

Missouri University of Science & Technology Sports Medicine

Concussion Management Program

(Updated May 2018)

The S&T Sports Medicine Program recognizes the importance of proper diagnosis, treatment, and management of concussions. NCAA Guidelines and current medical standards of practice have been used to develop the *Missouri S&T Sports Medicine Concussion Management Program*. This program will be updated annually.

This program is a partnership between the medical staff, athletic trainers, coaches, and student athletes.

Reference is made to:

*NCAA Sports Medicine Handbook 2014-2015

Guideline 21 "SPORTS-RELATED CONCUSSION" Revised July 2014 pages 56-64

*Concussion (Mild Traumatic Brain Injury) and the Team Physician: A Consensus Update – 2011

Sports Medicine (Update January/February 2012)

*National Athletic Trainers' Association Position Statement:

Management of Sport Concussion *Journal of Athletic Training* April 2014

EDUCATION

Training will occur annually and with orientation for new athletes, coaches, and medical staff

- 1) All S&T athletes:
 - a. Will read the [NCAA Concussion Fact Sheet for Student-Athletes](#)
 - b. Sign the attached [Student-Athlete Concussion Statement](#) attesting they understand the NCAA Concussion Fact Sheet

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- c. Accept the responsibility for reporting their injuries and illnesses to the institutional medical staff, including signs and symptoms of concussions by signing the S&T Concussion Agreement
- 2) All S&T coaches (head coaches, assistant coaches, and volunteer coaches):
 - a. Will read the NCAA Concussion Fact Sheet for coaches
 - b. They will sign the Coaches Concussion Statement that they understand the NCAA Concussion Fact Sheet
 - c. Will encourage their athletes to report any suspected injuries and illnesses to the institutional medical staff, including signs and symptoms of concussions; and that they accept the responsibility for the referring any athlete to the medical staff suspected of sustaining a concussion
 - d. Will read and understand the *S&T Sports Medicine Concussion Management Program*
- 3) All S&T team physicians, physician extenders, athletic trainers, graduate assistant athletic trainers, and undergraduate athletic trainers:
 - a. Will encourage their athletes to report any suspected injuries and illnesses to the institutional medical staff, including signs and symptoms of concussions
 - b. Have read, understand, and will follow the *S&T Sports Medicine Concussion Management Program*
 - c. Will read and sign the Provider Concussion Statement
- 4) The Student Health Educator:
 - a. May promote campus awareness of concussion reporting and management through programs and marketing. This will include current information that is available through the Center for Disease Control and other authoritative sources.
 - b. Ensure the updated *S&T Sports Medicine Concussion Management Program* document will be accessible through the S&T Sports Medicine website.

PREPARTICIPATION

All student athletes will receive baseline testing regardless of sport

- 1) Tested individuals include: first year athletes, transfer athletes, athletes with previous season concussions, and other selected athletes
- 2) Testing documentation will be part of the athletic medical record

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- 3) Testing includes: ImPACT cognitive software, symptom review, balance testing, and vestibular ocular testing
- 4) Testing will occur before an athlete is cleared to participate in their first practice

DIAGNOSIS

Because recognition of a concussion is difficult and the associated symptoms may be vague, S&T medical staff will take an active approach to early head injury recognition. If there is any doubt, the athlete will be taken out of competition.

Diagnosis starts with recognition or reports of wide variety of potential symptoms.

Possible Signs and Symptoms of Concussions include:

Physical

Headache

Nausea or vomiting

Blurred Vision

Balance Problems

Fatigue or Low Energy

Sensitivity to Light

Sensitivity to Noise

Numbness/Tingling

Dizziness/Dazed

Loss of Consciousness, Seizure, or Convulsions

Amnesia

“Pressure to the Head”

Neck Pain

Cognitive

Feeling mentally “Foggy”

Feeling Slowed Down

Difficulty Concentrating

Difficulty Remembering

Forgetful of Recent Information

Forgetful of Recent Conversations

Confused about Recent Events

Answers Questions Slowly

More Emotional

Drowsiness

Irritability Sadness

Nervous or Anxious

At least one Missouri S&T Certified Athletic Trainer will be present at all NCAA varsity home competitions in the following contact/collision sports: basketball, football, pole vault, and soccer.

