

<b>Virginia Tech Sports Medicine</b>  <i>Review: Yearly</i> Director of Athletic Training  NCAA Guideline 1d	<b>Departmental Policy</b>  <b>Title: Concussion Management Policy</b>	12  <b>Key Function: S-A Safety</b>  Reviewed: 7/2017
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**POLICY STATEMENT:** This policy ensures and communicates complete and comprehensive procedures for the management of a student-athlete who may have sustained a concussion.

**PURPOSE:** To provide and communicate to sports medicine staff with regards to each individual's responsibility related to the management of a student-athlete who may have sustained a concussion.

**ENTITIES TO WHOM THIS POLICY APPLIES:** Virginia Tech Sports Medicine Staff including Physicians, Certified Athletic Trainers, Sports Psychology, and Academics.

**PROCEDURE:**

- 1) All Virginia Tech student-athletes are required to sign a statement in which the student-athlete accepts the responsibility for reporting their injuries and illnesses to the institutional medical staff, including the signs and symptoms of concussions. During the review and signing process the student-athletes will be presented with the NCAA Concussion Fact Sheet for Student-Athletes.
- 2) All Virginia Tech Athletic Department coaches, sport administrators, sports medicine staff, and athletes are required to sign a statement in which they accept the responsibility for reporting signs and symptoms of concussions. During the review and signing process they will be presented with the NCAA Concussion Fact Sheet.
  - a. The Director of Sports Medicine will work with Compliance to coordinate the distribution, educational session, signing, and collection of the necessary documents. The Director of Sports Medicine will turn the signed documents over to the staff athletic trainer where they will be kept in the student-athlete's medical file.
  - b. The Director of Sports Medicine will coordinate the signing of the aforementioned documents on an annual basis.
  - c. A copy of the *Virginia Tech Concussion Policy* will also be distributed through the Policies and Procedures manuals for each of the athletic training facilities and athletics department staff policies and procedures.
  - d. The Director of Sports Medicine will coordinate an annual meeting each May with all involved parties to review and update the Concussion Policy with the medical staff. Any changes to the policy will be effective August 1<sup>st</sup> of that year.
- 3) Virginia Tech Athletics will have on file and posted electronically an annually updated emergency action plan 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, and sickle trait related symptoms.
- 4) Virginia Tech will have an appropriate health care plan that includes equitable access to athletics healthcare providers for each sport.
  - a. Medical personnel with training in the diagnosis, treatment and initial management of acute concussion must be "present" at all NCAA varsity competitions, in which Virginia Tech has a team, in the following contact/collision sports: basketball, football, lacrosse, pole vault, soccer and wrestling.
  - b. Medical personnel with training in the diagnosis, treatment and initial management of acute concussion must be "available" at all NCAA varsity practices in which Virginia Tech has a team, in the following contact/collision sports: basketball, football, lacrosse, pole vault, soccer and wrestling.
  - c. Additional coverage with medical personnel with training in the diagnosis and treatment on concussions may be present or available for other sports as directed by the Director of Sports Medicine.
- 5) Virginia Tech Athletics healthcare providers should be empowered to have unchallengeable authority to determine management and return-to-play of any ill or injured student-athlete, as he or she deems appropriate. For example, a countable coach should not serve as the primary supervisor for an athletics healthcare provider nor should they have sole hiring or firing authority over that provider.
- 6) Virginia Tech shall have on file a written team physician-directed concussion management plan that specifically outlines the roles of athletics healthcare staff (e.g., physician, certified athletic trainer, nurse practitioner, physician assistant, neuropsychologist).
- 7) Institutions should document the incident, evaluation, continued management, and clearance of the student-athlete with a concussion.

- 8) Although sports currently have rules in place; athletics staff, student-athletes and officials should continue to emphasize that purposeful or flagrant head or neck contact in any sport should not be permitted and current rules of play should be strictly enforced.

## Virginia Tech Sports Medicine Concussion Management Plan

### Virginia Tech Sports Medicine Baseline Testing

- 1) Virginia Tech Athletics will record a baseline assessment for all student-athletes prior to their first practice. The same baseline assessment tools will be used post-injury at appropriate time intervals. The baseline assessment will include the following variables.
  - a. Symptom Checklist, including brain injury and concussion history
  - b. SCAT Form (most recent version)
  - c. ImPACT

\*Exception of M/W swimming, M/W golf, M/W track and cross country will not be using IMPACT.

- 2) If a student athlete sustains a concussion, they will meet with a team physician prior to the start of the next calendar year to determine if they have any ongoing issues or symptoms related to their head injury.
- 3) The team physician will determine pre-participation clearance, and may refer the student athlete for further consultation and/or treatment as necessary.

### Virginia Tech Sports Medicine Concussion Assessment

When a student-athlete shows any signs, symptoms or behaviors consistent with a concussion, the athlete shall be removed from practice or competition and evaluated by a Virginia Tech Athletics healthcare provider. NO athlete suspected of having a concussion is permitted to return to play while symptomatic!

