



Gfeller-Waller/NCHSAA Concussion Management Guiding Principles



Health and Safety Personnel

Licensed Physician - Physician Licensed to Practice Medicine (MD or DO) under Article 1 of Chapter 90 of the General Statutes and has training in concussion management.

Licensed Athletic Trainer (LAT) - An individual who is licensed under Article 34 of Chapter 90 of the General Statutes entitling them to perform the functions and duties of an athletic trainer.

Licensed Physician Assistant (PA) - Any person who is licensed under the provisions of G.S. 90-9.3 to perform medical acts, tasks, and functions as an assistant to a physician.

Licensed Nurse Practitioner (NP) - Any nurse approved under the provisions of G.S. 90-18(14) to perform medical acts, tasks or functions.

First Responder (FR) - A first responder must meet the requirements set forth by the North Carolina State Board of Education Policy ATHL-000.

Key Tenets of Concussion Management

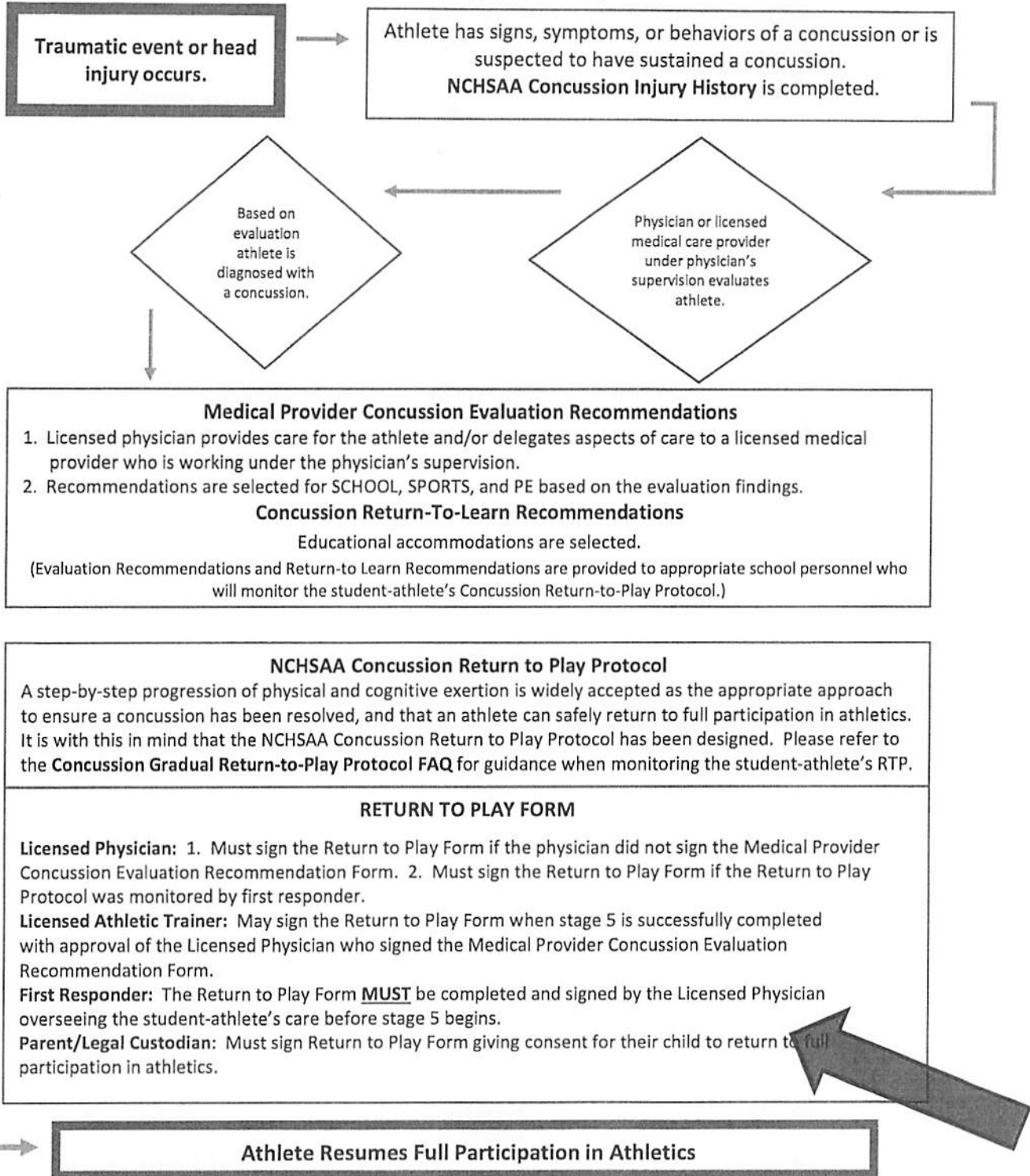
1. No athlete with a suspected concussion is allowed return to practice or play the same day that his or her head injury occurred.
2. Athletes should never return to play or practice if they still have ANY symptoms.
3. A concussion is a traumatic brain injury that can present in several ways and with a variety of signs, symptoms, and neurologic deficits that can present immediately or evolve over time.
4. Both academic and cognitive considerations should be addressed when managing a student-athlete with a concussion. The NC Dept. of Public Instruction now requires a "Return to Learn" plan for students with suspected head injury. Also, consider guidance on proper sleep hygiene, nutrition, and hydration.
5. More than one evaluation is typically necessary for medical clearance for concussion. Due to the need to monitor concussions for recurrence of signs and symptoms with cognitive or physical stress, Emergency Room and Urgent Care physicians typically should not make clearance decisions at the time of first visit.
6. In order to clear an athlete to return to sport without restriction, an athlete should be completely symptom-free both at rest AND with cognitive stress, then with full physical exertion (i.e. has completed Return to Play Protocol).
7. It is not feasible for a provider to diagnosis an acute concussion and provide clearance on the same day.

