

Guideline for Concussion/Mild Traumatic Brain Injury and Persistent Symptoms

3rd Edition - for adults, +18 years of age



Ontario Neurotrauma Foundation
Fondation ontarienne de neurotraumatologie

Patient Version

This guideline has been created to help with management of concussion/mild traumatic brain injury (mTBI). It is only for management for adults over 18 years of age. The guideline can be used by patients when speaking with healthcare providers about their care. It covers getting a diagnosis, managing symptoms in the early phase (acute) and management in the longer recovery phase (persistent symptoms). It is based on up-to date, quality research evidence, the expertise of providers and the input of patients.

12b) Returning to Activity - Education (Post-secondary)

The physical, mental, and emotional difficulties that are common after a concussion/mTBI can make it difficult for you to do your regular activities. But it is important to know that some activity is more likely to speed up your recovery than delay it.

For this reason, it is important to return to your regular activities **gradually**, starting within a few days to weeks of your injury.

During your recovery period, and especially in the first 7 to 10 days, avoid any activity that might put you at risk of having another concussion/mTBI.

General considerations regarding rest and return to activity

The majority of people can return to work or school within 1 to 2 weeks after the injury. When planning your return to regular activities, both physical and mental activities need to be considered, because both have the potential to make your concussion/mTBI symptoms worse.

In the early days after your injury, try to avoid activities that can have a high cognitive load. These are activities that require a lot of

About rest:

When you first have a concussion/mTBI it is important to rest for the first one or two days. Research is now showing that after two days, it is helpful to gradually increase your level of activity. Doing some light activity can improve your wellness and your mood. As you gradually increase it, make sure it does not bring on or worsen any symptoms.

attention, concentration, and problem solving. For example:

- Doing work or school tasks that need focus or problem-solving
- Reading
- Using a computer or cell phone, watching TV, playing video games
- Being in demanding social situations, such as with too many people

It will be helpful for you or your family members to keep track of your tolerance level for both cognitive and physical activity. If any activity causes a symptom to worsen, reduce your effort for a short while, and then gradually resume the activity at a slower pace.

You may need to do an exertion test (such as a graded treadmill exercise test) to identify the level of effort that causes your symptoms to return. This is what is known as “your threshold”, and the results of this test will be useful when planning your return-to-activity plan.

General considerations for return to school (post-secondary)

Returning to some form of productive activity as soon as possible after a concussion/mTBI will improve your health and your sense of well-being. The support of your family, friends and healthcare providers is important to your recovery.

It is important that you, a family member or support person contacts your school registrar as soon as possible after your injury, even if symptoms are short-lived, to make sure you’ll have as much support as possible. Other people who may be

involved in developing your management plan include your school's disability services, academic support staff, your course instructors and your team doctor or coach if you play sports.

Symptoms after a concussion/mTBI can be:

- Physical, such as sensitivity to light (photophobia) or sound (sonophobia), or balance and physical fatigue.
- Cognitive, affecting your ability to focus, understand, and remember information. Cognitive difficulties can also affect your ability to multi-task, prioritize, organize, plan, and manage your time.
- Mood related, affecting your ability to be in large groups or busy places, deal with stress, and manage your feelings.

Symptoms can have a serious impact on your ability to manage school responsibilities. In particular, mental effort (or cognitive exertion) can make symptoms worse and affect how quickly you recover from your injury.

The cognitive demands associated with post-secondary (college or university) studies include listening to lectures, note-taking, giving presentations, doing homework and assignments, taking exams and participating in clubs or committees.

Having a doctor with experience in concussion/mTBI rehabilitation will be useful to guide you and your instructors through the recovery process. They will help ensure that any management strategies you use will suit your life and needs as you return to school.

It is also important that you update your doctor, teachers, and school administrators about your progress, challenges, and changes in symptoms.

How to return to post-secondary education gradually.

The recommendations below are intended to help you return to your post-secondary education successfully after your concussion/mTBI.

