

Student's Name: _____ Grade: _____

School: JLHS JMHS GOETZ MCAULIFFE

JACKSON SCHOOL DISTRICT ATHLETIC DEPARTMENT

PRE-PARTICIPATION



ELIGIBILITY PACKET

WHITE: Sportsmanship Agreement / Impact Testing Info

GREEN: Emergency Contact Form/Parent Signature Form

BLUE: Pre-Participation Physical Evaluation

YELLOW: Sudden Cardiac Death Information /
Concussion Information / Sports-Related Eye Injury

Please review all forms for omissions and sign where indicated. Incomplete forms will result in a delay in eligibility. Please bring all completed forms to the Nurse's office.

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.

GENERAL QUESTIONS	Yes	No	MEDICAL QUESTIONS	Yes	No
1. Has a doctor ever denied or restricted your participation in sports for any reason?			26. Do you cough, wheeze, or have difficulty breathing during or after exercise?		
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 Other: _____			27. Have you ever used an inhaler or taken asthma medicine?		
3. Have you ever spent the night in the hospital?			28. Is there anyone in your family who has asthma?		
4. Have you ever had surgery?			29. Were you born without or are you missing a kidney, an eye, a testicle (males), your spleen, or any other organ?		
HEART HEALTH QUESTIONS ABOUT YOU	Yes	No	30. Do you have groin pain or a painful bulge or hernia in the groin area?		
5. Have you ever passed out or nearly passed out DURING or AFTER exercise?			31. Have you had infectious mononucleosis (mono) within the last month?		
6. Have you ever had discomfort, pain, tightness, or pressure in your chest during exercise?			32. Do you have any rashes, pressure sores, or other skin problems?		
7. Does your heart ever race or skip beats (irregular beats) during exercise?			33. Have you had a herpes or MRSA skin infection?		
8. Has a doctor ever told you that you have any heart problems? If so, check all that apply: <input type="checkbox"/> High blood pressure <input type="checkbox"/> A heart murmur <input type="checkbox"/> High cholesterol <input type="checkbox"/> A heart infection <input type="checkbox"/> Kawasaki disease Other: _____			34. Have you ever had a head injury or concussion?		
9. Has a doctor ever ordered a test for your heart? (For example, ECG/EKG, echocardiogram)			35. Have you ever had a hit or blow to the head that caused confusion, prolonged headache, or memory problems?		
10. Do you get lightheaded or feel more short of breath than expected during exercise?			36. Do you have a history of seizure disorder?		
11. Have you ever had an unexplained seizure?			37. Do you have headaches with exercise?		
12. Do you get more tired or short of breath more quickly than your friends during exercise?			38. Have you ever had numbness, tingling, or weakness in your arms or legs after being hit or falling?		
HEART HEALTH QUESTIONS ABOUT YOUR FAMILY	Yes	No	39. Have you ever been unable to move your arms or legs after being hit or falling?		
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)?			40. Have you ever become ill while exercising in the heat?		
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?			41. Do you get frequent muscle cramps when exercising?		
15. Does anyone in your family have a heart problem, pacemaker, or implanted defibrillator?			42. Do you or someone in your family have sickle cell trait or disease?		
16. Has anyone in your family had unexplained fainting, unexplained seizures, or near drowning?			43. Have you had any problems with your eyes or vision?		
BONE AND JOINT QUESTIONS	Yes	No	44. Have you had any eye injuries?		
17. Have you ever had an injury to a bone, muscle, ligament, or tendon that caused you to miss a practice or a game?			45. Do you wear glasses or contact lenses?		
18. Have you ever had any broken or fractured bones or dislocated joints?			46. Do you wear protective eyewear, such as goggles or a face shield?		
19. Have you ever had an injury that required x-rays, MRI, CT scan, injections, therapy, a brace, a cast, or crutches?			47. Do you worry about your weight?		
20. Have you ever had a stress fracture?			48. Are you trying to or has anyone recommended that you gain or lose weight?		
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)			49. Are you on a special diet or do you avoid certain types of foods?		
22. Do you regularly use a brace, orthotics, or other assistive device?			50. Have you ever had an eating disorder?		
23. Do you have a bone, muscle, or joint injury that bothers you?			51. Do you have any concerns that you would like to discuss with a doctor?		
24. Do any of your joints become painful, swollen, feel warm, or look red?			FEMALES ONLY		
25. Do you have any history of juvenile arthritis or connective tissue disease?			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

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 _____

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

ALL PARENTS MUST FILL OUT
AND SIGN THIS SECTION
(even if all answers are "No")

