Concussion Policy

Concussion Management policy for athletic training contracts with NFMMC

The following policy is for schools, organizations, and tournaments that are under contract for athletic training services with Niagara Falls Memorial Medical Center (NFMMC) and in affiliation with UB Orthopaedics & Sports Medicine of Niagara. NFMMC employs certified athletic trainer(s) for contracted services at the school for sports medicine. This policy is based on the Summary and Agreement statement of the 6th International Consensus Conference on Concussion in Sport held in Amsterdam, October 2022. An update to the Sport Concussion Assessment Tool 6th Edition (SCAT6) was published in the British Journal of Sports Medicine on June 15th, 2023, which is now the recommended concussion evaluation tool of choice. This concussion policy is for student athletes that will be attending The Charter School for Applied Technologies (CSAT) in grades 7-12.

Definition of concussion:

Concussion is a mild traumatic brain injury. Concussion occurs when normal brain functioning is disrupted by a blow or jolt to the head, face, neck or elsewhere on the body with an "impulsive" force transmitted to the head. Recovery from concussion will vary. Avoiding re-injury and over-exertion until fully recovered are the cornerstones of proper concussion management.

Defining the nature of a concussive head injury include:

- 1. Concussion may be caused either by a direct blow to the head, face, neck, or elsewhere on the body with an "impulsive" force transmitted to the head.
- 2. Concussion typically results in the rapid onset of short-lived impairment of neurologic function that resolves spontaneously
- 3. Concussion may result in neuropathological changes but the acute clinical symptoms largely reflect a functional disturbance rather than structural injury.
- 4. Concussion results in a graded set of clinical syndromes that may or may not involve loss of consciousness. Resolution of the clinical and cognitive symptoms typically follows a sequential course.
- 5. Concussion is typically associated with grossly normal structural neuro-imaging studies.

Pediatric Concussive injury:

Children, ages (5-18) years old should not be returned to playing or training until clinically completely symptom free. Because of the physiological response during childhood head trauma a conservative return to play approach is recommended. *It may be appropriate to extend the amount of time of asymptomatic rest and/or the length of the graded exertion in children and adolescents*. It is not appropriate for a child or adolescent athlete with concussion to RTP on the same day as the injury, regardless of the level of athletic performance. Concussion modifiers apply even more to this population than to adults and may mandate more cautious RTP advice. In addition, the concept of "cognitive rest" was highlighted, with special reference to a child's

need to limit exertion with activities of daily living and to limit scholastic and other cognitive stressors (eg, text messaging, video games, etc.) while symptomatic. School attendance and activities may also need to be modified to avoid provocation of symptoms.

Concussion Evaluation:

The diagnosis of acute concussion usually involves the assessment of a range of domains, including clinical symptoms, physical signs, behavior, balance, sleep, and cognition. Also, a detailed concussion history is an important part of the evaluation, both in the injured athlete and when conducting a pre-participation examination.

The suspected diagnosis of concussion can include one or more of the following clinical domains:

- a. Symptoms: somatic (eg, headache), cognitive (eg, feeling "like in a fog") and/or emotional symptoms (eg, lability)
- b. Physical signs (eg, loss of consciousness, amnesia)
- c. Behavioral changes (eg. irritability)
- d. Cognitive impairment (eg, slowed reaction time)
- e. Sleep disturbance (eg, drowsiness)
- f. If any one or more of these components is present, a concussion should be suspected and the appropriate management strategy instituted.

Grading concussions:

With concussion, an athlete suffers an injury that progressively resolves without complication over 7-10 days. Concussion represents the most common form of this injury and can be appropriately managed by primary care physicians or by certified athletic trainers working under medical supervision. Concussion management ideally is rest until all symptoms resolve and then a graded program of exertion before return to sport. All concussions mandate evaluation by a medical doctor who is comfortable in managing concussion injuries.

CONCUSSION MANAGEMENT:

Neuro- cognitive testing: We will do post-injury evaluations with the SCAT6 form as objective tools in the concussion management process to determine a safe return to play for the student athlete.