The first 1 to 2 days after the injury

If you have <u>no</u> symptoms:	If you <u>have</u> symptoms:
<p>You can go to school but do not take any tests or exams.</p> <p>If you have to write a test or exam, you will need accommodations (such as separate quiet space, paced breaks, rooms where lights can be dimmed, additional time to finish) and you will need someone to monitor you for symptoms.</p>	<p>Do not go to school or participate in any academic and sports activities, including apprenticeship, practicum, and shop-related activities. Your doctor might help you identify modified study tasks that you can do at home. It is important that you return to school before you return to sports/play. You need to make sure you can participate in school and life activities without making your symptoms worse, before you participate in sports or activities that may bring back symptoms.</p>

After the first 2 days

If you have <u>no</u> symptoms:	If you <u>have</u> symptoms:
<p>You can start doing school-related activities as long as they do not cause you to have symptoms.</p>	<ul style="list-style-type: none">• If your symptoms make it difficult for you to function, do not go to school for 1 week, and up to 2 weeks.

	<ul style="list-style-type: none">• Your doctor will inform your school’s accessibility/disability services that you had a concussion/mTBI and that you’ll need time off and may need accommodations and support to return to school.• Have someone you trust help monitor you for any new symptoms.• Make sure you return to your school activities gradually and that any accommodations do not cause your symptoms to get worse or bring on new symptoms.
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1 to 2 weeks after the injury

If you are still having difficulty functioning, you will need more time away from your academic and/or program-related activities. Your doctor should update your school’s administration or accessibility/disability services about your status.

More than 2 weeks after the injury

You can go back to your academic activities (non-physical activities) very gradually, with accommodations, as long as you can tolerate any symptoms you may have. Accessibility/disability services should be notified so that instructors can help you monitor your progress and adjust the return-to-school plan, if needed.

If you are still having difficulties at this point, you may need to see a neuropsychologist or someone who specializes in concussion/mTBI. It may be good to ask for this referral quickly, since there can be long waiting lists.

It may also be a good idea to review your accommodations. For example, you and your doctor may do any of the following:

- Look at the cognitive demands of your classes, to find out if other accommodations need to be made to the curriculum, class and school environment, activities, and timetable.
- Consider whether you need to move your courses/classes to audit status, so that you can participate in some academic activities without putting too much pressure on you from course requirements and exams.
- Consider whether you should take a temporary break from school.

TOOLS AND RESOURCES

- ✓ [Appendix 12.2 Example Concussion/mTBI Intake Package for Student Services/Special Needs Department](#)
- ✓ [Appendix 12.4 Managing your Return to Post-Secondary Education](#)

Appendix 12.2

Example Concussion/mTBI Accessibility Intake Package for Student Services/Special Needs Department*

Student Information Form **For Students with Acquired Brain Injury or Concussion**

Last name: _____

First name: _____

University of Toronto Student Number: _____

University of Toronto Email: _____

Telephone:

Home: (____) _____

Mobile: (____) _____

May we leave a message? Please circle below

Yes No Name and Number only

Yes No Name and Number only

1. What is your present status at the University of Toronto? (Check all that apply)

Undergraduate Student

Degree/Program: _____

Professional Faculty: _____

College (if an Arts & Science student): _____

Graduate Student

Degree/Program: _____

Professional Faculty: _____

Access Programs: Academic Bridging Program: _____ Transitional Year Program: _____

Other (e.g., Non-Degree, Visiting) Specify: _____

Income Student starting: _____ (e.g., Fall 2016, Winter 2017, etc.)

2. Have you registered with out service before? Yes No

If yes, who was your Disability Counsellor? _____

3. Are you an International Student? Yes No

If yes, please provide your home country _____

* Adapted from the Accessibility Services: Registration for New Students for the University of Toronto.

4. If you are a Canadian student, please provide your home province. _____

5. Who referred you to Accessibility Services? _____

6. Do you require accommodation of any kind to participate in an intake interview with a Disability Counsellor?

- Yes No

If yes, please indicate the type of accommodation:

7. What assistance are you seeking from Accessibility Services?

8. Please indicate the category of disability/ies:

- Chronic Health Issue (e.g., epilepsy, irritable bowel disorders, migraines)
- Head Injury (e.g., concussion, traumatic brain injury)
- Learning Disability or Attention Deficit Hyperactivity Disorder (ADHD)
- Autism Spectrum Disorder (ASD)
- Mental Health Issue (e.g., anxiety, bi-polar, depression, disordered eating, OCD)
- Mobility / Functional Issue (e.g., use of a mobility device, repetitive strain injuries)
- Sensory Issue (e.g., legally blind, low vision, d/Deaf, hard of hearing)
- Temporary (please describe) _____

9. Describe your disability/ies in your own words.

10. Is your disability (please check one):

- Permanent
- Progressive
- Temporary
- In the process of being assessed

11. Do you use an assistive mobility device? Yes No

If yes, please specify: Power/manual wheelchair Walker Cane

12. Do you require any on-campus residence related accommodations? Yes No

If so, please provide more information about your needs:

13. If you're seeking accommodation for any medication-related side effects, please provide information about how your medication impacts you:

* Adapted from the Accessibility Services: Registration for New Students for the University of Toronto.

