A concussion is a brain injury that is caused by a blow to the head or body that may result in improper brain functioning. A concussion can range from mild to very severe and manifests itself differently in each individual.

Concussions are recognized as being a potentially very serious condition that if managed improperly, can lead to catastrophic consequences. At The University of Maine, we take great pride in providing optimal health care to all student-athletes. The following policy has been adopted by the Department of Sports Medicine in an effort to provide a consistent management approach to any student-athlete that suffers a concussion, while also recognizing that each concussion, as well as each student-athlete, is unique and individualized in nature. By managing concussions individually, and considering the student-athlete’s medical history, it allows the physicians and athletic trainers on staff to ensure the safety for each student-athlete.

The University of Maine recognizes that concussions may occur outside of participating in a sport. Therefore the acute management of the student-athlete with such a concussion may occur outside the scope of this document when that occurs. The return to play decisions for the student-athlete that may have suffered a concussion outside of sport participation will be guided by this policy. This policy includes, but is not limited to the management principles mandated by the NCAA as well as those by the Colonial Athletic Association, Hockey East and America East Conferences.

**Education**

Prior to each Pre-Season, each student-athlete and coach will be educated on how to recognize signs and symptoms of concussion, the University of Maine Department of Sports Medicine Concussion Management Policy, as well as current trends in concussion management. Each group (Coaches & Student athletes) will receive the NCAA Fact Sheet on Concussion signs and symptoms for their respective group (Appendix A). At the conclusion of the educational session and in the team compliance meeting, each student-athlete and coach will sign a statement acknowledging the receipt of the education (Appendix B), as well as their role in reporting any student-athlete exhibiting signs and symptoms of a concussion to the appropriate member of the Sports Medicine Staff. Head Coaches will also complete the coaches’ form stating they will follow our policy and procedures on concussions (Appendix C) and the Vice President/Athletic Director will complete the Institutional Affidavit (Appendix D) certifying The University of Maine is in compliance with all NCAA rules pertaining to Concussion Management.

During the Annual Sports Medicine Staff Orientation, the Athletic Trainers will review The University of Maine Department of Sports Medicine Concussion Management Policy, review and update the document as necessary to meet the current trends and guidelines in concussion management, and sign a document certifying they will uphold the policy and protocol (Appendix E). The University of Maine Team Physicians will also review the policy and document their receipt of the policy on a signed document (Appendix F).

**Reporting a Concussion**

Anyone that suspects a student-athlete has a concussion, or notices any student-athlete suffering from any symptoms of a concussion, must report the concerns to the appropriate member of the University of Maine Sports Medicine Staff.
The Sports Medicine Staff shall remove any student-athlete that reports or appears to be suffering from symptoms of a concussion from participation for evaluation. Initial evaluation by the Sports Medicine Staff includes, but is not limited to, symptom assessment, physical and neurological exam, cognitive assessment, balance exam, and clinical assessment for vertical spine trauma, skull fracture and intracranial bleeding. Following evaluation from the Sports Medicine Staff and any emergent care issues are addressed, decisions will be made whether the student-athlete should be transported to the local hospital for emergency care and/or further diagnostic testing. **The student athlete will report to the athletic trainer and athletic training room DAILY for symptom scale paperwork and verbal communication with a certified athletic trainer. DAILY until told otherwise by the ATC.**

Any student-athlete that is diagnosed with a concussion by a physician shall not return to participation for the remainder of that day. This is to ensure that the student-athletes do not negatively influence the nature of the injury by further exerting themselves. Take home education, either orally or in written form, in reference to post-concussion injury will be given to the student-athlete and/or responsible adult (Appendix G).

**Post-Acute Concussion Management**

Once a concussion had been diagnosed the student-athlete will not be left alone on the sideline and mental status will be regularly monitored. If the student-athlete demonstrates a Glasgow coma scale less than 13, suffer prolonged loss of consciousness (> 1 minute), experience repetitive vomiting, worsening mental status, or any extreme exacerbation of symptoms EMS will be activated and the Facility EAP will be followed.

Follow-up Physician care will be determined on an individual basis as directed by the University of Maine Sports Medicine Staff. Student-athletes with prolonged recovery will be evaluated by a Team Physician in order to consider additional diagnosis and best management options.

SCAT3 testing (Appendix H) will be performed as determined by the Sports Medicine Staff based on the individual, and their symptoms.

Post-concussive neuro-psychological testing and a “symptom score” will be performed on a schedule as determined by the sports medicine staff based on the scores of the student-athlete and their symptoms.

Once a student-athlete has been asymptomatic for **at least 24 hours**, a gradual return-to-play protocol shall be implemented, under the direction of a Physician.

- Step 1. Light Aerobic Exercise without resistance training.
- Step 2. Sport-specific exercise and activity without head impact.
- Step 3. Non-contact practice with progressive resistance training.
- Step 4. Unrestricted Training.
- Step 5. Return to competition.

With the aforementioned progression, a student-athlete should be allowed to progress, **as long as symptoms do not arise** at the current level. **If symptoms do arise** during the progression, the student-athlete will **return to the previous asymptomatic level**.

**Return-to-Learn**

The Sports Medicine Staff will work with Student Academic Services (SAS), in compliance with the Americans with Disabilities Act Amendments Act (ADAAA), to complete a return-to-learn progression after an acute concussion.
If a student-athlete is suspected to have a concussion, the student-athlete will be held from class until further evaluation can be completed. The Sports Medicine Staff will work with the appropriate member of the SAS Team to inform the student athlete’s professors of their condition. The student-athlete should not return to class on the same day a concussion occurs. A cognitive rest letter will be sent to the student-athletes professors (Appendix I).

