

Avon Old Farms School & Select Physical Therapy Concussion Policy and Procedures 2022 – 2023

The following policy and procedures will be adhered to by the Avon Old Farms School Medical staff, which includes the Avon Old Farms Nursing staff and Physician, Certified Athletic Training staff, Avon Old Farms Administration and Faculty. These policies and procedures shall apply to all students who are suspected to have suffered a concussion or who have been diagnosed with a concussion during both on-campus and off-campus activities, regardless of sport / activity participation. The purpose of this policy is to educate school personnel, parents, and students on the effects of concussions and how they will be assessed and managed by the licensed health care professionals, Administration and Faculty at Avon Old Farms School.

Section 1: Definitions

“Concussion” is a type of traumatic brain injury (TBI) and is defined as a transient alteration in brain function caused by trauma, either a direct blow to the head or an indirect blow to the body that transmits force to the brain. Concussion symptoms may result in pathophysiologic changes, but acute clinical symptoms reflect a functional disturbance rather than a structural injury.

“Second Impact Syndrome” refers to when a student suffers a second traumatic brain injury without full recovery from initial brain injury that can cause rapid brain swelling, permanent brain damage, or death.

“Post-Concussion Syndrome” is defined as a range of physical, cognitive and emotional symptoms that can persist for extended period of time after a concussion, similar to symptoms listed in Section 3.

“Licensed Health Care Professional” able to diagnose, treat, and discharge from concussions in the state of Connecticut are: Physician (MD), Physician Assistant (PA), Advanced Practice Registered Nurse (APRN), and Athletic Trainer (ATC).

Section 2: Concussion Prevention – Education, Medical History and Protective Equipment

All Avon Old Farms individuals will be provided educational materials regarding concussion. Information may be presented in the form of printed/online reading material or in-person training sessions. This document may be used as an educational tool and will provide guidelines for proper recognition and management of concussion, including return to learn and return to play or activity. Parents must also read and sign the Concussion Policy Acknowledgement in the Magnus online portal prior to the start of the school year.

Students and parents should list previous concussions under the “Other Health Conditions” section on the Vital Health History in the Magnus portal as well as on the student’s physical examination. A review of concussion history will be performed by the Avon Old Farms School Health Center and Athletic Training staff. Knowledge of previous concussions can help the licensed health care professionals provide the best possible care should another concussion occur while attending Avon Old Farms School. Prior history of concussion will be taken into consideration when making a return to play / activity decision, for example the number of concussions in a lifetime, severity of concussion symptoms, etc. Concussion history will not excuse a student from activity participation unless deemed medically necessary by a physician.

Students must wear all required protective equipment for their sport of choice. It is recommended that a helmet fitting be verified by a licensed health care professional prior to use in sport. Based on current research, helmets are not shown to reduce risk of concussion; however, helmets can reduce the risk of skull fracture or other external head injury. Additionally, based on current research, mouth guards are not shown to reduce risk of concussion; however properly-worn mouth guards can reduce the risk of significant dental-oral injury.

Section 3: IMPACT (Neuro - Cognitive Testing)

The IMPACT test will no longer be utilized at Avon Old Farms School. This change has come on the guidance and recommendations of Dr. Alessi-LaRosa our school Sports Neurologist our preferred concussion specialist.

Section 4: Signs and Symptoms of Suspected Concussion

Signs and symptoms of concussion may have rapid onset, but it is common for symptoms to arise hours or days after the initial injury. Below is a list of commonly observed or described signs and symptoms of a suspected concussion. A student presenting with any of the following signs or symptoms shall be referred to a licensed health care professional for evaluation.

Observable Signs:

Loss of consciousness (LOC)	Nausea or vomiting	Dizziness
Delayed verbal / motor response	Blank or vacant stare	Memory deficits
Confusion or inability to focus	Disorientation	Balance problems
Emotions out of proportion to circumstance		Slurred or incoherent speech

Self-Reported Symptoms:

Headache or head pressure	Blurred vision	Fatigue or low energy
Feeling slowed down or “in a fog”	Emotional changes	Sleep disturbances
Difficulty concentrating	Difficulty remembering	Light or noise sensitivity
Irritability or anxiousness		

Section 5: Initial Evaluation

All suspected concussions will be evaluated by an Avon Old Farms licensed health care professional. The evaluation will include scoring the severity of signs and symptoms, cognitive and neurological assessment, vestibular testing and ocular motor testing. Any student presenting with signs or symptoms of concussion is immediately removed from activity, as school personnel must show concern for second impact syndrome. If necessary, a student will be referred to a level 1 emergency room (ER) evaluation.

