UT Athletics Policy Number 14.5.3 – Concussion Management Plan

Revised/Effective Date: Revised April 2019. Approved by OGC 4/17/19. Approved by NCAA TBD

Purpose: To outline general guidelines for education, identification, evaluation, treatment, and return to play following a concussion for all University of Tennessee student-athletes.

14.5.3.1 Policy

A Concussion is a relatively common injury sustained by athletes, especially in contact sports. Although sports currently have rules in place to promote safety, athletics staff 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. Proper management of most concussions allow for return to sport in a relatively short time frame. However, some concussions require a more prolonged recovery time. Returning to play too early after a concussion can result in worsening of symptoms and potentially devastating consequences. The purpose of this policy is to outline general guidelines for education, identification, evaluation, treatment, and return to play following a concussion for all University of Tennessee student-athletes.

The University of Tennessee Department of Sports Medicine (UTSM) Concussion Policy will have the following objectives:

• Educate student-athletes, coaches, administration, and support staff to proper management of concussions.
• Identify those student-athletes with signs and/or symptoms of concussion in a timely manner.
• Evaluate affected student-athlete at the time of injury and periodically thereafter until their concussion has resolved utilizing both subjective and objective evaluations. (i.e. physical examination, balance testing, neurocognitive testing, and/or imaging studies when appropriate)
• Determine general guidelines for return to play following a concussion.
• Initiate treatment for concussions including referrals to specialist when needed.

THE TEAM PHYSICIAN WILL WORK CLOSELY WITH THE TEAM ATHLETIC TRAINER(S) IN EVALUATING STUDENT-ATHLETES WITH SUSPECTED CONCUSSIONS. RETURN TO PLAY DECISIONS WILL BE GUIDED BY THE EVALUATIONS DESCRIBED BELOW. UNIQUE CIRCUMSTANCES SPECIFIC TO AN INDIVIDUAL STUDENT-ATHLETE MAY NECESSITATE MINOR CHANGES TO GUIDELINES AND WILL BE DETERMINED BY THE TEAM PHYSICIAN.

Procedures

I. Education:
All student-athletes will be given a copy of the NCAA Fact Sheet on Concussions for Student-Athletes annually. Also, all student-athletes will be required to read and sign the Athletic Risk Warning statement annually and indicate their receipt and understanding of the information contained in the NCAA Fact Sheet on Concussions for Student-Athletes.

All coaches, athletic trainers, team physicians, and the athletic director will be given a copy of the NCAA Fact Sheet on Concussions for Coaches annually. They will also meet to review this policy and sign an acknowledgement that they understand the concussion management plan, their role within the plan, and that they have received education about concussions.

In addition, the UTSM staff will review the Concussion Management Plan annually with the Team Physician to discuss proper identification, evaluation, and treatment of a student-athlete with a concussion.

II. Pre-participation Assessment:
All student-athletes will be required to have a baseline ImPACT test, and a baseline SCAT5 test completed as part of their initial pre-participation exam. These baseline tests will be performed prior to participation, and then
every two (2) years for athletes that do not sustain a concussion. If a player sustains a concussion, their baseline tests will be repeated prior to the next season of competition. All new student-athletes, and returning student-athletes who sustained a concussion in the prior year, will meet with the team physician in order to determine the need for any additional testing or medical referrals necessary to continue to participate.

ImPACT testing, SCAT5 testing, and symptom scores via a Post-Concussion Symptom Scale (PCSS), should be used as tools to assist in making return-to-play decisions. They require reasonable interpretation by a qualified sports medicine professional and should NOT be used individually as a sole determinant for making return-to-play decisions.

### III. Recognition and Diagnosis of Concussion:

Medical personnel (Team ATC and/or Team Physicians) with training in the diagnosis, treatment, and initial management of acute concussions will be present (on-site) for all varsity practices and competitions for the sports of football, men’s and women’s basketball, and soccer. For pole vault, medical personnel trained in the diagnosis, treatment, and initial management of acute concussions will be available for all practices, and present (on-site) for all competitions.

Any student-athlete suspected of having sustained a concussion, based on signs, symptoms, or behaviors, will be removed from participation and evaluated by a team athletic trainer, or team physician, with concussion experience. The team athletic trainers and team physicians are empowered with unchallengeable autonomous authority to determine medical management and return-to-play decisions of student-athletes.

When a student-athlete is suspected of having sustained a concussion, the following areas will be assessed on the field by the team athletic trainer, or team physician, in order to assist in diagnosis. A SCAT5 test may be performed if determined to be necessary by the evaluating team athletic trainer or team physician to assist in diagnosis. This test may be performed in a quiet environment away from distractions when possible.