NCHSAA specific requirements regarding the Gfeller-Waller Concussion Awareness Law as defined by NCHSAA Sports Medicine Advisory Committee (SMAC)

1. All member school student-athletes must have a Licensed Physician's (MD/DO) signature on the **RETURN TO PLAY FORM and/or Medical Provider Concussion Evaluation Form**. If the physician has signed the **Medical Provider Concussion Evaluation Form** both the Return to Play Protocol and decision to release of the student athlete to full participation in athletics may be delegated to the Licensed Athletic Trainer.
2. The physician signing the **RETURN TO PLAY FORM and/or the Medical Provider Concussion Evaluation Medical Recommendation Form** is licensed under Article 1 of Chapter 90 of the General Statutes and has training in concussion management.
3. Physicians may choose to delegate aspects of the student-athlete's care to a licensed athletic trainer, licensed nurse practitioner or licensed physician assistant who is working under that physician's supervision, and may work in collaboration with a licensed neuropsychologist in compliance with the Gfeller-Waller Concussion Law for RTP clearance.



NCHSAA Student-Athlete Concussion Management Algorithm





NCHSAA Concussion Injury History

Student-Athlete's Name: _____ Sport: _____ Male/Female

Date of Birth: _____ Date of Injury: _____ School: _____

| <u>Following the injury, did the athlete experience:</u> | <u>Circle one</u> | <u>Duration (write number/circle appropriate)</u> | <u>Comments</u> |
|--|-------------------|---|-----------------|
| <i>Loss of consciousness or unresponsiveness?</i> | YES NO | _____ seconds / minutes / hours | |
| <i>Seizure or convulsive activity?</i> | YES NO | _____ seconds / minutes / hours | |
| <i>Balance problems/unsteadiness?</i> | YES NO | _____ minutes / hrs / days / weeks /continues | |
| <i>Dizziness?</i> | YES NO | _____ minutes / hrs / days / weeks /continues | |
| <i>Headache?</i> | YES NO | _____ minutes / hrs / days / weeks /continues | |
| <i>Nausea?</i> | YES NO | _____ minutes / hrs / days / weeks /continues | |
| <i>Emotional Instability (abnormal laughing, crying, anger?)</i> | YES NO | _____ minutes / hrs / days / weeks /continues | |
| <i>Confusion?</i> | YES NO | _____ minutes / hrs / days / weeks /continues | |
| <i>Difficulty concentrating?</i> | YES NO | _____ minutes / hrs / days / weeks /continues | |
| <i>Vision problems?</i> | YES NO | _____ minutes / hrs / days / weeks /continues | |
| <i>Other</i> _____ | YES NO | _____ minutes / hrs / days / weeks /continues | |

Describe how the injury occurred: _____

Additional details: _____

Name of person completing Injury History: _____

Contact Information: Phone Number: _____ Email: _____

Injury History Section completed by: Licensed Athletic Trainer, First Responder, Coach, Parent, Other (Please Circle)



Medical Provider Concussion Evaluation Recommendations

(To be completed by Licensed Physician (MD/DO) or an LAT, PA, or NP under treating physician's supervision)

Name of Athlete: _____ DOB: _____ Date of Evaluation: _____

