Carleton College Concussion Safety Protocol
May 2020

Carleton College is committed to ensuring the health and safety of its student-athletes. To this end, and in accordance with NCAA legislation [Division III Constitution 3.2.4.16], Carleton College has adopted the following Concussion Safety Protocol for all student-athletes participating in NCAA Intercollegiate athletics.

This protocol establishes and/or identifies: (1) a sport-related concussion definition; (2) concussion safety protocol personnel; (3) independent medical care; (4) preseason education; (5) pre-participation assessment; (6) recognition and diagnosis of concussion; (7) concussion management; (8) return to activity, including both return-to-learn and return-to-play; and (9) reducing exposure to head trauma.

1. **Concussion Definition**
   The 5th International Conference on Concussion in Sport defines concussion as follows:
   Sport-related concussion (SRC) is a traumatic brain injury induced by biomechanical forces. Several common features that may be utilized to clinically define the nature of a concussion head injury include:
   - SRC may be caused either by a direct blow to the head, face, neck or elsewhere on the body with an impulsive force transmitted to the head.
   - SRC typically results in the rapid onset of short-lived impairment of neurological function that resolves spontaneously. However, in some cases, signs and symptoms evolve over a number of minutes to hours.
   - SRC may result in neuropathological changes, but the acute clinical signs and symptoms largely reflect a functional disturbance rather than a structural injury and, as such, no abnormality is seen on standard structural neuroimaging studies.
   - SRC results in a range of clinical signs and symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive features typically follows a sequential course. However, in some cases symptoms may be prolonged.
   - The clinical signs and symptoms cannot be explained by drug, alcohol or medication use, other injuries (such as cervical injuries, peripheral vestibular dysfunction, etc.) or other comorbidities (e.g., psychological factors or coexisting medical conditions).

2. **Concussion Safety Protocol Personnel**
   - Carleton sports medicine team (Team Physician and Certified Athletic Trainers)

3. **Independent Medical Care**
   As required by NCAA Independent Medical Care legislation, team physicians and athletic trainers shall have unchallengeable autonomous authority to determine concussion management and return-to-activity decisions for all student-athletes. Further, the athletics health care administrator shall make the concussion safety protocol available for all athletics personnel and strive for all athletics personnel to have rehearsed the steps provided for in the protocol.

4. **Preseason Education**
   All student-athletes will be provided the NCAA Concussion Fact Sheet (See Appendix A) and the NCAA Concussion Education Video (or similar applicable material) and be required to sign an acknowledgement, on an annual basis during their preparticipation evaluation, that they have been provided, read and
understood the concussion education material and that they were allowed an opportunity to discuss the material once arriving to campus. This signed acknowledgement will be filed in the student-athlete's medical record (See Appendix D).

All coaches, team physicians, athletic trainers, other personnel involved in student-athlete health and safety decision making and athletic administrators will be provided the NCAA Concussion Fact Sheet (See Appendix B) (or similar applicable material) and be required to sign an acknowledgement, on an annual basis, that they have been provided, read and understood the concussion education material (See Appendix E,F, G). This signed acknowledgement will be filed in a secure location.

5. **Pre-Participation Assessment**

All student-athletes will undergo at least one pre-participation baseline concussion assessment (ImPACT test). This pre-participation assessment will, at a minimum, include assessment for the following:

- History of concussion or brain injury, neurologic disorder, and mental health symptoms and disorders
- Symptom evaluation: SCAT 3, SCAT 5 or ImPACT symptom score (See Appendix H)
- Cognitive assessment: SCAT 3, SCAT 5 or ImPACT
- Balance evaluation. Balance Error Scoring System (BESS)

The team physician determines pre-participation clearance and any need for additional consultation or testing.

6. **Recognition and Diagnosis of Concussion**

A member of the Carleton College sports medicine team (or an approved designee) with training in the diagnosis, treatment and initial management of acute concussion will be present at all NCAA competitions in the following contact/collision sports: football, basketball, soccer, and pole vault.

**NOTE:** To be present means to be on site at the campus or arena of the competition. Carleton College will ensure that such personnel will be from Carleton, from the opposing team or will be contracted independently for the event.

A member of the Carleton College sports medicine team with training in the diagnosis, treatment and initial management of acute concussion will be available at all NCAA practices in the following contact/collision sports: football, basketball, soccer, and pole vault.

**NOTE:** 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.

Symptoms of concussion include, but are not limited to: (1) physical symptoms of headache, nausea, balance problems, dizziness, visual difficulty, fatigue, sensitivity to light, sensitivity to noise, headache, feeling "out of it" or "foggy," vision changes, feeling dazed or stunned; (2) cognitive symptoms of feeling mentally foggy or slowed down, difficulty concentrating, difficulty remembering, forgetfulness, confusion, feeling slow; (3) emotional symptoms of irritability, sadness, nervousness, feeling more emotional; (4) sleep symptoms of drowsiness, sleeping more or less than usual, difficulty falling asleep.
Visible signs of concussion include but are not limited to: lying motionless; unconsciousness; vomiting; vacant look; slow to get up; balance difficulty or incoordination; clutching the head.

If an athlete, teammate, coach, official or member of sports medicine team identifies signs, symptoms or behaviors consistent with concussion, the following steps should be taken immediately:

- The athlete must be removed from practice or competition.
- The athlete must be evaluated by a member of the medical team with concussion experience.
- The athlete must be removed from practice/play for that calendar day if concussion is confirmed or suspected.

