

# Concussion Resources for Medical Professionals

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The Concussion Awareness Training Tool (CATT) is a series of online educational modules and resources with the goal of standardizing concussion recognition, diagnosis, treatment, and management. Good concussion management may decrease the risk of brain damage and potentially reduce long-term health issues.

Developed by Dr. Shelina Babul, Associate Director/Sports Injury Specialist with the BC Injury Research and Prevention Unit, BC Children's Hospital, and Clinical Associate Professor, Department of Pediatrics, University of British Columbia, CATT is based upon the established principles of the Consensus Statement on Concussion in Sport and other evidence-based resources. The 2017 Berlin Concussion in Sport Group Consensus Statement builds on the principles outlined in previous concussion statements and aims to develop better understanding of sport-related concussion.

Research and evidence on concussions is evolving and the knowledge base is continually changing. As a result, this website is updated on a regular basis to provide current information, tools, and resources to support concussion recognition, diagnosis, treatment, and management.

The information, including text and images of this package are intended for your information only, does not substitute professional medical advice, and is provided for educational purposes only. Always seek the advice of a physician or other qualified health care provider about any questions you may have regarding a medical condition.

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### **Return to School**

This tool is a guideline for managing a student's return to school following a concussion and does not replace medical advice. Timelines and activities may vary by direction of a health care professional.

|  | AT HOME  |   |   | AT SC  | HOOL  |  |
|--|--|---|---|--|---|--|
| STAGE 1:   | STA  | GE 2:   | STAGE 3:  | STAGE 4:   | STAGE 5:  | STAGE 6:   |
| <ul> <li>Physical &amp; cognitive rest</li> <li>Basic board games, crafts, talk on phone</li> <li>Activities that do not increase your heart rate or cause you to break a sweat</li> <li>Limit/Avoid:</li> <li>Computer, TV, texting, video games, reading</li> <li>No: <ul> <li>School work</li> <li>Sports</li> <li>Work</li> <li>Driving until cleared by a health care professional</li> </ul> </li> </ul> | Start with light<br>cognitive activity:<br>Gradually increase<br>cognitive activity up to<br>30 min. Take frequent<br>breaks.<br>Prior activities plus:<br>• Reading, TV, drawing<br>• Limited peer contact<br>and social networking<br>Contact school to create<br>Return to School plan. | When light cognitive<br>activity is tolerated:<br>Introduce school work.<br>Prior activities plus:<br>• School work as per<br><i>Return to School</i> plan<br>Communicate with<br>school on student's<br>progression. | <ul> <li>Back to school<br/>part-time</li> <li>Part-time school<br/>with maximum<br/>accommodations.</li> <li>Prior activities plus:</li> <li>School work at school<br/>as per <i>Return to School</i><br/>plan</li> <li>No:</li> <li>P.E., physical activity<br/>at lunch/recess,<br/>homework, testing,<br/>sports, assemblies,<br/>field trips</li> <li>Communicate with<br/>school on student's<br/>progression.</li> </ul> | Part-time school<br>Increase school<br>time with moderate<br>accommodations.<br>Prior activities plus:<br>• Increase time at school<br>• Decrease<br>accommodations<br>• Homework – up to 30<br>min./day<br>• Classroom testing with<br>adaptations<br>No:<br>• P.E., physical activity at<br>lunch/recess, sports,<br>standardized testing<br>Communicate with<br>school on student's<br>progression. | <ul> <li>Full-time school</li> <li>Full days at<br/>school, minimal<br/>accommodations.</li> <li>Prior activities plus: <ul> <li>Start to eliminate<br/>accommodations</li> <li>Increase homework to<br/>60 min./day</li> <li>Limit routine testing to<br/>one test per day with<br/>adaptations</li> </ul> </li> <li>No: <ul> <li>P.E., physical activity at<br/>lunch/recess, sports,<br/>standardized testing</li> </ul> </li> </ul> | Full-time school<br>Full days at school,<br>no learning<br>accommodations.<br>• Attend all classes<br>• All homework<br>• Full extracurricular<br>involvement<br>• All testing<br><b>No:</b><br>• full participation in P.E.<br>or sports until <i>Return</i><br>to Sport protocol<br>completed and written<br>medical clearance<br>provided |
|  | No:<br>• School attendance<br>• Sports<br>• Work   |   |   | Increase school<br>work, introduce<br>homework,  | Work up to full<br>days at school,<br>minimal learning<br>accommodations  |  |
| Rest   | Gradually add cognit<br>school work at home  |   | School work only<br>at school   | decrease learning<br>accommodations  |   |  |
| When symptoms start to<br>improve OR after resting<br>for 2 days max,<br><b>BEGIN STAGE 2</b>  | Tolerates 30 min. of<br>cognitive activity,<br>introduce school work<br>at home  | Tolerates 60 min. of<br>school work in two 30<br>min. intervals,<br><b>BEGIN STAGE 3</b>  | Tolerates 120 min. of<br>cognitive activity in 30-<br>45 min. intervals, <b>BEGIN</b><br><b>STAGE 4</b>   | Tolerates 240 min. of<br>cognitive activity in 45-<br>60 min. intervals, <b>BEGIN</b><br><b>STAGE 5</b>  | Tolerates school full-<br>time with no learning<br>accommodations<br>BEGIN STAGE 6  | <i>Return to School</i> protocol<br>completed; focus on<br><i>RETURN TO SPORT</i>  |

Note: A student is tolerating an activity if symptoms are not exacerbated.