All NC public high school and middle school student-athletes must have a Licensed Physician's (MD/DO) signature prior to resuming full participation in athletics. Due to the need to monitor concussions for recurrence of signs & symptoms with cognitive or physical stress, **Emergency Room and Urgent Care physicians should not make clearance decisions at the time of first visit.** All medical providers are encouraged to review the CDC site if they have questions regarding the latest information on the evaluation and care of the scholastic athlete following a concussion injury. Providers should refer to NC Session Law 2011-147, House Bill 792 Gfeller-Waller Concussion Awareness Act for requirements for clearance, and please initial any recommendations you select. (Adapted from the Acute Concussion Evaluation (ACE) care plan (<http://www.cdc.gov/concussion/index.html>) and the NCHSAA concussion Return to Play Protocol.) The recommendations indicated below are based on today's evaluation.

RETURN TO SCHOOL:

PLEASE NOTE →

1. The North Carolina State Board of Education approved "Return-To- Learn after Concussion" policy effective beginning 2016-2017 school year to address learning and educational needs for students following a concussion.
2. A sample of accommodations is found on the Concussion Return to Learn Recommendations page.

SCHOOL (ACADEMICS):

(Physician Identified below should check all recommendations that apply.)

- Out of school until _____.
- May return to school on _____ with accommodations as selected on the Concussion Return to Learn Recommendations page.
- May return to school now with no accommodations needed.

RETURN TO SPORTS:

PLEASE NOTE →

A step-by-step progression of physical and cognitive exertion is widely accepted as the appropriate approach to ensure a concussion has resolved, and an athlete can return to sport safely. The NCHSAA Concussion Return to Play Protocol has been designed using a step-by-step progression.

SPORTS & PHYSICAL: EDUCATION

(Physician Identified below should check all recommendations that apply.)

- Not cleared for sports at this time.
- Not cleared for physical education at this time.
- May do light physical education that poses no risk of head trauma such (i.e. walking laps).
- May start RTP Protocol under appropriate monitoring and may return to PE activities after completion.
- Must return to examining physician for clearance before returning to sports/physical education.
- May start the RTP Protocol under monitoring of Licensed Athletic Trainer (LAT) and progress through all five stages with no office contact required. If student-athlete remains free of signs/symptoms the LAT may sign the RETURN TO PLAY FORM releasing the student-athlete to full participation in athletics. **(MD or DO only may make this recommendation.)**

Comment: _____

Physicians may choose to delegate aspects of the student-athlete's care to a licensed athletic trainer, licensed nurse practitioner or licensed physician assistant who is working under that physician's supervision, and may work in collaboration with a licensed neuropsychologist in compliance with the Gfeller-Waller Concussion Law for RTP clearance. * If this option is chosen, that individual should be designated by completing the requested information at the bottom of this page *.

