

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



**Division of Educational Services
Office of Student Support Services**

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Contributors

In December 2010, legislative updates concerning student athletes' health were enacted, which increased student athletes' protections regarding concussions. In the 2011-2012 school year, the New Jersey Department of Education (NJDOE) was charged with developing and implementing an inter scholastic athletic head injury safety training program for school physicians, coaches, and athletic trainers. In addition, a model concussion policy was established by the Commissioner of Education and serves as a reference for the development of district policy.

On September 24, 2021, legislation amending the original concussion law was enacted. The legislation requires NJDOE to review and revise its current model policy to ensure return to play protocols conform with the Centers for Disease Control and Prevention's (CDC) six-step return to play progression.

A stakeholder group was convened in May 2023. Representatives from these stakeholder groups were essential in creating a guidance document that reflect the current best practice. The New Jersey Department of Education thanks and recognizes the following individuals for their work and contribution:

New Jersey Academy of Pediatrics – Dr. Bert Mandelbaum

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**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

On September 24, 2021, an act amending and supplementing legislation (P.L. 2010, Chapter 94), N.J.S.A. 18A:40-41.3 was approved. Each school district, charter, and non-public school that participates in interscholastic athletics must annually review their policy concerning the prevention and treatment of concussions and update as needed. Districts are required to ensure policies and procedures are aligned to the most current recommendations developed by the Center for Disease Control and Prevention (CDC).

The CDC estimates that 1.6-3.8 million sports and recreation related concussions occur each year. The National Institute of Health reports that it is estimated that between 1.1 and 1.9 million sports- and recreation-related concussions occur annually in the United States among children under the age of 18. A concussion is a type of traumatic brain injury—or TBI—caused by a bump, blow, or jolt to the head or by a hit to the body that causes the head and brain to move rapidly back and forth.

Each case is unique, therefore; there is not a consistent timeline or standard treatment for recovery. Some people get better in days, while others need weeks or months to recover. To ensure the safety of student-athletes, it is imperative that athletes, coaches, parents/guardians, and school personnel 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.

This document provides guidance to assist each district board of education, board of trustees, and non-public school in developing its sports-related concussion protocols, and head injury policies, as required in N.J.S.A. 18A: 40-41.4. This document includes appropriate references to statutes, regulations and emergent information on sports-related concussions and head injuries.

Part II

Mandatory Requirements for Local Policy Development

Policy Content

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 are 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: 40-41.1 - 41.4 regarding the care and treatment of a student-athlete or cheerleader who is suspected of sustaining a sports-related concussion or head injury.

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:

1. Districts must adopt an Interscholastic Head Injury Training Program to be completed by the school/team physician, licensed athletic trainer, coaches, and other appropriate district personnel pursuant to N.J.S.A. 18A:40-41.2. The training program shall include:
 - The recognition of the signs of head and neck injuries, concussions and second impact syndrome.
 - The Graduated Six-Step Return to Play Progression developed by the Center for Disease Control and Prevention (CDC), or any subsequent changes or other updates developed by the Centers for Disease Control and Prevention.
2. Districts 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 and 41.4
 - At a minimum, this policy must include the procedure to be followed when it is suspected a student athlete or cheerleader has sustained a concussion or other head injury.
 - A student who participates in an interscholastic sports program, intramural sports program or cheerleading program who sustains a head injury or is suspected of having a concussion while engaged in practice or competition shall immediately be removed from competition or practice.
 - The student may not return to competition or practice until:
 - They are evaluated by a physician or other licensed healthcare provider

trained in the evaluation and management of concussions and receives written clearance from a physician trained in the evaluation and management of concussions; and

- They progress through the steps outlined in the CDC's Return to Play Progression.
3. Annually distribute the educational fact sheet to the parents / guardians of student-athletes and cheerleaders and obtain a signed acknowledgement by the student athlete or cheerleader and their parent or guardian.
 4. 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.

*A student sustaining a suspected concussion or head injury may be evaluated by a health care provider, however written clearance must come from a physician trained in the evaluation and management of concussions.

*If school is in session the student must return to regular school activities without symptoms or need for additional support before returning to practice or competition as part of the return to play progression. If school is not in session the student must return to their normal daily activities without symptoms as part of the return to play progression.

Part III

Policy Content and Recommendations

This section provides policy content recommendations. This document is presented as a summary guide with suggestions and considerations. 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. While this document focuses on athletes and sports related head injuries or concussions, districts may want to consider including policies for any student sustaining a concussion.