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At least one Missouri S&T Certified Athletic Trainer will be available at all NCAA varsity practices at home for in season sports in the following contact/collision sports: basketball, football, pole vault, and soccer.

Whenever a concussion is suspected:

- 1) Missouri S&T medical staff shall be notified immediately of any signs and symptoms of a concussion that is witnessed, reported or suspected
- 2) The athlete will be immediately taken out of participation (practice or competition)
- 3) A sideline evaluation will be promptly administered by an athletic trainer. A SCAT5 examination will be initiated and the medical staff's neurological evaluation are performed
- 4) Student-Athlete may only return to play the same day if ALL of the following are present:
 - a. He/She passes examination from the SCAT5 exam
 - b. He/She does not present any concussion like symptoms at rest or with exertion tests
 - c. A minimum of 15 minute observation with monitoring
- 5) Student-Athlete is removed from play if he/she fails any part of the SCAT5
 - a. If removed from play, the student-athlete is not to return for the remainder of the practice/competition
 - b. The student-athlete will be diagnosed with a concussion
 - c. If student-athlete sustains loss of consciousness or displays a progression or deterioration of mental or physical condition, they will be sent immediately to the local emergency room via ambulance with additional emphasis on cervical spine and airway stabilization

When a concussion is confirmed:

- 1) During Competition
 - a. If the student-athlete does not display emergent symptoms he/she will remain on the sidelines and will be rechecked periodically for changing symptoms by the medical staff
 - b. If at any time during the competition the medical staff feels that the student-athlete's symptoms deteriorate beyond his/her scope of practice he/she will be sent immediately to the local emergency room
- 2) Post Competition
 - a. If determined to be stable the student-athlete will receive a copy of the approved Missouri S&T Athletic Training Post Concussion Take Home Instructions
 - b. A reliable person will be assigned to assist and monitor the involved student-athlete and will also review the take home instructions

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- c. The assigned person will be responsible for notifying the assigned athletic trainer if signs and symptoms deteriorate
 - d. A copy of this documentation will be part of the athletic medical treatment record
- 3) Follow up Evaluations
- a. A standardized post-concussion symptom checklist, ImPACT and balance testing will be administered in a timely manner (except when a team is traveling, then it will be done at an appropriate time), which will then be compared to his/her baseline score. Results of examination will be documented
 - b. A Physician evaluation is recommended in a timely manner post-injury
 - c. Student-Athletes will have continued repeat evaluations at a frequency determined by the athletic trainer and the team physician
 - d. With any deterioration of symptoms or decline in examination the student-athlete will have considered for additional imaging or specialty referral as necessary
 - e. The student-athlete will be educated on Second Impact Syndrome
 - f. Prolonged symptoms will be assessed for Post-Concussion Syndrome
 - g. A member of the Sports Medicine team will work with the schools disability office for any return to school issues for student-athlete
- 4) When student-athlete becomes asymptomatic
- a. The student-athlete will be retested using the symptom checklist, ImPACT and balance testing along with any additional neurologic testing
 - b. The team physician will reexamine the student-athlete and clear for a graduated return to play protocol. Refer to return to play stages and supplemental documentation form
 - c. The student-athlete must be cleared for play by the team physician after completing stage 5 of the return to play
 - d. Final clearance and all intermediate clearances will be documented in the student-athlete medical treatment record

The S&T Sports Medicine Program:

Does not allow coaches to serve as the primary supervisor for athletic health care providers (e.g., sports medicine staff, athletic trainer, team physician, outside physician).

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Gives qualified health care providers with experience in the evaluation and management of TBIs and concussions the final authority to remove any such athlete with “possible TBI or concussion” from athletic activity (such as competition, practice, or conditioning sessions).

Gives qualified health care providers with experience in the evaluation and management of TBIs and concussions final authority to prevent the return to athletic activity (such as competition, practice, or conditioning sessions) of any such athlete with “possible TBI or concussion.”

Gives qualified health care providers with experience in the evaluation and management of TBIs and concussions final authority to immediately refer any such athlete with “possible TBI or concussion” to an appropriately-qualified physician or emergency service provider.