14. Has anyone ever told you that you may have a learning disability? Yes No

15. Did you recently (within 2 years) complete high school or studies at another educational institution?

Yes No

If yes, please provide name of the educational institution: _____

If yes, please provide any disability-related accommodations you received at that educational institution (if any):

16. How has your disability most recently impacted your academic functioning?

- Difficulty meeting deadlines and/or time management
- Concentration, focus, or attention issues
- Absences
- Difficulty completing required readings and/or understanding course material
- Difficulty with math
- Difficulty with presentations
- Difficulty with writing and/or academic writing and research
- Difficulty writing tests or exams

17. How has your disability most recently impacted your academic functioning? (continued)

Not meeting academic potential

Other (please explain) _____

18. What strategies do you use to manage the impact of your disability/ies on your academic functioning?

- Academic Coach
- Adaptive Technology/Equipment
- Counselling/Therapy
- Exercise/Meditation
- Massage therapy
- Medication
- Physiotherapy
- Tutoring
- Other (Please describe) _____

19. Do you receive or have you applied for provincial financial aid? (For example: Ontario Student Assistance Program – OSAP)? Yes No

If yes, are you eligible to receive provincial financial aid? Yes No

20. What are your reasons for attending the University of Toronto? What are your academic or career goals?

21. Do you have additional comments or questions? (If so, please add them in space below.)

* Adapted from the Accessibility Services: Registration for New Students for the University of Toronto.

Documentation for Students with an Acquired Brain Injury/Concussion

Accessibility/Disability Services provides support for students with documented disabilities, including those with Temporary Disabilities. If you have sustained an injury that limits your ability to attend to your academic responsibilities, you may be eligible to receive alternative accommodations and support from Accessibility Services. In order to determine your eligibility, contact our office as soon as possible and an appointment will be arranged. Accessibility Services requires documentation to verify your injury, which is important to bring to your first appointment.

Please include the documentation completed by a physician, neurologist, neurosurgeon, psychologist or neuropsychologist with the following information:

- Date of Injury
- Diagnosis and/or detailed description of injury
- Treatment plan
- Prescribed and over-the-counter medications with dosages
- Anticipated length of recovery

Please also note:

- If complications arise, or recovery takes longer than anticipated, students will be asked to provide additional documentation. If cognitive related challenges persist after one year post-injury, neuropsychological/cognitive assessment results will be needed to assist with accommodation planning. An adult cognitive assessment will be required for brain injuries sustained in childhood or adolescence with regards to residual cognitive challenges to help guide accommodations at the post-secondary level. Student may be eligible for a bursary/funding to assist with the costs of obtaining this type of assessment. Speak to your disability counsellor for further details.

* Adapted from the Accessibility Services: Registration for New Students for the University of Toronto.

Medical Certificate for Acquired Brain Injury/Concussion-Related Issues

Dear Healthcare Practitioner,

This student is requesting disability-related supports and accommodations while studying at the University. The student is required to provide the University with documentation that is:

- provided by a licensed health-care practitioner, qualified in the appropriate specialty
- thorough enough to support the accommodations being considered or requested

Note: The provision of all reasonable accommodations and services is assessed based on the current impact of the disability on academic performance. A diagnosis is requested but not required for students to receive academic accommodations, however, a confirmation of disability and an understanding of the functional limitations is required.

CONFIDENTIALITY

The collection, use, and disclosure of this information resides under the guidelines of the Freedom of Information and Protection of Privacy Act (FIPPA). Under this legislation information may be shared on a need to know basis if it is required by another staff member in order to fulfill the responsibilities of their position. The documentation will be kept for a period of ten years.