Adapted from the Return to Learn protocol by G.F. Strong School Program (Vancouver School Board), Adolescent and Young Adult Program, G.F. Strong Rehabilitation Centre.







### **Return to Sport**

This tool is a guideline for managing an individual's return to sport following a concussion and does not replace medical advice. Timelines and activities may vary by direction of a health care professional.

| STAGE 1:   | STAGE 2:   | STAGE 3:   | STAGE 4:  | STAGE 5:  | STAGE 6:   |
|--|--|--|---|---|--|
| No sporting<br>activity  | Light aerobic<br>exercise  | Sport-specific<br>exercise   | Non-contact drills<br>Progress to complex   | Full-contact<br>practice  | <b>Back in the game</b><br>Normal game play        |
| Physical and<br>cognitive rest until<br>symptoms start to<br>improve OR after resting<br>for 2 days max. | Walking, swimming,<br>stationary cycling.<br>No resistance training.<br>The pace of these<br>activities should be at<br>the point where you<br>are still able to have a<br>conversation. | Skating drills (ice hockey),<br>running drills (soccer).<br>No head-impact activities. | training drills<br>(e.g. passing drills).<br>May start resistance<br>training.<br>Exercise, coordination, | Following medical<br>clearance participate in<br>normal training activities.<br>Restore confidence;<br>assess functional skills |  |
| Recovery   | Increase heart rate  | Add movement   | cognitive load  |   | Note: Premature return                             |
| Symptoms improve or 2  | No new or worsening  | No new or worsening  | Symptom-free for  | Symptom-free for  | to contact sports (full<br>practice and game play) |
| days rest max?   | symptoms for 24 hours?   | symptoms for 24 hours?   | 24 hours?   | 24 hours?   | may cause a significant<br>setback in recovery.    |
| Yes: Move to stage 2   | Yes: Move to stage 3   | Yes: Move to stage 4   | Yes: Move to stage 5  | Yes: Move to stage 6  | setback in recovery.                               |
| No: Continue resting   | No: Return to stage 1  | No: Return to stage 2  | No: Return to stage 3   | No: Return to stage 4   |  |
| Time & Date completed:   | Time & Date completed:   | Time & Date completed:   | Time & Date completed:  | Time & Date completed:  |  |

If new or worsening symptoms are experienced at any stage, go back to the previous stage for at least 24 hours. You many need to move back a stage more than once during the recovery process.

Medical clearance required before moving to stage 5

BOTH TOOLS CAN BE USED IN PARALLEL; HOWEVER, RETURN TO SCHOOL SHOULD BE COMPLETED BEFORE RETURN TO SPORT IS COMPLETED



CONCUSSION AWARENESS



### **Return to Activity**

This tool is a guideline for managing an individual's return to activity following a concussion and does not replace medical advice. Timelines and activities may vary by direction of a health care professional.

| STAGE 1:   | STAGE 2:   | STAGE 3:   | STAGE 4:  | STAGE 5:  |
|--|--|--|---|---|
| Initial rest   | Prepare to return to<br>activity   | Increase your activity   | Gradually resume daily activities   | Full return to activity   |
| <ul> <li>Stay home in a quiet and calm<br/>environment.</li> <li>Limit your screen time<br/>(computer, television, and<br/>smartphone use).</li> <li>Keep any social visits brief.</li> <li>Sleep as much as your body<br/>needs while trying to maintain<br/>a regular night sleeping<br/>schedule.</li> </ul> Note: The goal for each stage is<br>to find the 'sweet spot' between<br>doing too much and too little. | <ul> <li>Test your readiness by trying<br/>some simple, familiar tasks such<br/>as reading, using the computer,<br/>or shopping for groceries.</li> <li>Keep the time on each activity<br/>brief (e.g., less than 30 minutes)<br/>and take regular rest breaks.</li> <li>Go for walks or try other<br/>light physical activity (e.g.,<br/>swimming, stationary bike),<br/>without becoming short of<br/>breath.</li> <li>Keep bed rest during the day to<br/>a minimum. It is unlikely to help<br/>your recovery.</li> </ul> | <ul> <li>Gradually return to usual activities and decrease rest breaks.</li> <li>Start with less demanding activities before harder ones.</li> <li>Physical activity might include jogging, lifting light weights, or non-contact sport drills, gardening, dancing.</li> <li>Note: You could start returning to school or work on a part-time basis (e.g., a few hours per day).</li> <li>Start your return</li> </ul> | Resuming daily activities can be<br>challenging because your energy<br>and capacity for activities may<br>be variable, but should improve<br>day-to-day or week-to-week.<br>Students and workers may<br>require accommodations, such<br>as reduced hours, reduced<br>workload, extra time for<br>assignments, or access to a<br>quiet distraction-free work<br>environment. | <ul> <li>Full class schedule, with no rest<br/>breaks or accommodations.</li> <li>Full work schedule with usual<br/>expectations for productivity</li> <li>Student athletes should not<br/>return to sport competition<br/>until they have fully returned to<br/>school.</li> <li>Only return to contact sports<br/>or dangerous job duties (e.g.,<br/>operating heavy equipment,<br/>working from heights) when<br/>cleared by your doctor.</li> </ul> |
| Rest   |  |  |   |   |
| When symptoms start to improve<br>OR after resting for 2 days max,<br>BEGIN STAGE 2  | Tolerates simple,<br>familiar tasks,<br><b>BEGIN STAGE 3</b>   | Tolerates further increase in<br>level of activity,<br><b>BEGIN STAGE 4</b>  | Tolerates partial return to<br>usual activities,<br><b>BEGIN STAGE 5</b>  |   |