Return to play PROTOCOL

During the period of recovery, in the first few days following the injury, it is important to emphasize to the athlete that physical AND cognitive rest is required. Activities that require concentration and attention may exacerbate the symptoms and as a result delay recovery.

Pharmacological therapy:

An important consideration in RTP is that concussed athletes should not only be symptom free but also should not be taking any pharmacologic agents or medications that may mask or modify the symptoms of concussion. Where antidepressant therapy may be commenced during the management of a concussion, the decision to return to play (RTP) while still on such medication must be considered carefully by the treating clinician.

A player should never return to play while symptomatic.

"WHEN IN DOUBT, SIT THEM OUT!"

Charter School For Applied Technologies Concussion Protocol

In-Season:

- In the event that an athlete suffers a mechanism of injury and/or signs and symptoms of concussion, a sideline evaluation is performed.
- SCAT 6
- If it is determined that any athlete is positive for signs and symptoms of concussion, they are immediately removed from that day's contest and/or practice.
- Student athletes are ineligible to return on the day of injury.
- Parents/guardians are immediately contacted regarding injury.
- Parents/guardians are given a head injury warning sheet of instructions to follow until seen by a primary care physician and/or emergency room.
- Injury report is sent to the school nurse and athletic office.
- Within return to school, or ASAP a post injury SCAT6 test is performed (24-48 hours post-injury is the optimal time frame).
- Prior to the test, we review the list of signs and symptoms.
 - This is done during each evaluation / re-evaluation during the recovery process.

Reports:

- Once the Post injury test has been completed, CSAT school nurse/medical director is informed of the injured student athlete.
- CSAT school policy states that final release of a student to return to play is determined by the CSAT medical director.
- Student athletes MUST be evaluated by their Primary Care Physician, report the injury, but the CSAT medical director is the one to release students for return to play.
- Once student athletes have returned to baseline level (if available) on the SCAT6 and are symptom free based on the SCAT6 evaluation, they may begin the return to play exercise progression initiated/approved by the CSAT school nurse/medical director.
- The final SCAT6 post-injury report will be sent to the school nurse and medical director along with completed RTP exercise progression form for interpretation and possible clearance.

Return To Play:

- CSAT follows the 2022 Amsterdam guidelines/concussion policy for return to play. (see Return to play progression protocol form) (see 2022 Amsterdam guidelines)
- CSAT also follows Guidelines for Concussion management in schools Concussion
 Guideline Update (see attachment)
 - The Department has updated the <u>Guidelines for Concussion</u>
 <u>Management in Schools</u> to reflect the inclusion of nonpublic schools in following the requirements of the revised Concussion
 Management and Awareness Act effective July 1, 2023.
 - The guidelines provide direction specific to nonpublic schools, while also providing information on the requirements for all schools including:
 - · School coaches, physical education teachers, school nurses, and athletic trainers are required to complete an approved course related to concussions every two years. The approved courses are listed under each profession in the guidelines.
 - Schools must remove from athletic activities any student suspected of having sustained a concussion during such activity. The following conditions must be met for the student to return to athletic activity:
 - § The student may not be permitted to return to athletic activity until they have been symptom-free for not less than 24 hours.
 - § The student must have been evaluated by and received written signed authorization from a **physician**; and
 - § The school is to follow the directives of the treating physician.
 - · Schools must also include information on concussions, and/or reference how to obtain information on concussions from the or the school's website if one exists, on parent/guardian permission or consent forms for their child to participate in interscholastic sports.
 - The guidance also provides information on students injured outside of athletic activities, and recommendations and resources to assist schools in

limiting student's cognitive, athletic, and physical activities while recovering from a concussion.

 For questions, please contact the Office of Student Support Services at studentsupportservices@nysed.gov or 518-486-6090.