School nurses are uniquely positioned to work with coaches, athletic trainers, students, and parents to provide care coordination, education, and advocacy to support a student diagnosed with a head injury or concussion. The nurse may also play a key role in educating student athletes regarding risks, signs, and symptoms of concussion and second impact syndrome. School health services staff (e.g., school nurse, school physician, non-certified school nurse, etc.) are responsible for coordinating care by communicating with the student's family and health care providers.

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

Changing the culture around concussion can go a long way in promoting recovery and preventing second impact syndrome. Coaches, parents, and staff can communicate with athletes to always report signs of a concussion, even during a big game. Athletes should receive positive reinforcement for reporting symptoms. Teammates should support the injured athlete if they are required to refrain from practice or competition.

Education

The CDC offers tips for health professionals and educators on their website. Interscholastic Head Injury Training Programs are available via the CDC website, or the National Federation of State High School Associations. This training should be completed by the school/team physician, licensed athletic trainer, school nurses, coaches, and other relevant school personnel.

Prevention

- Limit the number of stunts during cheerleading practices.
 - When stunting is performed, always use spotters, and make sure the surface is soft and in good condition.

- Teach safe stunting techniques and do not allow cheerleaders to attempt new or difficult stunts without proper instruction and a coach on hand.
- Ensure athletes have appropriate supervision during practices and a designated and safe practice facility.
- Ensure use of appropriate fitted and maintained safety equipment
- Ensure athletes avoid unsafe actions such as:
 - Hitting another athlete in the head.
 - Using their head to contact another athlete.
 - Making illegal contacts.
 - Trying to injure or put another athlete at risk for injury.
- Limit the amount of contact during practices. This may include:
 - Limiting the amount of practice time that includes scrimmages or full-speed drills.
- Teach athletes proper techniques and ways to avoid hits to the head.
- Keep a close eye on athletes in positions that are at increased risk for concussion to help spot a potential concussion.

Treatment

Pursuant to N.J.S.A.18A:40-41, a student who participates in an interscholastic sports program, intramural sports program, or cheerleading program and who sustains or is suspected of having sustained a concussion or other head injury while engaged in a competition or practice shall be immediately removed from the 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.

A student-athlete or cheerleader who is removed from competition or practice shall not participate in further sports or cheerleading activity until:

- The student-athlete or cheerleader is evaluated by a physician or other licensed healthcare provider trained in the evaluation and management of concussions, and **receives written clearance from a physician** trained in the evaluation and management of concussions to return to competition or practice; and
- The student-athlete or cheerleader returns to regular school activities without the need for additional support and is no longer experiencing symptoms of the injury when conducting those activities*.

* If school is in session, the student must return to regular school activities without symptoms or need for additional support before returning to practice or competition as part of the return

to play progression. If school is not in session the student must return to their normal daily activities without symptoms as part of the return to play progression.

The return of a student-athlete or cheerleader to competition or practice shall be in accordance with the Six-Step Return to Play Progression recommendations and any subsequent changes or other updates to those recommendations as developed by the CDC. Recovery is individual. As applicable, the treating healthcare provider may guide the student through the return to play protocol while experiencing mild symptoms as part of the treatment. In addition, the treating healthcare provider may adjust the treatment plan prior to step 6, full return to competition. Clearance from a physician trained in the evaluation and management of concussions is required before returning to full competition.

Step 1: Back to regular activities (such as school)

Athlete is back to their regular activities (such as school).

Step 2: Light aerobic activity

Begin with light aerobic exercise only to increase an athlete's heart rate. This means about 5 to 10 minutes on an exercise bike, walking, or light jogging. No weightlifting at this point.

Step 3: Moderate activity

Continue with activities to increase an athlete's heart rate with body or head movement. This includes moderate jogging, brief running, moderate-intensity stationary biking, moderate-intensity weightlifting (less time and/or less weight from their typical routine).

Step 4: Heavy, non-contact activity

Add heavy non-contact physical activity, such as sprinting/running, high-intensity stationary biking, regular weightlifting routine, non-contact sport-specific drills (in 3 planes of movement).

Step 5: Practice & full contact

Young athletes may return to practice and full contact (if appropriate for the sport) in controlled practice.

Step 6: Competition

Young athletes may return to competition.

