

East Greenbush Central School District

Protocol and Procedures for Management of Sports-Related Concussion



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East Greenbush Central School District Protocol and Procedures for Management of Sports-Related Concussion

Medical management of sports-related concussion is evolving. In recent years, there has been a significant amount of research into sports-related concussion in high school athletes. Columbia High School has established this protocol to provide education about concussions for athletic department staff to follow in managing head injuries, and outlines school protocol and procedures as it pertains to return to play issues after concussion.

Columbia High School seeks to provide a safe return to activities for all athletes after injury, particularly after concussion. To respond to these injuries effectively and consistently, procedures have been developed to identify, treat concussed athletes and refer appropriately; they should receive appropriate follow-up medical care during the school day and be fully recovered prior to returning to activity.

This protocol will be reviewed on a yearly basis, by the EGCS D Concussion Management Team. Any change or modification will be reviewed and given to athletic department staff and appropriate school personnel in writing.

**Protocol and Procedures for Management of
Sports-Related Concussion
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East Greenbush Central School District Concussion Management Team

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Chris Hosley; Coach

Nicole Conte; Coach

I. Impact Procedure

Neurocognitive Baseline Testing

(Impact)

Students who participate in interscholastic athletics may, depending upon the sport, be subject to neurocognitive baseline testing (Impact) prior to the start of their sport season. Only satisfactory baselines will be accepted. Unsatisfactory tests will require a retest at a later date and prior to any sport related practices or games.

In the event that a student sustains a concussion, he or she will be retested post injury to help determine cognitive recovery. Post injury testing will only occur after a student's symptoms have completely resolved and before any return to physical activity is permitted.

Baseline and post injury testing is conducted at the high school by the school's certified athletic trainer. Baseline testing for certain sports will occur during a student's freshman and junior year. Interpretation of the test results is done collaboratively between the schools Certified Athletic Trainer and the School Physician. Only those students, who demonstrate satisfactory results as determined by the School Physician and Certified Athletic Trainer, will be allowed to begin the return to play protocol.

Return to Play Protocol

A proper Return to Play Protocol following a concussion ensures that a student can return to physical activity safely while also decreasing the risk of re-injury. Protecting students from Post-Concussion and Second Impact Syndromes are vital. Return to play is a stepwise progression that a student will undergo after: 1) a complete resolution of symptoms has occurred for at least 24 hours and 2) medical clearance has been given by Physician.

The Certified Athletic Trainer, under the direction of the School Physician, will administer the Return to Play Protocol. Each step in the progression requires 24 hours in between. If any symptoms return at any time during the progression the student must return to the previous step and wait for symptoms to resolve. The student's parents and School Physician will be notified in such an event. Following a successful completion of the progression, the student will be cleared to resume full athletic/physical activity without restriction by the School Physician.

Phase 1: Low impact, non-strenuous, light aerobic activity such as walking or riding a stationary bike.

If tolerated without return of symptoms over a 24 hour period proceed to;

Phase 2: Higher impact and exertion, and moderate aerobic activity such as running or jumping rope. No resistance training. If tolerated without return of symptoms over a 24 hour period proceed to;

Phase 3: Sport specific non-contact activity. Low resistance weight training with a spotter. If tolerated without return of symptoms over a 24 hour period proceed to;

Phase 4: Sport specific non-contact drills. Higher resistance weight training with a spotter. If tolerated without return of symptoms over a 24 hour period proceed to;

Phase 5: Full contact training drills and intense aerobic activity. If tolerated without return of symptoms over a 24 hour period proceed to;

Phase 6: Return to full activities without restrictions

Impact Procedure

- Access to computer lab
- 15-20 student-athletes per testing session
- Assigned days prior to start of season for teams to test
- Will have a set make up days for those who miss or have an unsatisfactory baseline
- If student-athlete cannot make assigned testing day or assigned make up day, test will be completed at a later date, but student-athlete will not be able to participate until baseline is completed
- Chief School Physician, Certified Athletic Trainer and Athletic Director reserve all rights to designate test dates, make up dates, and whether baseline is satisfactory or unsatisfactory