The initial concussion evaluation will include:

- Symptom assessment. SCAT 3 or SCAT 5
- Physical and neurological exam. SCAT 3 or SCAT 5
- Cognitive assessment. SCAT 3 or SCAT 5
- Balance exam. BESS
- Clinical assessment for cervical spine trauma, skull fracture, intracranial bleed and catastrophic injury

Any student athlete diagnosed with a concussion is prohibited from returning to play or participating in any practice or game on the same day in which they sustained the concussion. Any student athlete diagnosed with a concussion will follow the protocol below and will not be permitted to return to play or practice until cleared by a physician in accordance with the steps below.

7. Post-concussion Management
An emergency action plan will be arranged for any suspected or diagnosed concussion. The emergency action plan may be activated for any of the following:

- If performed, Glasgow Coma Scale < 13 on initial assessment, or GCS <15 at 2 hours or more post-initial assessment
- Prolonged loss of consciousness.
- Focal neurological deficit suggesting intracranial trauma.
- Repetitive emesis.
- Persistently diminished/worsening mental status or other neurological signs/symptoms.
- Spine injury.

Because concussion may evolve or manifest over time, for all suspected or diagnosed concussions, there will be in place a mechanism for serial evaluation of the athlete.

For all cases of diagnosed concussion, the athlete and another responsible adult will be provided oral and/or written care regarding concussion management. Such instructions are documented.

As most athletes with concussion have resolution of symptoms in 7-10 days, all athletes who have prolonged recovery more than two weeks will be re-evaluated by a physician. Such re-evaluation will be performed to confirm the concussion diagnosis, best management options, consideration of a referral or to consider co-morbid or post-concussion diagnoses such as: sleep dysfunction; migraine or other headache disorders; mental health symptoms and disorders; ocular or vestibular dysfunction; cervicalgia/neck pain; other post-concussion diagnoses.

8. Return to Activity
Student-athletes require a graduated program of care following concussion, both for return-to-learn and return-to-play. Both will be considered carefully.

**Return-to-Learn**

Returning to academic activities after a concussion is a parallel concept to returning to play after concussion. After concussion, brain energy may not be available to perform normal cognitive exertion and function. The return-to-learn concept should follow an individualized and step-wise process overseen by a point person within the athletics department, who will work in conjunction with a multidisciplinary team.

The Carleton College multidisciplinary team may vary student-to-student, depending on the difficulty in returning to a normal school schedule. Such team may include, but will not necessarily be limited to:

- Team physician.
- Athletic trainer.
- Office of disability services representative
- Dean of Students office.
- Neuropsychologist consultant.
- Psychologist/counselor at Student Health and Counseling.
- Academic advisor.
- Faculty.
- College administrators.

Student-athletes who have suffered a concussion should not return to the classroom on the same day. Following the first day of rest, the athlete will undergo an individualized plan that should include the following:

- Discussion of any potential limitations and/or reasonable accommodations in accordance with the ADA and other applicable law.
- The athlete will remain at home or in the dorm if he/she cannot tolerate light cognitive activity. Otherwise, return to the classroom and studying will be as tolerated and on a gradual basis.

The academic schedule will normally not need to be adjusted for more than two weeks. If the student-athlete continues to require accommodations after two weeks, the following steps may be taken:

- The athlete will be re-evaluated by a physician or their designee, which will confirm the diagnosis or consider other post-concussion diagnoses.
- Other members of the multi-disciplinary team will become engaged as needed.
- For more prolonged return-to-learn cases, consideration will be given to working with other campus resources, in accordance with the ADA and other applicable law. Such resources will include any of the following:
  - Learning specialists.
  - Office of disability services.
  - ADAAA office.

**Return-to-Sport**

It is important to recognize each return-to-sport plan will be individualized and supervised by a Carleton College health care provider with expertise in concussion management. Final determination of return-to-sport will be made by the team physician or his/her qualified designee.
The initial treatment for all athletes following concussion is at least 24-48 hours of relative physical and cognitive rest. Relative rest should continue until the athlete has returned to his/her pre-concussion baseline status. Discretion can be used by the health care provider to introduce mild aerobic activity during the transition period of returning to pre-concussion baseline status, so long as such activity does not exacerbate post-concussion symptoms or signs.

Once the athlete is symptom-free, the Carleton Concussion Clearance Form (Appendix C), a stepwise progression return-to-sport protocol, may be utilized. Progression from one step in the protocol to the next can take place when the stepwise activity does not lead to worsening or new symptoms. The stepwise progression includes:

1. Light aerobic exercise such as walking, swimming or riding a stationary bike for at least 15 minutes. No resistance training is permitted. If asymptomatic with light aerobic exercise, then;
2. Sport-specific activity (mode, duration and intensity specific) exercise with no head impact. If asymptomatic with sport-specific activity, then;
3. Non-contact sport drills and resumption of progressive resistance training. If asymptomatic with non-contact drills and resistance training, then;
4. Full-contact practice and unrestricted training. If asymptomatic with full-contact practice, then;
5. Return-to-sport is allowed. **Unrestricted return-to-sport should not occur prior to unrestricted return-to-learn for injuries occurring while the athlete is enrolled in classes.

**NOTE:** If at any point the student-athlete becomes symptomatic (more symptomatic than baseline), the team physician or physician designee will be notified, and adjustments will be made to the return-to-sport progression. It is commonplace for progression of each step to take at least 24 hours.