- **Symptoms:**
  - Common signs/symptoms of a concussion include, but are not limited to:
    - Headache
    - Nausea
    - Vomiting
    - Dizziness
    - Imbalance
    - Fatigue
    - Trouble sleeping
    - Sleeping too much
    - Drowsiness
    - Sensitive to light
    - Sensitive to noise
    - Sadness
    - Nervousness
    - Numbness/tingling
    - Feeling slow
    - Feel “in a fog”
    - Difficulty concentrating
    - Difficulty remembering

- **Physical and Neurological exam**
- **Cognitive assessment**
- **Balance evaluation**
- **Cervical spine or skull injury evaluation**

If a student-athlete is determined to have sustained a concussion, they will be removed from participation in all athletic activities for the remainder of the day at a minimum, and referred to the Team Physician for further evaluation and planning, or transported to the nearest emergency medical facility for evaluation and treatment if necessary.

- **No Return to Play (RTP) IF:**
  - Loss of consciousness OR
  - Amnesia OR
  - Persistent symptoms consistent with concussion

- **Return to Play IF:**
  - No loss of consciousness or amnesia reported AND
  - No motor or sensory signs/symptoms AND
  - Resolution of symptoms AND
  - Normal physical and neurocognitive evaluations AND
  - No recurrence of signs/symptoms with exertion.
IV. Post-Concussion Management

Phase I: Initial Management Phase

After a student-athlete has been determined to have sustained a concussion and has been removed from participation, he/she will be monitored/evaluated by a member of the sports medicine department or team physician for a period of time to be determined by the team physician, or a member of the medical staff. A SCAT5 exam will be performed if not already completed during the on-the-field evaluation.

The following conditions warrant the need for activation of the emergency action plan and timely transportation to the nearest emergency medical facility:
- Glasgow Coma score < 13
- Prolonged loss of consciousness
- Focal neurological deficit suggesting intracranial trauma
- Repetitive emesis
- Persistently diminished/worsening mental status or other neurological signs/symptoms
- Suspected spinal injury or skull fracture

Phase II: Symptomatic Phase

The student-athlete’s symptoms will be re-evaluated using a PCSS and physical exam. If still symptomatic, or has an abnormal physical exam, then the student-athlete will not be permitted to advance to Phase III. Based on emerging research, non-contact aerobic activity that does not increase symptoms may be instituted after a brief period of cognitive and physical rest (i.e. 24-48 hours) When asymptomatic with activities of daily living (ADLs) and non-contact aerobic activity, proceed to Phase III.

Phase III: Exertional Testing

Once the student-athlete successfully completes Phase II, he/she will perform non-contact sport-related drills and/or sport specific exertional activities, under the guidance of the team physician, and the supervision of the sport athletic trainer. If symptoms return during Phase III, the student-athlete will not return to full participation. If the student-athlete successfully completes Phase III, he/she will advance to Phase IV.

Phase IV: Neurocognitive testing (ImPACT)

Once a student-athlete has completed Phases I-III, neurocognitive evaluation utilizing ImPACT will be performed. If a student-athlete successfully completes Phases I-III and ImPACT test results are interpreted by Team Physician (and if needed, in consultation with Neuropsychologist) as not reflecting clinical neurocognitive deficits, the student-athlete can progress to full contact participation.

Final clearance for full participation will be determined by the team physician after Phases I-IV are complete.

Treatment

Following a concussion, the student-athlete will be provided with instructions verbally and either written or electronically, with emergency contact information and instructions should his/her symptoms worsen. (See Appendix for copy of written instructions form) It is desirable that the student-athlete should not be left alone for extended periods of time following the concussion. Therefore, written or electronic instructions and emergency contact information will also be provided to the student-athlete’s roommate or other responsible adult who will be in direct contact with the athlete, when available. Documentation of instructions will be kept by UTSM.

Pharmaceutical treatment will generally consist of acetaminophen (Tylenol) in the first 48 hours and then OTC analgesics in consultation with the Team Physician and/or Team ATC thereafter.

The need for diagnostic imaging studies including CT scans and/or MRI will be determined by the Team Physician. For a student-athlete with prolonged recovery, the Team physician will re-evaluate his/her signs/symptoms in order to rule out additional diagnoses such as post-concussion syndrome, sleep dysfunction, migraines or other headache disorders, mood disorders such as anxiety or depression, or ocular/vestibular dysfunction. Referrals to a specialist such as a Neurologist, Neuropsychologist, Neurosurgeon, or Physical Therapist also will be determined by the Team Physician.
V. Return to Learn: (Adapted from NCAA Sport-Related Concussion)
Return-to-Learn (RTL) guidelines assume that both physical and cognitive activities require brain energy utilization, and that after a sport-related concussion, brain energy may not be available for physical and cognitive exertion because of a brain energy crisis. The student-athlete may appear physically normal but may be unable to perform as expected due to concussive symptomatology. Not all student-athletes will require time away from academics, and the Team Physician, in collaboration with the Team Athletic Trainer, and the student-athlete’s academic advisor, will serve as the point person for determining when and if a concussed student-athlete will require academic accommodations. Generally, student-athletes will not be expected to return to class on the same day as a concussion.