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 <ul style="list-style-type: none"> Marfan stigmata (kyphoscoliosis, high-arched palate, pectus excavatum, arachnodactyly, arm span > height, hyperlaxity, myopia, MVP, aortic insufficiency) 		
Eyes/ears/nose/throat <ul style="list-style-type: none"> Pupils equal Hearing 		
Lymph nodes		
Heart ^a <ul style="list-style-type: none"> Murmurs (auscultation standing, supine, +/- Valsalva) Location of point of maximal impulse (PMI) 		
Pulses <ul style="list-style-type: none"> Simultaneous femoral and radial pulses 		
Lungs		
Abdomen		
Genitourinary (males only) ^b		
Skin <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 _____

Today's Date:

Date of Exam:

■ 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 _____



JACKSON SCHOOL DISTRICT

101 Don Connor Blvd.
Jackson, NJ 08527
(732) 833-4600
FAX (732) 833-4636

Stephen Genco
Superintendent of Schools

Robert Paneque
Supervisor of Athletics

JACKSON SCHOOL DISTRICT ATHLETICS **ATHLETE/PARENT SIGNATURE FORM**

This form is to be reviewed by both the student-athlete and their parent/guardian. Upon review, both shall initial next to each line and sign at the end of the document.

1. I have read and reviewed with my child the information provided by the Jackson School District regarding Sudden Cardiac Death in Young Athletes.

Parent Initial _____ Student Initial _____

2. I have read and reviewed with my child the information provided by the Jackson School District regarding Concussion and Traumatic Brain Injury.

Parent Initial _____ Student Initial _____

3. I give permission for my child to be ImPact tested as part of the Jackson School District Head Injury Management Plan (information regarding ImPact neuro-cognitive testing can be found at www.impacttest.com).

Parent Initial _____ Student Initial _____

4. I consent to random drug testing in accordance with the NJSIAA steroid testing policy and understand that if my child's team(s) qualifies for a state tournament or competition, he/she may be subject to testing for banned substances.

Parent Initial _____ Student Initial _____

5. I have read and reviewed with my child the Jackson School District Athletic Department's student conduct/sportsmanship agreement and the Shore Conference's expectations for spectators and agree to be bound by its terms.

Parent Initial _____ Student Initial _____

6. Should I chose private transportation for my child in lieu of district-provided transportation, I agree to release and hold harmless the Jackson Board of Education and its employees, both collectively and individually, from all liability for personal injury and/or property damage sustained or caused by this voluntary, private transportation of my child to/from district-sponsored athletic events.

Parent Initial _____ Student Initial _____

7. I authorize the Principals of the Jackson School District to permit my child to participate in interscholastic athletics during the 20____/20____ school year. By doing so I:
- a. Release the Board of Education and its employees of any liability whatsoever for any accidents that may occur to my child during participation.
 - b. Grant permission for the Sports Medicine Team (district physicians, nurses, and athletic trainers) to assess, diagnose, treat, and rehabilitate injuries that my child may suffer as a result of participation.
 - c. Authorize the exchange of my child's confidential medical records amongst the sports medicine team, guidance department, and administration if such information is pertinent to providing appropriate health care.
 - d. Grant permission for my child to travel off school grounds for the purpose of participating in team activities and events. I do this knowing full well that medical personnel may not accompany my child's team off school grounds. In the event of a medical emergency, I authorize the Jackson Board of Education employee that is responsible for my child to obtain appropriate medical care and further authorize any appropriate medical personnel to render all necessary medical treatment (to include drug and alcohol testing).
 - e. Understand that all medications being taken while traveling and participating in interscholastic athletics, including over-the-counter medications, must be approved with the school nurse in accordance with board policy #5141.211. This includes treatment for asthma, allergies, diabetes, and all chronic medical conditions that require medication.

Parent Initial _____

Student Initial _____

Print Student/Athlete Name

Signature of Student-Athlete

Date

Print Parent/Guardian Name

Signature of Parent/Guardian

Date

Jackson School District Athletics Emergency Contact Information Form

Last Name	First Name	Date of Birth	Grade	20____/20____ School year
Home Address		Home Phone	Parent Cell #	
Parent Work Contact #		Parent Work Contact #		
Parent E-mail		Emergency Contact# Relation to Student		
Medical Insurance Carrier		(HMO/PPO/POS)	Medical Insurance Policy #	

____ Please place an "X" in the box if you have no Medical Insurance. Information about affordable medical insurance is available through the school and through NJ Family Care at 1-800-701-0701.