The return to play following a concussion incorporates a step wise process:

- 1. No activity, complete rest. Once asymptomatic for 24 hours, proceed to levels using the following:
- 2. Light aerobic exercise such as walking or stationary cycling, no resistance training.
- 3. Sport specific exercise (Skating in hockey, running in soccer, etc.) progressive addition of resistance training at steps 3 or 4.
- 4. Non-contact training drills.
- 5. Full contact training and/or exertional testing after medical clearance.
- 6. Return to FULL Game play.
- 7. This progression should be over 5 days for return to play without return of symptoms.
- If a student suffers any return of symptoms during the return to play protocol, they immediately stop the return to play protocol until they are once again symptom free.
- Once the athlete is symptom free for 24 hours, they can continue with the return to play process where they previously ended.
- When a student completes the return to play, they are eligible for full release to game activity.
- Completed RTP protocol form signed off by ATC is then sent to the school nurse/medical director for final approval and RTP (see attachment).

The above policy will be followed by all healthcare professionals (school physician, nurse practitioner's, school nurses, athletic trainer, athletic department) that manage the return to play of student athletes at local high schools and colleges that are under contract for athletic training services with NFMMC. This concussion management/return to play protocol will be followed despite the athlete presenting a prescription note to return to play sooner from their primary care physician or Emergency room.

If an athlete presents a prescription from their primary care physician for the appropriate time frame in regards to return to play, then the exertional progressive steps will be followed by the athletic trainer; using the return to play protocol from the SCAT6 form. See attached SCAT6 form. CSAT school nurse/medical director MUST approve initiation of return to play protocol completed by the school district's athletic trainer. The completed return to play protocol form (See attached form) MUST be approved upon completion by the CSAT school physician. Please have the appropriate professionals sign this policy and make copies for the athletic office, nurse's/MD office, and athletic training room at your school. If you do not have the

professionals below or more than the lines provided at your school district, please leave those blank or add them to the below section to sign.

Policy written by Tony Surace, M.Ed., ATC Date: 5/29/08

Revised: 1/7/10 Revised: 4/17/12 Revised 8/15/2018 Revised 6/19/2024

Director of Sports Medicine at NFMMC/ affiliated with UB Orthopaedics & Sports

Medicine of Niagara

Charter School (KenTon School District): Section VI Concussion Management Team 2024

School Principal: *Brett Lutterbein (High School)*School Principal: *Patrick Heyden (Middle School)*

School Physician/Medical Director: Athletic Director: *Chris Burzynski*

Director of Nursing Services: Tara Jefferson

Certified Athletic Trainer: Ana Taylor

School Phys-ed Teacher(s): Jamee Rinehart

Richard York II Nathan Sutch

Concussion Management Return to Play Protocol

Athlete	DO:	B Phone	Grade
PCP			
Coach	School	Sport Mod/JV/V	
MOI			
	Functional exer	cise at each Stage of Rehabili	itation
Date of Concu	ssion Injury:		
Date Athlete b	ecame asymptomatic:		
Check box wl	hen each phase is comp	oleted and if no return of sym	ptoms
\square No activity	(Complete physical and	l cognitive rest (Recovery) # of	days
Date:			
□ Day 1: Lig	tht aerobic exercise for 2	20 minutes (Walking, swimmin	g, or stationary cycling,
keeping intens	sity to < 70% of maximu	im predicted heart rate; no resis	stance training) (Increase
heart rate) Dat	te started:	(Activity done:	
		30 minutes (Skating drills in ice	
soccer, no hea	d impact activities (Add	movement) Date:	(Activity
)		
□ Day 3: No	n-contact training drills	for 40 minutes (Progression to	more complex training
drills, ie. passi	ing drills in football and	ice hockey; may start progress	ive resistance training)
(Exercise, coo	rdination, and cognitive	load)	
Date:	(Activ	ity done:)
		l length of practice (Following	
participate in r	normal training activities	s) (Restore athlete's confidence	e; coaching staff assesses
functional skil	ls)		
Date:	<u> </u>		
(Activity done	e:		_)
	turn to play (Normal gar		
Comments:			
ATC :		Print Name:	
	Dat	e:	
School Physic	ian:	Print Name:	
•	Date		

Concussion Information Sheet

INFORMATION FOR STUDENT—ATHLETES & PARENTS/LEGAL CUSTODIANS

What is a concussion? A concussion is an injury to the brain caused by a direct or indirect blow to the head. It results in your brain not working as it should. It may or may not cause you to black out or pass out. It can happen to you from a fall, a hit to the head, or a hit to the body that causes your head and your brain to move quickly back and forth.

