

Model Policy and Guidance for Prevention and Treatment of Sports-Related Concussions and Head Injuries

Introduction

This document is designed to provide guidance to local district boards of education in the development, establishment, and implementation of policies, procedures and programs for the prevention, treatment, and education of Sports- Related Concussions and Head Injuries.

Part I Background

Legislation (P.L. 2010, Chapter 94) (*N.J.S.A. 18A:40-41.3*) enacted on December 7th, 2010 requires each school district, charter , and non-public school that participates in interscholastic athletics to adopt by September 1, 2011, a policy concerning the prevention and treatment of sports- related concussions and other head injuries among student- athletes. The Center for Disease Control estimates that 300,000 concussions are sustained during sports- related activity in the United States. A concussion is a traumatic brain injury (TBI) caused by a direct or indirect blow to the head or body. In order to ensure the safety of student-athletes, it is imperative that athletes, coaches, and parents/guardians are educated about the nature and treatment of sports- related concussions and head injuries. Allowing a student-athlete to return to play before recovering from a concussion increases the chance of a more serious brain injury that can result in severe disability and/or death.

To assist each district board of education, board of trustees, and non-public school in developing its sports-related concussion and head injuries policy, the legislation required the Commissioner of Education to issue a model policy applicable to grades kindergarten through twelve (K-12), by March 31, 2011. This document includes appropriate references to statutes, regulations and emergent information on sports-related concussions and head injuries.

Part II Guidance For Local Policy Development

Policy Context

The New Jersey Department of Education (NJDOE) recognizes that the decisions made on the policy governing the care of student-athletes who have sustained sports-related concussions and head injuries is dependent on the individual characteristics in each school district, charter, and non-public school. Each district board of education, charter, and non-public school policy, however, must comply with the

minimum requirements stated in *N.J.S.A.* 18A: 40-41.4 in regards to the care and treatment of a student-athlete who is suspected of sustaining a sports-related concussion or head injury.

Local Policy Development

The following descriptions of applicable regulations make it clear that the **content and format of local policies and procedures must be developed locally:**

- Each district board of education, board of trustees, and non-public school will adopt an Interscholastic Head Injury Training program to be completed by the School/Team Physician, Licensed Athletic Trainer, Coaches, School Nurses, and other appropriate district personnel pursuant to *N.J.S.A.* 18A:40-41.2
- Each district board of education, board of trustees, and non-public school must develop its written policy concerning the prevention and treatment of sports-related concussions and head injuries in accordance with *N.J.S.A.* 18 A:40-41.3.
- Each district board of education, board of trustees, and non-public school must review their sports-related concussion and head injury policy annually, and update as necessary, to ensure that it reflects the most current information available on the prevention, risk, and treatment of sports related concussions and head injuries pursuant to *N.J.S.A.* 18A:40-41.3.

Requirements for Policy Contents

Each district board of education, board of trustees, and non-public school has local control over the content of the Sports-Related Concussion and Head Injury Policy, except that the policy must contain, at a minimum, the following components:

- 18A:40-41.4- Removal of student-athlete from competition, practice; return.
A student who participates in interscholastic athletics and who sustains or is suspected of sustaining a concussion or other head injury shall be immediately removed from practice or competition. The student-athlete may not return to play until he/she has obtained medical clearance in compliance with local school district return-to-play policy.
- All Coaches, School Nurses, School/ Team Physicians and Licensed Athletic Trainers must complete an Interscholastic Head Injury Training Program.
- The Athletic Head Injury training program must include, but not be limited to:
 1. The recognition of the symptoms of head and neck injuries, concussions, risk of secondary injury, including the risk of second impact syndrome; and
 2. Description of the appropriate criteria to delay the return to sports competition or practice of a student –athlete who has sustained a concussion or other head injury.
- An Athletic Head Injury Training program such as the National Federation of State High Schools Association online “Concussion in Sports” training program or a comparable program that meets mandated criteria shall be completed by the above named staff or others named by local district/school policy. Additional head injury training programs that meet the mandated criteria may be completed by professionals of different levels of medical knowledge and training. Guidance for these additional training programs will be provided to each school district, charter and non-public school by the NJDOE.
- Distribution of NJ Department of Education Concussion and Head Injury fact sheet to every student-athlete who participates in interscholastic sports. Each school district, charter or non public school,

that participates in interscholastic sports shall obtain a signed acknowledgement of the receipt of the fact sheet by the student-athlete's parent/ guardian and keep on file for future reference.

Model Concussion Protocol for the Prevention and Treatment of Sports-Related Concussions and Head Injuries

Prevention

1. Pre-season baseline testing.
 2. Review of educational information for student-athletes on prevention of concussions.
 3. Reinforcement of the importance of early identification and treatment of concussions to improve recovery.
- Student-athletes who are exhibiting the signs or symptoms of a sports-related concussion or other head injuries during practice or competition shall be immediately removed from play and may not return to play that day.