Participation Restrictions	Hospital Preference	
Medical Conditions	Allergies	Medications

Student Conduct/Sportsmanship Agreement

I voluntarily agree to abide by the following conditions of my participation in the aforementioned activity:

1. My participation is a privilege. As such, the coach/advisor, as well as school administrators, has the right to revoke this privilege and terminate my participation if I fail to conduct myself in an appropriate manner.
2. I am a representative of the Jackson School District and the Jackson Township community, and therefore, understand that I must maintain high standards for my conduct and behavior. Because my participation is a reflection of my school program, I must always conduct myself in an acceptable manner. Failure to do so may result in disciplinary action consistent with the school discipline code, which may affect my eligibility to participate in this and other activities.
3. I agree to conduct myself in an appropriate and acceptable manner according to:
 - * the rules instituted by my coach/advisor
 - * the laws of the state
 - * the rules set forth by any governing body specific to this activity
 - * any other rules and requirements set forth by the Jackson Board of Education and by my school
4. I agree not to engage in any substance abuse. "Substance abuse" includes but is not limited to:
 - * use or possession of controlled dangerous substances as defined in NJSA18A: 40A-9
 - * use or possession of alcoholic beverages
 - * use or possession of performance enhancing drugs
 - * unlawful use or possession of any substance prohibited by law

I understand that any violation of the substance abuse conditions listed above shall result in the assignment of penalties for the offense committed in accordance with Jackson Board of Education Policies 5570 and 5600.

WE ACKNOWLEDGE THAT WE HAVE READ AND UNDERSTAND THIS DOCUMENT AND AGREE TO BE BOUND BY ITS TERMS.

Student Signature	Print Student Name	Date
Parent/Guardian Signature	Print Parent/Guardian Name	Date

Jackson School District Athletics Student Conduct/Sportsmanship Agreement

As a participant in interscholastic athletics, I voluntarily agree to abide by the following terms and conditions:

1. My participation is a privilege. As such, the coach/advisor, as well as school administrators, has the right to revoke this privilege and terminate my participation if I fail to conduct myself in an appropriate manner.

2. I am a representative of the Jackson School District and the Jackson Township community, and therefore, understand that I must maintain high standards for my conduct and behavior. Because my participation is a reflection of my school program, I must always conduct myself in an acceptable manner. Failure to do so may result in disciplinary action consistent with the school discipline code, which may affect my eligibility to participate in this and other activities.

3. I agree to conduct myself in an appropriate and acceptable manner according to:

- * the rules instituted by my coach/advisor
- * the laws of the state
- * the rules set forth by any governing body specific to this activity
- * any other rules and requirements set forth by the Jackson Board of Education and by my school

4. I agree not to engage in any substance abuse. "Substance abuse" includes but is not limited to:

- * use or possession of controlled dangerous substances as defined in NJSA18A:40A-9
- * use or possession of alcoholic beverages
- * use or possession of performance enhancing drugs
- * unlawful use or possession of any substance prohibited by law

I understand that any violation of the substance abuse conditions listed above shall result in the assignment of penalties for the offense committed in accordance with Jackson Board of Education Policies 5) +\$ fGdcfhga Ubg\]dŁ' and '5* \$\$`fB]gV]d`]bY# cXY`cZ7 cbXi WŁ



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Stephen Genco
Superintendent of Schools

Robert Paneque
Supervisor of Athletics

Dear Parent/Guardian,

The Jackson School District Athletic Department, in efforts to provide the highest level of healthcare to our student-athletes, utilizes an innovative head injury management plan. As part of this plan, students who compete in football, soccer, field hockey, cheerleading, ice hockey, wrestling and lacrosse will be required to take a computerized neuro-cognitive exam known as ImPact (Immediate Post Concussion Assessment and Cognitive Testing). This is a baseline test taken prior to the athletic season and under the direct supervision of the Athletic Department.

If a student-athlete is believed to have suffered a concussion during competition, the exam is taken again and the data from the post-injury test is compared to the baseline test. This information is then used as a tool to assist the sports medicine team in determining the extent of the injury, monitoring recovery, and in making safe return to play decisions.

The baseline exam takes about 25-30 minutes and is non-invasive. It is set up in a "video-game" format and tracks neuro-cognitive information such as memory, reaction time, brain processing speed, and concentration. It is a simple exam and most who take it enjoy the challenge of the test.

Founded by the University of Pittsburgh Medical Center's Sports Concussion Program, this software is quickly becoming the "Gold Standard" in recognizing and managing head injuries. Countless colleges and school districts use the program across the country as do professional sports and the Olympics. General information about the test can be found at: www.impacttest.com.