The student-athlete will be re-evaluated by the Sports Medicine Staff periodically and will return to class as symptoms allow. The student-athlete is responsible for communicating with the sports medicine staff if symptoms increase during academic activity so appropriate adjustments can be made. The Sports Medicine Staff will communicate with the SAS Team as much as necessary on the condition of each student athlete pertaining to their return to academic activity.

If the student-athlete has concussion symptoms lasting longer than 2 weeks after the initial injury, the sports medicine staff, in consultation with the SAS Team, will determine if further academic modification is needed. If further academic modification is needed, the sports medicine staff will work with the SAS Team and Student Assistance Services for necessary accommodations. A Concussion Modification request will be filled out by the Team Physician and sent to Student Assistance Services (Appendix J).

In accordance with NCAA policies and the University of Maine’s commitment to student-athlete welfare and safety, the following plan regarding the management of concussions is being implemented.

1.) At the beginning of each school year, every student-athlete will sign a statement in which student-athletes accept the responsibility for reporting their injuries and illnesses to the institutional medical staff, including signs and symptoms of concussions. During the review and signing process student-athletes will be presented with educational material on concussions.

2.) At the beginning of each school year, every coach will receive an informational sheet on concussions and sign a statement acknowledging receipt of the information and their role in the management of concussions and sport safety.

3.) Emergency Action Plans for each venue utilized by the athletics program at the University of Maine are maintained and posted on the University of Maine Athletics website under the Sports Medicine page.

4.) All student-athletes involved in the intercollegiate athletic program at the University of Maine are guaranteed equitable access to appropriate health care. The team physician / medical provider and certified athletic trainers are available through the Kessock Sports Medicine Center and the Cutler Health Center with their staff of clinicians is open to all university students.

5.) Athletics healthcare providers are empowered to have the unchallengeable authority to determine management and return-to-play of any ill or injured student-athlete, as he or she deems appropriate. The certified athletic training staff works very closely with a team of medical providers in a number of specialties to provide comprehensive sports medicine services. Occasionally the providers will also utilize outside, consulting physicians to provide the best care possible to the student-athlete.
6.) Baseline assessments will be available to all student-athletes at the University of Maine. In addition and in accordance with NCAA recommendations, first-time student athletes at Maine will automatically have baseline testing done. The Team Physician will review their medical and concussion history during their pre-participation physical and determine pre-participation clearance and/or the need for additional consultation or testing.

Baseline testing will include a symptoms checklist, a neuropsychological exam as well as vestibular testing.

7.) When a student-athlete shows any signs, symptoms or behaviors consistent with a concussion, the athlete shall be removed from practice or competition and evaluated by an athletics healthcare provider with experience in the evaluation and management of concussion. This may be a certified athletic trainer, physician, nurse practitioner or physician assistant.

A student-athlete diagnosed with a concussion shall be withheld from the competition or practice and not return to activity for the remainder of that day.

The student-athlete will receive serial monitoring for deterioration. Athletes will be provided with written instructions upon discharge; preferably with a roommate, guardian, or someone that can follow the instructions.

The student-athlete will be evaluated by a team physician or other appropriate medical provider at the earliest possible opportunity.

Follow-up symptom scores, neuropsychological testing and balance testing will be done and these test results will be interpreted by a medical provider with specific training in the interpretation of such results.

Once asymptomatic and post-exertion assessments are within normal baseline limits, return to play will follow a medically supervised stepwise process as outlined in the Consensus Statement on Concussion in Sport: The 3rd International Conference on Concussion in Sport Held in Zurich, November 2008. (See Table 1.)

**Final authority for Return-to-Play shall reside with the team physician or the physician’s designee.**

8.) Documentation of the incident, evaluation, continued management, and clearance of the student-athlete with a concussion will be placed in the student-athlete’s medical record.

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

10.) Academic Support Services for Student Athletes will be notified of any student-athletes with a concussion. Request of academic accommodations and notification of professors will be made when appropriate.
<table>
<thead>
<tr>
<th>Rehabilitation Stage</th>
<th>Functional Exercise at Each Stage of Rehabilitation</th>
<th>Objective of Each Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No activity</td>
<td>Complete physical and cognitive rest</td>
<td>Recovery</td>
</tr>
<tr>
<td>2. Light aerobic exercise</td>
<td>Walking, swimming, or stationary cycling, keeping intensity to 70% of maximum predicted heart rate; no resistance training</td>
<td>Increase heart rate</td>
</tr>
<tr>
<td>3. Sport-specific exercise</td>
<td>Skating drills in ice hockey, running drills in soccer; no head impact activities</td>
<td>Add movement</td>
</tr>
<tr>
<td>4. Non-contact training drills</td>
<td>Progression to more complex training drills, eg, passing drills in football and ice hockey; may start progressive resistance training</td>
<td>Exercise, coordination, and cognitive load</td>
</tr>
<tr>
<td>5. Full-contact practice</td>
<td>Following medical clearance, participate in normal training activities</td>
<td>Restore athlete’s confidence; coaching staff assesses functional skills</td>
</tr>
<tr>
<td>6. Return to play</td>
<td>Normal game play</td>
<td></td>
</tr>
</tbody>
</table>

* If symptoms return during any one of these phases, discontinue activity for that day and repeat that step the next day.
Signs and symptoms of a concussion may include, but are not limited to the following:

- Headache
- Dizziness
- Nausea/Vomiting
- Tinnitus (ringing in ears)
- Disorientation
- Balance problems
- Difficulty concentrating
- Personality changes
- Vision changes
- Amnesia
- Sensitivity to light and/or noise
- Loss of consciousness

Exercise or activities that require a lot of concentration may cause symptoms to re-appear or worsen, thus increasing the time one needs to recover from a concussion.

**Baseline Testing**

Each student-athlete on an active sport roster will be **tested with a computerized neuropsychological exam (ImPact)**, symptom evaluation (Appendix K), and balance assessment using the BESS TEST. The reason for this is to have “baseline scores” for comparison should a student-athlete sustain a concussion throughout their athletic career.