Possible Signs of Concussion:

(Could be observed by Coaches, Licensed Athletic Trainer, School/Team Physician, School Nurse)

1. Appears dazed, stunned, or disoriented.
2. Forgets plays, or demonstrates short term memory difficulty.
3. Exhibits difficulties with balance or coordination.
4. Answers questions slowly or inaccurately.
5. Loses consciousness.

Possible Symptoms of Concussion

(Reported by the student athlete to Coaches, Licensed Athletic Trainer, School/ Team Physician, School Nurse, Parent/ Guardian)

1. Headache
 2. Nausea/Vomiting
 3. Balance problems or dizziness.
 4. Double vision or changes in vision.
 5. Sensitivity to light or sound/noise.
 6. Feeling sluggish or foggy.
 7. Difficulty with concentration and short term memory.
 8. Sleep disturbance.
 9. Irritability
- Student-Athletes must be evaluated by a physician or licensed health care provider trained in the evaluation and management of concussion to determine the presence or absence of a sports-related concussion or head injuries.
 - To return to practice and competition the student-athlete must follow the protocol:
 1. Immediate removal from competition or practice. 911 should be called if there is a deterioration of symptoms, loss of consciousness, or direct neck pain associated with the injury.
 2. When available the student-athlete should be evaluated by the school's licensed healthcare provider who is trained in the evaluation and management of concussions.

3. School personnel (Athletic Director/Building Administrator, Licensed Athletic Trainer, School Nurse, Coach, etc.) should make contact with the student-athlete's parent/guardian and inform him/her of the suspected sports-related concussion or head injury.
4. School personnel (Athletic Director/ Building Administrator, Licensed Athletic Trainer, School Nurse, Coach, etc.) shall provide the student-athlete with district board of education approved suggestions for management/ medical checklist to provide their parent/guardian and physician or other licensed healthcare professional trained in the evaluation and management of sports related concussions and other head injuries (See attachment sections at end of model policy for examples CDC, NCAA, etc.)
5. The student-athlete must receive written clearance from a physician, trained in the evaluation and management of concussions that states the student-athlete is asymptomatic at rest and may begin the local districts' graduated return-to-play protocol. Medical clearance that is inconsistent with district, charter, and non-public school policy may not be accepted and such matters will be referred to the school/team physician.

Graduated Return to Competition and Practice Protocol

- Complete physical, cognitive, emotional, and social rest is advised while the student-athlete is experiencing symptoms and signs of a sports-related concussion or other head injury. (Minimize mental exertion, limiting overstimulation, multi-tasking etc.)
- After written medical clearance is given by a physician trained in the evaluation and management of concussions stating that the student-athlete is asymptomatic at rest, the student-athlete may begin a graduated individualized return-to-play protocol supervised by a licensed athletic trainer, school/team physician or in cases where the afore mentioned are not available a physician or licensed health care provider trained in the evaluation and management of sports-related concussions. The following steps should be followed:
 1. Completion of a full day of normal cognitive activities (school day, studying for tests, watching practice, interacting with peers) without re-emergence of any signs or symptoms. If no return of symptoms, next day advance to:
 2. Light aerobic exercise, which includes walking, swimming, or stationary cycling, keeping the intensity < 70% maximum percentage heart rate: no resistance training. The objective of this step is increased heart rate. If no return of symptoms, next day advance to:
 3. Sport-specific exercise including skating, and/or running; no head impact activities. The objective of this step is to add movement and continue to increase heart rate. If no return of symptoms, next day advance to:
 4. Non-contact training drills (e.g., passing drills). The student-athlete may initiate progressive resistance training. If no return of symptoms, next day advance to:
 5. Following medical clearance (consultation between school health care personnel, i.e., Licensed Athletic Trainer, School/Team Physician, School Nurse and student-athlete's physician), participation in normal training activities. The objective of this step is to restore confidence and to assess functional skills by the coaching staff. If no return of symptoms, next day advance to:
 6. Return to play involving normal exertion or game activity.
- In the absence of daily testing by knowledgeable school district staff (i.e. Licensed Athletic Trainer, School/Team Physician) to clear a student-athlete to begin the graduated return-to-play

protocol a student –athlete should observe a 7 day rest/recovery period before commencing the protocol. Younger students (K-8) should observe the 7 day rest/recovery period (after they are symptom free at rest) prior to initiating the graduated-return-to play protocol. A physician trained in the evaluation and management of concussion as well as the parents/guardians of the student-athlete shall monitor the student-athlete in the absence of knowledgeable school district staff (i.e., Athletic Trainer, School/Team Physician). School Nurses may serve as an advocate for student-athletes in communicating signs and symptoms to physicians and parents/guardians.

- Utilization of available tools such as symptom checklists, baseline and balance testing are suggested.
- If the student athlete exhibits a re-emergence of any concussion signs or symptoms once they return to physical activity, he/she will be removed from further exertional activities and returned to his/her school/team physician or primary care physician.
- If concussion symptoms reoccur during the graduated return-to-play protocol, the student-athlete will return to the previous level of activity that caused no symptoms.

