

Wake Forest University Campus Recreation Concussion Management Plan

Concussions pose a significant risk to participants at all levels. To increase awareness of concussions in sports and provide recreation employees and participants with the information they need to recognize when to seek help for a suspected concussion, campus recreation staff at Wake Forest University will institute the following concussion protocol and education plan.

- I. Concussion Education Components**
 - a. Concussion education and awareness materials used by the department will include information on:
 - i. What concussions are
 - ii. How concussions can happen
 - iii. Signs and Symptoms to look for.
 - iv. What to do if a concussion is suspected
 - v. Red flags that indicate emergency medical care
 - vi. The dangers of ignoring a concussion
 - b. Who is trained in concussion education and awareness?
 - i. Athletic Training staff
 - ii. Sport Program supervisors
 - iii. Safety officers
 - iv. Lifeguards
 - v. Outdoor pursuits staff
 - vi. **Club sports officers and leaders**

What is a concussion?

Sport related concussion is a traumatic brain injury (TBI) induced by biomechanical forces. Several common features that may be utilized in clinically defining the nature of a concussion include:

- Concussions may be caused by a direct blow to the head, neck, face, or elsewhere with an impulsive force transmitted to the head and brain.
- Concussions typically results in the rapid onset of short lived impairment of neurological function that resolves spontaneously. However symptoms may evolve over several minutes, hours, or days.

- Concussions may result in neuropathological changes but the acute clinical signs and symptoms largely reflect a functional disturbance rather than a structural injury. As such no abnormality is typically seen on standard imaging evaluations.
- Concussion may result in a range of clinical signs and symptoms and not all concussions will look alike. Resolution of the clinical and cognitive features typically follow a sequential course however symptoms can be prolonged and each case will be treated and evaluated on an individual basis.

What are the signs and symptoms?

Recognizing and evaluation concussions of the club sports athletes and other recreation participants on the field can be a challenging for the healthcare provider. Performing this task often involves a rapid assessment during competition with outside factors that add to the difficulty. Repeated assessments may be necessary and symptoms may have delayed onset. Because of these factors safety staff or athletic trainers may hold a participant out erring on the side of caution. This is important to keep all participants safe.

Suspected diagnosis of concussions can include one or more of the following signs or symptoms:

1. Abnormal headache
2. Dizziness
3. Nausea
4. Loss of consciousness
5. Balance impairment
6. Behavior changes
 - a. Higher anxiety
 - b. Irritability
 - c. Trouble sleeping
 - d. Feeling foggy or out of it
7. Cognitive impairment
8. Neurological deficit
9. Sensitivity to light or noise

If one or more of the clinical signs/symptoms are present and a mechanism of injury (MOI) is present a concussion should be suspected, and appropriate management should be instituted.

*****RED FLAGS TO LOOK OUT FOR*****

If after a head injury if any of the following occur any participant should seek urgent medical evaluation:

- 1. Significant midline neck pain**
- 2. Decreased cervical spine range of motion**
- 3. Double vision**
- 4. Weakness/tingling/burning in arms or legs**
- 5. Severe or increasing headache**
- 6. Seizure or convulsions**
- 7. Deteriorating conscious state**
- 8. Vomiting**

II. Pre-participation Assessment

All incoming freshman and any new participants to Wake Forest Club sports that are participating in sports classified as “High Risk” (see figure below) will undergo baseline testing prior to team participation using a baseline SCAT5. This will be completed by a certified athletic trainer and will be scheduled to be completed during the first week of practices. The baseline test will be used to compare evaluation after participant suffers a potential concussion.

Any team or participant that is not required to be baseline tested but would like to have one, may reach out to a certified athletic trainer at atrec@wfu.edu to schedule a time to complete their testing. It is strongly recommended that any participant who has a history of concussions connects with athletic training staff to get a baseline completed before participation.

High Risk	Moderate Risk	Low Risk
<ul style="list-style-type: none"> ● Ice Hockey ● Basketball (M+W) ● Lacrosse (M+W) ● Rugby ● Soccer (M+W) 	<ul style="list-style-type: none"> ● Baseball ● Boxing ● Equestrian ● Field Hockey ● Gymnastics ● Running ● Softball ● Ultimate ● Volleyball ● Swimming 	<ul style="list-style-type: none"> ● Archery ● Badminton ● Ballroom Dance ● Bass Fishing ● Climbing ● Cycling ● Fencing ● Golf ● Crew ● Rowing ● Water Polo and Waterski

III. Event of an Injury

- A. The participant suspected of concussion should be evaluated by a licensed healthcare provider or safety officer on site using standard emergency management principles.
- B. If available at the time of injury an athletic trainer should be called to complete an evaluation. If unavailable participant should be held from participation and referred out to AT or to student health.
- C. First responder to injury should provide standard first aid in the event of injury and ensure there is no medical emergency in which an emergency action plan needs to be activated.
- D. The participant should not be left alone immediately following an injury and should be monitored for deterioration for initial few hours after injuries.
- E. After being suspected of a concussion and diagnosed participant may not return to play until cleared by healthcare professional.
- F. Post injury information should be given to any athletes who suffers a potential concussion including being informed not to take any pain management medication (ie. Ibuprofen, Tylenol, Aleve, etc) for at least 72 hours

****Some concussions may warrant immediate transportation to a hospital.**

Emergency personal is needed if the participant experiences any of the “Red Flag Symptoms” (Page 3). If this is the case, please follow the appropriate EAP for the venue that the participant is at.