Signature of Physician Licensed to Practice Medicine MD / DO

Date _____

Please Print Name

Office Address

Phone Number

Physician signing this form is licensed under Article 1 of Chapter 90 of the General Statutes and has training in concussion management.

*** The physician above has delegated aspects of the student-athlete's care to the individual designated below *.**

Signature of LAT, NP, PA-C, Neuropsychologist (Please Circle)

Date _____

Please Print Name

Office Address

Phone Number



Concussion Return-To-Learn Recommendations

(To be completed by Licensed Physician (MD/DO) or an LAT, PA, or NP under treating physician's supervision)

Name of Athlete: _____ DOB: _____ Date: _____

Following a concussion, most individuals typically need some degree of cognitive and physical rest to facilitate and expedite recovery. Activities such as reading, watching TV or movies, playing video games, working/playing on the computer and/or texting require cognitive effort and can worsen symptoms during the acute period after concussion. Navigating academic requirements and a school setting present a challenge to a recently concussed student-athlete. A Return-To-Learn policy facilitates a gradual progression of cognitive demand for student-athletes in a learning environment. Healthcare providers should consider whether academic and school modifications may help expedite recovery and lower symptom burden. It is important to review academic/school situation for each student athlete and identify educational accommodations that may be beneficial.

Educational accommodations that may be helpful are listed below.

Return to school with the following supports:

Length of Day

- Shortened day. Recommended _____ hours per day until re-evaluated or (date) _____.
- ≤ 4 hours per day in class (consider alternating days of morning/afternoon classes to maximize class participation)
- Shortened classes (i.e. rest breaks during classes). Maximum class length of _____ minutes.
- Use _____ class as a study hall in a quiet environment.
- Check for the return of symptoms when doing activities that require a lot of attention or concentration.

Extra Time

- Allow extra time to complete coursework/assignments and tests.
- Take rest breaks during the day as needed (particularly if symptoms recur).

Homework

- Lessen homework by _____ % per class, or _____ minutes/class; or to a maximum of _____ minutes nightly, no more than _____ minutes continuous.

Testing

- No significant classroom or standardized testing at this time, as this does not reflect the patient's true abilities.
- Limited classroom testing allowed. No more than _____ questions and/or _____ total time.
 - Student is able to take quizzes or tests but no bubble sheets.
 - Student able to take tests but should be allowed extra time to complete.
- Limit test and quiz taking to no more than one per day.
- May resume regular test taking.

Vision

- Lessen screen time (SMART board, computer, videos, etc.) to a maximum _____ minutes per class AND no more than _____ continuous minutes (with 5-10 minute break in between). This includes reading notes off screens.
- Print class notes and online assignments (14 font or larger recommended) to allow to keep up with online work.
- Allow student to wear sunglasses or hat with bill worn forward to reduce light exposure.

Environment

- Provide alternative setting during band or music class (outside of that room).
- Provide alternative setting during PE and/or recess to avoid noise exposure and risk of injury (out of gym).
- Allow early class release for class transitions to reduce exposure to hallway noise/activity.
- Provide alternative location to eat lunch outside of cafeteria.
- Allow the use of earplugs when in noisy environment.
- Patient should not attend athletic practice
- Patient is allowed to be present but not participate in practice, limited to _____ hours

Additional Recommendations:



NCHSAA Concussion Return to Play Protocol

Name of Student- Athlete: _____ Sport: _____ Male/Female

DOB: _____ Date of Injury: _____ Date Concussion Diagnosed: _____

Licensed Athletic Trainers: All 5 stages listed below must be completed under the observation of a Licensed Athletic Trainer. The Return to Play Form can then be signed by the Licensed Athletic Trainer, with approval of the Licensed Physician overseeing the student-athlete's care, thereby releasing the student-athlete to full participation in athletics.

