



SPORT SCIENCE
INSTITUTE™



CONCUSSION RECOVERY

WHAT EDUCATORS
NEED TO KNOW

What is a concussion?

The Consensus Statement on Concussion in Sport, which resulted from the 5th international conference on concussion in sport, defines sport-related 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... For complete definition click [here](#):

What is your role in Concussion Recovery?

- Each athletics department should have a concussion management plan that outlines the steps to be taken by team physicians and athletic trainers following a sport-related concussion diagnosis and during a student-athlete's recovery.
- The concussion management plan should provide for the identification of an academic point person who will navigate return-to-learn activities with a student-athlete who has been diagnosed with a sport-related concussion.
- The return-to-learn pathway is considered part of the suggested medical management plan and, in more complex

cases of return-to-learn, the academic point person will be part of a broader interdisciplinary team.

- Return-to-learn should be done in a step-by-step progression that fits the needs of the individual, with adjustments to be made as needed to manage the student-athlete's unique symptoms and recovery response.
- As an academic point person or other member of academic staff, it is beneficial to understand the science underlying concussion management and the rationale behind related return-to-learn considerations.

Specific Return-to-Learn Considerations

Return-to-learn guidelines assume that both physical and cognitive activities require brain energy utilization, and that after a sport-related concussion, brain energy may not be available for physical and cognitive exertion because of the brain energy crisis. The student-athlete may appear physically normal but may be unable to perform as expected due to concussion symptoms.

The unique nature of concussion symptoms and recovery make it difficult to provide prescriptive recommendations

for return-to-learn. Importantly, unrestricted return-to-sport should not occur before unrestricted return-to-learn for injuries occurring while the athlete is enrolled in classes. The broad return-to-learn recommendations outlined on the next page are based on available data and related expert consensus, and portions of the content have been previously published by the NCAA as part of its [Concussion Safety Protocol Checklist](#) and corresponding [Concussion Safety Protocol Template](#).

Return-to-Learn Recommendations

Stepwise Progression

The first step of return-to-learn is relative physical and cognitive rest. Relative cognitive rest involves minimizing potential cognitive stressors, such as reading and schoolwork. The necessary period of time that a concussed student-athlete waits before resuming class or homework should be individualized with a return to classroom/studying as tolerated. Return-to-learn should be gradual with specific attention to any worsening of concussion symptoms following cognitive exposure or symptoms lasting longer than two weeks. According to currently available expert consensus:

- If the student-athlete cannot tolerate light cognitive activity, he or she should remain at home or in the residence hall.
- Once the student-athlete can tolerate light cognitive activity, he/she should return to the classroom as tolerated, often in graduated increments.
- At any point, if the student-athlete experiences a worsening of symptoms with academic challenge (i.e., more symptomatic than baseline), or scores on clinical/cognitive measures decline, the team physician should be notified, and the student-athlete's return-to-learn activity reassessed.

Common Academic Adjustments

For the student-athlete whose academic schedule requires a minor modification in the first one to two weeks following a sport-related concussion, adjustments can often be accomplished through consultation between the student-athlete and the academic point person without

material changes to schedules, curriculum or testing environments. Recovery and return-to-learn schedules will vary on a case-by-case basis but the majority of student-athletes who are concussed fully recover within two weeks.

Atypical or Persistent Symptoms

- In the case of complex return-to-learn scenarios (e.g., atypical cases or cases in which symptoms persist beyond two weeks), the extent of necessary academic adjustments/accommodations should be decided in consultation with a broader multi-disciplinary team that may include, among others, the team physician, athletic trainer, faculty athletics representative, coach, teachers, office of disability representatives, neuropsychologist or psychologist/counselor.

- Cases that cannot be managed through schedule or academic accommodations may require the engagement of other campus resources. These resources should be engaged in a manner consistent with the Americans with Disabilities Act Amendments Act and should include learning specialists and/or representatives from the campus office of disability services or ADAAA.

Implementation of Return-to-Learn

The successful implementation of return-to-learn depends on several variables, including the following:

- Recognition that concussion symptoms vary widely among student-athletes, and even within the same individual who may be suffering a repeat concussion.
- Identification of an academic point person who can work with the recovering student-athlete to navigate the challenges that may occur in the academic space.

- Identification of symptoms that may warrant additional medical attention or impair cognitive recovery, such as headache conditions, difficulty maintaining attention, hyperactivity, anxiety and mood swings.
- Identification of additional campus resources that can help assure that the rights of the recovering student-athlete are adequately considered during this transition period.

Available Campus Resources

Campus resources vary, and may include the following:

- **Learning specialists.** Many college campuses have certified learning specialists who have specialized knowledge of medical conditions such as concussion and post-concussion syndrome.

- **Office of disability services.** Most campuses have a disability office that is responsible for verifying each student's impairment under the Americans with Disabilities Act Amendments Act and some institutions also offer a separate ADAAA office.