To be completed by a regulated Healthcare Practitioner – Please Print Clearly

Patient's Name: _____

Patient's University Student Number: _____

Date of Birth: ____/____/____ (Year, Month, Day)

How long have you been treating this patient? _____

Last date of Clinical Assessment: _____

Statement of Disability:

Please indicate the appropriate statement for this student in the current academic setting:

Permanent disability with on-going (chronic or episodic) symptoms (that will significantly impact the student over the course of their academic career). This functional limitation is expected to remain with you for the rest of your life.

Temporary with anticipated duration from ____/____/____ to ____/____/____ (Year, Month, Day)
*If unknown, please indicate reasonable duration for which s/he should be accommodated/supported at this time (please specify number of weeks/months or list the next date you will review the symptoms). _____

* Adapted from the Accessibility Services: Registration for New Students for the University of Toronto.

Functional Impacts of Injury and Concurrent Conditions:

Date of Brain Injury/Concussion: _____

Description of Injury: _____

The provision of a diagnosis in the documentation is requested but not required, however, disability documentation must still confirm the student's type of disability and the functional limitations. If the student consents, please provide a clear diagnostic statement; avoiding such terms as "suggests" or "is indicative of". If the diagnostic criteria are not present, this must be stated in the report.

Please note any FUNCTIONAL LIMITATION or concurrent conditions.

Please note all applicable:

Primary:

Secondary:

Additional / Other:

Impacts:

Medication(s):

Potential side effects of medication(s) on academic performance:

Anticipated Date of Recovery: _____

Current treatment: (Check all that apply)

- Physiotherapy
- Chiropractic treatment
- Massage therapy
- Occupational therapy
- Speech language therapy
- Outpatient ABI treatment program
- Counselling
- Neuropsychological Assessment/Counselling
- Other _____

* Adapted from the Accessibility Services: Registration for New Students for the University of Toronto.

Impacts on Academic Functioning:

Energy Level (please specify impact, e.g., fluctuating):

Impact on sleeping cycles:

Ability to manage full academic workload:

Recommendations for assignments/tests/exams:

Ability to manage practicum/placement activities (if applicable):

Impacts on Academic Work:

- Reduced Attention and Concentration
- Communication difficulties
- Slowed information processing speed (needing longer to complete written work/ complete tests)
- Memory Difficulties (difficulty learning and/or retaining new material)
- Reduction in organization skills and time management skills
- Difficulties with Social interactions
- Physical fatigue or pain
- Visual difficulties restricting ability to: view screens, read academic materials
- Other/comments: _____

Does this individual require any adaptive equipment (laptop, voice recorder, furniture or seating in class), software (Inspiration, Kurzweil) or other supports (massage, light box, counselling, FM system, CCTV, hearing aid etc.) to achieve academic success? Yes No

Please be specific about what is required.

* Adapted from the Accessibility Services: Registration for New Students for the University of Toronto.

Healthcare Practitioner Information

Name of Healthcare Practitioner: (Please Print) _____

Signature: _____

Date:(DD/MM/YY): ____ / ____ / ____

Area of Specialization and License/Registration #: _____

- Physician
- Occupational Therapist
- Psychiatrist
- Sports Medicine Specialist
- Neurologist
- Neuropsychologist
- Psychologist
- Speech Pathologist
- Other

Facility/Clinic/Practice Name and Address: (Please use office stamp)

* Adapted from the Accessibility Services: Registration for New Students for the University of Toronto.

Release of Information

TO BE COMPLETED BY STUDENT

I, _____, hereby authorize _____ to provide
(Student) (Name of Healthcare Practitioner)

the following information to Accessibility/Disability Services at the University and if required, to supply additional information relating to the provision of my academic accommodations and disability-related services. I understand that I am not required to disclose a diagnosis to receive academic accommodations and services. I also understand that documentation to provide a verification of a disability and the functional limitations is required. I authorize Accessibility/Disability Services to contact the Healthcare Practitioner to discuss the provision of accommodations.

I understand that any medical information provided from my healthcare provider resides under the guidelines under the Freedom of Information and Protection of Privacy Act (FIPPA). Under this legislation necessary information may be shared on a need to know basis if it is required by another U of T staff member in order to fulfill the responsibilities of their position.

