports-eye-protectors.

It is recommended that all children participating in school sports or recreational sports wear protective eyewear. Parents and coaches need to make sure young athletes protect their eyes, and properly gear up for the game. Protective eyewear should be part of any uniform to help reduce the occurrence of sports-related eye injuries. Since many youth teams do not require eye protection, parents may need to ensure that their children wear safety glasses or goggles whenever they play sports. Parents can set a good example by wearing protective eyewear when they play sports.

[1] National Eye Institute, National Eye Health Education Program, Sports-Related Eye Injuries: What You Need to Know and Tips for Prevention, www.nei.nih.gov/sports/pdf/sportsrelatedeyeInjuries.pdf, December 26, 2013.

[2] Rodriguez, Jorge O., D.O., and Lavina, Adrian M., M.D., Prevention and Treatment of Common Eye Injuries in Sports, http://www.aafp.org/afp/2003/0401/p1481.html, September 4, 2014; National Eye Health Education Program, Sports-Related Eye Injuries: What You Need to Know and Tips for Prevention, www.nei.nih.gov/sports/pdf/sportsrelatedeyeInjuries.pdf, December 26, 2013.

[3] Bedinghaus, Troy, O.D., Sports Eye Injuries, http://vision.about.com/od/emergencyeyecare/a/Sports_Injuries.htm, December 27, 2013.

Most Common Types of Eye Injuries

The most common types of eye injuries that can result from sports injuries are blunt injuries, corneal abrasions and penetrating injuries.

- **Blunt injuries:** Blunt injuries occur when the eye is suddenly compressed by impact from an object. Blunt injuries, often caused by tennis balls, racquets, fists or elbows, sometimes cause a black eye or hyphema (bleeding in front of the eye). More serious blunt injuries often break bones near the eye, and may sometimes seriously damage important eye structures and/or lead to vision loss.
- **Corneal abrasions:** Corneal abrasions are painful scrapes on the outside of the eye, or the cornea. Most corneal abrasions eventually heal on their own, but a doctor can best assess the extent of the abrasion, and may prescribe medication to help control the pain. The most common cause of a sports-related corneal abrasion is being poked in the eye by a finger.
- **Penetrating injuries:** Penetrating injuries are caused by a foreign object piercing the eye. Penetrating injuries are very serious, and often result in severe damage to the eye. These injuries often occur when eyeglasses break while they are being worn. Penetrating injuries must be treated quickly in order to preserve vision.[4]

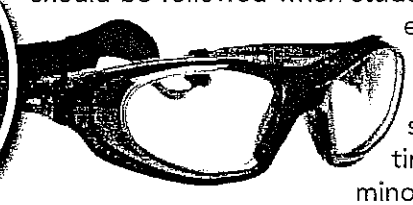
Signs or Symptoms of an Eye Injury

- Pain when looking up and/or down, or difficulty seeing;
- Tenderness;
- Sunken eye;
- Double vision;
- Severe eyelid and facial swelling;
- Difficulty tracking;
- The eye has an unusual pupil size or shape;
- Blood in the clear part of the eye;
- Numbness of the upper cheek and gum, and/or
- Severe redness around the white part of the eye.

What to do if a Sports-Related Eye Injury Occurs

If a child sustains an eye injury, it is recommended that he/she receive immediate treatment from a licensed HCP (e.g., eye doctor) to reduce the risk of serious damage, including blindness. It is also recommended that the child, along with his/her parent or guardian, seek guidance from the HCP regarding the appropriate amount of time to wait before returning to sports competition or practice after sustaining an eye injury. The school nurse and the child's teachers should also be notified when a child sustains an eye injury. A parent or guardian should also provide the school nurse with a physician's note detailing the nature of the eye injury, any diagnosis, medical orders for the return to school, as well as any prescription(s) and/or treatment(s) necessary to promote healing, and the safe resumption of normal activities, including sports and recreational activities.

