

Canandaigua School District Management of Concussion

Canandaigua School District seeks safe return to play for all sick or injured athletes. Recent research in sport related concussion has increased awareness in both the medical community and the general public. This valuable new knowledge forces us to rethink our approach to concussion recognition and management. The following recommendations are designed to meet required state mandates as well as reflect current acceptable medical standards.

These recommendations provide guidelines of concussion recognition, management, and communication of safe return to play for the athletic department staff and other school personnel. Academic assistance, medical monitoring, and counseling may be necessary during the school day for an athlete or any student with this injury. Appropriate school personnel will be contacted on a case by case basis.

This protocol will be reviewed annually by the Canandaigua concussion management team that includes the school physician, school athletic trainer, athletic director, school nursing, coaching. Other personal may be included as needed. . Any changes or modifications will be reviewed and given to the athletic department staff and appropriate school personnel in writing. All coaching staff will be issued training in concussion recognition and management annually.

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I. Recognition of Concussion

The term “ding” should not be used to describe a sport-related concussion. Use of this term diminishes the seriousness of the injury.

A sport-related concussion usually involves a blow to the head either direct or indirect. The following are common signs and symptoms of sport-related concussion.

Common signs and symptoms of sport-related concussion

1. Signs (observed by others) include, but are not limited to:

- Loss of consciousness (any duration)
- Nausea or vomiting
- Athlete appears dazed or stunned
- Confusion (about assignment, plays, etc.)
- Forgets plays
- Unsure about game, score, opponent
- Moves clumsily (altered coordination)
- Balance problems
- Personality and/or behavior changes
- Responds slowly to questions
- Forgets events prior to hit
- Forgets events after the hit

2. Symptoms (reported by athlete):

- Headache
- Fatigue
- Nausea or vomiting
- Double vision, blurry vision
- Sensitive to light or noise
- Feels sluggish
- Feels “foggy”
- Problems concentrating
- Problems remembering

These signs and symptoms are indicative of probable concussion. Other causes for any of these signs/symptoms should also be considered.

II. Immediate Referral Guidelines for All Staff

1. 911 will be contacted immediately for any athlete with a witnessed loss of consciousness (LOC) of any duration. CPR measures should be initiated with extra caution of possible head/neck injuries.
2. If any athlete has symptoms of a concussion and is not stable (condition is rapidly deteriorating), the athlete should be asked to sit/lie and remain at rest and 911 should be contacted immediately. The athletic trainer, if present, should not leave student unattended. If athletic trainer is not available, coaching should stay with student until EMS services arrive.

Criteria for “Unstable” include:

- deterioration of neurological function
 - decreasing level of consciousness
 - decrease or irregularity in respirations
 - decrease or irregularity in pulse
 - unequal, dilated, or unreactive pupils
 - any signs or symptoms of associated injuries, spine or skull fracture
 - fluid (clear or blood) from the eyes, ears, nose, or mouth
 - mental status changes: lethargy, difficulty maintaining arousal, increasing confusion or agitation
 - seizure activity
 - cranial nerve deficits
3. An athlete who is thought to have sustained a concussion and is symptomatic but stable, (meaning not showing any of the unstable signs listed above), may be transported by his or her parents. The parents should be advised to contact the athlete’s primary care physician, or seek care at the nearest emergency department. Parents are to be offered option of having 911 called for assistance in evaluation even if they indicate they will take athlete.
 4. If the parents are unavailable, a responsible individual may be allowed to transport the injured athlete home if the individual understands the home care instructions and is able to monitor the athlete. Efforts should continue to contact the parents. Under no circumstances should the student be allowed to leave unaccompanied. As above, option of having 911 notified for assistance will be offered.