Teams that will be Impact Tested

Fall

Football- varsity, junior varsity and modified

Field Hockey- varsity, junior varsity

Cheerleading- varsity, junior varsity

Girls' soccer- varsity, junior varsity

Boys' soccer- varsity, junior varsity

Girls' volleyball- varsity, junior varsity

Boys' volleyball- varsity, junior varsity

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Winter

Wrestling- varsity, junior varsity, modified

Boys' Basketball- varsity, junior varsity

Girls' Basketball- varsity, junior varsity
Track- pole vault, high jump, long jump, triple jump

Spring

Boy's Lacrosse- varsity, junior varsity, modified
Girl's Lacrosse- varsity, junior varsity, modified
Baseball- varsity, junior varsity
Softball- varsity, junior varsity
Track- pole vault, high jump, long jump, triple jump

II. RECOGNITION OF CONCUSSION

- A. Common signs and symptoms of sports-related concussion
1. Signs (observed by others)
 - Athlete appears dazed or stunned
 - Confusion (about assignment, plays, etc.)
 - Forgets play
 - Unsure about game, score, opponent
 - Moves clumsily (altered coordination)
 - Balance problems
 - Personality change
 - Responds slowly to questions
 - Forgets events prior to hit
 - Forgets events after hit
 - Loss of consciousness (any duration)
 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
 3. These signs and symptoms are indicative of probable concussion. Other Causes for symptoms should also be considered.
- B. Cognitive impairment (altered or diminished cognitive function)
1. General cognitive status can be determined by simple sideline cognitive testing. Including but not limited to pupil check, memory testing, balance/coordination testing.
 2. Guidelines for sideline assessment

If the Certified Athletic Trainer or the coach suspects that a player has a concussion, then the Following steps will be taken:

1. Remove athletes from play.
2. Talk with athlete and complete a symptom check, and a sideline assessment
Coaches follow sideline assessment card - Add for ease of information shared
3. Inform the athlete's parents or guardian about the signs and symptoms of a concussion That have been observed in the student to indicate known or Possible concussion.
4. Ensure the athlete is evaluated by an appropriate health care professional. Do not Try to judge the seriousness of the injury yourself. Do not allow the athlete Return to play until after full East Greenbush Concussion Protocols and Procedures Are followed.

If a Student-athlete is suspected of a concussion from an interscholastic sporting event, they need to be evaluated by a Physician, as stated by the NYSED Concussion Guidelines and shown in the table below.

Where injury occurred	Who can diagnose	Who can clear to return to school activities inclusive of PE	Who has final clearance for student to return to athletic activities	Additional information
School Athletic Activities (interscholastic sports)	Physician	Physician	District Medical Director*	Must be symptom free for 24 hours prior to return to Athletic Activities (interscholastic sports)
School during non-athletic activities	Physician Nurse Practitioner Physician Assistant	Physician Nurse Practitioner Physician Assistant or Designee (e.g., Neuropsychologist)	District Medical Director*	School Must follow private health care provider orders
Outside of school	Physician Nurse Practitioner Physician Assistant	Physician Nurse Practitioner Physician Assistant or Designee (e.g., Neuropsychologist)	District Medical Director*	School Must follow private health care provider orders

III. MANAGEMENT AND REFERRAL GUIDELINES FOR ALL STAFF

A. Suggested Guidelines for Management of Sports-Related Concussion

1. Any athlete with a witnessed loss of consciousness (LOC) of any duration should be transported immediately to the nearest emergency department.
2. Any athlete who has symptoms of a concussion, and who is not stable (i.e., condition is deteriorating), is to be transported immediately to the nearest emergency department via emergency vehicle.
3. An athlete who exhibits any of the following symptoms should be transported immediately to the nearest emergency department.
 - a. deterioration of neurological function
 - b. decreasing level of consciousness
 - c. decreased or irregularity in respirations
 - d. decrease or irregularity in pulse
 - e. unequal, dilated, or unreactive pupils
 - f. Any signs or symptoms of associated injuries, spine or skull fracture, or bleeding.
 - g. mental status changes: lethargy, difficulty maintaining arousal, confusion or agitation
 - h. seizure activity
 - i. cranial nerve deficits
4. An athlete who is symptomatic but stable, 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, on the day of the injury.
 - a. **ALWAYS** give parents the option of emergency transportation, even if you do Not feel it is necessary.

