

R 2431.4 PREVENTION AND TREATMENT OF SPORTS-RELATED
CONCUSSIONS AND HEAD INJURIES

A concussion is a traumatic brain injury caused by a direct or indirect blow to the head or body. 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. The following procedures shall be followed to implement N.J.S.A. 18A:40-41.1 et seq. and Policy 2431.4.

A. Interscholastic Athletic Head Injury Training Program

1. The school district will adopt an Interscholastic Athletic Head Injury Training Program to be completed by the school or team physician, licensed athletic trainer(s) involved in the interscholastic athletic program, all staff members that coach an interscholastic sport, designated school nurses, and other appropriate school district personnel as designated by the Superintendent.
2. This Training Program shall be in accordance with the guidance provided by the New Jersey Department of Education and the requirements of N.J.S.A. 18A:40-41.1 et seq.

B. Prevention

1. The school district may require pre-season baseline neurocognitive testing of student-athletes before the student-athlete begins participation in an interscholastic athletic program or activity. The baseline and post injury neurocognitive testing program shall be reviewed and approved by the school or team physician trained in the evaluation and management of sports-related concussions and other head injuries.
2. The Principal or designee will review educational information for student-athletes on prevention of concussions.
3. All school staff members, student-athletes, and parents of student-athletes shall be informed through the distribution of the New Jersey Department of Education Concussion and Head Injury Fact Sheet and Parent/Guardian Acknowledgement Form and other communications from the Principal

and coaches on the importance of early identification and treatment of concussions to improve recovery.

C. Signs or Symptoms of Concussion or Other Head Injury

1. Possible signs of concussions can be observed by coaches, licensed athletic trainer, school or team physician, school nurse, or other school staff members. Possible signs of a concussion may be, but are not limited to, the student-athlete:
 - a. Appears dazed, stunned, or disoriented;
 - b. Forgets plays, or demonstrates short-term memory difficulty;
 - c. Exhibits difficulties with balance or coordination;
 - d. Answers questions slowly or inaccurately; and/or
 - e. Loses consciousness.

2. Possible symptoms of concussion shall be reported by the student-athlete to coaches, licensed athletic trainer, school or team physician, school nurse, and/or parent. Possible symptoms of a concussion are, but not limited to:
 - a. Headache;
 - b. Nausea/vomiting;
 - c. Balance problems or dizziness;
 - d. Double vision or changes in vision;
 - e. Sensitivity to light or sound/noise;
 - f. Feeling sluggish or foggy;
 - g. Difficulty with concentration and short-term memory;
 - h. Sleep disturbance; or
 - i. Irritability.

D. Emergency Medical Attention for Concussion or Other Head Injury

1. Any student-athlete who is exhibiting the signs or symptoms of a sports-related concussion or other head injury during practice or competition

shall immediately be removed from play and activities and may not return to the practice or competition that day.

2. The school staff member supervising the student-athlete when the student-athlete is exhibiting signs or symptoms of a sports-related concussion or other head injury shall immediately contact emergency medical assistance when symptoms get worse, loss of consciousness, direct neck pain associated with the injury, or any other sign the supervising school staff member determines emergency medical attention is needed.
 - a. In the event the school or team physician/designee or licensed healthcare professional is available when the student-athlete is exhibiting signs or symptoms of a sports-related concussion or other head injury, the physician/designee or licensed healthcare professional may make the determination to call emergency medical assistance.
3. The school staff member supervising the student-athlete when the student-athlete is exhibiting signs or symptoms of a sports-related concussion or other head injury during practice or competition shall report the occurrence to the Principal or designee. The Principal or designee shall contact the student-athlete's parent and inform the parent of the suspected sports-related concussion or other head injury.

E. Sustained Concussion or Other Head Injury

1. A student-athlete who participates in interscholastic athletics and who sustains or is suspected of sustaining a concussion or other head injury shall immediately be removed from practice or competition and shall be required to have a medical examination conducted by their physician or licensed health care provider. The student-athlete's physician or licensed health care provider shall be trained in the evaluation and management of concussion to determine the presence or absence of a sports-related concussion or head injury.
2. The student-athlete suspected of sustaining a concussion or other head injury shall be provided a copy of Board of Education Policy and Regulation 2431.4 and a copy of Board of Education approved suggestions for management/medical checklist to provide to their parent and their physician or licensed health care professional.
3. The student-athlete's physician must provide to the school district, upon the completion of a medical examination, a written medical release/clearance when the student-athlete is able return to the activity. The release/clearance must indicate:

- a. The medical examination determined the injury was not a concussion or other head injury, the student-athlete is asymptomatic at rest, and the student-athlete may return to the interscholastic athletic activity; or
- b. The medical examination determined the injury was a concussion or other head injury, the student-athlete is asymptomatic at rest, and can begin the graduated return to competition and practice protocol outlined in F. below.

