

ATTENTION PARENT/GUARDIAN: The preparticipation physical examination (page 3) must be completed by a health care provider who has completed the Student-Athlete Cardiac Assessment Professional Development Module.

■ PREPARTICIPATION PHYSICAL EVALUATION HISTORY FORM

(Note: This form is to be filled out by the patient and parent prior to seeing the physician. The physician should keep a copy of this form in the chart.)

Date of Exam _____

Name _____ Date of birth _____

Sex _____ Age _____ Grade _____ School _____ Sport(s) _____

Medicines and Allergies: Please list all of the prescription and over-the-counter medicines and supplements (herbal and nutritional) that you are currently taking

Do you have any allergies? ☐ Yes ☐ No If yes, please identify specific allergy below.

☐ Medicines ☐ Pollens ☐ Food ☐ Stinging Insects

Explain "Yes" answers below. Circle questions you don't know the answers to.

[illegible]

I hereby state that, to the best of my knowledge, my answers to the above questions are complete and correct.

| | | |
|----------------------|------------------------------|------|
| Signature of athlete | Signature of parent/guardian | Date |
|----------------------|------------------------------|------|

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New Jersey Department of Education 2014; Pursuant to P.L.2013, c.71

9.2631.5M10

■ PREPARTICIPATION PHYSICAL EVALUATION THE ATHLETE WITH SPECIAL NEEDS: SUPPLEMENTAL HISTORY FORM

Date of Exam _____

Name _____ Date of birth _____

Sex _____ Age _____ Grade _____ School _____ Sport(s) _____

| | | |
|--|-----|----|
| 1. Type of disability | | |
| 2. Date of disability | | |
| 3. Classification (if available) | | |
| 4. Cause of disability (birth, disease, accident/trauma, other) | | |
| 5. List the sports you are interested in playing | | |
| | Yes | No |
| 6. Do you regularly use a brace, assistive device, or prosthetic? | | |
| 7. Do you use any special brace or assistive device for sports? | | |
| 8. Do you have any rashes, pressure sores, or any other skin problems? | | |
| 9. Do you have a hearing loss? Do you use a hearing aid? | | |
| 10. Do you have a visual impairment? | | |
| 11. Do you use any special devices for bowel or bladder function? | | |
| 12. Do you have burning or discomfort when urinating? | | |
| 13. Have you had autonomic dysreflexia? | | |
| 14. Have you ever been diagnosed with a heat-related (hyperthermia) or cold-related (hypothermia) illness? | | |
| 15. Do you have muscle spasticity? | | |
| 16. Do you have frequent seizures that cannot be controlled by medication? | | |

Explain "yes" answers here

Please indicate if you have ever had any of the following.

| | | |
|---|-----|----|
| | Yes | No |
| Atlantoaxial instability | | |
| X-ray evaluation for atlantoaxial instability | | |
| Dislocated joints (more than one) | | |
| Easy bleeding | | |
| Enlarged spleen | | |
| Hepatitis | | |
| Osteopenia or osteoporosis | | |
| Difficulty controlling bowel | | |
| Difficulty controlling bladder | | |
| Numbness or tingling in arms or hands | | |
| Numbness or tingling in legs or feet | | |
| Weakness in arms or hands | | |
| Weakness in legs or feet | | |
| Recent change in coordination | | |
| Recent change in ability to walk | | |
| Spina bifida | | |
| Latex allergy | | |

Explain "yes" answers here

I hereby state that, to the best of my knowledge, my answers to the above questions are complete and correct.

Signature of athlete _____ Signature of parent/guardian _____ Date _____

NOTE: The preparticipation physical examination must be conducted by a health care provider who 1) is a licensed physician, advanced practitioner, nurse, or physician assistant; and 2) completed the Student-Athlete Cardiac Assessment Professional Development Module.

PREPARTICIPATION PHYSICAL EVALUATION PHYSICAL EXAMINATION FORM

Name _____ Date of birth _____

PHYSICIAN REMINDERS

- Consider additional questions on more sensitive issues
 - Do you feel stressed out or under a lot of pressure?
 - Do you ever feel sad, hopeless, depressed, or anxious?
 - Do you feel safe at your home or residence?
 - Have you ever tried cigarettes, chewing tobacco, snuff, or dip?
 - During the past 30 days, did you use chewing tobacco, snuff, or dip?
 - Do you drink alcohol or use any other drugs?
 - Have you ever taken anabolic steroids or used any other performance supplement?
 - Have you ever taken any supplements to help you gain or lose weight or improve your performance?
 - Do you wear a seat belt, use a helmet, and use condoms?
- Consider reviewing questions on cardiovascular symptoms (questions 5–14).