How do I know if I have a concussion? There are many signs and symptoms that you may have following a concussion. A concussion can affect your thinking, the way your body feels, your mood, or your sleep. Here is what to look for:

Thinking/Rememb ering	Physical	Emotional/Mood	Sleep
Difficulty thinking clearly Taking longer to figure things out Difficulty concentrating Difficulty remembering new information	Headache Fuzzy or blurry vision Feeling sick to your stomach/queasy Vomiting/throwing up Dizziness Balance problems Sensitivity to noise or light	Irritability-things bother you more easily Sadness Being more moody Feeling nervous or worried Crying more	Sleeping more than usual Sleeping less than usual Trouble falling asleep Feeling tired

Talbe is adapted from the Centers for Disease Control and Prevention (http://www.cdc.gov/concussion/)

What should I do if I think I have a concussion? If you are having any of the signs or symptoms listed above, you should tell your parents, coach, athletic trainer or school nurse so they can get you the help you need. If a parent notices these symptoms, they should inform the school nurse or athletic trainer.

When should I be particularly concerned? If you have a headache that gets worse over time, you are unable to control your body, you throw up repeatedly or feel more and more sick to your stomach, or your words are coming out funny/slurred, you should let an adult like your parent or coach or teacher know right away, so they can get you the help you need before things get any worse.

What are some of the problems that may affect me after a concussion? You may have trouble in some of your classes at school or even with activities at home. If you continue to play or return to play too early with a concussion, you may have long term trouble remembering things or paying attention, headaches may last a long time, or personality changes can occur once you have a concussion, you are more likely to have another concussion.

How do I know when it's ok to return to physical activity and my sport after a concussion? After telling your coach, your parents, and any medical personnel around

that you think you have a concussion, you should be seen by a doctor trained in helping people with concussions. We will work with your parents to determine who is best to treat you and determine when you will be eligible to return to participation. Our School District has a policy in place for how to treat concussions. You should not return to play or practice on the same day as your suspected concussion. Your physician and the district physician must sign off on your return to play.

Source: UNC Matthew Gfeller Sport-Related TBI Research Center, North Carolina Medical Society, North Carolina Athletic Trainers' Association, Brain

Injury Association of North Carolina, North Carolina Neuropsychological Society, and North Carolina High School Athletic Association.

CONCUSSION

You should not have any symptoms at rest or during/after activity when you return to play, as this is a sign your brain has not recovered from the injury.

CHARTER SCHOOL FOR APPLIED TECHNOLOGIES

Student-Athlete & Parent/Legal Guardian Concussion Statement

(If there is anything on this sheet that you do not understand, please ask an adult to explain or read it to you.)

Student-Athlete Name:

(This form must be completed for each student-athlete, even if there are multiple student-athletes in a household.)

Parent/Legal Custodian Name(s):

o We have read the Student-Athlete & Parent/Legal Custodian Concussion Information Sheet. (if true, please check box)

After reading the information sheet, I am aware of the following information:

Student-At hlete Initials		Parent Initials
	A concussion is a brain injury, which should be reported to my parent/legal guardian, my coach(es), or a medical professional is one is available.	
	A concussion can affect the ability to perform everyday activities such as the ability to think, balance, and perform in the classroom.	
	A concussion cannot be 'seen.' Some symptoms might be present right away. Other symptoms can show up hours or days after an injury.	
	I will tell my parent(s)/guardian, my coach and/or a medical professional about my injuries and illnesses.	N/A
	If I think a teammate has a concussion, I should tell my coach(es), parent/guardian, or medical professional about the concussion.	N/A
	I will not return to play in a game or practice if a hit to my head or body causes any concussion-related symptoms.	N/A
	I will/my child will tell the coach, certified athletic trainer, school nurse, and/or a medical professional, if I have hit my head or am experiencing any concussion related symptoms from any injury that has occurred at any time (during school related activities or recreational activities held outside of school).	
	I will/my child will need written permission from my physician and the district physician for them to return to play or practice after a concussion.	