First Responders: If the return to play protocol is being monitored by a First Responder, the **Licensed Physician** overseeing the student-athlete's care should be kept apprised of his/her progress. This progress may be reviewed electronically or by phone and does not require an additional office visit, unless otherwise indicated by the **Licensed Physician**. However, the Return to Play Form **MUST** be completed and signed by the **Licensed Physician** overseeing the student-athlete's care before Stage 5 is begun.

| STAGE | EXERCISE | GOAL | DATE SUCCESSFULLY COMPLETED | COMMENTS | MONITORED BY |
|--|--|--|-----------------------------|----------|--------------|
| 1 | 20-30 min of cardio activity: walking, stationary bike. | Perceived intensity/exertion: Light Activity | | | |
| 2 | 30 min of cardio activity: jogging at medium pace. Body weight resistance exercise (e.g. push-ups, lunge walks) with minimal head rotation x 25 each. | Perceived intensity/exertion: Moderate Activity | | | |
| 3 | 30 minutes of cardio activity: running at fast pace, incorporate intervals. Increase repetitions of body weight resistance exercise (eg. sit-ups, push-ups, lunge walks) x 50 each. Sport-specific agility drills in three planes of movement. | Perceived intensity/exertion: Hard Activity, changes of direction with increased head and eye movement | | | |
| 4 | Participate in non-contact practice drills. Warm-up and stretch x 10 minutes. Intense, <u>non-contact</u> , sport-specific agility drills x 30-60 minutes. | Perceived intensity/exertion: High/Maximum Effort Activity | | | |
| If <i>First Responder</i> is monitoring progress, The RETURN TO PLAY FORM MUST be signed by the Licensed Physician overseeing student-athlete's care before stage 5 is begun. | | | | | |
| 5 | Participate in full practice. If in a contact sport, controlled contact practice allowed. | | | | |
| If signs or symptoms occur after stage 5 the student-athlete MUST return to Licensed Physician overseeing student-athlete's care. | | | | | |

Individual who monitored the student-athlete's Return-to Play Protocol should sign and date below when stage 5 is successfully completed.

By signing below, I attest that I have monitored the above named student-athlete's return to play protocol.

Signature of Licensed Physician, Licensed Athletic Trainer, Licensed Physician Assistant,
Licensed Nurse Practitioner, Licensed Neuropsychologist, or First Responder (Please Circle)

Date

Please Print Name



North Carolina High School Athletic Association

RETURN TO PLAY FORM: CONCUSSION MEDICAL CLEARANCE RELEASING THE STUDENT-ATHLETE TO RETURN TO ATHLETIC PARTICIPATION

Name of Athlete: _____ Sport: _____ Male/Female

DOB: _____ Date of Injury: _____ Date Concussion Diagnosed: _____

This is to certify that the above-named student-athlete has been evaluated and treated for a concussion. I attest that the above-named student-athlete is now reporting to be completely free of all clinical signs and reports he/she is entirely symptom-free at rest and with both full cognitive and full exertional/physical stress.

(If previously designated by the Licensed Physician overseeing the student-athletes care, this form may be completed by a Licensed Athletic Trainer.)

By signing below, I attest that the above-named student-athlete has successfully completed the Return to Play Protocol through stage 4. The student-athlete is released to progress through stage 5 and if remains symptom-free, may resume full participation in athletics.

Signature of Physician Licensed to Practice Medicine
Physician signing this form is licensed under Article 1 of Chapter 90 of the General Statutes and has training in concussion management.

MD or DO (Please Circle)

Date: _____

Please Print Name

Physician Office Stamp:

By signing below, I attest that the above-named student-athlete has successfully completed the Return to Play Protocol and is now released to full participation in athletics.

Signature of Licensed Athletic Trainer

Date

Please Print Name

By signing below, I hereby give consent for my child to return to full participation in athletics.

Signature of Parent/Legal Custodian

Date

Please Print Name