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IV. PROCEDURES FOR THE CERTIFIED ATHLETIC TRAINER (ATC)

1. The ATC will assess the injury, or provide guidance to the coach if unable to personally attend to the athlete. Will contact the Athletic Director and the parent of the injured athlete. Immediate referral to the athlete's primary care physician or to the hospital will be made when medically appropriate.
2. The ATC will perform serial assessments including motor, neurological, cognitive, balance and memory tests along with a symptom check. The ATC will be responsible to contact the athlete's parents and give follow-up instructions per the East Greenbush Concussion Protocols and Procedures.
3. The ATC will fill out an East Greenbush School District's Accident Report.
4. The ATC will notify the school nurse of the injury via email and will subsequently send the accident report health office so that the nurse can initiate appropriate follow-up in school.
5. Once clearance is received from the Primary Care Physician (PCP), the ATC will begin the Return to Play Protocol with the athlete. The school nurse will notify the ATC and PE teacher that the athlete will be beginning his or her RTP protocol. At this time, the ATC will begin the exceptional testing during PE,

lunch, study hall or after school.

Phase 1: Low impact, non-strenuous, light aerobic activity such as walking or riding a stationary bike. If tolerated without return of symptoms over a 24 hour period proceed to;

Phase 2: Higher impact and exertion, and moderate aerobic activity such as running or jumping rope. No resistance training. If tolerated without return of symptoms over a 24 hour period proceed to;

Phase 3: Sport specific non-contact activity. Low resistance weight training with a spotter. If tolerated without return of symptoms over a 24 hour period proceed to;

Phase 4: Sport specific non-contact drills. Higher resistance weight training with a spotter. If tolerated without return of symptoms over a 24 hour period proceed to;

Phase 5: Full contact training drills and intense aerobic activity. If tolerated without return of symptoms over a 24 hour period proceed to;

Phase 6: Return to full activities without restrictions.

6. If the six day progressive return to practice is uneventful, then the ATC will report all findings to Medical Director. At this time, the ATC will record the events of the RTP and send them to the Medical Director via fax or email along with all other doctors' notes and Medical Director will make a medical determination on clearance to play. If athlete is cleared, Medical Director or staff will send clearance back to the ATC and the ATC will make copies for the school nurse and Athletic Director. The school nurse will then send copy of clearance to coach and PE teacher.
7. If the Medical Director feels compelled to evaluate student athlete, the school nurse will Contact parents or guardian to arrange an office visit. This will be billed to EGCS D as a consultation Fee. If a student has no health insurance, all attempts will be made to secure health insurance for The student. If this is impossible, then the student can be sent to the Medical Director for evaluation.

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V. GUIDELINES AND PROCEDURES FOR COACHES

RECOGNIZE, REMOVE, REFER

A. Recognize concussion

1. All coaches should become familiar with the signs and symptoms of concussion that are described in Section I of this document.
2. Very basic cognitive testing should be performed to determine cognitive deficits.

B. Remove from activity

1. If the coach suspects the athlete has sustained a concussion, the athlete should be removed from activity until evaluated medically.
 - a. **Any athlete who exhibits signs or symptoms of a concussion should be removed immediately assessed and should not be allowed to return to activity that day.**

C. Refer the athlete for medical evaluation

1. Coaches should report all head injuries to the ATC as soon as possible, for medical assessment and management, and for coordination of follow-up care.

- a. The ATC can be reached at (518) 207-2084 (office) (518) 810-7675 (Cell)
 - b. The ATC will be responsible for contacting the athlete's parents and providing follow-up instructions.
2. Coaches should seek assistance from the host site ATC if at an away contest.
3. If the Columbia High School ATC is unavailable, or the athlete is injured at an Away event, the coach is responsible for notifying the athlete's parents of the injury.
 - a. Contact the parents to inform them of the injury and make arrangements for them to pick the athlete up at school.
 - b. Contact the ATC at the above number, with the athlete's home phone number, so that the follow-up can be initiated.
 - c. Remind the athlete to report directly to the ATC as soon as possible.
4. In the event that an athlete's parents cannot be reached, and the athlete is able to be sent home (rather than directly to MD):
 - a. The coach or ATC should insure that the athlete will be with a responsible individual, who is capable of monitoring the athlete and understanding the home care instructions, before allowing the athlete to go home.
 - b. The coach or ATC should continue efforts to reach the parent.
 - c. 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 or ATC should accompany the athlete and remain with the athlete until the parents arrive.
 - d. Any athlete with suspected head injuries should not be permitted to drive home.