As with return-to-play, the first step of return-to-learn is relative physical and cognitive rest. The period of time needed to withhold the student-athlete from classes or class work will be individualized based on their symptoms. A gradual return to academics will be based on the student-athlete’s ability to tolerate academic activities without an increase in symptoms, and the clinical judgement of the team physician. If these symptoms worsen, or return, with exposure to academic work, the student-athlete will be reassessed by the Team Physician to determine when to begin the stepwise progression again.

The majority of student-athletes who are concussed will not need a detailed return-to-learn program because full recovery typically occurs within two weeks. For the student-athlete whose academic schedule requires some minor schedule/academic modifications in the first two weeks following a sport-related concussion, adjustments can often be made without requiring meaningful curriculum or testing alterations. These short-term adjustments will be coordinated by the academic counselor, in consultation with the team physician.

The University Of Tennessee Office Of Disability Services (ODS) offers academic accommodations to students that suffer academic impacting events. A concussion may qualify as such an event, and therefore may make a student-athlete eligible for such accommodations. When a student-athlete experiences concussion symptoms that 1) impact their academic ability, and 2) extend, or are predicted by the Team Physician to extend beyond a short duration such as two weeks, The Team Physician, in possible consultation with a multi-disciplinary team of professionals, including but not limited to the Team Athletic Trainer, academic support staff, or learning specialist, will write a letter to the ODS requesting academic accommodations for the student-athlete for a period of time to be determined by the Team Physician. The ODS will determine the exact accommodations that each student-athlete will be offered in accordance with current ADAAA guidelines.

VI. Reduction of Exposure to Head Trauma
In an effort to reduce unnecessary exposure to head trauma by a student-athletes, the University of Tennessee Athletic Department will adhere to the Inter-Association Consensus on Year-Round Football Practice Contact Guidelines, as well as the Independent Medical Care Guidelines. Further, all sports will take a “safety first” approach and make every effort to reduce gratuitous contact during practices, as well as provide coaching to avoid the use of their head during contact in sports, and to have safe and proper sport technique.
14.5.3.2 Addendum


Youth sport camps present a unique population when dealing with suspected or confirmed concussion management. Most sport camp participants are minors, and a parent or legal guardian may or may not be present during evaluation and subsequent follow up discussions. The following guidelines will be used as a guide by all UTSM medical personnel when assessing or treating a sports camp participant for a suspected or confirmed concussion.

Education
Each youth sport camp participant will be advised of the inherent risks of concussions, as well as common signs and symptoms, and instructions on appropriate reporting of a suspected concussion, as part of the registration process for camp. This will be done either electronically, if registering online, or in writing, if registering in person. A parent or legal guardian, or temporary custodian [or adult chaperone] to which authority has been assigned as it pertains to camp attendance, will be required to acknowledge in writing the receipt and understanding of this educational material prior to being able to complete and submit a registration form for a UT sports camp.

Youth sport camp coaches will also be educated about common signs and symptoms of concussions, as well as the appropriate steps to take to refer a camp participant to the appropriate medical staff member for evaluation if a concussion is suspected.

Evaluation
Sports medicine professionals (athletic trainers, and possibly physicians) educated in appropriate concussion management will be present at collision and/or contact sports camps, and on-call for minimal or non-contact sports camp. For camps utilizing multiple venues, attempts will be made to have a sports medicine professional or a representative of the sports medicine department (such as an undergraduate student assistant) present at each venue to increase communication when possible. When unable to have someone present at each venue, the athletic trainer in charge of covering the camps will utilize either a cell phone or 2-way radio in order to communicate to coaches or other staff members at multiple venues at once. Any suspected concussion should be immediately referred to the nearest sports medicine professional for evaluation and management. If a UTSM Team Physician is present at the camp, the athletic trainer will provide an initial assessment of the camp participant and then refer them to the physician for follow up treatment and/or recommendations.

Return to Play
Any sport camp participant diagnosed with a concussion by the sports medicine professional shall not return to participate in athletic activity for the remainder of the day. If a camp participant is attending a multiple day camp, they will not be allowed to return to participation on following days of camp unless they have been evaluated by a physician or qualified health care professional, and given written permission to return to participation. If a physician or qualified health care professional is not available, the camp participant will not be allowed to return to participation for the remainder of the camp.

Discharge Instructions
In the event a camp participant is diagnosed with a concussion, and he/she is scheduled to leave campus at the end of the day or the end of the camp, the medical professional managing their care will give the parent or legal guardian the UTSM Take Home Instruction Form – Sport Camp Participant. The camp participant, as well as the adult present, will be informed that prior to the participant returning to athletic activity, they should be evaluated and cleared by a physician of their choosing. If a parent or legal guardian is not present to receive the written or verbal discharge instructions, they will be given to the adult chaperone (i.e. coach, parent of a friend or teammate) that is responsible for transporting the participant home, and phone calls will be made to inform the emergency contact(s) listed on the camp registration forms of details regarding the participants injury and recommendations.