**Balance examination**

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

**Balance testing**

“I am now going to test your balance. Please take your shoes off, roll up your pant legs above ankle (if applicable), and remove any ankle taping (if applicable). This test will consist of three twenty second tests with different stances.”

(a) **Double leg stance:**

“The 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 in that position for 20 seconds. I will be counting the number of times you move out of this position. I will start timing when you are set and have closed your eyes.”

(b) **Single leg stance:**

“If you were to kick 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 30 degrees of hip flexion and 45 degrees of knee flexion. 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.”
(e) **Tandem stance:**

“Now stand 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 iliac crest
2. Opening eyes
3. Step, stumble, or fall
4. Moving hip into > 30 degrees abduction
5. Lifting forefoot or heel
6. Remaining out of test position > 5 sec
**Reporting a Concussion**

Anyone that suspects a student-athlete has a concussion, or notices any student-athlete suffering from any symptoms of a concussion, must report the concerns to the appropriate member of the University of Maine Sports Medicine Staff.

**Acute Management of a Concussion**

The Sports Medicine Staff shall remove any student-athlete that reports or appears to be suffering from symptoms of a concussion from participation for evaluation. Initial evaluation by the Sports Medicine Staff includes, but is not limited to, symptom assessment, physical and neurological exam, cognitive assessment, balance exam, and clinical assessment for cervical spine trauma, skull fracture and intracranial bleeding.

Following evaluation from the Sports Medicine Staff and any emergent care issues are addressed, decisions will be made whether the student-athlete should be transported to the local hospital for emergency care and/or further diagnostic testing.

Any student-athlete that is diagnosed with a concussion by a physician shall not return to participation for the remainder of that day. This is to ensure that the student-athletes do not negatively influence the nature of the injury by further exerting themselves. Take home education, either orally or in written form, in reference to post-concussion injury will be given to the student-athlete and/or responsible adult (Appendix H).

**Post-Acute Concussion Management**

Once a concussion had been diagnosed the student-athlete will not be left alone on the sideline and mental status will be regularly monitored. If the student-athlete demonstrates a Glasgow coma scale less than 13, suffer prolonged loss of consciousness (> 1 minute), experience repetitive vomiting, worsening mental status, or any extreme exacerbation of symptoms EMS will be activated and the Facility EAP will be followed.

Follow-up Physician care will be determined on an individual basis as directed by the University of Maine Sports Medicine Staff. Student-athletes with prolonged recovery will be evaluated by a Team Physician in order to consider additional diagnosis and best management options. SCAT3 testing (Appendix I) will be performed as determined by the Sports Medicine Staff based on the individual, and their symptoms.

Post-concussive neuro-psychological testing and a “symptom score” will be performed on a schedule as determined by the sports medicine staff based on the scores of the student-athlete and their symptoms.

Once a student-athlete has been asymptomatic for at least 24 hours, a gradual return-to-play protocol shall be implemented, under the direction of a Physician.

- Step 1. Light Aerobic Exercise without resistance training.
- Step 2. Sport-specific exercise and activity without head impact.
- Step 3. Non-contact practice with progressive resistance training.
- Step 4. Unrestricted Training.
- Step 5. Return to competition.

With the aforementioned progression, a student-athlete should be allowed to progress, as long as symptoms do not arise at the current level. If symptoms do arise during the progression, the student-athlete will return to the previous asymptomatic level.
The University of Maine Department of Sports Medicine

Concussion Management Policy

Appendix A

NCAA Concussion Fact Sheets
CONCUSSION
A FACT SHEET FOR STUDENT-ATHLETES

WHAT IS A CONCUSSION?
A concussion is a brain injury that:
• Is caused by a blow to the head or body.
  – From contact with another player, hitting a hard surface such as the ground, ice or floor; or being hit by a piece of equipment such as a bat, lacrosse stick or field hockey ball.
• Can change the way your brain normally works.
• Can range from mild to severe.
• Presents itself differently for each athlete.
• Can occur during practice or competition in ANY sport.
• Can happen even if you do not lose consciousness.

HOW CAN I PREVENT A CONCUSSION?
Basic steps you can take to protect yourself from concussion:
• Do not initiate contact with your head or helmet. You can still get a concussion if you are wearing a helmet.
• Avoid striking an opponent in the head. Undercutting, flying elbows, stepping on a head, checking an unprotected opponent, and sticks to the head all cause concussions.
• Follow your athletics department’s rules for safety and the rules of the sport.
• Practice good sportsmanship at all times.
• Practice and perfect the skills of the sport.

WHAT ARE THE SYMPTOMS OF A CONCUSSION?
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. Concussion symptoms include:
• Amnesia.
• Confusion.
• Headache.
• Loss of consciousness.
• Balance problems or dizziness.
• Double or fuzzy vision.
• Sensitivity to light or noise.
• Nausea (feeling that you might vomit).
• Feeling sluggish, foggy or groggy.
• Feeling unusually irritable.
• Concentration or memory problems (forgetting game plays, facts, meeting times).
• Slowed reaction time.

Exercise or activities that involve a lot of concentration, such as studying, working on the computer, or playing video games may cause concussion symptoms (such as headache or tiredness) to reappear or get worse.

IT’S BETTER TO MISS ONE GAME THAN THE WHOLE SEASON.
WHEN IN DOUBT, GET CHECKED OUT.
For more information and resources, visit www.NCAA.org/health-safety and www.CDC.gov/Concussion.
CONCUSSION
A FACT SHEET FOR COACHES

THE FACTS
- A concussion is a brain injury.
- All concussions are serious.
- Concussions can occur without loss of consciousness or other obvious signs.
- Concussions can occur from blows to the body as well as to the head.
- Concussions can occur in any sport.
- Recognition and proper response to concussions when they first occur can help prevent further injury or even death.
- Athletes may not report their symptoms for fear of losing playing time.
- Athletes can still get a concussion even if they are wearing a helmet.
- Data from the NCAA Injury Surveillance System suggests that concussions represent 5 to 18 percent of all reported injuries, depending on the sport.