- 1) Virginia Tech Athletics healthcare providers will practice within the standards as established for their professional practice (e.g., physician, certified athletic trainer, nurse practitioner, physician assistant, neurologist, neuropsychologist).
- 2) A student-athlete suspected of sustaining a concussion will be evaluated by the Virginia Tech Athletics healthcare providers using a clinical evaluation for concussion, as well as the Sport Concussion Assessment Tool (SCAT), in addition, clinical assessment for associated injuries such as cervical spine trauma, skull fracture and intracranial bleed. Should the team physician not be present, the athletic trainer will notify the team physician ASAP to develop an evaluation and treatment plan. The presence or absence of symptoms will dictate the inclusion of additional neurocognitive and balance testing.
- 3) Athletes that demonstrate a Glasgow Coma Scale < 13, prolonged loss of consciousness, focal neurological deficit, repetitive emesis, worsening mental status or other neurological symptoms, or spine injury should be transported to the nearest emergency medical center as directed by the Emergency Action Plan.
- 4) Once the student-athlete is symptom free at rest, the athletic trainer, following consultation with the team physician, will conduct follow up ImPACT testing as directed. ImPACT testing can be performed if the athlete is symptomatic at the discretion of the team physician.
- 5) A student-athlete diagnosed with a concussion shall be withheld from the competition, practice, and class and will not return to activity for the remainder of that day.
- 6) The student-athlete should receive serial monitoring for deterioration. Athletes should be provided with the "Concussion Injury Advice" sheet located on the SCAT upon discharge; preferably with a roommate, guardian, or someone that can follow the instructions.
- 7) The student-athlete should be evaluated by a team physician as outlined within the concussion management plan. Once asymptomatic and post-exertion assessments are within normal baseline limits, return to play should follow a medically supervised stepwise process.

### Virginia Tech Sports Medicine Concussion Return to Play

- 1) At the time of injury, a clinical evaluation is performed, symptoms checklist and SCAT conducted and Team Physician notified.

- 2) After the initial clinical evaluation, the symptom checklist should be repeated followed by referral to the team physician if indicated.
- 3) First day post injury, the student-athlete should have a follow up clinical evaluation and symptom checklist completed.
- 4) Follow-up clinical evaluations and symptom checklists are completed daily until the athlete is asymptomatic with cognitive and physical rest.
- 5) Once the athlete is asymptomatic at rest:
  - a. Complete post traumatic IMPACT testing and compare to baseline.
  - b. Complete symptom checklist and SCAT (most recent version).
  - c. Clinical evaluation including Neuropsychological assessment.
- 6) Upon satisfactory completion of the above variables, the physician can direct the athletic trainer to initiate the 5-step graduated exertional RTP protocol.
  - a. Light aerobic exercise – 20 minute stationary bike at 10-15 mph. Objective is to increase heart rate.
  - b. Sport-specific exercise – 20 minutes of individual drills, running team drills, etc. Objective is to add body weight movement.
  - c. Non-contact training drills – 20 minutes of more advanced drills like passing drills, etc. May add resistance training. Objective is to add coordination and cognitive load with exercise.
  - d. Full contact practice – participate in normal training activities. Objective is to restore confidence and allow assessment of functional skills by coaching staff
  - e. Return to play.

IF AT ANY POINT DURING THIS PROCESS THE ATHLETE BECOMES SYMPTOMATIC THE ATHLETE SHOULD BE RE-ASSESSED DAILY UNTIL ASYMPTOMATIC.

- 7) Student-athletes with prolonged recovery should be evaluated or referred by the team physician for the potential additional diagnosis and best management options.
  - a. Additional diagnoses included but are not limited to post-concussion syndrome, sleep dysfunction, migraine or headache disorders, mood disorders such as anxiety and depression, and ocular or vestibular dysfunction.
- 8) Final determination of return-to-play is made from the team physician or medically qualified physician designee.
- 9) All documentation pertaining to the student-athlete's concussion assessment will be included in the student-athletes medical record.

### Virginia Tech Sports Medicine Concussion *Return to Academics Protocol*

Virginia Tech Sports Medicine staff will work diligently to educate coaches, academic staff, and athletes on the importance of a safe return to the classroom for any concussed athlete. Certain activities that take place in a classroom may exacerbate an athlete's symptoms, which could ultimately lead to a delayed recovery and/or return to play.

- 1) Once an athlete is diagnosed with a concussion they should be withheld from classroom activities for the remainder of the day.
- 2) The athletic trainer responsible for the injured student athlete should send a letter to the SAASS representative for their sport who will help navigate the return-to-learn process for the student athlete.
  - a. This letter will dictate the name of the athlete, the date of injury, and the signs and symptoms that are present or may arise.
  - b. The athletic trainer will provide SAASS with any medical documentation that is needed to confirm the diagnosis of a concussion.
- 3) If the athlete has been previously diagnosed with any mental condition (ADHD, depression, anxiety, etc.) they will be referred to Sports Psychology for consultation.
- 4) If the student-athlete cannot tolerate light cognitive activity, he or she should remain at home or in the residence hall as directed by the team physician or physician's designee.
- 5) Once the student-athlete can tolerate cognitive activity without return of symptoms, he/she should return to the classroom/studying as tolerated. At any point, if the student-athlete becomes symptomatic, or scores on clinical measures decline, the staff athletic trainer and/or team physician should be notified and the student-athlete's cognitive activity reassessed by the team physician.
- 6) The extent of academic adjustments needed should be decided by a multi-disciplinary team that may include the team physician, athletic trainer, SAASS representative, coaches, instructors, sports psychologist, and the office of disability services representatives as needed. The level of multi-disciplinary involvement should be made on a case-by-case basis.

- 7) Modifications to the student athlete's schedule/accommodations will be made for up to two weeks with the help of the athlete's SAASS representative.
- 8) Cases that cannot be managed through schedule modification/academic accommodations should utilize campus resources consistent with ADA/AA including learning specialists and the office of disability services.

## Reducing Head Trauma Exposure Management Plan

Virginia Tech is committed to reducing exposure to head trauma through extensive clinical research and the most current safe teach techniques pertaining to each sport

- 1) Virginia Tech Sports Medicine will ensure adherence to the Inter-Association Consensus: Year-Round Football Practice Contact Guidelines and Independent Medical Care Guidelines.
- 2) Sports medicine staff will educate athletes and coaches on the importance of taking the head out of contact and reducing gratuitous contact during practice.
- 3) Management of head trauma injuries will always take the safety first approach.