A level I trauma center provides the most comprehensive trauma care. There must be a trauma / general surgeon in the hospital 24-hours a day. There must also be an anesthesiologist and full OR staff available in the hospital 24-hours a day as well as a critical care physician 24-hours a day. If anesthesia residents or CRNAs are in-hospital on-call, an attending anesthesiologist must be available from home within 30 minutes. There must also be immediate availability of an orthopedic surgeon, neurosurgeon, radiologist, plastic surgeon, and oral / maxillofacial surgeon.

If a concussion is suspected, it is recommended that the student remains under observation for the next 4 hours to monitor for “RED FLAG” symptoms. The student will rest in the health center until closing and will be cleared to return to his dorm after notification of advisor, dorm head, and dean of students to complete additional check-in with student through the evening.

Concussion Evaluation performed by an Avon Old Farms licensed health care professional will consist of:

Assess for loss of consciousness (LOC).

LOC or suspected LOC – transport to level 1 ER following the Avon Old Farms School Emergency Action Plan

Assess for neck or spine injury. If no neck or spine injury is suspected, student may walk off field.

Assess for signs and symptoms of a concussion and generate symptom score

A student who presents with the following “RED FLAG” symptoms will be transported to level 1 ER:

Headache that worsens	Seizures	Repetitive vomiting
Increasing confusion	Abnormal drowsiness	Changes in state of consciousness
Weakness or numbness	Inability to recognize people / places	

Assess orientation, mental concentration, memory, coordination, and balance

Neurological assessment – cranial nerve screen and ocular motor screen

Communication of Concussion

An Avon Old Farms licensed health care professional will specifically notify the parent / guardian of the student within 24 hours when a concussion is suspected. All faculty and administration at Avon Old Farms School will be notified within 24 hours when a student is diagnosed with a concussion, including but not limited to:

Health Center Nursing Staff	Student's Advisor	Associate Head of school
Athletic Training Staff	Dean of Students	Learning Center Staff
Athletic Director(s)	Academic Dean	Dorm Parent
Coach / Activity Director		

Section 6: Acute Concussion Management

If a concussion is suspected after initial evaluation, it is recommended that the student be placed on brain rest for a minimum of 24 hours AND initial symptoms reduce to the point where the student can tolerate sitting in classes or the initial symptoms subside. The student is required to see a medical doctor for additional evaluation and to provide guidance with academics, treatment and clearance. The student may see his own pediatrician; however, the majority of concussions will be managed on campus. The licensed health care professional will communicate with the parent / guardian and provide instructions and recommendations on "next steps".

Management of concussion on campus will include physical and cognitive rest for a minimum of 24 hours. The student may remain in his dorm resting, with regular in-person check-in with the health center and athletic training staff. The student will be referred to Dr. Stephanie Alessi-LaRosa of the Sport Neurology department at Hartford Healthcare in Hartford, CT for further evaluation. In the event that Dr. Alessi-LaRosa is unable to evaluate the student, then she will connect the student with a comparable colleague. Recommendations for rest, academic accommodations, medications, return to classes, daily exercises / activities and return to sport participation will be provided under the direction of the concussion specialist.

Rest

Physical and cognitive activity causes an increase in blood flow to the brain which can exacerbate concussion symptoms and inhibit the brain's ability to heal, resulting in a prolonged recovery. It is recommended that a student have a minimum 24 hours of cognitive rest, refraining from activities that include reading, writing, school work / test taking, watching television, playing video games, and cell phone / computer use. Physical rest is also recommended where the student should not engage in an activity that elevates their heart rate above a resting rate (typically >100bpm). During this time, the student will be on the No Sports list and will not attend or participate in any extracurricular or athletic activities.

Athletic Restrictions

Students will not be allowed to return to sport/activity participation on the same day that signs and symptoms are present unless cleared by a medical professional. During this time, the student will be on the No Sports list and will not attend or participate in any extracurricular or athletic activities. If the student presents with mild symptoms similar to concussion symptoms, but the cause is unclear, he should be evaluated using provocative exertional tests such as, but not limited to: 40-yard sprint, push-ups, and sit-ups. Any appearance of associated concussion-like signs and symptoms during exertional testing will be treated conservatively.