Return to Play and Sports



According to the American Family Physician Journal, there are several guidelines that should be followed when students return to play after sustaining an eye injury. For example, students who have sustained significant ocular injury should receive a full examination and clearance by an ophthalmologist or optometrist. In addition, students should not return to play until the period of time recommended by their HCP has elapsed. For more minor eye injuries, the athletic trainer may determine that it is safe for a student to resume play based on the nature of the injury, and how the student feels. No matter what degree of eye injury is sustained, it is recommended that students wear protective eyewear when returning to play and immediately report any concerns with their vision to their coach and/or the athletic trainer.

Additional information on eye safety can be found at http://isee.nei.nih.gov and http://www.nei.nih.gov/sports.

[4]Bedinghaus, Troy, O.D., Sports Eye Injuries, http://vision.about.com/od/emergencyeyecare/a/Sports_Injuries.htm, December 27, 2013.

OPIOID USE AND MISUSE EDUCATIONAL FACT SHEET

Keeping Student-Athletes Safe

School athletics can serve an integral role in students' development. In addition to providing healthy forms of exercise, school athletics foster friendships and camaraderie, promote sportsmanship and fair play, and instill the value of competition.

Unfortunately, sports activities may also lead to injury and, in rare cases, result in pain that is severe or long-lasting enough to require a prescription opioid painkiller.[1] It is important to understand that overdoses from opioids are on the rise and are killing Americans of all ages and backgrounds. Families and communities across the country are coping with the health, emotional and economic effects of this epidemic.[2]

This educational fact sheet, created by the New Jersey Department of Education as required by state law (*N.J.S.A.* 18A:40-41.10), provides information concerning the use and misuse of opioid drugs in the event that a health care provider prescribes a student-athlete or cheerleader an opioid for a sports-related injury. Student-athletes and cheerleaders participating in an interscholastic sports program (and their parent or guardian, if the student is under age 18) must provide their school district written acknowledgment of their receipt of this fact sheet.

How Do Athletes Obtain Opioids?

In some cases, student-athletes are prescribed these medications. According to research, about a third of young people studied obtained pills from their own previous prescriptions (i.e., an unfinished prescription used outside of a physician's supervision), and 83 percent of adolescents had unsupervised access to their prescription medications.[3] It is important for parents to understand the possible hazard of having unsecured prescription medications in their households. Parents should also understand the importance of proper storage and disposal of medications, even if they believe their child would not engage in non-medical use or diversion of prescription medications.

What Are Signs of Opioid Use?

According to the National Council on Alcoholism and Drug Dependence, 12 percent of male athletes and 8 percent of female athletes had used prescription opioids in the 12-month period studied.[3] In the early stages of abuse, the athlete may exhibit unprovoked nausea and/or vomiting. However, as he or she develops a tolerance to the drug, those signs will diminish. Constipation is not uncommon, but may not be reported. One of the most significant indications of a possible opioid addiction is an athlete's decrease in academic or athletic performance, or a lack of interest in his or her sport. If these warning signs are noticed, best practices call for the student to be referred to the appropriate professional for screening,[4] such as provided through an evidence-based practice to identify problematic use, abuse and dependence on illicit drugs (e.g., Screening, Brief Intervention, and Referral to Treatment (SBIRT)) offered through the New Jersey Department of Health.

What Are Some Ways Opioid Use and Misuse Can Be Prevented?

According to NJSIAA Sports Medical Advisory Committee chair, John P. Kripsak, D.O., "Studies indicate that about 80 percent of heroin users started out by abusing narcotic painkillers."

According to the New Jersey State Interscholastic Athletic Association (NJSIAA) Sports Medical Advisory Committee chair, John P. Kripsak, D.O., "Studies indicate that about 80 percent of heroin users started out by abusing narcotic painkillers."