9. **Reducing Exposure to Head Trauma**

Carleton College is committed to student-athlete health and safety. To that end, Carleton College will be proactive in efforts to minimize exposure to head trauma in a manner consistent with the Interassociation Recommendations: Preventing Catastrophic Injury and Death in College Athletes. The following procedures are in place:

- Concussion Fact Sheets, plus education regarding safe play and proper technique, are made available to student-athletes at the time of the pre-season compliance meeting.
- Concussion Fact Sheets, plus education regarding safe play and proper technique, are made available to coaches, sport administrators, team physicians, athletic trainers and strength and conditioning coaches on an annual basis.
- Adherence to ‘[Interassociation Consensus: Year-Round Football Practice Contact Recommendations.](#)’
- All practices and competition adhere to existing ethical standards.
- Using playing and protective equipment (including the helmet) as a weapon is prohibited during all practices and competitions.
- In all practices and competitions, deliberately inflicting injury on another player is prohibited.
- Teams will take a “safety-first” approach to sport.
- All playing and protective equipment (including helmets), as applicable, meet relevant equipment safety standards and related certification requirements.
- All contact/collision, helmeted practices and competitions adhere to keeping the head out of blocking and tackling.
Appendix A, page 7 - NCAA Concussion Education sheet for Student-Athletes
Appendix B, page 9 - NCAA Concussion Education sheet for Coaches
Appendix C, page 11 - Concussion Clearance Form
Appendix D, page 12 - Student-Athlete Concussion Education and Agreement
Appendix E, page 14 - Medical Staff Concussion Statements
Appendix F, page 15 - Administrator Concussion Statements
Appendix G, page 16 - Coach Concussion Statements
Appendix H, page 17 - SCAT3 test
What is a concussion?
A concussion is a type of traumatic brain injury. It follows a force to the head or body and leads to a change in brain function. It is not typically accompanied by loss of consciousness.

**How can I keep myself safe?**

1. **Know the symptoms.**
   - You may experience ...
   - Headache or head pressure
   - Nausea
   - Balance problems or dizziness
   - Double or blurry vision
   - Sensitivity to light or noise
   - Feeling sluggish, hazy or foggy
   - Confusion, concentration or memory problems

2. **Speak up.**
   - If you think you have a concussion, stop playing and talk to your coach, athletic trainer or team physician immediately.

3. **Take time to recover.**
   - Follow your team physician and athletic trainer’s directions during concussion recovery. If left unmanaged, there may be serious consequences.
   - Once you’ve recovered from a concussion, talk with your physician about the risks and benefits of continuing to participate in your sport.

**How can I be a good teammate?**

1. **Know the symptoms.**
   - You may notice that a teammate ...
   - Appears dazed or stunned
   - Forgets an instruction
   - Is confused about an assignment or position
   - Is unsure of the game, score or opponent
   - Appears less coordinated
   - Answers questions slowly
   - Loses consciousness

2. **Encourage teammates to be safe.**
   - If you think one of your teammates has a concussion, tell your coach, athletic trainer or team physician immediately.
   - Help create a culture of safety by encouraging your teammates to report any concussion symptoms.

3. **Support your injured teammates.**
   - If one of your teammates has a concussion, let him or her know you and the team support playing it safe and following medical advice during recovery.
   - Being unable to practice or join team activities can be isolating. Make sure your teammates know they’re not alone.

*No two concussions are the same. New symptoms can appear hours or days after the initial impact.*
*If you are unsure if you have a concussion, talk to your athletic trainer or team physician immediately.*
What happens if I get a concussion and keep practicing or competing?
- Due to brain vulnerability after a concussion, an athlete may be more likely to suffer another concussion while symptomatic from the first one.
- In rare cases, repeat head trauma can result in brain swelling, permanent brain damage or even death.
- Continuing to play after a concussion increases the chance of sustaining other injuries too, not just concussion.
- Athletes with concussion have reduced concentration and slowed reaction time. This means that you won’t be performing at your best.
- Athletes who delay reporting concussion take longer to recover fully.

What are the long-term effects of a concussion?
- We don’t fully understand the long-term effects of a concussion, but ongoing studies raise concerns.
- Athletes who have had multiple concussions may have an increased risk of degenerative brain disease and cognitive and emotional difficulties later in life.

What do I need to know about repetitive head impacts?
- Repetitive head impacts mean that an individual has been exposed to repeated impact forces to the head. These forces may or may not meet the threshold of a concussion.
- Research is ongoing but emerging data suggest that repetitive head impact also may be harmful and place a student-athlete at an increased risk of neurological complications later in life.

Did you know?
- NCAA rules require that team physicians and athletic trainers manage your concussion and injury recovery independent of coaching staff, or other non-medical influence.
- We’re learning more about concussion every day. To find out more about the largest concussion study ever conducted, which is being led by the NCAA and U.S. Department of Defense, visit ncaa.org/concussion.

CONCUSSION TIMELINE

Baseline Testing
Balance, cognitive and neurological tests that help medical staff manage and diagnose a concussion.

Concussion
If you show signs of a concussion, NCAA rules require that you be removed from play and medically evaluated.

Recovery
Your school has a concussion management plan, and team physicians and athletic trainers are required to follow that plan during your recovery.

Return to Learn
Return to school should be done in a step-by-step progression in which adjustments are made as needed to manage your symptoms.

Return to Play
Return to play only happens after you have returned to your preconussion baseline and you’ve gone through a step-by-step progression of increasing activity.

For more information, visit ncaa.org/concussion.
NCAA is a trademark of the National Collegiate Athletic Association

SPORT SCIENCE INSTITUTE
What is a concussion?
A concussion is a type of traumatic brain injury. It follows a force to the head or body and leads to a change in brain function. It is not typically accompanied by loss of consciousness.

How can I tell if an athlete has a concussion?

You may notice the athlete…

- Appears dazed or stunned
- Forgets an instruction
- Is confused about an assignment or position
- Is unsure of the game, score or opponent
- Appears less coordinated
- Answers questions slowly
- Loses consciousness

The athlete may tell you he or she is experiencing…

- A headache, head pressure or that he or she doesn’t feel right following a blow to the head
- Nausea
- Balance problems or dizziness
- Double or blurry vision
- Sensitivity to light or noise
- Feeling sluggish, hazy or foggy
- Confusion, concentration or memory problems

Note that no two concussions are the same. All possible concussions must be evaluated by an athletic trainer or team physician.