WHAT IS A CONCUSSION?
A concussion is a brain injury that may be caused by a blow to the head, face, neck or elsewhere on the body with an “impulsive” force transmitted to the head. Concussions can also result from hitting a hard surface such as the ground, ice or floor, from players colliding with each other or being hit by a piece of equipment such as a bat, lacrosse stick or field hockey ball.

RECOGNIZING A POSSIBLE CONCUSSION
To help recognize a concussion, watch for the following two events among your student-athletes during both games and practices:
1. A forceful blow to the head or body that results in rapid movement of the head;
2. Any change in the student-athlete’s behavior, thinking or physical functioning (see signs and symptoms).

SIGNS AND SYMPTOMS
Signs Observed By Coaching Staff
- Appears dazed or stunned.
- Is confused about assignment or position.
- Forgets plays.
- Is unsure of game, score or opponent.
- Moves clumsily.
- Answers questions slowly.
- Loses consciousness (even briefly).
- Shows behavior or personality changes.
- Can’t recall events before hit or fall.
- Can’t recall events after hit or fall.

Symptoms Reported By Student-Athlete
- Headache or “pressure” in head.
- Nausea or vomiting.
- Balance problems or dizziness.
- Double or blurry vision.
- Sensitivity to light.
- Sensitivity to noise.
- Feeling sluggish, hazy, foggy or groggy.
- Concentration or memory problems.
- Confusion.
- Does not “feel right.”
PREVENTION AND PREPARATION
As a coach, you play a key role in preventing concussions and responding to them properly when they occur. Here are some steps you can take to ensure the best outcome for your student-athletes:

- Educate student-athletes and coaching staff about concussion. Explain your concerns about concussion and your expectations of safe play to student-athletes, athletics staff and assistant coaches. Create an environment that supports reporting, access to proper evaluation and conservative return-to-play.
- Review and practice your emergency action plan for your facility.
- Know when you will have sideline medical care and when you will not, both at home and away.
- Emphasize that protective equipment should fit properly, be well maintained, and be worn consistently and correctly.
- Review the Concussion Fact Sheet for Student-Athletes with your team to help them recognize the signs of a concussion.
- Review with your athletics staff the NCAA Sports Medicine Handbook guideline: Concussion or Mild Traumatic Brain Injury (mTBI) in the Athlete.
- Insist that safety comes first.
- Teach student-athletes safe-play techniques and encourage them to follow the rules of play.
- Encourage student-athletes to practice good sportsmanship at all times.
- Encourage student-athletes to immediately report symptoms of concussion.
- Prevent long-term problems. A repeat concussion that occurs before the brain recovers from the previous one (hours, days or weeks) can slow recovery or increase the likelihood of having long-term problems. In rare cases, repeat concussions can result in brain swelling, permanent brain damage and even death.

IF YOU THINK YOUR STUDENT-ATHLETE HAS SUSTAINED A CONCUSSION:
Take him/her out of play immediately and allow adequate time for evaluation by a health care professional experienced in evaluating for concussion.

An athlete who exhibits signs, symptoms or behaviors consistent with a concussion, either at rest or during exertion, should be removed immediately from practice or competition and should not return to play until cleared by an appropriate health care professional. Sports have injury timeouts and player substitutions so that student-athletes can get checked out.

IF A CONCUSSION IS SUSPECTED:
1. Remove the student-athlete from play. Look for the signs and symptoms of concussion if your student-athlete has experienced a blow to the head. Do not allow the student-athlete to just “shake it off.” Each individual athlete will respond to concussions differently.
2. Ensure that the student-athlete is evaluated right away by an appropriate health care professional. Do not try to judge the severity of the injury yourself. Immediately refer the student-athlete to the appropriate medical staff, such as a certified athletic trainer, team physician or health care professional experienced in concussion evaluation and management.
3. Allow the student-athlete to return to play only with permission from a health care professional with experience in evaluating for concussion. Allow athletics medical staff to rely on their clinical skills and protocols in evaluating the athlete to establish the appropriate time to return to play. A return-to-play progression should occur in an individualized, step-wise fashion with gradual increments in physical exertion and risk of contact.
4. Develop a game plan. Student-athletes should not return to play until all symptoms have resolved, both at rest and during exertion. Many times, that means they will be out for the remainder of that day. In fact, as concussion management continues to evolve with new science, the care is becoming more conservative and return-to-play time frames are getting longer. Coaches should have a game plan that accounts for this change.

IT’S BETTER THEY MISS ONE GAME THAN THE WHOLE SEASON.
WHEN IN DOUBT, SIT THEM OUT.
For more information and resources, visit www.NCAA.org/health-safety and www.CDC.gov/Concussion.

Reference to any commercial entity or product or service on this page should not be construed as an endorsement by the Government of the company or its products or services.
Student Athlete & Coach Concussion Acknowledgement
The University of Maine Department of Sports Medicine

Concussion Management Policy

What is a concussion?
A concussion is a brain injury that is caused by a blow to the head or body that may results in improper brain functioning. A concussion can range from mild to very severe and manifests itself differently in each individual.

Signs and Symptoms of a concussion include but are not limited to:
- Headache
- Personality changes
- Dizziness
- Vision changes
- Nausea/vomiting
- Amnesia
- Tinnitus
- Sensitivity to Light and/or noise
- Disorientation
- Loss of consciousness
- Balance problems
- Difficulty concentrating

Symptoms of a concussion are unique to each individual and may change or worsen over time. Activities that require prolonged concentrations such as studying, working on a computer, video games, etc. may also worsen concussion symptoms.