The Sports Medical Advisory Committee, which includes representatives of NJSIAA member schools as well as experts in the field of healthcare and medicine, recommends the following:

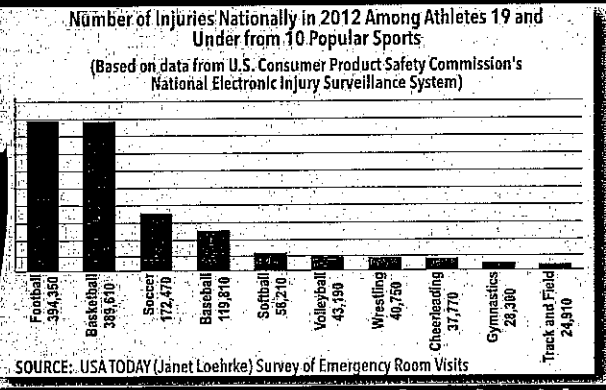
- The pain from most sports-related injuries can be managed with non-narcotic medications such as acetaminophen, non-steroidal anti-inflammatory medications like ibuprofen, naproxen or aspirin. Read the label carefully and always take the recommended dose, or follow your doctor's instructions. More is not necessarily better when taking an over-the-counter (OTC) pain medication, and it can lead to dangerous side effects.
- Ice therapy can be utilized appropriately as an anesthetic.
- Always discuss with your physician exactly what is being prescribed for pain and request to avoid narcotics.
- Tramadol, a non-opioid analgesic in the serotonin uptake inhibitor category, is a good choice should the previously listed options be insufficient to relieve pain.
- In extreme cases, such as severe trauma or post-surgical pain, opioid pain medication should not be prescribed for more than five days at a time;
- Parents or guardians should always control the dispensing of pain medications and keep them in a safe, non-accessible location; and
- Unused medications should be disposed of immediately upon cessation of use. Ask your pharmacist about drop-off locations or home disposal kits like Deterra or Medsaway.

STATE OF NEW JERSEY
DEPARTMENT OF EDUCATION
In consultation with

NJ Health New Jersey Department of Health | STATE OF NEW JERSEY DEPARTMENT OF HEALTH

NJSIAA | NJSIAA SPORTS MEDICAL ADVISORY COMMITTEE

Karan Chauhan
Parsippany Hills High School,
Permanent Student Representative
New Jersey State Board of Education



Even With Proper Training and Prevention, Sports Injuries May Occur

There are two kinds of sports injuries. Acute injuries happen suddenly, such as a sprained ankle or strained back. Chronic injuries may happen after someone plays a sport or exercises over a long period of time, even when applying overuse-preventative techniques.[5]

Athletes should be encouraged to speak up about injuries, coaches should be supported in injury-prevention decisions, and parents and young athletes are encouraged to become better educated about sports safety.[6]

What Are Some Ways to Reduce the Risk of Injury?[7]

Half of all sports medicine injuries in children and teens are from overuse. An overuse injury is damage to a bone, muscle, ligament, or tendon caused by repetitive stress without allowing time for the body to heal. Children and teens are at increased risk for overuse injuries because growing bones are less resilient to stress. Also, young athletes may not know that certain symptoms are signs of overuse.

The best way to deal with sports injuries is to keep them from happening in the first place. Here are some recommendations to consider:

PREPARE Obtain the preparticipation physical evaluation prior to participation on a school-sponsored interscholastic or intramural athletic team or squad.

CONDITIONING Maintain a good fitness level during the season and offseason. Also important are proper warm-up and cooldown exercises.

PLAY SMART Try a variety of sports and consider specializing in one sport before late adolescence to help avoid overuse injuries.

ADEQUATE HYDRATION Keep the body hydrated to help the heart more easily pump blood to muscles, which helps muscles work efficiently.

TRAINING Increase weekly training time, mileage or repetitions no more than 10 percent per week. For example, if running 10 miles one week, increase to 11 miles the following week. Athletes should also cross-train and perform sport-specific drills in different ways, such as running in a swimming pool instead of only running on the road.

REST UP Take at least one day off per week from organized activity to recover physically and mentally. Athletes should take a combined three months off per year from a specific sport (may be divided throughout the year in one-month increments). Athletes may remain physically active during rest periods through alternative low-stress activities such as stretching, yoga or walking.

PROPER EQUIPMENT Wear appropriate and properly fitted protective equipment such as pads (neck, shoulder, elbow, chest, knee, and shin), helmets, mouthpieces, face guards, protective cups, and eyewear. Do not assume that protective gear will prevent all injuries while performing more dangerous or risky activities.