III. Guidelines for the Certified Athletic Trainer (ATC)

1. If on-site, the ATC will assess the injury, or provide guidance to the coach if unable to physically attend to the athlete.
 - The ATC will perform serial assessments following recommendations in the NATA Position Statement, using SAC (Standardized Assessment of Concussions Tool) and Romberg balance test. Any additional testing may be conducted at the discretion of the ATC with the resources available according to those guidelines.
 - Immediate referral to the hospital will be made when medically appropriate as outlined in Section II.
2. The ATC will notify the athlete's parents of the injury as soon as possible and offer the appropriate medical referral and follow up care.
 - The ATC will encourage follow up with the athlete's primary care physician.
 - Written and verbal home care instructions will be given to the parents by the ATC.
 - Follow up care instructions and paperwork for personal physician communication will be given to the parents by the ATC.
 - The ATC will maintain communication with the parents regarding the athlete's status including return to play until athlete is completely recovered.
 - If the parents are unavailable, the ATC follows the guidelines in Section II-4.
 - ATC will complete appropriate school paperwork
3. The ATC will notify the school nurse of the injury as soon as possible. The school nurse will then initiate appropriate follow-up in the school immediately upon the athlete's return to school.
 - The ATC will continue to coordinate care of the athlete with the school nurse.
 - The ATC will communicate with the athlete's guidance counselor regarding the athlete's neurocognitive and recovery status, if needed.

IV. Guidelines for Coaches

1. Any athlete who exhibits signs or symptoms of a concussion must be removed immediately and should not be allowed to return to activity that day. All coaches should be familiar with the signs and symptoms of concussion described in section I.
2. If a coach suspects the athlete has sustained a concussion, the athlete should be removed from activity until evaluated medically.

3. Refer the athlete for medical evaluation with same outlined parameters as in section II.
4. Coaches should report all head injuries to the certified athletic trainer and school nursing as soon as possible for medical assessment, management, home instructions, and follow-up care.
5. Coaches should seek assistance from the host site certified athletic trainer if at an away contest.
6. If the certified athletic trainer is unavailable, the coach is responsible for notifying the athlete's parents of the injury.
 - The coach should contact the parents; inform them of the injury, and makes arrangements for the parents to pick the athlete up at school. The coach is to remain with the athlete until the parents arrive.
 - The coach should encourage the parents to follow up with the athlete's primary care physician. Paperwork will be given to parents to have personal MD complete for return to sports.
 - The coach should instruct the athlete to report directly to the school nurse the day he or she returns to school after the injury.
 - The coach should contact the certified athletic trainer and provide the athlete's name and home phone number so follow-up can be initiated.
7. In the event that an athlete's parents cannot be reached and the athlete is able to be sent home (rather than directly to hospital)
 - The coach should insure that the athlete will be with a responsible individual, who is capable of monitoring the athlete and understands the home care instructions, before allowing the athlete to go home.
 - The coach or ATC should continue efforts to reach the parent.
 - If there is any question about the status of the athlete, or if the athlete is not able to be monitored appropriately, the athlete should be referred to the emergency department for evaluation. A coach, ATC, or designated school administrator should accompany the athlete and remain with the athlete until the parents arrive.
 - Athletes with suspected head injuries should not be permitted to drive home.
8. **Canandaigua School District accident report form must be completed by the coach or ATC and given to the school nurse as soon as possible.**

V. Follow-up Care of the Athlete during the School Day

1. Responsibilities of the school nurse after notification of student's concussion
 - The athlete will be instructed to report to the school nurse upon his or her return to school. The school nurse will:
 - Re-evaluate the athlete for symptoms.
 - Notify the student's guidance counselor of the injury immediately if there is suspicion that student will need academic accommodations during period of recovery or missed school.
 - Notify the student's physical education teacher immediately that the athlete is restricted from all physical activity until further notice.
 - If the school nurse receives notification of a student-athlete who has sustained a concussion from someone other than the ATC (athlete's parent, athlete, physician note), the ATC should be notified as soon as possible.
 - Determine the level of monitoring the athlete will need on a regular basis during the school day.
 - Coordinate paperwork and communication to parents and/or personal physicians of student paperwork and status.