VI. FOLLOW-UP CARE OF THE ATHLETE DURING SCHOOL

Responsibilities of the School Nurse after notification of student's concussion:

1. When a Student returns to school from a diagnosed concussion the school nurse will:
 - a. Make sure all paperwork is completed
 - b. Notify guidance counselor of situation to help create individualized academic health care plan based on PCP instructions
 - c. Share all information with students teachers and ATC
 - d. Once clearance is received from PCP, let ATC, PE teacher and student know they can be using RTP protocol

Responsibilities of the Athletic Trainer (ATC)

1. Reevaluate the athlete on a regular basis.
2. Follow up with Parents as needed.
3. Perform Impact test if deemed necessary by ATC or Medical Director.
4. Perform Zurich Protocol on athletes cleared by PCP of concussion.
5. Keep Medical Director and school nurses informed
6. Share all findings with Medical Director, school nurse and coach.
7. Fax or email completed Zurich protocol along with all PCP notes to Medical Director for final clearance.
8. Continue to follow up with athlete after Zurich protocol is finished.

Responsibilities of the student's guidance counselor:

1. Monitor the student academic progress while returning from diagnosed concussion.
2. Communicate with the school health office on a regular basis, to provide the most effective Care for the student.

Requests of Primary Care Physicians:

In the event the Primary Care Physician (PCP) requests that the student, though symptomatic, perform activities during Physical Education class as part of their own Concussion Protocols, the following steps will be taken.

1. Written permission from PCP to take part in light aerobic activities
2. School nurse, ATC and Physical education teacher will all receive copy of permission note
3. All activities will be done in a non-group activity
4. ATC and or physical education teacher will supervise student
5. If any regression occurs, students activities will be stopped immediately and parent and PCP will be contacted

VII. RETURN TO PLAY PROCEDURES AFTER CONCUSSION

- A. Returning to participate on the same day of injury
 1. As previously discussed in this document, an athlete who exhibits signs or symptoms of concussion, or has abnormal testing, should not be permitted to return to play on the day of the injury. Any athlete who denies symptoms, but has undergone abnormal sideline cognitive testing, should be held out of activity.
 2. "When in doubt, hold them out."
- B. Return to play after concussion
 1. The athlete must meet the following criteria prior to progress to Activity:
 - A. Asymptomatic at rest and with exertion (including mental exertion in School) AND:
 - b. Provide written clearance from primary care physician or specialist that states the student is *asymptomatic*.
(Athlete must be cleared for progression to activity by a physician other Than an Emergency Room physician).
 - c. Be cleared by the ATC (after Zurich 6 Day protocol)
 - d. After reviewing all information from all medical and school professionals, The Medical Director must make the final determination and clear the student to Return to play in their sport.
 2. Once the above criteria are met, the athlete will be allowed back to full activity, under The supervision of the ATC.
 3. 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, and sport/activity in which the athlete participates. An athlete with a prior history of concussion, one who has had an extended duration of symptoms, or who is participating in a collision or contact sport should be progressed more slowly as dictated by physician.

EAST GREENBUSH CENTRAL SCHOOL DISTRICT

CONCUSSION GUIDELINES FOR PARENTS/STUDENT-ATHLETES

1. If a head injury is suspected, the student-athlete must seek medical evaluation for diagnosis and have the Head Injury Evaluation Form filled out by a physician.
2. The student-athlete must re-visit MD for clearance and MD must fill out appropriate “Head’s Injury Evaluation Form” (second doctor visit).
3. Once the “Head Injury Evaluation Form” is completed, it should be submitted directly to the school nurse or ATC who will send the form to the school Medical Director.
4. Once the student-athlete has received an *asymptomatic* clearance from Primary Care Doctor, the student-athlete will then begin a six-step back to play program. Program consists of:

Phase 1: Low impact, non-strenuous, light aerobic activity such as walking or riding a stationary bike. If tolerated without return of symptoms over a 24 hour period proceed to;
Phase 2: Higher impact and exertion, and moderate aerobic activity such as running or jumping rope. No resistance training. If tolerated without return of symptoms over a 24 hour period proceed to;
Phase 3: Sport specific non-contact activity. Low resistance weight training with a spotter. If tolerated without return of symptoms over a 24 hour period proceed to;
Phase 4: Sport specific non-contact drills. Higher resistance weight training with a spotter. If tolerated without return of symptoms over a 24 hour period proceed to;
Phase 5: Full contact training drills and intense aerobic activity. If tolerated without return of symptoms over a 24 hour period proceed to;
Phase 6: Return to full activities without restrictions.