A medical release/clearance not in compliance with this requirement will not be accepted. The student-athlete may not return to the activity or begin the graduated return to competition and practice protocol until he/she receives a medical evaluation and provides a medical clearance/release that has been reviewed and approved by the school or team physician.

4. 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, limit over-stimulation and multi-tasking, etc.)

F. Graduated Return to Competition and Practice Protocol

1. Upon the school physician's acceptance of the written medical release/clearance, the student-athlete may begin a graduated return to competition and practice protocol supervised by a licensed athletic trainer, school or team physician, or designated school nurse trained in the evaluation and management of concussions and other head injuries. Younger students (K-8) should observe a seven-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 concussions as well as the parent/guardians of the student-athlete shall monitor the student athlete in the absence of knowledgeable school district staff. The following steps shall be followed:

Step 1 - Completion of a full day of normal cognitive activities (attendance at school, studying for tests, watching practice, interacting with peers, etc.) without re-emergence of any signs or symptoms. If there is no return of signs or symptoms of a concussion, the student-athlete may advance to Step 2 below on the next day. If a re-emergence of any signs or symptoms of a concussion occur, the student-athlete shall be required to have a re-evaluation by the student-athlete's physician or licensed healthcare provider. The student-athlete shall not be permitted to begin the graduated return to competition and practice protocol until a medical clearance, as required in E.3. above, is provided and approved by the school or team physician/designee or licensed healthcare professional.

Step 2 - Light aerobic exercise, which includes walking, swimming, or stationary cycling, keeping the intensity less than 70% maximum percentage heart rate. There shall be no resistance training. The objective of this Step is increased heart rate. If there is no return of any signs or symptoms of a concussion, the student-athlete may advance to Step 3 below on the next day. If a re-emergence of any signs or symptoms of a concussion occur, the student-athlete shall return to Step 1.

Step 3 - Sport-specific exercise including skating and/or running. There shall be no head impact activities. The objective of this Step is to add movement and continue to increase the student-athlete's heart rate. If there is no return of any signs or symptoms of a concussion, the student-athlete may advance to Step 4 below on the next day. If a re-emergence of any signs or symptoms of a concussion occur, the student-athlete shall return to Step 2.

Step 4 - Non-contact training drills such as passing drills, agility drills, throwing, catching, etc. The student-athlete may initiate progressive resistance training. If there is no return of any signs or symptoms of a concussion, the student-athlete may advance to Step 5 below on the next day. If a re-emergence of any signs or symptoms of a concussion occur, the student-athlete shall return to Step 3.

Step 5 - The student/athlete's medical condition, upon completing Step 4 with no return of any signs or symptoms of a concussion, shall be evaluated for medical clearance based upon consultation between the school district's licensed athletic trainer, school or team physician, designated school nurse, and the student-athlete's physician. After this consultation and upon obtaining written medical release/clearance approved by the school or team physician, the student-athlete may participate in normal training activities. The objective of this Step is to restore the student-athlete's confidence and for the coaching staff to assess the student-athlete's functional skills. If there is no return of any signs or symptoms of a concussion, the student-athlete may advance to Step 6 below on the next day. If a re-emergence of any signs or symptoms of a concussion occur or if the student-athlete does not obtain medical release/clearance to proceed to Step 6, the school or team physician, in consultation with the student-athlete's physician, shall determine the student-athlete's return to competition and practice protocol.

Step 6 - Return to play involving normal exertion or game activity. If the student-athlete exhibits a re-emergence of any concussion signs or symptoms once he/she returns to physical activity, he/she will be removed from further activities and returned to Step 5.

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

1. 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 impact 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.
2. 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, and watching movies if a pupil is sensitive to light/sound, can slow a pupil's recovery. In accordance with the Centers for Disease Control's toolkit on managing concussions, the Board of Education may look to address the pupil's cognitive needs in the following ways. Pupils who return to school after a concussion may need to:
 - a. Take rest breaks as needed;
 - b. Spend fewer hours at school;
 - c. Be given more time to take tests or complete assignments (all courses should be considered);
 - d. Receive help with schoolwork;
 - e. Reduce time spent on the computer, reading, and writing; and/or
 - f. Be granted early dismissal from class to avoid crowded hallways.

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