What can I do to keep student-athletes safe?

<table>
<thead>
<tr>
<th>What can I do?</th>
<th>Preseason</th>
<th>In-Season</th>
<th>Time of Injury</th>
<th>Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Athletes who don’t immediately seek care for a suspected concussion take longer to recover.</strong></td>
<td>Create a culture in which concussion reporting is encouraged and promoted.</td>
<td>Know the signs and symptoms of concussions.</td>
<td>Remove athletes from play immediately if you think they have a concussion and refer them to the team physician or athletic trainer.</td>
<td>Follow the recovery and return-to-play protocol established by team physicians and athletic trainers.</td>
</tr>
<tr>
<td><strong>The more people who know what to look for in a concussed athlete, the more likely a concussion will be identified.</strong></td>
<td>Athletes who don’t immediately seek care for a suspected concussion take longer to recover.</td>
<td>Early removal from play can mean a quicker recovery and help avoid serious consequences.</td>
<td>Team physicians and athletic trainers have the training to follow best practices related to the concussion recovery process.</td>
<td></td>
</tr>
<tr>
<td><strong>Be present when your team physician or athletic trainer provides concussion education material to your team. Tell your team that this matters to you.</strong></td>
<td>Tips and strategies</td>
<td>Check in with your team physician or athletic trainer if you want to learn more about concussion safety.</td>
<td>Provide positive reinforcement when an athlete reports a suspected concussion.</td>
<td>Tell athletes that decisions related to their return to play and health are entirely in the hands of the team physician and athletic trainer.</td>
</tr>
</tbody>
</table>

You play a powerful role in setting the tone for concussion safety on your team. Let your team know that you take concussion seriously and reporting the symptoms of a suspected concussion is an important part of your team’s values.
What happens if an athlete gets a concussion and keeps practicing or competing?

- Due to brain vulnerability after a concussion, an athlete may be more likely to suffer another concussion while symptomatic from the first one.
- In rare cases, repeat head trauma can result in brain swelling, permanent brain damage or even death.
- Continuing to play after a concussion increases the chance of sustaining other injuries too, not just concussion.
- Athletes with a concussion have reduced concentration and slowed reaction time. This means they won't be performing at their best.
- Athletes who delay reporting concussion may take longer to recover fully.

What are the long-term effects of a concussion?

- We don't fully understand the long-term effects of a concussion, but ongoing studies raise concerns.
- Athletes who have had multiple concussions may have an increased risk of degenerative brain disease, and cognitive and emotional difficulties later in life.

What do I need to know about repetitive head impacts?

- Repetitive head impacts mean that an individual has been exposed to repeated impact forces to the head. These forces may or may not meet the threshold of a concussion.
- Research is ongoing but emerging data suggest that repetitive head impact also may be harmful and place a student-athlete at an increased risk of neurological complications later in life.

Did you know?

- Most contact or collision teams have at least one student-athlete diagnosed with a concussion every season.
- Your school has a concussion management plan, and team physicians and athletic trainers are expected to follow that plan during a student-athlete’s recovery.
- NCAA rules require that team physicians and athletic trainers have the unchallengeable authority to make all medical management and return-to-play decisions for student-athletes.
- We're learning more about concussion every day. To find out more about the largest concussion study ever conducted, which is being led by the NCAA and U.S. Department of Defense, visit ncaa.org/concussion.

For more information, visit ncaa.org/concussion.
Concussion Clearance Form

Athlete Name: _______________________

Sport: ________________________________

Date of Concussion: ____________________

Total # of Concussions in the past: __________

Asymptomatic Date: ______________________

24-48 Hour Asymptomatic Rest ________ Days Rest

Post-Concussion ImPACT test date: PASS or FAIL RETAKE (How many needed?) ______

<table>
<thead>
<tr>
<th>DATE</th>
<th>Rehabilitation Protocol</th>
<th>Functional Exercise</th>
<th>PASS signature initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Activity</td>
<td>Complete physical and cognitive tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light Aerobic Activity</td>
<td>Stationary Bike, 15 minutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aerobic Activity</td>
<td>Stationary Bike 15 min, 15 min warm up (non-contact with team), if no symptoms jog for 15 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sport-specific Exercise, Non-contact</td>
<td>Stationary Bike 15 min, warm up with team, non-contact practice equaling 1 hour 15 min total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sport-specific Exercise, Contact abbreviated</td>
<td>Stationary Bike 15 min, warm up with team, contact practice (drills only, no live play), equaling 1 hour 30 min total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sport-specific Exercise—Contact</td>
<td>Following medical clearance: normal training activities, full 2 hour practice (*Unrestricted return-to-sport should not occur prior to unrestricted return-to-learn for injuries occurring while the athlete is enrolled in classes.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Athlete is cleared to return to play with full contact on: ____________________________

_________________________________________________________________________________

Physician signature                                           Date of Clearance

_________________________________________________________________________________

Certified Athletic Trainer signature                           Date of Clearance
**Athlete Concussion Education and Agreement 2020-2021**

I acknowledge that I have to be an active participant in my own healthcare. As such, I have the direct responsibility for reporting all of my injuries and illnesses to the sports medicine staff of my institution (e.g., team physician, athletic training staff).

I recognize that my true physical condition is dependent upon an accurate medical history and a full disclosure of any symptoms, complaints, prior injuries and/or disabilities experienced.

I hereby affirm that I have fully disclosed in writing any prior medical conditions and will also disclose any future conditions to the sports medicine staff at my institution.

* Signature

By signing, I certify that I have read the above statements and agree that the statements are accurate.

You are required to watch this 3-minute NCAA video and certify that you understand the content of this video. Please copy the link below into your browser, watch the video, then come back to this form and complete the form.