	Based on the latest data, most concussions take days or weeks to get better. A concussion may not go away right away. I realize that resolution from this injury is a process and may require more than one medical evaluation.	
	I realize that the Emergency Room/Urgent Care physicians will not provide clearance if seen right away after the injury.	
	After a concussion, the brain needs time to heal. I understand that I am/my child is much more likely to have another concussion or more serious brain injury if return to play or practice occurs before concussion symptoms go away.	
	Sometimes, repeat concussions can cause serious and long-lasting problems.	
	I have read the concussion symptoms on the Concussion Information Sheet.	
Parent Sigr	nature:	
Date:		
Ctudopt Cic	un of uno I	Doto

raieiii Signaluie.	
Date:	
Student Signature:	Date:

Concussion management team

All Listed below are part of the concussion management team and are required to complete their task listed next to their title below

Student: Must Review the Concussion Information Sheet. Athletes must also sign the signature sheet.

<u>Parent/Guardian</u>: Review the Concussion Information Sheet. If a child is an Athlete, a Concussion Signature sheet must be signed.

* Parent & Athlete must receive and sign Concussion Information in order for athletes to participate.

<u>School Administrator/School Principal</u>: Must Share Concussion Information Sheet with parents & staff (this can be done via a letter to be sent home for parents and an email to staff- with the information attached)

<u>Medical Director (School Physician)</u>: If a school has an appointed school Physician, they must review and complete the CDC's *Heads up*, *Facts for Physicians About Mild Traumatic Brain Injury* (MTBI, students with these conditions are at a higher risk for prolonged recovery from a concussion

http://www.cdc.gov/concussion/headsup/pdf/Facts_for Physicians_booklet-a.pdf

<u>Private Medical Provider/Specialist (Primary Care Physician):</u>

If possible they must review and complete CDC's *Heads up*, *Facts for Physicians About Mild Traumatic Brain Injury* (MTBI, students with these conditions are at a higher risk for prolonged recovery from a concussion

http://www.cdc.gov/concussion/headsup/pdf/Facts for Physicians booklet-a.pdf

 We ask that notes from Private Medical providers that clear athletes from Concussions must include: Clearance for Return to Play and An Exercise Progression.

School Nurse: Must be knowledgeable on how to evaluate concussions i.e. SCAT6 form, and also must complete the Department approved course for school nurses and athletic trainers every two (2) years. NYSED has approved the course *Heads up For Clinicians* for these specific professions; it's a free web based course developed by the CDC. It is available at

http://preventingconcussions.org

<u>Director of Physical Education &/or Athletic Director</u>: Must Implement/enforce concussion management program. (To make sure members of the management team have done these).

<u>Certified Athletic Trainer</u>: Must complete the Department approved course for school nurses and athletic trainers every two (2) years. NYSED has approved the course *Heads up For Clinicians* for these specific professions; which it's a free web based

course developed by the CDC. It is available at

http://preventingconcussions.org

In charge of bridging the Concussion Policy from athletics to general school population.

Physical Education/Coach:

Responsibilities;

- Remove any student who has taken a significant blow to the head or body, or
 presents with signs and symptoms of a head injury immediately from play
 because the Concussion Awareness Management Act requires immediate
 removal of any student believed to have sustained a concussion.
- Contact the school nurse or certified athletic trainer (if available) for assistance with any student injury.
- Send any student exhibiting signs and symptoms of a more significant concussion (In Bold print below) to the nearest hospital emergency room via emergency medical services (EMS) or as per each school policy.

