

UVA Sports Medicine Concussion Management Guidelines Updated May, 2019

1. The University of Virginia shall have on file an annually updated emergency action plan (EAP) for each athletics venue to respond to student-athlete catastrophic injuries and illnesses, including but not limited to concussions, heat illness, spine injury, cardiac arrest, respiratory distress (e.g. asthma), and sickle cell trait collapses. The athletics healthcare providers and coaches shall review and practice the plan at least annually. The Athletics Sports Medicine Department will maintain a list of staff that have completed the requirement on file.
2. The University of Virginia shall require student-athletes to sign a statement (Assumption of Responsibility to Report Injuries) in which student-athletes accept the responsibility for reporting their injuries and illnesses to the sports medicine staff, including signs and symptoms of concussions. **As a component of this agreement, student-athletes will also accept the responsibility of reporting teammate(s) or other athlete(s) that exhibit signs and/or symptoms that may be consistent with a concussion.**
3. The University of Virginia's Student Athletes, Coaches, Team Physicians, Athletic Trainers and Directors of Athletics will receive education about concussions annually in order to fully understand the concussion management plan and their role within the plan. The education will include a minimum of the NCAA Concussion Fact Sheet. The Athletics Compliance Office will maintain a list of student athletes and staff that have acknowledged that they had read and understood the concussion materials.
4. The University of Virginia's sports medicine staff members shall be empowered with the unchallengeable authority to disqualify and determine management and return-to-play of any ill or injured student-athlete as he or she deems appropriate.
5. The University of Virginia shall implement a pre-participation baseline assessment on each student-athlete. Baseline measures should include a brain injury and concussion history, symptom evaluation, cognitive assessment (i.e., ImPACT™), and balance evaluation. This baseline information will be used post-injury at appropriate time intervals to help assess progress in the resolution of impairment related to the concussion. The Team Physician will determine pre-participation clearance and/or the need for additional consultation or testing. A new baseline concussion assessment will be administered six months or beyond for any student-athlete with a documented concussion.
6. Medical personnel with training in the diagnosis, treatment and initial management of acute concussion must be "present" at all NCAA varsity competitions in the following contact/collision sports: basketball; field hockey; football; lacrosse; pole vault; soccer; wrestling. To be present means to be on site on Grounds or at the arena of the competition. Medical personnel may be from either team, or may be independently contracted for the event.
7. Medical personnel with training in the diagnosis, treatment and initial management of acute concussion must be "available" at all NCAA varsity practices in the following contact/collision sports: basketball; field hockey; football; lacrosse; pole vault; soccer; wrestling. To be available means that, at a minimum, medical personnel can be contacted at any time during the practice via telephone, messaging, email, beeper or other immediate communication

means. Further, the case can be discussed through such communication, and immediate arrangements can be made for the athlete to be evaluated.

8. When a student-athlete is observed to have signs, symptoms or behaviors consistent with a concussion by any member of their team or the sports medicine staff, the student-athlete shall be immediately removed from practice or competition and evaluated by an athletics healthcare provider with experience in the evaluation and management of concussion. A concussion should be assumed when unsure and waiting for a final diagnosis ("when in doubt, sit them out").
9. Any student-athlete that exhibits signs, symptoms or behaviors consistent with a possible concussion should be held immediately from further participation to allow assessment and monitoring by the team's athletic trainer or team physician. These signs and symptoms include but are not limited to:
 - a. Altered level and/or loss of consciousness
 - b. Confusion, as evidenced by disorientation to person, time, or place; inability to respond appropriately to questions; inability to process information correctly and/or respond appropriately to analytical questions; or inability to remember assignments and/or plays;
 - c. Amnesia (antegrade and/or retrograde; immediate or delayed);
 - d. Abnormal neurological examination (i.e. abnormal pupillary response, persistent dizziness or vertigo, abnormal balance, etc.)
 - e. New and persistent headache, particularly if accompanied by photosensitivity or other visual disturbances, tinnitus, nausea, vomiting, or dizziness; and/or
 - f. Emotional lability
10. A student-athlete diagnosed with a concussion shall be immediately withheld from competition or practice and shall not return to activity for the remainder of that calendar day. Student-athletes that sustain a concussion outside of their sport will be managed in the same manner as those sustained during sport activity. A thorough history and assessment including the Sport Concussion Assessment Tool 5 (SCAT5) will be implemented. This assessment should include symptom assessment, physical and neurological exam, cognitive assessment, balance exam, and evaluation for cervical spine trauma, skull fracture and intracranial bleed. A team physician must assess the student-athlete within 72 hours of the initial injury; this is ideally accomplished at the time of injury if logistically feasible.
11. The student-athlete should be monitored closely post-concussion for physical or neurological deterioration. The Emergency Action Plan for that facility should be initiated in the event the student athlete's post-concussion evaluation presents any of the following significant conditions: Glasgow Scale <13, prolonged loss of consciousness, focal neurological deficits, late-onset or persistent vomiting, persistently diminished or worsening mental status, or indications of a spine injury.
12. Student-athletes diagnosed with a concussion are provided with documented oral or written instructions upon departure from the sports medicine department. Whenever feasible, they will be discharged from sports medicine care with a roommate or guardian, whom will also receive oral or written instructions. Driving restrictions may be imposed at the discretion of

the physician.

