



This information is being provided to ensure that members of the Cornell Faculty are well-informed about federal disability laws and strategies to support students with disabilities.

Students with Concussions

Over the last several years, we have seen an increase in the number of students with concussions. A concussion is a form of **traumatic brain injury (TBI)** typically caused by a bump or blow to the head. More often than not it does not involve a loss of consciousness. Concussions are rarely life threatening, but they can have serious long-term health impacts, especially without proper medical attention or follow up care.

Concussion: More than just a headache

A concussion is not just a static event—it is a process that may evolve over minutes, hours or days. When an individual suffers an impact to the brain, this may interrupt the normal balance of chemicals such as potassium and calcium inside and outside nerve cells in the brain. Restoring balance within the nerve cells requires energy, but another aspect of concussion involves a decrease in blood flow to the brain. This can lead to a mismatch between the energy needed by the brain and the energy available. This imbalance is sometimes referred to as an “energy crisis.” (NCAA, 2012 [Sports-Related Concussion Guidelines](#))

The brain energy crisis typically resolves within seven to 10 days during the “metabolic recovery phase.” The length of this process may vary, however due to a number of factors including whether proper care is taken during the recovery process and whether the individual suffers an additional concussion or has suffered one recently. If the brain chemistry, blood flow and energy balance is not restored, there may be further complications including inflammation, changes to the physical structure of the cell, or cell death. (NCAA, 2012)

Concussion management and treatment

The most important part of concussion recovery is rest, both physical and cognitive. Trying to push through symptoms or “tough it out” can make symptoms worse, prolong recovery time, and lead to further complications. Giving students sufficient time to take care of both body and brain is the best way for them to recover quickly and completely.

Students who experience a concussion should stay away from strenuous activity, get sufficient sleep, stay away from drugs and alcohol, and eat a healthy diet. At the same time, care must also be taken to reduce cognitive stress. Students should be encouraged to be patient with themselves through the recovery period and find ways to return to full cognitive capacity without undue strain. During recovery, individuals should be extremely careful to avoid activities that may lead to a second impact and resulting brain injury. This may lead to prolonged recovery, permanent brain damage or even death.

University notification

Gannett Health Services provides notification when a student seeks medical attention for a concussion through the University health care system. A letter is sent to the student’s Associate Dean or advising office to notify them that a student has suffered a concussion and to explain how this may affect their academic performance. If symptoms of concussion persist for more than three weeks, Gannett will refer the student to Student Disability Services (SDS) for assistance with developing an accommodation plan.

Concussion Symptoms

Thinking/Remembering

- Difficulty thinking clearly
- Feeling slowed down
- Difficulty concentrating
- Difficulty remembering new information

Physical

- Headache
- Nausea or vomiting (early on)
- Sensitivity to noise or light
- Feeling tired, having no energy
- Fuzzy or blurry vision
- Dizziness
- Balance problems

Emotional/Mood

- Irritability
- Sadness
- More emotional than usual
- Nervousness or anxiety

Sleep

- Sleeping more than usual
- Sleeping less than usual
- Trouble falling asleep

www.cdc.gov/concussion/pdf/Fact_Sheet_ConcussTBI-a.pdf

Accommodations for Students with Concussions

If a student requests accommodations for concussion symptoms from Student Disability Services, relevant documentation is first reviewed to determine whether they meet the criteria for receiving services. If the request is approved, SDS will then determine what accommodations are most appropriate for the particular student and situation. **Accommodations for concussion—as with all accommodations—are determined on a case by case basis.** A student may need books in an e-text format so they can listen to them rather than read, note taking assistance, permission for more time for test-taking (if they are able to take exams), use of noise-canceling headphones, or other forms of assistance. SDS will provide the student with an accommodation letter to verify the specific types of services recommended to facilitate recovery.

Additional information about concussions:

Recovering from a Concussion (Gannett): www.gannett.cornell.edu/cms/pdf/upload/Concussion.pdf; Concussion and mild TBI information (CDC): www.cdc.gov/concussion

Students with Concussions . . . A Case Review

In the fall semester Shawna fell while walking out of the library and bumped her head. After spending an evening with a severe headache and dizziness, she went to the doctor and was diagnosed with a concussion. Having had a head injury before, Shawna took all the precautionary measures to recover. Despite this, she was still experiencing symptoms when the spring semester began. Specifically, close work on the computer and being in rooms with fluorescent lights for more than a few minutes gave Shawna a stabbing headache. Memorization took much longer, even information that was easy to remember previously. After further evaluation, she was diagnosed by her health care provider with post-concussive syndrome.

Shawna was having difficulty learning a computer program that was required in her major. In trying to identify academic accommodations to assist Shawna, the SDS Counselor met with the instructor and Shawna to learn more about how the computer class was taught and to explore options for learning the material in a way that would not aggravate Shawna's symptoms.

The solutions that were arrived at included dimming the lights in the computer lab and using a glare screen for the computer. These measures allowed Shawna to spend more time at the computer. Using noise canceling headphones helped to minimize distractions in the lab. The instructor made a point of checking in with Shawna regularly to clarify steps on a one-to-one basis and Shawna worked with a tutor outside of class to help with the memorization of the steps involved in using the program. When learned thoroughly, Shawna became proficient in using the software.

The instructor offered a range of options for the final project that Shawna could select from that allowed her to meet the requirements while minimizing the aggravation of her concussion symptoms. Shawna successfully completed the course and has learned some strategies for handling future courses and the world of work after she graduates.

UDL* Tip: When presenting visual material with color (charts, graphs, etc.), if you lighten the light colors and darken the dark colors in your design, you will increase its visual accessibility.

*UDL=Universal Design for Learning

Raising or Lowering the Bar?

A reasonable accommodation for a student with a disability is defined as a change, adaptation or modification to a policy, practice or procedure that will allow equitable access to Cornell's programs, services and activities.

Meeting the academic standards established by colleges, programs, and course instructors should be expected of all students. Students with disabilities should be held to the same academic standards as other students, including essential course work, academic integrity and conduct.

Students with disabilities may not be expected to do more work, nor more difficult work, than other students because they receive accommodations, nor should they be expected to do less than what is expected of other students because they have a disability.

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Learn more about teaching students with disabilities

The *Faculty Resource Guide to Teaching Students with Disabilities* has information about types of disabilities and their impact on student learning. The guide also has suggestions for inclusive instructional strategies that help all learners and reduce the potential need for individual accommodations.

The guide, along with previous editions of this Bulletin and other helpful information, can be found on the SDS website at www.sds.cornell.edu/faculty.

If you have questions about accommodations, do not hesitate to contact the SDS staff. Our goal is to help identify effective solutions for barriers to equal access caused by disabilities.

Student Disability Services

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