It is important for an athlete's parent(s), coach(es) and teachers to watch for concussion symptoms after each day's return to play progression activity. An athlete should only move to the next step if they do not have any new symptoms at the current step. If an athlete's symptoms return or if they develop new symptoms, this could be a sign that they are overexerting. The athlete should stop these activities and the athlete's medical provider should

be contacted. After more rest and no concussion symptoms, the athlete can start at the previous step.

Other considerations

- Review of educational information for student-athletes on prevention of concussions.
- Reinforcement of the importance of early identification and treatment of concussions to improve recovery.
- School personnel should contact the athlete's or cheerleader's parent/guardian and inform them of the suspected sports-related concussion or head injury before allowing the student to go home after competition or practice.
- School personnel shall provide the parent of the student-athlete or cheerleader with a checklist or copy of the return to play protocols including the requirement of written clearance from a physician trained in the evaluation and management of concussions before the athlete is able to return to practice or competition.

Symptoms requiring immediate medical assessment (911/emergency evaluation)

This is not a complete or exhaustive list.

- Loss of consciousness
- Athlete has headache that gets worse and does not go away
- Experience weakness, numbness, decreased coordination, convulsions, or seizure
- Repeated vomiting / intractable retching
- Slurred speech or unusual behavior (disoriented)
- Have one pupil (the black part in the middle of the eye) larger than the other
- Cannot recognize people or places, get confused, restless, or agitated

Possible signs and symptoms of concussion

Some mild traumatic brain injuries (TBI) and concussion symptoms may appear right away, while others may not appear for hours or days after the injury. These symptoms may be observed by coaches, licensed athletic trainers, school/team physicians, school nurses, teachers or even a teammate:

- Athlete grabs or holds head after a play or hit. -" Hands to Head"
- Appears to be "shaking it off"
- Appears dazed or "foggy"
- Forgets plays or demonstrates short term memory difficulty
- Cannot recall injury or events just before or just after the injury

- Answers questions slowly or inaccurately
- Headache
- Nausea/vomiting
- Balance problems or dizziness
- Double vision or changes in vision
- Sensitivity to light or sound/noise
- Feeling sluggish or foggy
- Difficulty with concentration and short-term memory
- Sleep disturbance
- Irritability, mood changes

Temporary supports for student-athletes with sports-related head injuries or concussion

Initial rest followed by a gradual return to activity during healing is recommended. 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, texting – even watching movies if a student is sensitive to light/sound – can slow a student's recovery. Managing the symptoms through a balance of rest and activity is the key to recovery. Schools should be prepared to provide support for students diagnosed with concussion. The health care provider will handle short term medical accommodations.

Collaboration between the health care provider and the school may be necessary. If accommodations are needed for an extended time, the district may want to consider implementing accommodations via a formalized 504 plan.

- Boards of education may look to address the student's cognitive needs in the following ways:
 - Limit screen time
 - Take rest breaks as needed
 - Spend fewer hours at school
 - Be given more time to take tests or complete assignments. (All courses should be considered)
 - Receive help with schoolwork
 - Reduce time spent on the computer, reading, and writing
 - Be granted early passing time to avoid crowded hallways
 - Allow extra time to complete tests or coursework

These supports and/or short-term medical accommodations may be addressed in an individualized healthcare plan.

Concussions affect several aspects of brain function, including cognition, balance and coordination, visual tracking and processing, behavior, and others. The symptoms experienced, difficulties faced, and timeline for recovery will vary for each individual.

A brief period of relative rest followed by a gradual return to lighter activities is generally considered the best “medicine” for healing concussions or other head injuries. This may include relative rest from both physical and cognitive activities. Each injury, and therefore each treatment plan, is different. School personnel, in collaboration with the student, parents/guardian, and the student’s health care provider, are in the best position to create flexible, temporary supports to meet the needs of each student.

A model outline for a “Health Care Plan for Concussion” has been included as a reference.

“Return to Play Progressions” vs. “Therapeutic Progressions”

In many cases, after the initial rest period, concussed individuals may be encouraged to resume limited activities, including light physical and cognitive activities, even in the presence of some continued symptoms. This may be referred to as “therapeutic progressions,” and while some of the activities may overlap with the “graduated return to play progression,” it is different in the goals and intent from “return to play.”

“Return to play” progressions are intended to test the concussed individual’s readiness to perform the activity correctly, and to do so with no symptoms. “Therapeutic” progressions are intended to help the individual recover and to help them improve their performance and tolerance to those activities. This may take several days, or longer, at any given step.