Resources for Parents and Students on Preventing Substance Misuse and Abuse

The following list provides some examples of resources:

National Council on Alcoholism and Drug Dependence – NJ promotes addiction treatment and recovery.
New Jersey Department of Human Services, Division of Mental Health and Addiction Services has a mission to decrease the abuse of alcohol, tobacco and other drugs by supporting the development of a comprehensive network of prevention, intervention and treatment services in New Jersey.
New Jersey Prevention Network includes a parent's quiz on the effects of opioids.
Operation Prevention Parent Toolkit is designed to help parents learn more about the opioid epidemic, recognize warning signs, and open lines of communication with their children and those in the community.
Parent to Parent NJ is a grassroots coalition for families and children struggling with alcohol and drug addiction.
Partnership for a Drug Free New Jersey is New Jersey's anti-drug alliance created to localize and strengthen drug-prevention media efforts to prevent unlawful drug use, especially among young people.
ReachNJ provides information for parents and families, including addiction and treatment stories.
The Science of Addiction: The Stories of Teens shares common misconceptions about opioids through the voices of teens.
Youth IMPACTing NJ is made up of youth representatives from coalitions across the state of New Jersey who have been impacting their communities and peers by spreading the word about the dangers of underage drinking, marijuana use, and other substance misuse.

References
[1] Massachusetts Technical Assistance Partnership for Prevention
[2] Centers for Disease Control and Prevention
[3] New Jersey State Interscholastic Athletic Association (NJSIAA) Sports Medical Advisory Committee (SMAC)
[4] Athletic Management, David Csillan, athletic trainer, Ewing High School, NJSIAA SMAC
[5] National Institute of Arthritis and Musculoskeletal and Skin Diseases
[6] USA TODAY
[7] American Academy of Pediatrics

An online version of this fact sheet developed in January 2018 is available on the New Jersey Department of Education's Alcohol, Tobacco, and Other Drug Use webpage.

[The New Jersey Department of Education developed this template Student-Athlete Sign-Off Form in January 2018 to assist schools with adhering to state statute requiring student-athletes (and their parents/guardians, if the student is a minor) to confirm they have received an Opioid Fact Sheet from the school. School districts, approved private schools for students with disabilities, and nonpublic schools that participate in an interscholastic sports or cheerleading program should insert their district or school letterhead here.]

Use and Misuse of Opioid Drugs Fact Sheet

Student-Athlete and Parent/Guardian Sign-Off

In accordance with *N.J.S.A.* 18A:40-41.10, public school districts, approved private schools for students with disabilities, and nonpublic schools participating in an interscholastic sports program must distribute this *Opioid Use and Misuse Educational Fact Sheet* to all student-athletes and cheerleaders. In addition, schools and districts must obtain a signed acknowledgement of receipt of the fact sheet from each student-athlete and cheerleader, and for students under age 18, the parent or guardian must also sign.

This sign-off sheet is due to the appropriate school personnel as determined by your district prior to the first official practice session of the spring 2018 athletic season (March 2, 2018, as determined by the New Jersey State Interscholastic Athletic Association) and annually thereafter prior to the student-athlete's or cheerleader's first official practice of the school year.

Name of School: Memorial School

Name of School District: Eatontown Public Schools

I/We acknowledge that we received and reviewed the Educational Fact Sheet on the Use and Misuse of Opioid Drugs.

