

**GARWOOD PUBLIC SCHOOLS**  
**SPORT REGISTRATION AND PERMISSION FORM**

This form must be filled out completely and signed before a student becomes a candidate for participation in any interscholastic sport of the Garwood Public Schools.

**Part I – Student Participation** (to be filled out and signed by candidate)

**Name:** \_\_\_\_\_ **Sport:** \_\_\_\_\_ **DOB:** \_\_\_\_\_  
**Address:** \_\_\_\_\_ **Phone:** \_\_\_\_\_ **Grade:** \_\_\_\_\_

I, \_\_\_\_\_, hereby agree to conduct myself in an appropriate manner according to the laws of the State and the rules/requirements of my school and coaches. I recognize that I have accepted a challenge to be the best I can be by participating in the activity. I, therefore, agree that any conduct on or off school property in contrary to law and school rules and rules of my coach will result in dismissal from the above activity according to the policy set forth by the Board of Education. Further, I agree to be responsible for and will return all equipment issued to me or pay for that portion that is lost or unduly damaged.

**Date:** \_\_\_\_\_ **Student Signature:** \_\_\_\_\_

**Part II – Parental Approval Form** (to be filled out and signed by parent/guardian)

I agree to abide by the rules and regulations and I waive and release all rights and claims for damages against the Garwood Public Schools, their agents, representatives and assignees for any and all injuries suffered by the minor named above in said activities. I understand my child must maintain a “C” average in all academic subjects and maintain a good conduct record. I understand it is my responsibility to provide transportation for my child to and from the activity site. I understand I will conduct myself in a mature and appropriate manner at all games. I acknowledge I have submitted all appropriate medical information and updates and I am aware of the risk of concussion and sudden cardiac death. I understand it is my responsibility to update the coach if there is any change in medical condition in my child during the sport season.

**Date:** \_\_\_\_\_ **Parent/Guardian Signature:** \_\_\_\_\_

**Part III – Emergency Contact Information**

**Mother's Name** \_\_\_\_\_ **Phone** \_\_\_\_\_

**Father's Name** \_\_\_\_\_ **Phone** \_\_\_\_\_

**Alternate Emergency Contact Name:** \_\_\_\_\_ **Phone** \_\_\_\_\_

My child is allowed to walk home after the practice or game is completed

Yes \_\_\_\_\_ NO \_\_\_\_\_ Initial \_\_\_\_\_

# 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

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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.

| GENERAL QUESTIONS  | Yes | No |
|--|-----|----|
| 1. Has a doctor ever denied or restricted your participation in sports for any reason?   |     |    |
| 2. Do you have any ongoing medical conditions? If so, please identify below: <input type="checkbox"/> Asthma <input type="checkbox"/> Anemia <input type="checkbox"/> Diabetes <input type="checkbox"/> Infections<br>Other: _____   |     |    |
| 3. Have you ever spent the night in the hospital?  |     |    |
| 4. Have you ever had surgery?  |     |    |
| HEART HEALTH QUESTIONS ABOUT YOU   | Yes | No |
| 5. Have you ever passed out or nearly passed out DURING or AFTER exercise?   |     |    |
| 6. Have you ever had discomfort, pain, tightness, or pressure in your chest during exercise?   |     |    |
| 7. Does your heart ever race or skip beats (irregular beats) during exercise?  |     |    |
| 8. Has a doctor ever told you that you have any heart problems? If so, check all that apply:<br><input type="checkbox"/> High blood pressure <input type="checkbox"/> A heart murmur<br><input type="checkbox"/> High cholesterol <input type="checkbox"/> A heart infection<br><input type="checkbox"/> Kawasaki disease Other: _____ |     |    |
| 9. Has a doctor ever ordered a test for your heart? (For example, ECG/EKG, echocardiogram)   |     |    |
| 10. Do you get lightheaded or feel more short of breath than expected during exercise?   |     |    |
| 11. Have you ever had an unexplained seizure?  |     |    |
| 12. Do you get more tired or short of breath more quickly than your friends during exercise?   |     |    |
| HEART HEALTH QUESTIONS ABOUT YOUR FAMILY   | Yes | No |
| 13. Has any family member or relative died of heart problems or had an unexpected or unexplained sudden death before age 50 (including drowning, unexplained car accident, or sudden infant death syndrome)?   |     |    |
| 14. Does anyone in your family have hypertrophic cardiomyopathy, Marfan syndrome, arrhythmogenic right ventricular cardiomyopathy, long QT syndrome, short QT syndrome, Brugada syndrome, or catecholaminergic polymorphic ventricular tachycardia?  |     |    |
| 15. Does anyone in your family have a heart problem, pacemaker, or implanted defibrillator?  |     |    |
| 16. Has anyone in your family had unexplained fainting, unexplained seizures, or near drowning?  |     |    |
| BONE AND JOINT QUESTIONS   | Yes | No |
| 17. Have you ever had an injury to a bone, muscle, ligament, or tendon that caused you to miss a practice or a game?   |     |    |
| 18. Have you ever had any broken or fractured bones or dislocated joints?  |     |    |
| 19. Have you ever had an injury that required x-rays, MRI, CT scan, injections, therapy, a brace, a cast, or crutches?   |     |    |
| 20. Have you ever had a stress fracture?   |     |    |
| 21. Have you ever been told that you have or have you had an x-ray for neck instability or atlantoaxial instability? (Down syndrome or dwarfism)   |     |    |
| 22. Do you regularly use a brace, orthotics, or other assistive device?  |     |    |
| 23. Do you have a bone, muscle, or joint injury that bothers you?  |     |    |
| 24. Do any of your joints become painful, swollen, feel warm, or look red?   |     |    |
| 25. Do you have any history of juvenile arthritis or connective tissue disease?  |     |    |