“Therapeutic progressions” should be recommended and supervised by a health care provider familiar with the evaluation and management of concussion, and monitored by a team including the student, parents, health care provider and school personnel. Adjustments to the program should be in response to the student’s overall symptom load and progress. It should be remembered that students may progress at different rates for various aspects of their injury, such as tolerating light to moderate aerobic activity before tolerating being in the classroom, or tolerating schoolwork done at home before tolerating the classroom and school environment. Of note, progressions in one aspect of the treatment plan can have a positive effect on other areas as the brain is returning to a more typical overall level of function. A successful treatment plan is one that can adapt appropriately for each student.

Part IV

Educating the School Community on the District Interscholastic Sports-Related Concussions and Head Injuries Policy

This document provides information addressing statutory requirements and considerations for the prevention and treatment of sports-related concussions and other head injuries.

The NJDOE recognizes that the decisions made on the policy governing the prevention and treatment of sports-related concussions and other head injuries among student-athletes and cheerleaders are dependent on the individual characteristics in each school district, charter, and non-public school. Each school district, charter, and non-public school shall develop a written policy meeting the criteria set forth in N.J.S.A. 18 A:40-41.1- 41.5.

Boards of education must review this 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.

Districts may consider providing regular education and training for staff including administrators, teachers, paraprofessionals, and school counselors regarding concussions and other head injuries. Although this document focuses on sports-related concussions for student athletes or cheerleaders, head injuries can happen at any time during the school day or outside of school.

Schools are in a unique position to promote healthy behaviors. Districts can embed education related to the prevention and treatment of head injuries through the New Jersey Student Learning Standards–Comprehensive Health and Physical Education Standard 2.3 Safety. In addition, N.J.S.A. 18A:6-2 requires education in accident and fire prevention and N.J.S.A. 18A:35-5 requires education in injury or illness emergencies.

Since signs or symptoms of a head injury may appear hours or even days after the impact, it is important to educate students, families, and all members of the education team in the recognition of symptoms as well as how to report symptoms and support individuals in recovery. Changing the culture around concussion can go a long way in promoting recovery and preventing second impact syndrome.

Part V

Resources on Interscholastic Sports Related Concussions and Head Injuries

Internet Resources

[Six Step Return to Play Progression](#)

[Online Concussion Training for School Health Professionals](#)

[Online Concussion Training for School Professionals](#)

[Online Concussion Training for Athletic Trainers](#)

[Heads Up Fact Sheet for Parents](#)

[National Federation of State High Schools Association online Concussion Training for Coaches](#)

[Brain Injury Alliance of New Jersey](#)

[Athletic Trainers Society of New Jersey](#)

[National Collegiate Athletic Association](#)

[New Jersey Interscholastic Athletic Association](#)

[How can I help my child recover after a concussion](#)

[Traumatic Brain Injury Fund](#)

Articles

[Return to Learn: Academic Effects of Concussion in High School and College Student-Athletes](#)

[Centers for Disease Control and Prevention Guideline on the Diagnosis and Management of Mild Traumatic Brain Injury Among Children](#)

Part VI

Sample Support Plan for a Student with a Head injury

(Insert Student Name) needs temporary supports related to a recent head injury/concussion.

Making short-term changes and including these supports can help a student's brain heal—and enable the student to get back to their regular school activities and routines. A student who suffered a concussion will sometimes have short term challenges with attention and concentration, speech, and language, learning and memory, reasoning, planning, and problem solving.

Please provide the supports indicated below to assist the student through their recovery. If you notice that symptoms worsen or return, please notify the school nurse. Contact the school nurse with any questions.

Start date:

Tentative end date:

- Excuse the student from physical activities, such as recess, physical education (PE) class
- Limit exposure to increased noise (consider lunch in a quiet location instead of the cafeteria)
- Allow early dismissal from class to transition when halls are not crowded
- Provide extra time on tests or other assessments
- Limit or reduce assignments or consider extra time for larger assignments.
- Allow rest breaks during the day
- Limit screen time
- Allow the use of headphones to muffle noise
- Allow the use of sunglasses
- Provide a copy of classroom notes when possible
- Allow time to visit the school nurse for treatment of headaches or other symptoms.

Please Note: This support plan is intended to be completed by the school nurse.