| EXAMINATION | | |
|---|--------------|--|
| Height _____ | Weight _____ | <input type="checkbox"/> Male <input type="checkbox"/> Female |
| BP _____ / _____ (_____ / _____) | Pulse _____ | Vision R 20/ _____ L 20/ _____ Corrected <input type="checkbox"/> Y <input type="checkbox"/> N |
| MEDICAL | NORMAL | ABNORMAL FINDINGS |
| Appearance • Marfan stigmata (kyphoscoliosis, high-arched palate, pectus excavatum, arachnodactyly, arm span > height, hyperlaxity, myopia, MVP, aortic insufficiency) | | |
| Eyes/ears/nose/throat • Pupils equal • Hearing | | |
| Lymph nodes | | |
| Heart ^a • Murmurs (auscultation standing, supine, +/- Valsalva) • Location of point of maximal impulse (PMI) | | |
| Pulses • Simultaneous femoral and radial pulses | | |
| Lungs | | |
| Abdomen | | |
| Genitourinary (males only) ^b | | |
| Skin • HSV lesions suggestive of MRSA, tinea corporis | | |
| Neurologic ^c | | |
| MUSCULOSKELETAL | | |
| Neck | | |
| Back | | |
| Shoulder/arm | | |
| Elbow/forearm | | |
| Wrist/hand/fingers | | |
| Hip/thigh | | |
| Knee | | |
| Leg/ankle | | |
| Foot/toes | | |
| Functional • Duck-walk, single leg hop | | |

^aConsider ECG, echocardiogram, and referral to cardiology for abnormal cardiac history or exam.

^bConsider GU exam if in private setting. Having third party present is recommended.

^cConsider cognitive evaluation or baseline neuropsychiatric testing if a history of significant concussion.

- ☐ Cleared for all sports without restriction
- ☐ Cleared for all sports without restriction with recommendations for further evaluation or treatment for _____
- ☐ Not cleared
- ☐ Pending further evaluation
- ☐ For any sports
- ☐ For certain sports _____
- Reason _____

Recommendations _____

I have examined the above-named student and completed the preparticipation physical evaluation. The athlete does not present apparent clinical contraindications to practice and participate in the sport(s) as outlined above. A copy of the physical exam is on record in my office and can be made available to the school at the request of the parents. If conditions arise after the athlete has been cleared for participation, a physician may rescind the clearance until the problem is resolved and the potential consequences are completely explained to the athlete (and parents/guardians).

Name of physician, advanced practice nurse (APN), physician assistant (PA) (print/type) _____ Date _____

Address _____ Phone _____

Signature of physician, APN, PA _____

■ PREPARTICIPATION PHYSICAL EVALUATION CLEARANCE FORM

Name _____ Sex ☐ M ☐ F Age _____ Date of birth _____

☐ Cleared for all sports without restriction

☐ Cleared for all sports without restriction with recommendations for further evaluation or treatment for _____

☐ Not cleared

☐ Pending further evaluation

☐ For any sports

☐ For certain sports _____

Reason _____

Recommendations _____

EMERGENCY INFORMATION

Allergies _____

Other information _____

HCP OFFICE STAMP

| |
|--|
| |
|--|

SCHOOL PHYSICIAN:

Reviewed on _____

(Date)

Approved _____ Not Approved _____

Signature: _____

I have examined the above-named student and completed the preparticipation physical evaluation. The athlete does not present apparent clinical contraindications to practice and participate in the sport(s) as outlined above. A copy of the physical exam is on record in my office and can be made available to the school at the request of the parents. If conditions arise after the athlete has been cleared for participation, the physician may rescind the clearance until the problem is resolved and the potential consequences are completely explained to the athlete (and parents/guardians).

Name of physician, advanced practice nurse (APN), physician assistant (PA) _____ Date _____

Address _____ Phone _____

Signature of physician, APN, PA _____

Completed Cardiac Assessment Professional Development Module

Date _____ Signature _____

State of New Jersey
DEPARTMENT OF EDUCATION

HEALTH HISTORY UPDATE QUESTIONNAIRE

Name of School _____

To participate on a school-sponsored interscholastic or intramural athletic team or squad, each student whose physical examination was completed more than 90 days prior to the first day of official practice shall provide a healthy history update questionnaire completed and signed by the student's parent or guardian.