| MEDICAL QUESTIONS   | Yes | No |
|---|-----|----|
| 26. Do you cough, wheeze, or have difficulty breathing during or after exercise?                                    |     |    |
| 27. Have you ever used an inhaler or taken asthma medicine?   |     |    |
| 28. Is there anyone in your family who has asthma?  |     |    |
| 29. Were you born without or are you missing a kidney, an eye, a testicle (males), your spleen, or any other organ? |     |    |
| 30. Do you have groin pain or a painful bulge or hernia in the groin area?  |     |    |
| 31. Have you had infectious mononucleosis (mono) within the last month?   |     |    |
| 32. Do you have any rashes, pressure sores, or other skin problems?   |     |    |
| 33. Have you had a herpes or MRSA skin infection?   |     |    |
| 34. Have you ever had a head injury or concussion?  |     |    |
| 35. Have you ever had a hit or blow to the head that caused confusion, prolonged headache, or memory problems?      |     |    |
| 36. Do you have a history of seizure disorder?  |     |    |
| 37. Do you have headaches with exercise?  |     |    |
| 38. Have you ever had numbness, tingling, or weakness in your arms or legs after being hit or falling?              |     |    |
| 39. Have you ever been unable to move your arms or legs after being hit or falling?                                 |     |    |
| 40. Have you ever become ill while exercising in the heat?  |     |    |
| 41. Do you get frequent muscle cramps when exercising?  |     |    |
| 42. Do you or someone in your family have sickle cell trait or disease?   |     |    |
| 43. Have you had any problems with your eyes or vision?   |     |    |
| 44. Have you had any eye injuries?  |     |    |
| 45. Do you wear glasses or contact lenses?  |     |    |
| 46. Do you wear protective eyewear, such as goggles or a face shield?   |     |    |
| 47. Do you worry about your weight?   |     |    |
| 48. Are you trying to or has anyone recommended that you gain or lose weight?                                       |     |    |
| 49. Are you on a special diet or do you avoid certain types of foods?   |     |    |
| 50. Have you ever had an eating disorder?   |     |    |
| 51. Do you have any concerns that you would like to discuss with a doctor?  |     |    |
| FEMALES ONLY  |     |    |
| 52. Have you ever had a menstrual period?   |     |    |
| 53. How old were you when you had your first menstrual period?  |     |    |
| 54. How many periods have you had in the last 12 months?  |     |    |

Explain "yes" answers here

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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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HE0503

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

9-2681/0410

# ■ 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   |            |           |
|  | <b>Yes</b> | <b>No</b> |
| 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**

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

|   | <b>Yes</b> | <b>No</b> |
|---|------------|-----------|
| 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**

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**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

# 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 <ul style="list-style-type: none"> <li>Marfan stigmata (kyphoscoliosis, high-arched palate, pectus excavatum, arachnodactyly, arm span &gt; height, hyperlaxity, myopia, MVP, aortic insufficiency)</li> </ul> |              |  |
| Eyes/ears/nose/throat <ul style="list-style-type: none"> <li>Pupils equal</li> <li>Hearing</li> </ul>   |              |  |
| Lymph nodes   |              |  |
| Heart <sup>a</sup> <ul style="list-style-type: none"> <li>Murmurs (auscultation standing, supine, +/- Valsalva)</li> <li>Location of point of maximal impulse (PMI)</li> </ul>  |              |  |
| Pulses <ul style="list-style-type: none"> <li>Simultaneous femoral and radial pulses</li> </ul>   |              |  |
| Lungs   |              |  |
| Abdomen   |              |  |
| Genitourinary (males only) <sup>b</sup>   |              |  |
| Skin <ul style="list-style-type: none"> <li>HSV, lesions suggestive of MRSA, tinea corporis</li> </ul>  |              |  |
| Neurologic <sup>c</sup>   |              |  |
| MUSCULOSKELETAL   |              |  |
| Neck  |              |  |
| Back  |              |  |
| Shoulder/arm  |              |  |
| Elbow/forearm   |              |  |
| Wrist/hand/fingers  |              |  |
| Hip/thigh   |              |  |
| Knee  |              |  |
| Leg/ankle   |              |  |
| Foot/toes   |              |  |
| Functional <ul style="list-style-type: none"> <li>Duck-walk, single leg hop</li> </ul>  |              |  |

<sup>a</sup>Consider ECG, echocardiogram, and referral to cardiology for abnormal cardiac history or exam.