**NCAA CONCUSSION VIDEO:**

https://www.youtube.com/watch?time_continue=60&v=cXOLh6lwy8w&feature=emb_logo

* Signature (2)

By signing I certify that I have watched the NCAA Concussion video.

**NCAA CONCUSSION FACT SHEET**

Please go to this link and read the 3-page NCAA Concussion fact sheet for student-athletes:

http://www.ncaa.org/sites/default/files/2017SSI_ConcussionFactSheet_StudentAthletes_20170721.pdf

* Signature (3)

By signing I certify that I have read the NCAA Concussion Fact Sheet for Student Athletes.

I understand that there is a possibility that participation in my sport may result in a head injury and/or concussion. I have been provided with education on head injuries and understand the importance of immediately reporting symptoms of a head injury/concussion to my sports medicine staff. I waive, release and discharge for myself, my heirs, executors, administrators, legal representatives, assigns and successors in interest any and all rights or claims for injuries or losses of any description that I may have or which may hereafter accrue to me against Carleton College, its Trustees, employees, or agents, in connection with my participation in activities associated with a Carleton College activity.

I know that I can find more information about Carleton's Concussion Safety Protocol on the Carleton Athletics website at this link:


* Signature (4)

By signing I acknowledge that my institution has provided me with specific educational materials on what a concussion is.

**CONCUSSION EDUCATION**

A concussion is a type of traumatic brain injury. It follows a force to the head or body and leads to a change in brain function. It is not typically accompanied by loss of consciousness.

Basic steps you can take to protect yourself from concussions:

1. You cannot see a concussion, but you might notice some of the symptoms immediately. Other symptoms can show up hours or days after the injury. Concussion symptoms include (but are not limited to):
You may experience:
- Headache or head pressure
- Nausea
- Balance problems or dizziness
- Double or blurry vision
- Sensitivity to light or noise
- Feeling sluggish, dizzy or foggy
- Confusion, concentration or memory problems

2. Speak up.
- If you think you have a concussion, stop playing and talk to your coach, athletic trainer or team physician immediately.

3. Take time to recover.
- Follow your team physician and athletic trainer’s directions during concussion recovery. If left unmanaged, there may be serious consequences.
- Once you’ve recovered from a concussion, talk with your physician about the risks and benefits of continuing to participate in your sport.

4. Return to Learn
   Return to school should be done in a step-by-step progression in which adjustments are made as needed to manage your symptoms.

5. Return to Play
   Return to play only happens after you have returned to your pre-concussion baseline and you’ve gone through Carleton’s Concussion Clearance Form, a step-by-step progression of increasing activity.

* Signature (5) I have read and understand ALL of the above statements.

Signature (6) If the student-athlete is under 18 years of age, this form must be signed here by a parent or guardian.
Carleton College
Medical Staff Concussion Statement

I have read and understand the Carleton College Concussion Safety Protocol.

I have read and understand the NCAA Concussion Fact Sheet.

After reading the NAA Concussion Fact Sheet and reviewing the Carleton College Concussion Safety Protocol, I am aware of the following information:

A concussion is a brain injury, which athletes should report to the medical staff.

A concussion can affect an athlete’s ability to perform everyday activities, reaction time, balance, sleep and classroom performance. You can’t see a concussion, but you might notice some of the symptoms right away. Other symptoms can show up hours or days after the injury.

I should not knowingly allow the athlete to return to play in a game or practice if he/she has received a blow to the head or body that results in concussion related symptoms.

Athletes shall not return to play in a game or practice on the same day that they are suspected of having a concussion.

If I suspect one of my athletes has a concussion, I should have the athlete see our medical staff.

I will encourage my athletes to report any suspected injuries and illnesses to our medical staff, including signs and symptoms of concussions.

Following a concussion the brain needs time to heal. Concussed athletes are much more likely to have a repeat concussion if they return to play before their symptoms resolve. In rare cases, repeat concussions can cause permanent brain damage and even death.

I am aware that every first-year athlete participating on specified Carleton teams should be baseline tested prior to participation in their sport. These tests allow for comparison of symptoms, neurocognition, and balance if the athlete were to become injured.

I am aware that athletes diagnosed with a concussion will be assessed by our medical staff. I recognize that each return-to-play plan will be individualized and supervised by a member of our Carleton medical staff and final determination of return-to-play will be made by our team physician or his/her qualified designee.

__________________________________________    ________________________
Signature of Medical Staff                                      Date

__________________________________________
Printed name of Medical Staff
Carleton College
Administrator Concussion Statement

_____ I have read and understand the Carleton College Concussion Safety Protocol.

_____ I have read and understand the NCAA Concussion Fact Sheet.

After reading the NAA Concussion Fact Sheet and reviewing the Carleton College Concussion Safety Protocol, I am aware of the following information:

_____ A concussion is a brain injury, which athletes should report to the medical staff.

_____ A concussion can affect an athlete’s ability to perform everyday activities, reaction time, balance, sleep and classroom performance. You can’t see a concussion, but you might notice some of the symptoms right away. Other symptoms can show up hours or days after the injury.

_____ I should enforce with the coaching staff not knowingly allow the athlete to return to play in a game or practice if he/she has received a blow to the head or body that results in concussion related symptoms.

_____ Athletes should not return to play in a game or practice on the same day that they are suspected of having a concussion.

_____ I should enforce with coaches that if they suspect one of their athletes has a concussion, they should have the athlete see the medical staff

_____ I should encourage coaches to have their athletes report any suspected injuries and illnesses to the medical staff, including signs and symptoms of concussions.

_____ Following a concussion the brain needs time to heal. Concussed athletes are much more likely to have a repeat concussion if they return to play before their symptoms resolve. In rare cases, repeat concussions can cause permanent brain damage and even death.