What should I do if I suspect I have a concussion?
The primary objective of the University of Maine Sports Medicine Staff is to provide the best possible care to each and every student athlete. It is the responsibility of the student-athlete to report any and all injuries, including the suspicion of concussion to a member of the Sports Medicine Staff. Proving such information will help to guide a safe recovery and return to play as directed by the Sports Medicine Staff.

Concussion Disclosure

I, _______________________________, understand and recognize that in order to ensure the best possible medical care I am responsible to disclose any and all information regarding an athletic or non-athletic related injury to the University of Maine Sports Medicine Department. Additionally, I hereby affirm that I have received and understand educational material related to concussion and will specifically disclose to the University of Maine Sports Medicine Department any sign or symptom of concussion that I may experience. I understand that my failure to do so may be detrimental to my medical care and I may suffer unnecessary harm.

_________________________________________           _________________
Student-Athlete Signature                      Date
The University of Maine Department of Sports Medicine

Concussion Management Policy

What is a concussion?
A concussion is a brain injury that is caused by a blow to the head or body that may results in improper brain functioning. A concussion can range from mild to very severe and manifests itself differently in each individual.

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- Vision changes
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- Loss of consciousness
- Difficulty concentrating

Symptoms of a concussion are unique to each individual and may change or worsen over time. Activities that require prolonged concentrations such as studying, working on a computer, video games, etc. may also worsen concussion symptoms.

What should I do if I suspect a student athlete has a concussion?
The primary objective of the University of Maine Sports Medicine Staff is to provide the best possible care to each and every student athlete. It is the responsibility of the coach to report any and all injuries, including the suspicion of concussion to a member of the Sports Medicine Staff. Proving such information will help to guide a safe recovery and return to play as directed by the Sports Medicine Staff.

Concussion Disclosure

I, ______________________________, understand and recognize that in order to ensure the best possible medical care for our student athletes; I am responsible to disclose any and all information regarding an athletic or non-athletic related injury to the University of Maine Sports Medicine Department. Additionally, I hereby affirm that I have received and understand the educational materials related to concussion and will specifically disclose to the University of Maine Sports Medicine Department any sign or symptom of concussion that I observe a student athlete to possess. I further understand that my failure to do so may be detrimental to the medical care for a student athlete and it may cause them unnecessary harm.

___________________________________________           _________________  
Coach Signature                              Date
The University of Maine Department of Sports Medicine

Concussion Management Policy

Appendix C

Head Coaches Concussion Acknowledgement
Coaches Concussion
Acknowledgement Form

I, ________________________, acknowledge that as a member of the athletic department at, ________________, I accept responsibility for supporting my university’s policy on concussion management.

I understand that student-athletes are at risk of head injury and/or concussion. I also understand the importance of reporting any symptoms of a head injury/concussion to an athletic trainer and/or team physician. I also accept responsibility for reporting signs or symptoms that I may witness.

By signing below, I acknowledge that my institution has provided me and the student-athletes within my program with educational materials on concussion symptoms, including institutional policies regarding concussion management and I have had the opportunity to ask questions about areas and issues that are not clear to me on this issue.

I, _________________ have read the above and agree that the statements are accurate.

_______________________________
Head Coach (Signature)

______________________________
Compliance or Sport Administrator (Signature)

Date

Date
The University of Maine Department of Sports Medicine

Concussion Management Policy

Appendix D

Athletics Health Care Administrator
Concussion Affidavit
Institutional Affidavit

I certify that the athletic department has a formal institutional written concussion management plan that is in compliance with NCAA requirements of bylaw 3.2.4.18 and affirms proper education of staff, coaches and student-athletes regarding this policy.

By signing below, I accept responsibility for supporting my university’s policy on concussion management as athletics health care administrator.

Athletics Health Care Administrator (Signature)  Date
The University of Maine Department of Sports Medicine

Concussion Management Policy

Appendix E

University of Maine Sports Medicine Agreement
University of Maine Sports Medicine Agreement

I,______________________________, have read and understand the contents of this manual. By signing this page, I agree to adhere to the rules and regulations, including the concussion management policy, emergency action plans, and the policies and procedures, established by the University of Maine Sports Medicine Program. I realize as an athletic trainer that I am expected to conduct myself in a professional manner at all times. I understand that if I fail to comply with these guidelines, disciplinary action may be taken.

________________________________  ________________________
Signature                                Date
The University of Maine Department of Sports Medicine

Concussion Management Policy

Appendix F

The University of Maine Team Physician
Concussion Acknowledgement
University of Maine Sports Medicine Team Physician Concussion Acknowledgement

I, ________________________________, have read and understand the contents of The University of Maine Department of Sports Medicine Concussion Management Policy and have reviewed the associated educational materials provided to all parties. By signing below, I agree to adhere to the policy pertaining to student athletes under my care with a concussion and will work with other members of the Sports Medicine and SAS Teams to provide each student athlete with the appropriate medical care.

__________________   ____________________
Team Physician   Signature   Date
The University of Maine Department of Sports Medicine

Concussion Management Policy

Appendix G

Concussion/Head Injury Take Home Instructions
Concussion/Head Injury Take Home Instructions

Name: ______________________      Date: _______

You have received an injury to your head. At this time, no serious signs or complications have been noted. However, it is highly recommended you be monitored by a responsible adult for a period of time.

If you notice any changes in behavior, vomiting, dizziness, worsening headache, double vision or excessive drowsiness, **contact your Athletic Trainer or report to the Athletic Training Room immediately**. If you are unable to reach the Sports Medicine staff and it is after Athletic Training Room hours, then you may activate emergency medical services by either having someone drive you to the nearest hospital, or call 911 for an ambulance. **DO NOT ignore any changes in the symptoms of your concussion**.

