

Concussion Identification, Management and Return to Play at North Hunterdon Regional High School

In tandem with the New Jersey Interscholastic Athletic Association and the National Athletic Trainers Association North Hunterdon Regional High School will follow the following protocols in regards to concussion and head injury.

According to the Centers for Disease Control and Prevention, at least 3 million sports and recreation related concussions occur in the United States each year. Concussions are a serious and growing public health concern, especially for students participating in contact sports. The competitive athletic culture of playing through pain or “toughing it out” puts student-athletes at serious risk of brain injury, disability, and death.

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.

Currently many student-athletes, school personnel including coaches, parents/guardians, and others involved in interscholastic athletics lack awareness about prevention, identification, and treatment of concussions as well as when it is most appropriate for the student-athlete to return to play.

The effects of concussion while not all preventable can be mitigated by prompt recognition and appropriate response.

A concussion is a type of traumatic brain injury (TBI) caused by a direct or indirect blow to the head. The injury can range from mild to severe and can disrupt the way the brain normally functions. Sometimes concussions are called “closed head injuries”.

An athlete does not need to lose consciousness to sustain a concussion. Sometimes symptoms occur right away and sometimes they develop over time. It can be hours, days or weeks after the injury.

North Hunterdon Regional High School requires a baseline Impact neurocognitive test for each student-athlete for athletic clearance. If a concussion has been sustained the student-athlete will need to re-take the Impact test. The student is required to return to all baseline testing levels for return to play. The student-athlete may need to be seen by the school doctor before being returned to play.

POSSIBLE SIGNS AND SYMPTOMS OF A CONCUSSION:

Signs are observed by a member of the coaching staff, athletic trainer and or physician and are not limited to:

1. Appears dazed, stunned or disoriented.
2. Forgets plays or demonstrates short-term memory difficulties (e.g. unsure of the game, score or opponent).
3. Exhibits difficulties with balance or coordination
4. Answers questions slowly or inaccurately.
5. Loses consciousness.
6. Demonstrates behavior or personality changes.
7. Is unable to recall events prior to or after the hit.

Symptoms reported by the student-athlete to a member of the coaching staff, athletic trainer, parent, and physician includes but are not limited to:

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 of sluggishness or foginess
7. Difficulty with concentration, short-term memory and or confusion
8. Irritability or agitation
9. Depression or anxiety
10. Sleep disturbance (e.g. sleeping too much or too little)

Return to Play Guidelines:

NHHS has a written policy that addresses incidents of suspected or actual concussion among participants involved in district programs. A student-athlete who is suspected of sustaining or who has sustained a concussion and or has become unconscious during an athletic event shall not return-to-play until (s)he meets all of the following criteria:

1. Immediate removal from play and no return-to-play that day.
2. Medical evaluation to determine the presence/absence of concussion.
3. When diagnosis of concussion is present student-athlete will take a post concussion Impact test preferably within 72 hours of onset.
4. It is recommended that the student-athlete diagnosed with a concussion complete AT A MINIMUM, DEPENDING ON PAST HISTORY AND SEVERITY OF SYMPTOMS, a symptom-free week before initiating a graduated return-to-play exercise protocol. North Hunterdon believes that our student-athletes should be symptom free at rest, symptom free with activity and cognitively symptom free before being returned to play. The student-athlete must be monitored during this time period for any

- reoccurrence of concussion symptoms. At this time the student—athlete may need to re-take the post concussion Impact test to return to baseline levels.
5. If the student-athlete exhibits a re-emergence of any post concussion sign or symptoms once they return-to-play, they will be removed from exertional maneuvers and return to his/her primary care physician or the team doctor for reevaluation.
 6. If concussion symptoms reoccur during the graduated return-to-play exercise protocol, the student-athlete will return to the previous level of activity that caused no symptoms and then advance as tolerated.

GRADUATED RETURN-TO-PLAY EXERCISE PROTOCOL

Step 1: No activity, complete physical and cognitive rest.(e.g. no computer work, video games, school work when necessary, Ipod or music directly into ear canals.) The objective of this step is recovery

Step 2: Following medical clearance and return to Impact test baseline measures, participation in normal training activities. The objective of this step is to restore confidence and assess functional skills by the coaching staff.

Step 3: 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

Step 4: Sport-specific exercise including skating, and or running drills; no head impact activities. The objective of this step is to add movement.

Step 5: Non-contact training drills involving progression to more complex training drills (e.g. passing drills). The student-athlete may initiate progressive resistance training.

Step 6: Return to play involving normal exertional or game activity.

This statement was prepared with references from: Consensus Statement on Concussion in Sports3rd International Conference on Concussion in Sport held in Zurich, November2008. Clinical Journal of Sport Medicine, Volume 19, No. 3 May 2009, pp185-200. Concussion Identification, Management and Return-To-Play NJSIAA Policy Statement, NJSIAA Medical Advisory Board, March 2010. National Athletic Trainers' Association Position Statement: Management of Sport-Related Concussion; Journal of Athletic Training 2004; 39(3):280-297