_____ I am aware that every first-year athlete participating on specified Carleton teams should be baseline tested prior to participation in their sport. These tests allow for comparison of symptoms, neurocognition, and balance if the athlete were to become injured.

_____ I am aware that athletes diagnosed with a concussion will be assessed by our medical staff. I recognize that each return-to-play plan will be individualized and supervised by a member of the Carleton medical staff and final determination of return-to-play will be made by the team physician or his/her qualified designee.

_____________________________          __________________________
Signature of Administrator                  Date

_____________________________
Printed name of administrator
Carleton College
Coach Concussion Statement

_____ I have read and understand the Carleton College Concussion Safety Protocol

_____ I have read and understand the NCAA Concussion Fact Sheet

After reading the NAA Concussion Fact Sheet and reviewing the Carleton College Concussion Safety Protocol, I am aware of the following information:

_____ A concussion is a brain injury, which athletes should report to the medical staff.

_____ A concussion can affect an athlete’s ability to perform everyday activities, reaction time, balance, sleep and classroom performance. You can’t see a concussion, but you might notice some of the symptoms right away. Other symptoms can show up hours or days after the injury.

_____ I should not knowingly allow the athlete to return to play in a game or practice if he/she has received a blow to the head or body that results in concussion related symptoms.

_____ Athletes should not return to play in a game or practice on the same day that they are suspected of having a concussion.

_____ If I suspect one of my athletes has a concussion, I should have the athlete see the medical staff.

_____ I should encourage my athletes to report any suspected injuries and illnesses to the medical staff, including signs and symptoms of concussions.

_____ Following a concussion the brain needs time to heal. Concussed athletes are much more likely to have a repeat concussion if they return to play before their symptoms resolve. In rare cases, repeat concussions can cause permanent brain damage and even death.

_____ I am aware that every first-year athlete participating on specified Carleton teams should be baseline tested prior to participation in their sport. These tests allow for comparison of symptoms, neurocognition, and balance if the athlete were to become injured.

_____ I am aware that athletes diagnosed with a concussion will be assessed by our medical staff. I recognize that each return-to-play plan will be individualized and supervised by a member of the Carleton medical staff and final determination of return-to-play will be made by the team physician or his/her qualified designee.

Signature of Coach ___________________________ Date _______________________

Printed name of coach ___________________________
What is the SCAT3?1

The SCAT3 is a standardized tool for evaluating injured athletes for concussion and can be used in athletes aged from 11 years and older. It superseded the original SCAT and the SCAT 2 published in 2005 and 2009, respectively. For younger persons, ages 12 and under, please use the Child SCAT3. The SCAT3 is designed for use by medical professionals. If you are not qualified, please use the Sport Concussion Recognition Tool. An interview with the SCAT3 can be helpful for determining pre-injury test scores.

Specific instructions for use of the SCAT3 are on page 3. If you are not familiar with the SCAT3, please read through these instructions carefully. This tool may be freely copied in its current form for distribution to individuals, teams, groups, and organizations. Any revision or any reproduction in a digital form requires approval by the Concussion in Sport Group.

NOTE: The diagnosis of a concussion is a clinical judgment, ideally made by a medical professional. The SCAT3 should not be used solely to make, or exclude, the diagnosis of concussion in the absence of clinical judgement. An athlete may have a concussion even if their SCAT3 is “normal.”

What is a concussion?

A concussion is a disturbance in brain function caused by a direct or indirect force to the head. It results in a variety of non-specific signs and/or symptoms (some examples listed below) and most often does not involve loss of consciousness.

A concussion should be suspected if one or more of the following:

- Symptoms (e.g., headache, or physical signs (e.g., unsteadiness, or impaired brain function (e.g., confusion) or abnormal behavior (e.g., change in personality).

SIDELINE ASSESSMENT
Indications for Emergency Management

NOTE: A hit to the head can sometimes be associated with a more serious brain injury. Any of the following warrants consideration of activating emergency procedures and urgent transportation to the nearest hospital:

- Glasgow Coma Score less than 15
- Deteriorating mental status
- Posterior spinal injury
- Progressive worsening symptoms or new neurologic sign

Potential signs of concussion?

Any of the following signs should be observed after a direct or indirect blow to the head, the athlete should stop participation, be evaluated by a medical professional and should not be permitted to return to sport the same day if a concussion is suspected.

Any loss of consciousness?

- “If so, how long?”
- Balance or motor incoordination; faint, slurred words, etc.
- Disorientation or confusion; inability to maintain conversation or complete sentences
- Loss of memory
- “If so, how long?”
- “Before or after the injury?”

Any athlete with a suspected concussion should be REMOVED FROM PLAY, medically assessed, monitored for deterioration (i.e., should not be left alone) and should not drive a motor vehicle until cleared to do so by a medical professional. No athlete diagnosed with a concussion should return to sports participation on the day of injury.
**Background**

Name: __________________________ Date: __________________________
Examiner: __________________________
Sport/team/school: __________________________
Date/time of injury: __________________________
Age: __________________________
Gender: __________________________
Years of education completed: __________________________
Dominant hand: __________________________
How many concussions do you think you have had in the past? __________________________
When was the most recent concussion? __________________________
How long was your recovery from the most recent concussion? __________________________
Have you ever been hospitalized or had medical imaging done for a head injury? __________________________
Have you ever been diagnosed with headaches or migraines? __________________________
Do you have a learning disability, attention deficit hyperactivity disorder (ADHD), or any other psychiatric disorder? __________________________
Has anyone in your family ever been diagnosed with any of these problems? __________________________
Are you on any medications? If yes, please list: __________________________

SCAT3 to be done in resting state. Best done 10 or more minutes post exertion.