**Other important points to remember:**
- Rest and avoid any strenuous activity for at least 24 hours or until you have been reevaluated by the Sports Medicine Staff
- **NO** alcohol
- **NO** drugs/painkillers that could alter your mental status
- **NO** operating a motor vehicle until cleared by the Sports Medicine Staff
- You may use Tylenol if instructed by a physician or a member of the Sports Medicine Staff
- **Please** limit the use of all electronic devises (texting, computer use, video games, television, etc.)

Please report to the athletic training room on ______________________ for further evaluation before returning to any athletic/academic activity.

__________________________________________  ______________________________
Athletic Trainer                      Phone Number

__________________________________________  ______________________________
Athletic Trainer Signature            Student Athlete Signature
The University of Maine Department of Sports Medicine

Concussion Management Policy

Appendix H

SCAT 3
Br J Sports Med 2013 47: 259
Sport Concussion Assessment Tool – 3rd Edition
For use by medical professionals only

What is the SCAT3?

The SCAT3 is a standardized tool for evaluating injured athletes for concussion and can be used in athletes aged 13 years and older. It superseded the original SCAT and the SCAT2 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. Preseason baseline testing with the SCAT3 can be helpful for interpreting post-injury test scores.

Specific instructions for use of the SCAT3 are provided 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. Concussion should be suspected in the presence of any 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
- Potential spinal injury
- Progressive, worsening symptoms or new neurologic signs

Potential signs of concussion:

- Any loss of consciousness?
- "If so, how long?"
- Balance or motor incoordination (trembling, slow balance movements, etc.)
- Disorientation or confusion (inability to respond appropriately to questions)
- Loss of memory
- "Before or after the injury?"
- Blank or vacant look
- Visible facial injury in combination with any of the above

1. Glasgow coma scale (GCS)

<table>
<thead>
<tr>
<th>Best eye response (E)</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye opening in response to pain</td>
<td>2</td>
</tr>
<tr>
<td>Eye opening to speech</td>
<td>3</td>
</tr>
<tr>
<td>Eyes opening spontaneously</td>
<td>4</td>
</tr>
<tr>
<td>Best verbal response (V)</td>
<td>1</td>
</tr>
<tr>
<td>No verbal response</td>
<td>2</td>
</tr>
<tr>
<td>Incomprehensible sounds</td>
<td>3</td>
</tr>
<tr>
<td>Confused</td>
<td>4</td>
</tr>
<tr>
<td>Oriented</td>
<td>5</td>
</tr>
<tr>
<td>Best motor response (M)</td>
<td>1</td>
</tr>
<tr>
<td>No motor response</td>
<td>2</td>
</tr>
<tr>
<td>Extremity to pain</td>
<td>3</td>
</tr>
<tr>
<td>Resistance to pain</td>
<td>4</td>
</tr>
<tr>
<td>Localizes to pain</td>
<td>5</td>
</tr>
<tr>
<td>Obey commands</td>
<td>6</td>
</tr>
</tbody>
</table>

Glasgow Coma score (E + V + M)

2. Maddocks Score

"I am going to ask you a few questions, please listen carefully and give your best effort."

<table>
<thead>
<tr>
<th>What venue are we at today?</th>
<th>0</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which half is it now?</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Who scored last in this match?</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>What team did you play last week/game?</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Did your team win the last game?</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Maddocks score of 5

Maddocks score is valid for sideline diagnosis of concussion only and is not used for serial testing.

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 concussion should be returned to sports participation on the day of injury.
BACKGROUND

Name: 
Date: 

Examiner: 

Sport/Team/school: 
Date/time of injury: 

Age: 
Gender: M F

Years of education completed: 

Dislocated hand: right left neither

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? 

Have you ever been diagnosed with depression, anxiety, or 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-exercise.

SYMPTOM EVALUATION

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>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Pressure in head</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Neck pain</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Nausea or vomiting</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Dizziness</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Blurred vision</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Balance problems</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Sensitivity to light</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Sensitivity to noise</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Feeling slowed down</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Feeling like &quot;in a fog&quot;</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>&quot;Don't feel right&quot;</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Difficulty concentrating</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Difficulty remembering</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Fatigue or low energy</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Confusion</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Drowsiness</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Trouble falling asleep</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>More emotional</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Irritability</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Sadness</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Nervous or anxious</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Total number of symptoms (Maximum possible 21)

Symptoms severity score (maximum possible 122)

Do the symptoms get worse with physical activity?

Do the symptoms get worse with mental activity?

self rated 

self rated and clinician monitored 

clinician interview

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

no different very different unsure N/A

Scoring on the SCAT3 should not be used as a stand-alone method to diagnosis concussion, measure recovery or make decisions about an athlete's readiness to return to competition after concussion. Since signs and symptoms may evolve over time, it is important to consider repeat evaluation in the acute assessment of concussion.

COGNITIVE & PHYSICAL EVALUATION

4 Cognitive assessment

Standardized Assessment of Concussion (SAC)*

Orientation (5 points for each correct answer)

What month is it? 0 1
What is the date today? 0 1
What is the day of the week? 0 1
What year is it? 0 1
What time is it right now (within 1 hour)? 0 1

Orientation score of 5

Immediate memory list

<table>
<thead>
<tr>
<th>Item</th>
<th>Trial 1</th>
<th>Trial 2</th>
<th>Trial 3</th>
<th>Alternative word list</th>
</tr>
</thead>
<tbody>
<tr>
<td>knee</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>candle baby finger</td>
</tr>
<tr>
<td>apple</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>paper monkey penny</td>
</tr>
<tr>
<td>carpet</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>sugar perfume blanket</td>
</tr>
<tr>
<td>saddle</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>sandwich sunet lemon</td>
</tr>
<tr>
<td>bubble</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>wagon run insect</td>
</tr>
</tbody>
</table>

Total

Immediate memory score total of 15

Concentration: Digits Backward

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

Total of 4

Concentration score of 5

5 Neck Examination:

Range of motion

Tenderness

Upper and lower limb sensation

Strength

Findings:

6 Balance examination

Do you or both of the following tests:

Footwear (shoes, barefoot, braces, etc.)