Symptoms of a Concussion include, but are not limited to:

- Amnesia (i.e. decreased or absent memory of events prior to or immediately after the injury, or difficulty retaining new information)
- Confusion or appearing dazed
- Headache or head pressure
- Loss of Consciousness
- Balance difficulty or dizziness, or clumsy movements
- Double or blurry vision
- Sensitivity to light and/or sound
- Nausea, vomiting, and/or loss of appetite
- Irritability, sadness or other changes in personality
- Feeling sluggish,foggy, groggy, or lightheaded
- Concentration or focusing problems
- Slowed reaction times, drowsiness
- Fatigue and/or sleep issues (i.e. sleeping more or less than usual)

Students who develop any of the following signs, or if the above listed symptoms worsen, they must be seen and evaluated immediately at the nearest hospital emergency room:

- Headaches worsen
- Seizures
- Looks drowsy and/or cannot be awakened
- Repeated vomiting

- Slurred speech
- Unable to recognize people or places
- Weakness or numbness in arms or legs, facial drooping
- Unsteady gait
- Dilated or pinpoint pupils, or change in pupil size of one eye
- Significant irritability
- Any loss of Consciousness
- Suspicion of skull fracture, i.e. blood draining from ear, or clear fluid from nose

Inform the parent/guardian of the need for evaluation by their medical provider. The coach should provide the parent/guardian with written educational materials on concussions along with the School's concussion management policy Inform the AD, Certified Athletic Trainer, the school nurse and/or medical director of the student's potential concussion. This is necessary to ensure that the student does not engage in activities at school that may complicate the student's condition prior to having written clearance by a medical provider.

Ensure that students diagnosed with a concussion do not participate in any athletic activities until cleared by the student's physician and return to play protocol is followed. The PE teacher/coach has received written authorization from the medical director or their designee that the student has been cleared to participate.

Ensure that students diagnosed with a concussion do not substitute mental activities for physical activities unless the medical provider clears the student to do so i.e. due to the need for cognitive rest, a student should not be required to write a report if they are not permitted to participate in PE class by their medical provider.

Complete the Department approved course for coaches and PE teachers every two years. NYSED has approved the course Heads up, Concussion in Youth Sports for these professions, which is a free web based course that has been developed by the CDC, it is available at:

http://www.cdc.gov/concussion/HeadsUp/online training.html

<u>Teacher</u>: Must Review the information listed below in this section Students who have been diagnosed with a concussion require both physical and cognitive rest.

Cognitive rest requires that the student avoid participation in, or exposure to, activities that require concentration or mental stimulation including, but not limited to:

- Computers and video games
- Television viewing
- Texting
- Reading and writing
- Studying or homework

- Taking a test or completing significant projects
- Loud music
- Bright lights

Students transitioning into school after a concussion might need academic accommodations to allow for sufficient cognitive rest. These include, but are not limited to:

- Shorter school days
- Rest periods
- Extended time for tests and assignments
- Copies of notes
- Alternative assignments
- Minimizing distractions
- Permitting student to audiotape classes
- Peer note takers
- Provide assignment in writing
- Refocus student wit verbal and nonverbal cues

More information on classroom accommodations can be found at: http://www.upstate.edu/pmr/heathcare/programs/concussion/classroom.php http://www.nationwidechildrens.org/concussions-in-the-classroom http://www.cdc.gov/concussion/pdf/TBI_Returning_to_School-a.pdf

In addition links to SCAT6, child SCAT6 pdf and Consensus statement on concussion in sport:

Sport Concussion Assessment Tool 6 (SCAT6)

https://completeconcussions.com/wp-content/uploads/2023/06/SCAT6.pdf

http://www.sportsconcussion.co.za/sportconcussion/wp-content/uploads/2023/07/Child-SCAT6-v 5.pdf

Consensus statement on concussion in Sport: The 6th International Consensus Conference on Concussion in Sport-Amsterdam, October 2022. https://bjsm.bmj.com/content/57/11/695