

# **Avon Old Farms School & Select Physical Therapy Concussion Policy and Procedures 2023 – 2024**

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, physician, and certified athletic training staff, as well as the 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 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 healthcare 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 an extended period of time after a concussion, similar to symptoms listed in Section 3.

“Licensed Healthcare Professional” is one that is able to diagnose, treat, and discharge from concussions. In the state of Connecticut this includes: 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 review and sign the Concussion Policy Acknowledgement in the Magnus 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 annual 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 healthcare 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/activity of choice. It is recommended that a helmet fitting be verified by a licensed healthcare 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 (NeuroCognitive Testing)**

The ImPACT test is no longer utilized at Avon Old Farms School. This change has come from the guidance and recommendations of Dr. Alessi-LaRosa, the consulting sports neurologist.

#### **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 healthcare 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 healthcare 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) for further evaluation and treatment.

*A level I trauma center provides the most comprehensive trauma care. There must be a trauma surgeon, general surgeon, critical care physician, anesthesiologist and full OR staff available in the hospital 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 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 (see below). 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 the student throughout the evening.

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

Assess for loss of consciousness (LOC).

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

Assess for neck or spine injury. If no neck or spine injury is suspected, the student may move and ambulate.

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 healthcare 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  
Athletic Training Staff  
Athletic Director(s)  
Coach / Activity Director

Student's Advisor  
Dean of Students  
Academic Dean

Associate Head of school  
Learning Center Staff  
Dorm Parent

## **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 healthcare professional will communicate with the parent/guardian and provide instructions and recommendations on next steps on an individual basis. 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, a consulting sports neurologist at Hartford Healthcare for further evaluation. In the event that Dr. Alessi-LaRosa is unable to evaluate the student, 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 physician.

### **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 licensed healthcare professional. 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 his symptoms allow, per recommendation from the concussion specialist. 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 or concussion specialist 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 healthcare professionals 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 students 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 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 healthcare professional will complete a symptom checklist. Additionally, the student is required to meet with the athletic training staff after classes daily to complete a symptom checklist. The checklist comprises 22 signs and symptoms, rated on a scale of 0 (none) to 6 (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, which may include rest, supervised or other low intensity activity with the athletic training staff, or return to play guidelines. The student will be held out of 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 recommendations from physician

Symptom score = 10 - 49: student will check in at library or learning center to study or health center to rest

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 healthcare professionals at Avon Old Farms School will advocate for light exercise in a supervised 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. Light aerobic activity, even if the student is still symptomatic, will qualify as step 1 of the gradual return to play. 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. A sample return to play protocol is listed below.

Step 1: Light aerobic activity

Step 2: Moderate aerobic activity

Step 3: Supervised weight room workout and/or sport-specific drills

Step 4: Non-contact practice

Step 5: Full contact practice

#### **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