Testing surface (hard floor, field, etc.)

Condition

Double leg stance: Errors

Single leg stance (non-dominant foot): Errors

Tandem stance (non-dominant foot at back): Errors

And/or:

Tandem gait* Time between steps: ____________ seconds

7 Coordination examination

Upper limb coordination

Which arm was tested:

Coordination score of 5

8 SAC Delayed Recall*

Delayed recall score of 5

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 tester.

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 done in a resting state, at least 10 minutes post exercise.
For total number of symptoms, maximum possible is 22.
For Symptom severity score, add all scores in table, maximum possible is 22 x 4 = 88.

SAC

"I am going to test your memory. I will read you a list of words and when I am done, repeat each word as many times as you can remember, in any order.
Trials 2 & 3:
1. I am going to repeat the same list again. Repeat back as many words as you can remember in any order; even if you say the word before.
2. 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:
Dichotic backward
"I am going to read you a string of numbers and when I am done, you repeat them back to me backwards, in reverse order of how I read them to you. For example, if I say 7-9, you would say 9-7-
If correct, go to next string length. If incorrect, repeat trial 1. One point possible for each string length. Stop after incorrect on both trials. The digits should be read at the rate of one per second.
Months in reverse order
"Now tell me the months of the year in reverse order. Start with the last month and go backwards. So you’d say December, November and so on.
Score 1 pt. for entire sequence correct.

Delayed Recall:
The delayed recall should be performed after completion of the Balance and Coordination Examination.
"Does your remember that list of words I read you 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 (BESS) testing

This balance testing is based on a modified version of the Balance Error Scoring System (BESS). A stopwatch or watch with a second hand is required for this testing.
"I am now going to test your balance. Please take your shoe off, roll up your pant legs above ankles if applicable, and remove any ankle strap if applicable. This test will consist of three twenty second tests with different stances.
(a) Double leg stance:
The 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 in that position for 20 seconds. I will be counting the number of times you move out of this position. I will start timing when you are set and have closed your eyes.
(b) Single leg stance:
If you were to kick 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 30 degrees of hip flexion and 45 degrees of knee flexion. 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.
(c) Tandem stance:
Now stand heel-to-toe with your non-dominant foot in back. Your weight should be evenly distributed between 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 iliac crest
2. Opening eyes
3. Step, stumble, or fall
4. Moving hip into > 30 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 BESS 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 8. If an 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, ten, for that testing condition.

OPTION: For further assessment, the same 3 stances can be performed on a surface of medium density foam (e.g., approximately 50cm x 40cm x 6cm).

Tandem Gait

Participants are instructed to stand with their feet together behind a starting line (the test is best done with footwear removed). Then, they walk in a forward direction as quickly and as accurately as possible along a 30cm wide paper strip. They must walk with an alternate foot heel-to-toe gait ensuring that they approximate their heel and toe on each step. Once they reach the end of the 3m line, they turn 180 degrees and return to the starting point using the same gait. A total of 4 trials are done and the best time to return is recorded. Athletes should complete the test in 14 seconds. Athletes fail the test if they step off the line, have a separation between their heel and toe, or if they touch or grab the examiner or an object. In that case, the time is not recorded and the trial repeated, if appropriate.

Coordination Examination

Upper limb 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 left or right) extended (shoulder flexed to 90 degrees and elbow and fingers extended), pointing in front of you. When I give you a start signal, I would like you to perform five successive finger to nose repetitions using your index finger to touch the tip of your nose, and then return to the starting position, as quickly and as accurately as possible."

Scoring: 5 correct repetitions in 4 seconds = 1
Note for testers: Athletes fail the test if they do not touch their nose, do not fully extend their elbow or do not perform five repetitions. Failure should be scored as 0.

References & 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 tool are published in The BMJ Injury Prevention and Health Protection, 2013, Volume 47, Issue 5. The outcome paper will also be simultaneously co-published in other leading biomedical journals with the copyright held by the Concussion in Sport Group, to allow unrestricted distribution, providing no alterations are made.


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 at once 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 unsteady 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 returned to play the same day of injury.
When returning athletes to play, they should be medically cleared and then follow a stepwise supervised program, with stages of progression.

For example:

<table>
<thead>
<tr>
<th>Rehabilitation stage</th>
<th>Functional exercise at each stage of rehabilitation</th>
<th>Objective of each stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light activity</td>
<td>Resting, walking, stationary cycling, light tasks</td>
<td>Increase heart rate</td>
</tr>
<tr>
<td>Light aerobic exercise</td>
<td>Resting, walking, stationary cycling, light tasks</td>
<td>Increase heart rate</td>
</tr>
<tr>
<td>Sport-specific exercise</td>
<td>Resting, walking, stationary cycling, light tasks</td>
<td>Increase heart rate</td>
</tr>
<tr>
<td>Non-contact training drills</td>
<td>Resting, walking, stationary cycling, light tasks</td>
<td>Increase heart rate</td>
</tr>
<tr>
<td>Full contact practice</td>
<td>Resting, walking, stationary cycling, light tasks</td>
<td>Increase heart rate</td>
</tr>
</tbody>
</table>

There should be at least 24 hours (or longer) for each stage and if symptoms recur the athlete should not until they resolve once again and then resume the program at the previous asymptomatic stage. Resistance training should only be added in the later stages.

If the athlete is symptomatic for more than 10 days, then consultation by a medical practitioner who is expert in the management of concussion, is recommended.

Medical clearance should be given before return to play.