Section 7: Post-Concussion Management

Students are advised to rest for a minimum of 24 hours. In the dorm, faculty on duty is responsible for checking on the student and will report to the on-call nurse if the student experiences any symptom increase or onset of "red flag" symptoms. The student will be referred for assessment by Dr. Alessi-LaRosa or other concussion specialists of Dr. Alessi-LaRosa's designation. The concussion specialist is able to advise on symptom management, prescribe academic modifications if necessary, and provide guidance on return to classes and sport participation.

Return To Learn

A student will begin attending classes to tolerance after the initial 24 hours has passed and as tolerated and as symptoms allow, unless otherwise directed by the treating physician. Faculty will understand that a student is permitted

to leave class in order to be assessed at the health center if symptoms are severe or significantly increase during class time. Under the direction of a physician, the student will be provided with academic modifications as needed. The physician may recommend a longer rest period, in which case the student, advisor, and academic dean will coordinate efforts to complete schoolwork to tolerance. The Avon Old Farms licensed health care professional will alert the academic dean and learning center staff of any academic modifications via email. The student, along with his advisor and academic dean, will be responsible for coordinating with faculty about missed assignments or exams and to facilitate implementation of academic modifications. The advisor will work diligently with the student to ensure all schoolwork is completed in a timely manner. The Learning Center is available for faculty and student to use for isolated testing or extra help. The student and his advisor will work with the Learning Center staff to coordinate use of the Learning Center. The student must be asymptomatic, off any medication that was prescribed specifically for the concussion, attending full / all classes and be released from academic modifications prior to beginning steps 4 and 5 of the Avon Old Farms return to play protocol (see RTP below).

Daily Symptom Checklist / Score

If a student must report to the health center during classes due to significant symptoms, the licensed health care provider will complete a symptom checklist. Additionally, the student is required to meet with the athletic training staff after classes daily for symptom monitoring. The symptom monitoring is comprised of 22 signs and symptoms and the student will rank each on a scale of 0 to 6, where 0 is not currently experiencing the symptom and 6 is severe. The highest possible score is 132 and, ideally, the symptom score will decrease over time as the student is recovering. The student will be given instructions for the duration of the athletics period based on his symptom score each day as well as their academic standing, which may include rest, supervised light aerobic activity or other low intensity activity, or return to play guidelines. The student will be held out of maximal physical exertion / sport participation until cleared by athletic training staff and Concussion Specialist or treating Physician. A breakdown of activity recommendations based on symptom score is listed below, with additional information in the Return to Play / Activity section.

Symptom score => 50: continued rest and follow MD recommendations.

Symptom score = 10 - 49: student will return to dorm, library or learning center to rest and/or study.

Symptom score =< 9: student is permitted to attend his afternoon commitment as a spectator.

Symptom score = 0: student will progress to return to play/activity

Return to Play/Activity

Current research suggests that properly administered exercise treatment following concussion can be beneficial to healing, regardless of the student being symptomatic. The licensed health care professionals at Avon Old Farms School will advocate for light exercise in a controlled environment as the student's symptoms allow. Additionally, any student diagnosed with a concussion must complete a 5-step gradual return to play protocol under the direction of the Avon Old Farms athletic training staff prior to full unrestricted return to sport or activity. The gradual return to play protocol will be adhered to by all students regardless of medical clearance note from the treating physician. Students may progress through the return to play up to step 3 while still symptomatic. Each step of the gradual return to play must be completed a minimum of 24 hours apart. If the student experiences an increase in symptoms or a recurrence of symptoms while completing a step of the return to play protocol, the protocol must be stopped and will resume 24 hours after the symptoms either subside or return to the pre-exercise level. Students may not progress to steps 4 and 5 while symptomatic or on medications specific to the concussion.

5-Step RTP (Return To Play):

- Step 1: Walking or light stationary biking for 20-30 min
- Step 2: Stationary biking or jogging for 30-40 min
- Step 3: Sport specific agility drills and / or guided light weight lifting session 45-60 min
- Step 4 Non-contact full length practice participation
- Step 5 Full unrestricted practice participation

Section 8: References

National Athletic Trainers' Association

Connecticut Athletic Trainers' Association

Center for Disease Control – Heads Up

State of Connecticut Law – Public Act No. 10-62: An Act Concerning Student Athletes and Concussions

State of Connecticut Law – Public Act No. 14-66: An Act Concerning Youth Athletics and Concussions

New England Preparatory School Athletic Council – Sports Medicine Advisory Committee

Korey Stringer Institute at University of Connecticut