After a potential concussion participant may not return to play without being cleared by a healthcare professional. Safety officers and club leaders may not clear

any head injuries to return to participation. Participants must remain asymptomatic to be allowed to return to participation.

After being diagnosed with a concussion participant will work with athletic training staff to return to play and complete rehab. If the athletic trainer is not around when the injury occurs the AT should be notified immediately of the injury and meet with the participant as soon as possible.

IV. Event of injury at Away Club Events

During an away event if a participant suffers a potential concussion the club officers or leaders shall remove the participant from play and will not be allowed to return. If there is an AT or medical professional at the event the participant should seek care from the hosting AT. If there are no medical personnel available at the venue, designated team officer should notify athletic training staff at WFU and within 24 hours of return to campus participant should meet with athletic training.

If treated by any medical professional outside of WFU then documentation must be brought back to athletic training staff. If preferred by the hosting medical staff digital communication can be accepted by emailing atrec@wfu.edu

V. Intramural and Open Recreation events

Any participant of intramural or open recreation with a suspected concussion should get in touch with safety officer at the event who will then reach out to athletic training staff. Student staff should escort any participant with suspected concussion to athletic training staff if necessary. Concussion information will be presented to the participant and the athletic trainer will give recommended chain of events to the participant after evaluation. If possible follow up with the athletic trainer should be completed before any return to activity.

VI. Recordkeeping and Review of Plan

It is essential that records of any incidents that happen be kept. An accident report should be filled out by responding safety officer or club leader, if any participant is suspected to have a concussion. Initial accident reports should be completed on Connect2 and after an athletic trainer will complete and injury evaluation and plan of action and upload that to EPIC. Athletic trainers are the only staff members that

have access to EPIC and they will complete return to play documentation on there as well. Safety officers, club officers, club sports program coordinator and AT's will have access to Connect2.

Medical understanding of concussions is constantly evolving. This plan was written to be in alignment with the most recent international consensus statement on concussion in sport and the best practices for concussion management. This plan will be reviewed annually and updated as appropriate to stay in line with current recommendations.

Appendix A- Concussion testing tool ([SCAT5](#))

SCAT5 [®] **SPORT CONCUSSION ASSESSMENT TOOL – 5TH EDITION**
DEVELOPED BY THE CONCUSSION IN SPORT GROUP
FOR USE BY MEDICAL PROFESSIONALS ONLY

supported by

    

Patient details

Name: _____

DOB: _____

Address: _____

ID number: _____

Examiner: _____

Date of Injury: _____ Time: _____

WHAT IS THE SCAT5?

The SCAT5 is a standardized tool for evaluating concussions designed for use by physicians and licensed healthcare professionals¹. The SCAT5 cannot be performed correctly in less than 10 minutes.

If you are not a physician or licensed healthcare professional, please use the Concussion Recognition Tool 5 (CRT5). The SCAT5 is to be used for evaluating athletes aged 13 years and older. For children aged 12 years or younger, please use the Child SCAT5.

Preseason SCAT5 baseline testing can be useful for interpreting post-injury test scores, but is not required for that purpose. Detailed instructions for use of the SCAT5 are provided on page 7. Please read through these instructions carefully before testing the athlete. Brief verbal instructions for each test are given in italics. The only equipment required for the tester is a watch or timer.

This tool may be freely copied in its current form for distribution to individuals, teams, groups and organizations. It should not be altered in any way, re-branded or sold for commercial gain. Any revision, translation or reproduction in a digital form requires specific approval by the Concussion in Sport Group.

Recognise and Remove

A head impact by either a direct blow or indirect transmission of force can be associated with a serious and potentially fatal brain injury. If there are significant concerns, including any of the red flags listed in Box 1, then activation of emergency procedures and urgent transport to the nearest hospital should be arranged.

Key points

- Any athlete with suspected concussion should be REMOVED FROM PLAY, medically assessed and monitored for deterioration. No athlete diagnosed with concussion should be returned to play on the day of injury.
- If an athlete is suspected of having a concussion and medical personnel are not immediately available, the athlete should be referred to a medical facility for urgent assessment.
- Athletes with suspected concussion should not drink alcohol, use recreational drugs and should not drive a motor vehicle until cleared to do so by a medical professional.
- Concussion signs and symptoms evolve over time and it is important to consider repeat evaluation in the assessment of concussion.
- The diagnosis of a concussion is a clinical judgment, made by a medical professional. The SCAT5 should NOT be used by itself to make, or exclude, the diagnosis of concussion. An athlete may have a concussion even if their SCAT5 is "normal".

Remember:

- The basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Do not attempt to move the athlete (other than that required for airway management) unless trained to do so.
- Assessment for a spinal cord injury is a critical part of the initial on-field assessment.
- Do not remove a helmet or any other equipment unless trained to do so safely.