CONCUSSION 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 behaviour, 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
- No alcohol
- No prescription or non-prescription drugs without medical supervision
  - Specifically: No sleeping tablets
  - Do not use aspirin, anti-inflammatory medication or sedating pain killers
- Do not drive until medically cleared
- Do not train or play sport until medically cleared

Clinic phone number

Scoring Summary:

<table>
<thead>
<tr>
<th>Test Domain</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Symptoms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symptom Severity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orientation of 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immediate Memory of 15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concentration of 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delayed Recall of 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAC Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

Patient's name:

Date/time of injury:

Date/time of medical review:

Treating physician:

Contact details or stamp

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Concussion Management Policy

Appendix I

The University of Maine Baseline Concussion Symptom Scale
**UNIVERSITY OF MAINE SPORTS MEDICINE**  
*Concussion Symptom Scale*

Name: ______________________  ID#: __________________  DOB: ____________  
Date: ____________  Date of Injury: ____________  Sport: ____________

Directions: After reading each symptom, please circle the number which best describes the way that you are currently feeling. A rating of 0 means that you are not currently experiencing that particular symptom. A rating of 6 means that you are experiencing severe problems with that particular symptom. If this is a **baseline** scale, please rate the symptoms based on how you have felt in the past week.

<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>Confusion/Disorientation</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Nausea</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>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>Balance Problems</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Fatigue</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>
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<td>Feeling Like “In a Fog”</td>
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<td>Difficulty Concentrating</td>
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<td>Difficulty with Memory</td>
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*Lovell & Collins, Journal of Head Trauma Rehabilitation, 1998*
The University of Maine Department of Sports Medicine

Concussion Management Policy

Appendix J

Cognitive Rest Letter
Dear Professor,

This letter is to inform you that (student-athlete’s name) sustained a concussion on (date). As with all injuries, head injuries require a period of rest and rehabilitation to heal properly. The function of the brain requires that this rest be from both physical and cognitive exertion. While we have the capability to monitor the physical rest of this student-athlete, the academic, social, and environmental cognitive stressors are beyond our control. Therefore, we ask that you please consider these stressors and the overall well-being of (student-athlete’s first name) if (he/she) should contact you regarding rescheduling academic requirements that may occur during this period of cognitive rest.

Please be aware that our recommendation is for complete physical and cognitive rest until the student-athlete is asymptomatic at rest. That being said, at no time will the student-athlete be instructed to disregard any academic requirement, merely to work with each professor to identify possible adjustments and/or extensions. The student-athlete has also been advised that cognitive rest entails avoiding unnecessary talking on the phone, text messaging, sitting in front of a computer, watching television, reading, etc. The student-athlete will be monitored for signs and symptoms on a daily basis by our certified athletic training staff and follow up with the medical provider will occur within 10 days. If longer-term arrangements must be made, Disability Support Services will be notified.

We appreciate your understanding in this matter. If you have any further questions about the nature of this letter or the importance of cognitive rest in the rehabilitation from concussive injuries, please feel free to contact me.

Sincerely,

Cameron Trubey, MD
Paul Culina, M.Ed., ATC
Ryan Taylor M.Ed., ATC
Sports Medicine, Department of Athletics
University of Maine
5747 Memorial Gymnasium
Orono, ME 04469
207-581-1071
Concussion Management Policy

Appendix K

Concussion Modification Request
University of Maine Sports Medicine
Concussion Modification Request

Patient Name: ___________________________________ Date of Evaluation: ____________________________

ACADEMIC ACCOMMODATIONS
The following academic accommodations may help in reducing the cognitive (thinking) load, thereby minimizing post-concussion symptoms and allowing the student to better participate in the academic process during the injury period. **These academic accommodations must be considered part of medical care and treatment for this medical condition.** Needed accommodations may vary by course. The student and athletic academic counselor are encouraged to discuss and establish accommodations with the professors on a class-by-class basis. The school and athletic academic counselor may wish to formalize accommodations through disability support services if symptoms persist following treatment and less formalized accommodations. Follow-up evaluation and revision of recommendations to occur ____________________.

☐ Testing: **Students with concussion have increased memory and attention problems.** Highly demanding activities like testing can significantly raise symptoms (e.g., headache, fatigue) which in turn can make testing more difficult.
  - extra time to complete tests
  - testing in a quiet environment
  - allow testing across multiple sessions
  - reduce length of tests
  - no tests or quizzes
  - open note / open book / take home tests when possible
  - reformat from free response to multiple choice or provide cueing (e.g., a notecard for helpful formulas).

☐ Note taking: **Note taking may be difficult due to impaired multitasking abilities and increased symptoms.** Allow student to obtain class notes or outlines ahead of time to aid organization and reduce multi-tasking demands. If this is not possible, allow the student photocopied notes from another student.

  - reduce overall amount of make-up work, class work, and homework (recommended: 50-75%)
  - short tests and projects
  - books on tape
  - passively work (e.g., sit and listen with no active involvement)
  - limited / no computer use

☐ Extra Time: **With increased symptoms, students are advised to rest, and therefore may need to turn assignments in late on occasion.** Allow student to turn in assignments late.

  - Full days as tolerated
  - Half–days as tolerated
  - No school until ____________, then attempt half days as tolerated until ____________, then full days as tolerated.

☐ Other attendance restriction

  ** Full or partial days missed due to post-concussion symptoms should be medically excused.

☐ Other Accommodations
  - Allow student to wear hat and/or sunglasses (sensitivity to light)
  - Report any changes in mood/personality to the sports medicine staff
  - Change setting (brightness/ contrast) on computer screen to reduce headache / sensitivity to light.
  - No physical exertion
  - No Sports Participation

Signature_____________________________________________ ____________________________

Cameron Trubey, MD, Team Physician
Craig Curtis MD, Team Physician
Paul Culina, M.Ed, ATC, Hockey Athletic Trainer
Ryan Taylor, M.Ed, ATC, Head Athletic Trainer