Student's Signature: _____

University Student Number: _____

Date: _____

* Adapted from the Accessibility Services: Registration for New Students for the University of Toronto.

Appendix 12.4

Managing Your Return to Post-Secondary Activities: Package Template and Activity Log

Name of Student: _____ **Current Date:** _____
Identification Number: _____
Date of Birth: _____

Injury Description

1. Did the injury occur before or after you arrived at your post-secondary institution? **Yes No**
 - a. Did you sustain a direct blow to the head or indirectly through other forces: *Direct Indirect Unknown*
 - b. Is there evidence of intracranial injury or skull fracture? **Yes No Unknown**
 - c. If forces were sustained directly to your head, what was the location:
Frontal Left Temporal Right Temporal Left Parietal Right Parietal Occipital Neck
2. Cause of injury:
Motor Vehicle Collision (MVC), Pedestrian-MVC, Bicycle Fall, Assault, Sports (Specify) _____
Other _____
3. Did you sustain in disruption in your memory for events:
 - a. Do you remember the impact and/or event (i.e., loss of consciousness or conscious awareness)?
 - b. Are there any events from before the injury that you do not remember (i.e., what you were doing just prior to the impact of event)? **Yes No**
If yes, then duration: _____
 - c. Are there any events from after in the injury that you do not remember, (i.e., what happened after the impact or event)? **Yes No**
If yes, then duration: _____
 - d. Any immediate symptoms of balance problems, being dazed, confused, unaware of where you were?
Yes No
If yes, then describe: _____
4. Were seizures observed or reported? **Yes No**

Current Activities

1. What is your academic status? *Full Time Part Time Transitional Other _____*
2. Do you have co-operative placements? **Yes No**
3. Do you have practical placements or labs related to your courses? **Yes No**
 - a. If yes, do you work with equipment, chemicals or other potential hazards? **Yes No**
4. Do you participate in extra-curricular activities either at post-secondary school or outside of school? **Yes No**
 - a. If yes, what activities do you participate in? Include clubs, intramural sports, varsity sports, student government, residence staff, residence and faculty representation, employment, and anything else you participate in at or outside of school apart from your classes. Describe your role in each of these commitments.

5. Have you attended class since your injury? **Yes No**

a. If yes, have you experienced any of the following ***more than usual?***

(Circle any of the items below if they are ***NEW*** symptoms since your injury or worsened since your injury)

a.	Nervousness before tests	Worsened	New
b.	Feeling overwhelmed when studying	Worsened	New
c.	Difficulty paying attention while studying	Worsened	New
d.	Procrastination	Worsened	New
e.	Not understanding assignments	Worsened	New
f.	Forgetting lessons/lectures	Worsened	New
g.	Difficulties with time management	Worsened	New
h.	Unable to manage your regular schedule of events	Worsened	New
i.	Feeling nervous and anxious	Worsened	New
j.	Feeling very sad and sdepressed	Worsened	New
k.	Unusual sense of irritability	Worsened	New
l.	Difficulty being around people	Worsened	New
m.	Problems maintaining regular friendships	Worsened	New
n.	Experiencing strained friendships and/or relationships	Worsened	New
o.	Unusually tired	Worsened	New
p.	Dizzy or light-headed	Worsened	New
q.	Headaches	Worsened	New
r.	Difficulties maintaining physical balance (i.e., feeling unsteady)	Worsened	New
s.	Sensitivity to light	Worsened	New
t.	Sensitivity to noise	Worsened	New

Please follow **Algorithm 12.2** to manage return to school and return to extra-curricular activities.

Use the following symptom/activity monitoring log to monitor your symptoms to facilitate your return-to-school and other activities:

Symptom Intensity: 1 = low intensity; 10 = highest intensity							
Symptomatic? (Yes or no) If yes, list symptoms.							
Alone? (Yes or no) If yes, number of people present?							
Activity: (e.g., class, homework, extra-curricular, work, home, lab, shop, waiting for bus, with friends, etc.)							
Time:							
Date:							

Date:	Time:	Activity: (e.g., class, homework, extra-curricular, work, home, lab, shop, waiting for bus, with friends, etc.)	Alone? (Yes or no) If yes, number of people present?	Symptomatic? (Yes or no) If yes, list symptoms.	Symptom Intensity: 1 = low intensity; 10 = highest intensity