Student Signature: _____

Parent/Guardian Signature (also needed if student is under age 18):

_____

Date:_____

[1]Does not include athletic clubs or intramural events.

urces

letes
rg/sudden-death-in-

myopathy Association

ciation www.heart.org

Agencies:

f Pediatrics

ad, Suite 108

iation
)1

nt of Education

)

tion/

nt of Health

)

cademy of Pediatrics,

y Sushma Raman Hebbar,
D PhD

Department of Education,
and Senior Services,
on/New Jersey Chapter, NJ
ce, Pediatric Cardiologists,
Nurses

DeWitt-Parker, MSN, CSN, RN;
usan Martz, EdM;
ey Rosenberg, MD,
Weinstock, MD

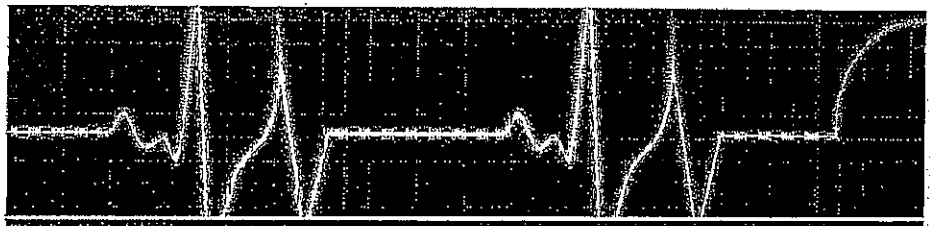
SUDDEN CARDIAC DEATH IN YOUNG ATHLETES

The Basic Facts on Sudden Cardiac Death in Young Athletes

STATE OF NEW JERSEY
DEPARTMENT OF EDUCATION

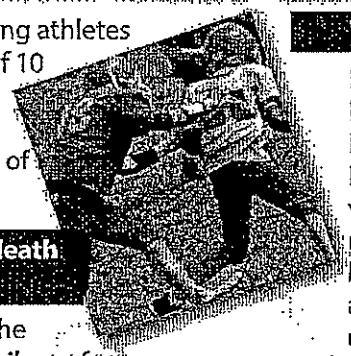
American Heart Association

Learn and Live



SUDDEN CARDIAC DEATH IN YOUNG ATHLE

Sudden 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?



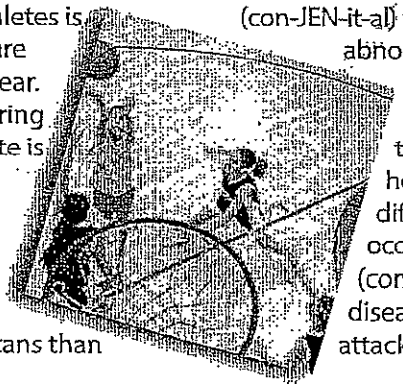
What is sudden cardiac death in the young athlete?

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 con

Research suggests that loss of proper heart rhyt heart to quiver instead blood to the brain and b ventricular fibrillation (ve roo-LAY-shun). The probl by one of several cardiov and electrical diseases of unnoticed in healthy-app

The most common caus an athlete is hypertrophi (hi-per-TRO-fic CAR- dee also called HCM. HCM is with abnormal thickenin muscle, which can cause problems and blockages genetic disease runs in fa develops gradually over

The second most likely c (con-JEN-it-al) (i.e., prese abnormalities c arteries. T blood ves the main b heart in an differs from occur when p (commonly c disease," which attack).

heart that can lead to
ıg people include:

ı-car-DIE-tis), an acute
e heart muscle (usually

ɔathy, an enlargement
known reasons.

and other electrical
e heart which cause
t rhythms that can also

an inherited disorder
alves, walls of major
he skeleton. It is
nusually tall athletes,
all is not common in
ers.

igns to watch for?

ɔf these sudden cardiac
arning signs that were
ı seriously. Warning

ɔr convulsions during

e from emotional
ɔnal distress or being

eadedness, especially

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 ev
review of the family hea
be performed on a year
athlete's primary health
proper screening and e
cases can be identified.

Why have an AED on s events?

The only effective treat
fibrillation is immediate
automated external def
AED can restore the hea
normal rhythm. An AED
ventricular fibrillation c
the chest over the heart

Effective September 1, :
Department of Educatic
public and nonpublic sc
through 12 shall:

- Have an AED availabl
event (three minutes
and return with the A
- Have adequate perso
in AED use present at
games;
- Have coaches and ath
in basic life support te
- Call 911 immediately
retrieving the AED.

State of New Jersey
DEPARTMENT OF EDUCATION

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: _____