2. Responsibilities of the student's guidance counselor
 - Monitor the student athlete closely and recommend appropriate academic accommodations to the student athlete's teachers.
 - Communicate with the school nurse on a regular basis any changes made to the student athlete's academic plan.

VI. RETURN TO PLAY (RTP) PROCEDURES AFTER CONCUSSION

1. Returning to participate on the same day of injury
 - An athlete who exhibits signs or symptoms of concussion of any duration, any loss of consciousness, or has abnormal cognitive testing, should not be permitted to return to play on the day of the injury. Any athlete who denies symptoms but has abnormal sideline cognitive testing should also be held out of activity.
 - "When in doubt, hold them out."

2. Return to play after a 1st concussion:
 - The athlete must meet all of the following criteria in order to progress to activity:
 - a) Asymptomatic at rest and with progressive exertion (including mental exertion in school) for at least 24 hours AND:

- b) Have written clearance from primary care physician or specialist (athlete must be cleared for progression to activity by their personal physician or that persons' designee (physician other than an Emergency Room or urgent care physician).
 - c) Canandaigua School District currently also utilizes IMPACT testing to assess cognitive injuries following concussions. Results of this testing may also guide in return to play progression.
3. If there is a discrepancy between the personal physician's medical clearance for return to play and the school's policy, the school's physician will have the final say.
 4. Once the above criteria are met, the athlete may be progressed back to full participation under the supervision of the ATC and with clearance from the school physician. The ATC will keep all pertinent parties informed regarding the status of the athlete.
 5. Progression is individualized and will be determined on a case by case basis. Factors that may affect the rate of progression include
 - Previous history of concussion
 - Duration and type of symptoms
 - Age of the athlete
 - Sport/activity the athlete will return to
 6. All athletes with concussion will participate in a six step graduated progression for Return to Play. There is a minimum of 24 hours rest between the steps. School nursing will meet and evaluate the athlete every day during this progressive return to play. In addition, athletic trainer will monitor either directly, if on site, or defer to coaching to review daily the athlete's progress and symptoms.
 - Step 1. No physical activity until medically cleared and asymptomatic for 24 hours
 - Step 2. Light aerobic exercise such as walking or stationary bike. No resistance training
 - Step 3. Sport specific exercise such as skating, running, etc. Progressive addition of resistance training may begin.
 - Step 4. Non-contact training/skills drills.
 - Step 5. Full contact training in practice setting.
 - Step 6. Return to full competition.

Note: If the athlete experiences post-concussion symptoms during any phase, the athlete drops back to the previous asymptomatic level and resumes the progression after 24 hours. The student-athlete should also be monitored for recurrence of symptoms due to mental exertion, such as reading, working on a computer, or taking tests.

7. The ATC and athlete will discuss appropriate activities for the day. The athlete will be given verbal and written instructions regarding permitted activities.
8. The athlete should see the ATC and school nurse daily for re-assessment and instructions until progressed to unrestricted activity, and given a written report from the ATC. The ATC will continue to monitor the athlete after full participation for recurrence of signs or symptoms the next few days. In the event the ATC is not present on a given day, the athlete should still see the nurse daily and meet with coaching to review the ATC instructions left with the coach.

VII. NON-ATHLETE STUDENT CONCUSSIONS

1. In the event that a student sustains a concussion and is not currently participating in an athletic season, basic evaluation and initial treatment will occur as per athletic injury. School nursing should be immediately contacted if injury occurs on school property during normal school times. If school nursing is not present, emergency services shall be notified by any staff. Concussions that occur off school grounds will also fall into the category of needing to be monitored by school staff. School nursing will evaluate student upon return to school and notify school guidance of any potential academic accommodations needed. Physical education staff will also be notified of any needed modifications. If child has been IMPACT tested for athletic participation, the school may wish to retest with IMPACT following the injury. Similar return to sports/physical activity monitoring will occur, but may not necessarily include the athletic trainers.