**Symptom Evaluation**

### 3 How do you feel?

*You should score yourself on the following symptoms based on how you feel now.*

<table>
<thead>
<tr>
<th>Symptom</th>
<th>None</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Pressure in head</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Neck pain</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Nausea or vomiting</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Dizziness</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Blurred vision</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Balance problems</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Sensitivity to light</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Sensitivity to noise</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Feeling slowed down</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Feeling like &quot;in a fog&quot;</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>&quot;Don't feel right&quot;</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Difficulty concentrating</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Difficulty remembering</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Fatigue or low energy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Confusion</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Drowsiness</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Trouble falling asleep</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>More emotional</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Irritability</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Sadness</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Nervous or Antious</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total number of symptoms (Maximum possible 22)**

**Symptom severity score (Maximum possible 150)**

Do the symptoms get worse with physical activity? __________________________

Do the symptoms get worse with mental activity? __________________________

Self rated: __________________________

Clinician interview: __________________________

Self rated and clinician monitored: __________________________

Overall rating: If you know the athlete well prior to the injury, how different is the athlete acting compared to his/her usual self? __________________________

Please circle your answer:

- No different
- Very different
- Unsure
- NA

**Cognitive & Physical Evaluation**

### 4 Cognitive Assessment

**Standardized Assessment of Concussion (SAC)**

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Orientation score</th>
<th>Orientation score of 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Immediate memory**

<table>
<thead>
<tr>
<th>List</th>
<th>Trial 1</th>
<th>Trial 2</th>
<th>Trial 3</th>
<th>Alternative word list</th>
</tr>
</thead>
<tbody>
<tr>
<td>elbow</td>
<td>0 1 0 1</td>
<td>0 1 0 1</td>
<td>0 1 0 1</td>
<td>candle baby finger</td>
</tr>
<tr>
<td>apple</td>
<td>0 1 0 1</td>
<td>0 1 0 1</td>
<td>0 1 0 1</td>
<td>paper monkey penny</td>
</tr>
<tr>
<td>carp</td>
<td>0 1 0 1</td>
<td>0 1 0 1</td>
<td>0 1 0 1</td>
<td>sugar perfume blanket</td>
</tr>
<tr>
<td>puzzle</td>
<td>0 1 0 1</td>
<td>0 1 0 1</td>
<td>0 1 0 1</td>
<td>sandwich sunsets lemon</td>
</tr>
<tr>
<td>bubble</td>
<td>0 1 0 1</td>
<td>0 1 0 1</td>
<td>0 1 0 1</td>
<td>wagon run insect</td>
</tr>
</tbody>
</table>

**Total Immediate memory score total**

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Concentration score</th>
<th>Concentration score of 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Concentration: Digits Backward**

<table>
<thead>
<tr>
<th>List</th>
<th>Trial 1</th>
<th>Alternative digit list</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1</td>
<td>6 2 9</td>
<td>5 2 6</td>
</tr>
<tr>
<td>3 5</td>
<td>1 7 3</td>
<td>3 9 5</td>
</tr>
<tr>
<td>6 2 9</td>
<td>1这样</td>
<td>3 8 5 2 7</td>
</tr>
<tr>
<td>7 1</td>
<td>5 9 1</td>
<td>5 3 1 7 6 4</td>
</tr>
</tbody>
</table>

**Total of 6**

**Concentration: Month in Reverse Order**

Dec: Nov - Oct - Sept - Aug - Jul - Jun - May - Apr - Mar - Feb - Jan | 0 1

**Concentration score**

<table>
<thead>
<tr>
<th>Neck Examination:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range of motion:</td>
</tr>
<tr>
<td>Tenderness:</td>
</tr>
<tr>
<td>Upper/lower limbs sensations &amp; strength:</td>
</tr>
</tbody>
</table>

**Balance Examination**

**Footwear** (shoes, barefoot, brace, tape, etc.)

**Modified Balance Error Scoring System (MBESS)**

Testing surface (hard floor, field, etc.)

**Condition**

Double leg stance: __________________________

Single-leg stance (non-dominant leg): __________________________

Tandem stance (non-dominant foot in back): __________________________

**RN/On**

Tandem gait:* **Time (least of 4 trials):** ________ seconds

**Coordination Examination**

**Upper limbs coordination**

**Which arm was tested?**

<table>
<thead>
<tr>
<th>Left</th>
<th>Right</th>
</tr>
</thead>
</table>

**Coordination score**

<table>
<thead>
<tr>
<th>SAC Delayed Recall**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delayed recall score</td>
</tr>
</tbody>
</table>

**Score**

280 SCAT3 SPORT CONCUSSION ASSESSMENT TOOL | PAGE 2 © 2013 Concussion in Sport Group
INSTRUCTIONS

Words in italics throughout the SCAT3 are the instructions given to the athlete by the scorer.

Symptom Scale

"You should score yourself on the following symptoms, based on how you feel now."

To be completed by the athlete. In situations where the symptom scale is being completed after exercise, it should still be completed in a resting state, at least 15 minutes post exercise.

For total number of symptoms, a maximum possible is 21.

For Symptom Severity score, all scores in table, maximum possible is 22 to 100.

SAC5

Immediate Memory

"I am going to test your memory. I will read you a list of words and when I am done, repeat back as many words as you can remember in any order.""}

Trials 1 & 2.

"I am going to repeat the same list again. Repeat back as many words as you can remember in any order, even if you read the words backwards."

Complete all 3 trials regardless of score on trial 1 & 2. Read the words at a rate of one per second. Score 1 pt. for each correct response. Total score equals sum across all 3 trials. Do not inform the athlete that delayed recall will be tested.

Concentration

Digits backward

"I am going to read you a string of numbers and when I am done, you repeat them back to me backward, in reverse order of how I read them to you. For example, if I say 357, you would say 753.""}

If correct, go to next string length. If incorrect, next trial 3. One point possible for each string length. Stop after incorrect on next trials. The digits should be read at the rate of one per second.