Student _____ Age _____ Grade _____

Date of Last Physical Examination _____ Sport _____

Since the last pre-participation physical examination, has your son/daughter:

1. Been medically advised not to participate in a sport? Yes ____ No ____
If yes, describe in detail _____

2. Sustained a concussion, been unconscious or lost memory from a blow to the head? Yes ____ No ____
If yes, explain in detail _____

3. Broken a bone or sprained/strained/dislocated any muscle or joints? Yes ____ No ____
If yes, explain in detail _____

4. Fainted or "blacked out" Yes ____ No ____
If yes, was this during or immediately after exercise? _____

5. Experience chest pains, shortness of breath or "racing heart?" Yes ____ No ____
If yes, explain _____

6. Has there been a recent history of fatigue and unusual tiredness? Yes ____ No ____
7. Been hospitalized or had to go to the emergency room? Yes ____ No ____
If yes, explain in detail _____

8. Since the last physical examination, has there been a sudden death in the family or has any member of the family under age 50 had a heart attack or "heart trouble?" Yes ____ No ____
9. Started or stopped taking any over-the-counter or prescribed medications? Yes ____ No ____
If yes, name of medication(s) _____

Date: _____ Signature of parent/guardian _____

PLEASE RETURN COMPLETED FORM TO THE SCHOOL NURSE'S OFFICE

Website Resources

- Sudden Death in Athletes
<http://tinyurl.com/m2gjmva>
- Hypertrophic Cardiomyopathy Association
www.4hcm.org
- American Heart Association 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



American Heart Association

1 Union Street, Suite 301
Robbinsville, NJ, 08691
(p) 609-208-0020
www.heart.org



New Jersey Department of Education

P.O. Box 500
Trenton, NJ 08625-0500
(p) 609-292-5935
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



Lead Author: American Academy of Pediatrics,

New Jersey Chapter

Written by: Initial draft by **Sushma Raman Hebbat, 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:

Nancy Curry, EdM;
Christine 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

The Basic Facts on Sudden Cardiac Death in Young Athletes



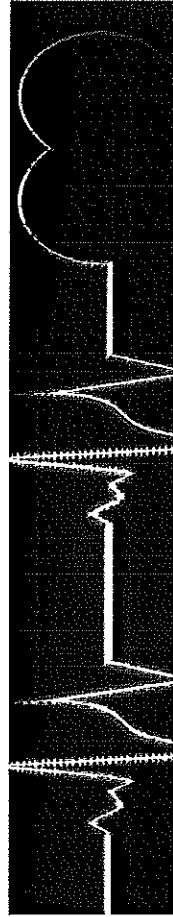
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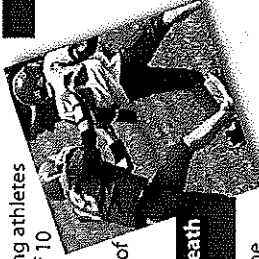
American Heart
Association

Learn and Live



SUDDEN CARDIAC DEATH IN YOUNG ATHLETES

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.

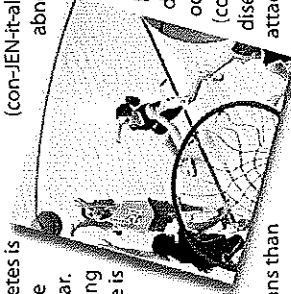
Sudden cardiac death is more common: in males than in females; in football and basketball than in other sports; and in African-Americans than in other races and ethnic groups.

What are the most 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 (labored breathing).

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 Preparation Physical Examination Form (PPE). 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.

Are there options privately available to screen for cardiac conditions?

Technology-based screening programs including a 12-lead electrocardiogram (ECG) and echocardiogram (ECHO) are noninvasive and painless options parents may consider in addition to the required

PPE. However, these procedures may be expensive and are not currently advised by the American Academy of Pediatrics and the American College of Cardiology unless the PPE reveals an indication for these tests. In addition to the expense, other limitations of technology-based tests include the possibility of "false positives" which leads to unnecessary stress for the student and parent or guardian as well as unnecessary restriction from athletic participation.

The United States Department of Health and Human Services offers risk assessment options under the Surgeon General's Family History Initiative available at <http://www.hhs.gov/familyhistory/index.html>.

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).

N.J.S.A. 18A:40-41a through c, known as "Janet's Law," requires that at any school-sponsored athletic event or team practice in New Jersey public and nonpublic schools including any of grades K through 12, the following must be available:

- An AED in an unlocked location on school property within a reasonable proximity to the athletic field or gymnasium; and
 - A team coach, licensed athletic trainer, or other designated staff member if there is no coach or licensed athletic trainer present, certified in cardiopulmonary resuscitation (CPR) and the use of the AED; or
 - A State-certified emergency services provider or other certified first responder.
- The American Academy of Pediatrics recommends the AED should be placed in central location that is accessible and ideally no more than a 1 to 1½ minute walk from any location and that a call is made to activate 911 emergency system while the AED is being retrieved.

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: _____

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

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 too 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