Upon completion of six day program, the certified athletic trainer will send documentation to school medical director for further review of student-athletes file.

5. The student-athlete cannot return to play until final clearance is received from the school medical director. This clearance will then be forwarded to the school nurse (or athletic trainer if school nurse unavailable).

For questions or concerns, contact your child’s health office:

Columbia High School
Health Office
Phone: 207-2075

Goff Middle School
Health Office
Phone: 207-2490

Sean Leggett
Athletic Trainer
Phone: 207-2084

Fax: 207-2079

Fax: 477-2667

Fax: 207-2089

**EAST GREENBUSH CENTRAL SCHOOL DISTRICT
Head Injury Evaluation**

Name of Student: _____ **DOB:** _____

Injury Date: _____ **Sport:** _____

Physician Evaluation

Date of First Evaluation: _____ Time of Evaluation: _____

Date of Second Evaluation: _____ Time of Evaluation: _____

Symptoms Observed:	First Doctor Visit	Second Doctor Visit
Dizziness	Yes No	Yes No
Headache	Yes No	Yes No
Tinnitus	Yes No	Yes No
Nausea	Yes No	Yes No
Fatigue	Yes No	Yes No
Drowsy/Sleepy	Yes No	Yes No
Sensitivity to Light	Yes No	Yes No
Sensitivity to Noise	Yes No	Yes No
Anterograde Amnesia (After impact)	Yes No	N/A N/A
Retrograde Amnesia (Backwards in time from impact)	Yes No	N/A N/A

First Doctor Visit:

Did the athlete sustain a concussion? (Yes or No) (One or the other must be circled)

** Post-dated releases will not be accepted. The athlete must be seen and released on the same day.

Is this the student's first concussion? (Yes or No)

Please note that if there is a history of previous concussion, then a referral for professional Management by a specialist or concussion clinic should be strongly considered.

Additional Findings/Comments _____

And/or Diagnostic Tests:

Recommendations/Limitations: _____

MD Signature: _____ Date: _____

MD Print or stamp name: _____ Phone number: _____

Second Doctor Visit:

*** Athlete must be completely symptom free before beginning six-step return to play.

If an athlete still has symptoms more than seven days after injury, referral to a concussion specialist/clinic should be strongly considered.

Please check one of the following:

____ Athlete is asymptomatic and is ready to begin the six-step return to play.

____ Athlete is still symptomatic more than seven days after injury.

MD Signature: _____

Date: _____

MD Print or stamp name: _____

Phone number: _____

Concussion Resources

NYSED Guidelines for Concussion Management

https://www.p12.nysed.gov/sss/documents/FinalConcussionGuidelines7_6_2022PDF.pdf

American Association of Neurological Surgeons

<http://www.aans.org/Patient%20Information/Conditions%20and%20Treatments/Concussion.aspx>

Brain Injury Association of New York State

<http://www.bianys.org>

Centers for Disease Control and Prevention

<http://www.cdc.gov/concussion/index.html>

Child Health Plus

http://www.health.ny.gov/health_care/managed_care/consumer_guides/about_child_health_plus.htm

Consensus Statement on Concussion in Sport – The 3rd International Conference on Concussion in Sport, held in Zurich, November 2008

<http://sportconcussions.com/html/Zurich%20Statement.pdf>

ESPN Video- Life Changed by Concussion

<http://espn.go.com/video/clip?id=7525526&categoryid=5595394>

Local Departments of Social Services- New York State Department of Health

http://www.health.ny.gov/health_care/medicaid/ldss.htm

Nationwide Children's Hospital- an Educator's Guide to Concussions in the Classroom

<http://www.nationwidechildrens.org/concussions-in-the-classroom>

New York State Department of Health

http://www.health.ny.gov/prevention/injury_prevention/concussion.htm

New York State Public High School Athletic Association, Safety and Research

<http://www.nysphsaa.org/safety/>

SportsConcussions.org

<http://www.sportsconcussions.org/ibase/line/>

Upstate University Hospital- Concussion in the Classroom

<http://www.upstate.edu/pmr/healthcare/programs/concussion/classroom.php>