<sup>b</sup>Consider GU exam if in private setting. Having third party present is recommended.

<sup>c</sup>Consider 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 \_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**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 \_\_\_\_\_

HISTORY REVIEWED AND STUDENT EXAMINED BY: Physician's/Provider's Stamp:

- ☐ Primary Care Provider  
☐ School Physician Provider  
☐ License Type:  
☐ MD/DO  
☐ APN  
☐ PA

PHYSICIAN'S/PROVIDER'S SIGNATURE: \_\_\_\_\_

Today's Date: \_\_\_\_\_

Date of Exam: \_\_\_\_\_

**RESERVED FOR SCHOOL DISTRICT USE**

**NOTE:** *N.J.A.C. 6A:16-2.2* requires the school physician to provide written notification to the parent/legal guardian stating approval or disapproval of the student's participation in athletics based on this physical evaluation. This evaluation and the notification letter become part of the student's school health record.

History and Physical Reviewed By: \_\_\_\_\_ Date: \_\_\_\_\_

Title of Reviewer (please check one): ☐ School Nurse ☐ School Physician

Medical Eligibility Notification Sent to Parent/Guardian by School Physician \_\_\_\_\_  
Date

☐ Letter of notification is attached.

OR

Parent notification indicates that:

- ☐ Participation Approved without limitations.  
☐ Participation Approved with limitations pending evaluation.  
☐ Participation NOT Approved

Reason(s) for Disapproval: \_\_\_\_\_

\_\_\_\_\_

## **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 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](http://www.cdc.gov/concussion/sports/index.html)

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

[www.ncaa.org/health-safety](http://www.ncaa.org/health-safety)

[www.bianj.org](http://www.bianj.org)

[www.atsnj.org](http://www.atsnj.org)

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Signature of Student-Athlete

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Print Student-Athlete's Name

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Date

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Signature of Parent/Guardian

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Print Parent/Guardian's Name

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Date



**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: \_\_\_\_\_

## Website Resources

- Sudden Death in Athletes  
<http://tinyurl.com/m2gjmvg>
- 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)



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# SUDDEN CARDIAC DEATH IN YOUNG ATHLETES

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



STATE OF NEW JERSEY  
DEPARTMENT OF EDUCATION

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



American Heart  
Association   
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## 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).



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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 Preparticipation 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.

# Sports Physical Forms Checklist

Please Initial:

\_\_\_\_\_ Your health care provider signed/ stamped physical form with the date of the examination.

\_\_\_\_\_ Your health care provider filled in all indicators: including height, weight, blood pressure, pulse and vision. **Please note:** Sees eye doctor is not acceptable. Vision > 20/40 in either eye requires clearance by an eye doctor.

\_\_\_\_\_ The date of the physical exam was conducted **less than 365 days prior** to the first day of practice.

\_\_\_\_\_ Health history form was signed and dated by both you and the student athlete

\_\_\_\_\_ The Athlete with special needs: supplemental history form was signed by both student and parent/guardian. You may write N/A in the body of the form.

\_\_\_\_\_ You submitted an **INDIVIDUAL HEALTH CARE PLAN** for your child suffers from a life threatening illness such as Asthma, Diabetes or an Anaphylactic Allergy which requires an EpiPen.

\_\_\_\_\_ You submitted a concussion awareness form signed by the student and parent/guardian.

\_\_\_\_\_ A Sudden Cardiac Death pamphlet sign-off sheet was completed by both student and parent/guardian.

\_\_\_\_\_ You submitted a medical clearance letter from your child's physician/specialist if indicated on the clearance form.

\_\_\_\_\_ Physical form is original, not copied or faxed.

\_\_\_\_\_ Completed Sport registration and permission form.

\_\_\_\_\_ Form is submitted within the timeframe provided by school to participate.

\_\_\_\_\_ I understand an additional health update form will be due for students participating in more than one sport or the physical is more than 60 days from the start of the season.

\_\_\_\_\_ If my child is participating in a school physical (for students without a medical home) it is their responsibility to see the school nurse for pre-physical vital signs prior to the day of exam.

According to NJ Administrative Code Chapter 16, 6A:16-12.2, 'A form that is incomplete shall be returned to the students' medical home for completion'.

Late forms are not guaranteed to be cleared by the school physician prior to the start of the season and may result in your child being excluded from play.