The baseline test is not intended to identify a present concussion. **Students who have suffered a recent concussion or have not recovered from a diagnosed concussion should not take the ImPact baseline test. Instead please notify the athletic trainers or your physician immediately for a thorough evaluation.** Student-athletes must receive full, unrestricted clearance from appropriate medical personnel before taking the baseline test. Additionally, athletes who are fatigued, feeling ill, or suffering injury should postpone the baseline test until feeling better.

As a parent/guardian, you play a very important role in the management of head injuries. It's therefore vital that you're aware of what a concussion is defined as, the signs and symptoms of a concussion and the extreme dangers of returning to play before complete recovery. On the back of this sheet, you'll find the Center for Disease Control (CDC) "Heads Up" information sheet. Please review this material with your child and keep it available for quick reference. Additional head injury information can be found under the sports medicine link on the Jackson School District website: www.jacksonsd.org. Please click on "athletics" to find the sports medicine link.

Thank you for your attention and please feel free to contact us with any questions or concerns.

Sincerely,

Athletic Trainers of the Jackson School District

NOTE: Scoring data for ImPact testing should be used in conjunction with clinical examination and symptom scoring and should not be used as a stand alone method to diagnose concussion, measure recovery, or make return to play decisions.

Website Resources

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

PO 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



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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 
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 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.



HEADS UP CONCUSSION IN YOUTH SPORTS

A Fact Sheet for PARENTS

WHAT IS A CONCUSSION?

A concussion is a type of traumatic brain injury. Concussions are caused by a bump or blow to the head. Even a “ding,” “getting your bell rung,” or what seems to be a mild bump or blow to the head can be serious.

You can’t see a concussion. Signs and symptoms of concussion can show up right after the injury or may not appear or be noticed until days or weeks after the injury. If your child reports any symptoms of concussion, or if you notice the symptoms yourself, seek medical attention right away.

WHAT ARE THE SIGNS AND SYMPTOMS OF A CONCUSSION?

Signs Observed by Parents or Guardians

If your child has experienced a bump or blow to the head during a game or practice, look for any of the following signs and symptoms of a concussion:

- Appears dazed or stunned
- Is confused about assignment or position
- Forgets an instruction
- Is unsure of game, score, or opponent
- Moves clumsily
- Answers questions slowly
- Loses consciousness (even briefly)
- Shows mood, behavior, or personality changes

Symptoms Reported by Athlete

- Headache or “pressure” in head
- Nausea or vomiting
- Balance problems or dizziness
- Double or blurry vision
- Sensitivity to light
- Sensitivity to noise
- Feeling sluggish, hazy, foggy, or groggy
- Concentration or memory problems
- Confusion
- Just “not feeling right” or “feeling down”

HOW CAN YOU HELP YOUR CHILD PREVENT A CONCUSSION OR OTHER SERIOUS BRAIN INJURY?

- Ensure that they follow their coach’s rules for safety and the rules of the sport.
- Encourage them to practice good sportsmanship at all times.
- Make sure they wear the right protective equipment for their activity. Protective equipment should fit properly and be well maintained.
- Wearing a helmet is a must to reduce the risk of a serious brain injury or skull fracture.
 - However, helmets are not designed to prevent concussions. There is no “concussion-proof” helmet. So, even with a helmet, it is important for kids and teens to avoid hits to the head.

WHAT SHOULD YOU DO IF YOU THINK YOUR CHILD HAS A CONCUSSION?

1. SEEK MEDICAL ATTENTION RIGHT AWAY.

A health care professional will be able to decide how serious the concussion is and when it is safe for your child to return to regular activities, including sports.

2. KEEP YOUR CHILD OUT OF PLAY.

Concussions take time to heal. Don’t let your child return to play the day of the injury and until a health care professional says it’s OK. Children who return to play too soon—while the brain is still healing—risk a greater chance of having a repeat concussion. Repeat or later concussions can be very serious. They can cause permanent brain damage, affecting your child for a lifetime.

3. TELL YOUR CHILD’S COACH ABOUT ANY PREVIOUS CONCUSSION.

Coaches should know if your child had a previous concussion. Your child’s coach may not know about a concussion your child received in another sport or activity unless you tell the coach.

It’s better to miss one game than the whole season.

For more information, visit www.cdc.gov/Concussion.

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

- Pain when looking up and/or down, or difficulty seeing;
- Tenderness;
- Sunken eye;
- Double vision;
- Severe eyelid and facial swelling;
- Difficulty tracking;

Signs or Symptoms of an Eye Injury



- 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>.

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