13. Physical and cognitive rest is recommended during the first 24 hours following a concussion. The student-athlete should be monitored for recurrence of symptoms with activities of daily living as well as cognitive tasks such as reading, working on a computer, classroom work, or taking a test. Academic advisors should be notified of the student-athlete's concussion. Upon request, an academic adjustment letter may be provided by the team physician to assist in the facilitation of academic accommodations for the injured student-athlete.
14. The team physician may choose to obtain radiologic imaging or specialist referral for more extensive neurological or neurocognitive testing with individuals presenting significant or persisting symptoms. Return to activities will follow medical guidelines established by the Athletics Department Medical Director or treating physician.
15. The Athletic Trainer or team physician will perform daily re-assessments for persisting symptoms and re-administer the SCAT 5, ImPACT and balance tests as clinically indicated. Re-assessment by a physician will be required for a student-athlete with prolonged recovery in order to consider other additional diagnoses and best management options. **For student-athletes with prolonged recoveries, submaximal aerobic exercise may also be prescribed in order to facilitate symptom recovery under the guidance and supervision of a team physician and athletic training staff.**

Additional diagnoses include, but are not limited to:

Prolonged/persistent concussive symptoms

Sleep dysfunction

Migraine or other headache disorders

Mood disorders such as anxiety and depression

Ocular or vestibular dysfunction

Return to play shall follow a medically supervised stepwise process as noted below. Final authority for return to play shall reside with the team physician or the physician's designee.

Return To Play Algorithm

In order to be considered for return to play, the student-athlete must follow the outlined guidelines for management of his/her injury:

Be fully asymptomatic at rest, with exertional testing, and with supervised non-contact and contact sports-specific activities.

Be within normal baseline limits on all post-exertion neurocognitive and balance assessments.

Be cleared for participation by the University of Virginia Team Physician and/or his/her designee.

Step-Wise Return to Sport Hierarchy

Symptom-limited activity

Light aerobic exercise (e.g., walking or stationary cycling at slow to medium pace. No resistance training.

Sport-specific exercise (e.g., running or skating drills. No head impact activities).

Non-contact training drills. Harder training drills, e.g., passing drills. May start progressive resistance training. Full contact controlled training/practice.

Return to competition/ full training.

16. Athletics staff, student-athletes and officials will continue to emphasize that purposeful or flagrant head or neck contact in any sport should not be encouraged or permitted, and current rules of play should be strictly enforced.

17. "Return to Learn" Guidelines

Along with the restriction of physical activity when a concussion has occurred, the limitation of cognitive demands via "cognitive rest" is an essential component of optimal care of the student athlete. The following steps are to be followed after the initial diagnosis.

1. When a student-athlete suffers a concussion, the Athletic Trainer will notify the Academic Affairs staff member for that sport. The student-athlete will be advised to avoid any non-essential mental activities including texting, emailing, reading or computer work if appropriate. In the event of substantial symptoms, total rest from cognitive stress is recommended for at least 24 hours following the injury.
2. The symptom status of the student-athlete will be assessed daily and if significant symptoms including, but not limited to, headaches, confusion, difficulty concentrating, or sensitivity to light or noise are present, then the team physician will be notified. At the discretion of the treating physician, the student-athlete may be advised to avoid going to class on that day.
3. If requested, the treating physician may provide an academic adjustment letter which indicates which symptoms the athlete is experiencing and what academic adjustments are suggested to reduce symptom exacerbation.
4. *In the event that the physician advises the student-athlete not to attend class, or to alter their academic engagement, the medical staff will communicate this decision to the academic support person in the Athletics Academic Affairs office. When possible, the student-athlete will email his/her professors and copy the Association Dean and Academic Coordinator. If the student is not able to initiate communication the Academic Coordinator will email the student's Association Dean who will then communicate with the student's professors.*
5. Athletics Academic Affairs personnel will be the point persons for communication with the academic dean if the student-athlete is unable to contact the faculty or if any academic adjustments need to be implemented. The Association/Academic Dean will be informed of the medical recommendation and will be kept updated on the status and progress of the student athlete through the medical staff or Athletics Academic Affairs personnel.

6. The overseeing physician will guide the reintegration of the student athlete back into his/her academic work with updates provided as the medical status changes. As each concussion is a unique injury, the timeline for such reintegration is variable and will be inherently different for each student-athlete. As such, student-athletes will not be held to a rigid timeframe for return to academic work.
7. In the event of a delay in the resolution of symptoms, the physician will utilize consultations with a neuropsychologist and/or Learning Needs Specialist to determine what, if any, academic accommodations are indicated.
8. In concussive cases with symptoms exceeding seven days or with extreme cases where the student-athlete's condition may necessitate long-term academic modifications, the Student Disability Access Center may be accessed. The Student Disability Access Center (SDAC) is the University of Virginia's access agency for students with disabilities. The primary role of SDAC is to determine eligibility and to provide reasonable academic accommodations for students with disabilities in line with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, as amended. SDAC, in conjunction with input from the treating physician, Association/Academic Dean, and Learning Needs Specialist, will be consulted to determine the best course of action for present or future academic involvement. This could include, for example, a reduced course load or withdrawal from all classes for the term.
9. In the event that SDAC should be utilized by a student athlete, the academic coordinator will refer him/her to the Learning Needs Specialist and will prompt the student athlete to go on-line to the SDAC web portal to apply for services. The Learning Needs Specialist will coordinate a meeting with the student athlete and SDAC and maintain communication with the academic coordinator and the physician.