Temporary Accommodations for Student-Athletes with Sports-Related Head Injuries

- Rest is the best “medicine” for healing concussions or other head injuries. The concussed brain is affected in many functional aspects as a result of the injury. Memory, attention span, concentration and speed of processing significantly impacts learning. Further, exposing the concussed student-athlete to the stimulating school environment may delay the resolution of symptoms needed for recovery.
- Accordingly, consideration of the cognitive effects in returning to the classroom is also an important part of the treatment of sports-related concussions and head injuries.
- Mental exertion increases the symptoms from concussions and affects recovery. To recover, cognitive rest is just as important as physical rest. Reading, studying, computer usage, testing, texting – even watching movies if a student is sensitive to light/sound – can slow a student's recovery. In accordance with the Centers for Disease Control's toolkit on managing concussions boards of education may look to address the student’s cognitive needs in the following ways.
- Students who return to school after a concussion may need to:
 1. Take rest breaks as needed.
 2. Spend fewer hours at school.
 3. Be given more time to take tests or complete assignments. (All courses should be considered)
 4. Receive help with schoolwork.
 5. Reduce time spent on the computer, reading, and writing.
 6. Be granted early dismissal to avoid crowded hallways.

This document is presented as a summary guide and model. District boards of education, boards of trustees, and non-public schools may add additional provisions or protocols to address local issues and priorities, and may use formats that are consistent with the board of education's approved policies and procedures.

Part IV

Implementation of the Interscholastic Sports-Related Concussions and Head Injuries Policy

Statutory and Regulatory Provisions: *N.J.S.A. 40-41.3* Information regarding the Interscholastic Head Injury Safety training program and policy for the prevention and treatment of sports-related concussions and head injuries which shall be completed by the school/team physician, coaches, athletic trainer, school nurse, and any other school employee the local district, charter, and non-public school deems necessary.

The school district, charter, and non-public school are required to monitor the above named school district employees in the completion of an Interscholastic Head Injury Training program such as the National Federation of State High Schools Association's online, "Concussion in Sports" or a comparable program which meets the mandated criteria and includes but is not limited to:

1. The recognition of the symptoms of head and neck injuries, concussions, and injuries related to second-impact syndrome.
2. Includes the appropriate criteria to delay the return to sports practice or competition of a student-athlete who has sustained a concussion or other head injury.

*Additional head injury training programs that meet the mandated criteria may be completed by professionals of different levels of medical knowledge and training. Guidance for these additional training programs will be provided to each school district, charter, and nonpublic school by NJDOE.

The school district, charter, or nonpublic school that participates in an interscholastic sports program shall distribute the educational fact sheet annually to the parents or guardians of student-athletes and shall obtain a signed acknowledgement of the receipt of the fact sheet by the student-athlete and his parent or guardian.

Each school district, charter, and non-public school shall develop a written policy concerning the prevention and treatment of sports-related concussions and other head injuries among student-athletes. The policy shall include, but need not be limited to, the procedure followed when it is suspected that student-athlete has sustained a concussion or other head injury. Each school district shall implement the policy by the 2011-2012 school year.

Each school whose students participate in an interscholastic sports program and are suspected of sustaining a concussion or other head injury in practice or competition shall be immediately removed from the sports competition or practice. Student-athletes who are removed from competition or practice shall not participate in further sports activity until they are evaluated by a physician or other licensed healthcare provider trained in the evaluation and management of concussions, and receive written

clearance from a physician trained in the evaluation and management of concussions to return to completion or practice.

Part V Resources on Interscholastic Sports Related Concussions and Head Injuries

Internet Resources

Centers for Disease Control and Prevention – Concussion Toolkit

http://www.cdc.gov/concussion/HeadsUp/physicians_tool_kit.html

<http://www.cdc.gov/concussion/headsup/pdf/ACE-a.pdf>

http://www.cdc.gov/concussion/headsup/pdf/ACE_care_plan_school_version_a.pdf

http://www.cdc.gov/concussion/headsup/pdf/Concussion_in_Sports_palm_card-a.pdf

National Federation of State High Schools Association- Online “Concussion in Sports” training program.

www.nfhs.org

Brain Injury Association of New Jersey

www.BIANJ.org

www.sportsconcussion.com

Athletic Trainers Society of New Jersey

www.atsnj.org

National Collegiate Athletic Association

www.NCAA.org/health-safety

New Jersey Interscholastic Athletic Association

www.njsiaa.org

Articles

“Consensus Statement on Concussion in Sport: 3rd International Conference on Concussion in Sport held in Zurich, November 2008”. Clinical Journal of Sports Medicine, Volume 19, May 2009, pp.185-200

Clinical Report: Sport-related Concussion in Children and Adolescents” Halstead ME, Walter, KD and the Council on Sports Medicine and Fitness Pediatrics Volume 126, September 2010, pp.597-615.