Months in reverse order

"Now tell me the months in the year in reverse order. Start with the last month and go backward. So you say December, November, October..."}

1 pt. for entire sequence correct.

Delayed Recall

The delayed recall should be performed after completion of the Balance and Coordination Examination.

"Do you remember that list of words we had a few times earlier? Tell me as many words from the list as you can remember in any order.""

Score 1 pt. for each correct response.

Balance Examination

Modified Balance Error Scoring System (MBESS).

This balance test is based on a modified version of the Balance Error Scoring System (BEST). A stopwatch or watch with a second hand is required for this testing.

"I am now going to test your balance. Please take your shoes off, roll up your pant leg, and remove any ankle rings (if applicable).""}

The test will consist of three twenty-second tests with different stances.

(a) Double leg stance:

"This first stance is standing with your feet together with your hands on your hips and with your eyes closed. You should try to maintain stability for 20 seconds. I will be counting the number of times you move outside of this position. I will start timing when you are set and have closed your eyes.""

(b) Single leg stance:

"If you are able to keep a ball, which foot would you use? (This will be the dominant foot) Now stand on your non-dominant foot. The dominant leg should be held in approximately 90 degrees at hip flexion and 25 degrees of knee flexion. Again, you should try to maintain stability. I will be counting the number of times you move outside of this position. If you stumble out of this position, open your eyes and return to the start position and continue balancing. I will start timing when you are set and have closed your eyes!""

(c) tandem stance:

Your stance heel-to-toe with your non-dominant foot in back. Your weight should be evenly distributed across both feet. Again, you should try to maintain stability for 20 seconds with your hands on your hips and your eyes closed. I will be counting the number of times you move out of this position, if you stumble out of this position, open your eyes and return to the start position and continue balancing. I will start timing when you are set and have closed your eyes.

Balance testing – types of errors

1. Hands lifted off floor 
2. Opening eyes 
3. Stop, stumble, or fall 
4. Moving hips > 20 degrees abduction 
5. Lifting forefoot or heel 
6. Remaining out of test position > 5 sec.

Each of the 20-second trials is scored by counting the errors, or deviations from the proper stance, accumulated by the athlete. The examiner will begin counting errors only after the individual has assumed the proper start position. The modified BEST is calculated by adding one error point for each error during the three 20-second tests. The maximum total number of errors for any single condition is 18. If a athlete commits multiple errors simultaneously, only one error is recorded but the athlete should quickly return to the testing position, and counting should resume once subject is set. Subjects that are unable to maintain the testing procedure for a minimum of five seconds at the start are assigned the highest possible score, 18, for that testing condition.

COORDINATION EXAMINATION

Upright stance coordination

Finger-to-nose (FTN) task.

"I am going to test your coordination now. Please sit comfortably on the chair with your eyes open and your arm either right or left outstretched should be extended to 90 degrees and allow fingers extended, pointing in front of you. When I say a start signal, I would like you to perform five successive finger-to-nose replications using your index finger to touch the tip of your nose, then to touch your right ear, then return to your starting position. Please be precise with your fingers on your nose, and then return to the starting position, as quickly and as accurately as possible.""

Scoring: 5 correct replications in ≤ 5 seconds = 1

Eye cover test: attempt to touch the tip of your nose with your eyes closed.

Reference & Footnotes

1. This tool has been developed by a group of international experts at the 4th International Consensus meeting on Concussion in Sport held in Zurich, Switzerland in November 2012. The full details of the conference outcomes and the authors of the test are published in the British Journal of Sports Medicine, 2013, 47, 1-17.


ATHLETE INFORMATION

Any athlete suspected of having a concussion should be removed from play, and then seek medical evaluation.

Signs to watch for
Problems could arise over the first 24–48 hours. The athlete should not be left alone and must go to a hospital or clinic if they:
- Have a headache that gets worse
- Are very dizzy or can’t be awakened
- Can’t recognize people or places
- Have repeated vomiting
- Behave unusually or seem confused; are very irritable
- Have seizures (arms and legs jerk uncontrollably)
- Have weak or numb arms or legs
- Are unstable on their feet; have slurred speech

Remember, it is better to be safe. Consult your doctor after a suspected concussion.

Return to play
Athletes should not be allowed to return to any contact or collision sport until cleared by a medical professional.

For example:
- Rehabilitation stage
- Functional exercise at each stage of rehabilitation
- Objective of each stage

Scoring Summary:
- Number of Symptoms of 2
- Symptom Severity Score of 12
- Orientation of 5
- Immediate Memory of 15
- Concentration of 5
- Delayed Recall of 5
- SAC Total

No loss of consciousness
- Baseline
- Mild
- Moderate
- Severe

Notes:
Patient’s name
Date/time of injury
Date/time of medical review
Treating physician

CONTACT INJURY ADVICE
(To be given to the person monitoring the concussed athlete)

This patient has received an injury to the head. A careful medical examination has been carried out and no sign of any serious complications has been found. Recovery time is variable across individuals and the patient will need monitoring for a further period by a responsible adult. Your treating physician will provide guidance as to this timeframe.

If you notice any change in behavior, vomiting, dizziness, worsening headache, double vision or excessive drowsiness, please contact your doctor or the nearest hospital emergency department immediately.

Other important points:
- Rest physically and mentally, including training or playing sports, until symptoms resolve and you are medically cleared
- Avoid alcohol
- No prescription or non-prescription drugs without medical supervision
- Specificity:
  - No sleeping tablets
  - Do not use aspirin, anti-inflammatory medication or sedating painkillers
  - Do not drive until medically cleared
  - Don’t return to sport until medically cleared

Clinic phone number

Copyright © 2015 Cochlear Limited Group