If new or worsening symptoms are experienced at any stage, go back to the previous stage for at least 24 hours. You many need to move back a stage more than once during the recovery process.

Each person will progress at his/her own pace. It is best not to "push" through symptoms. If you do too much, your symptoms may worsen. Decrease your activity level and your symptoms should settle. Then continue to gradually increase your activity in smaller increments.







Adapted from Noah D. Silverberg, PhD.

### **Return to Work**

This tool is a guideline for managing an individual's return to work following a concussion and does not replace medical advice. The goal for each stage is to find the 'sweet spot' between doing too much and doing too little. Timelines and activities may vary by direction of a health care professional.

|  | AT HOME   |  |   | AT V  | VORK  |   |
|--|---|--|---|---|---|---|
| STAGE 1:   | STAGE 2:  | STAC   | GE 3:   | STAGE 4:  | STAGE 5:  | STAGE 6:  |
| <ul> <li>Initial physical and cognitive rest</li> <li>Rest in a quiet and calm environment.</li> <li>Try activities that do not aggravate symptoms (e.g., listening to quiet music or colouring).</li> <li>Sleep as much as your body needs while trying to maintain a regular night sleeping schedule.</li> <li>Limit: <ul> <li>Lengthy social visits.</li> <li>Screen time (smartphone,</li> </ul> </li> </ul> | <ul> <li>Light activity</li> <li>Gradually increase<br/>cognitive activity by<br/>trying simple, familiar<br/>tasks (e.g., reading,<br/>watching TV, using the<br/>computer or drawing).</li> <li>Go for walks or try<br/>other light physical<br/>activity (e.g., swimming,<br/>stationary bike, light<br/>housework), without<br/>becoming short of<br/>breath.</li> <li>Take frequent rest<br/>periods; keep napping to</li> </ul> | <ul> <li>Prepare to return to work—at home</li> <li>Continue to increase cognitive activity.</li> <li>Continue to return to pre-injury physical activities (e.g., grocery shopping, gardening, jogging, light weight training).</li> <li>Contact workplace to discuss a tailored Return to Work plan.</li> <li>Attempt to commute to work to assess if it</li> </ul> | <ul> <li>Prepare to return to work—at work</li> <li>Work accommodations can include: flexible hours, reduced workload, extra time for tasks, access to a quiet, distraction-free work environment.</li> <li>Arrange to return to work on a graduated basis. Consider number of hours per day and appropriate accommodations.</li> <li>Work your way up to an additional down of the properties of the</li></ul> | <ul> <li>Begin graduated<br/>return to work</li> <li>Return to work according<br/>to your graduated return<br/>to work plan, with the<br/>agreed upon number<br/>of hours per day and<br/>accommodations.</li> <li>At work, start with less<br/>demanding activities<br/>before more difficult<br/>ones.</li> <li>Gradually increase<br/>working hours week-<br/>to-week, or sooner, as<br/>appropriate.</li> </ul> | <ul> <li>Regular work hours<br/>with modifications, as<br/>needed</li> <li>Decrease accommodations<br/>as energy and capacity<br/>increases.</li> <li>Accommodations can<br/>be phased out in "trial"<br/>periods, to ensure that<br/>they are no longer needed.</li> <li>Monitor energy levels for<br/>completing household<br/>tasks and participating<br/>in social or recreational<br/>activities after the work</li> </ul> | Full return to work • Full regular work schedule with usual expectations for productivity, without accommodations. NOTE: Only return to job duties that may have safety implications for you or others when cleared by a licensed modified professional |
| <ul> <li>Sports or physical activities that increase your heart rate or cause you to break a sweat.</li> </ul>   | <ul> <li>periods; keep happing to<br/>a minimum.</li> <li>Begin with brief periods<br/>of activity, up to 30<br/>minutes.</li> <li>Start thinking about<br/>returning to work:<br/>communicating with<br/>the workplace, a return<br/>to work plan, and your</li> </ul>   | <ul> <li>aggravates symptoms or<br/>drains energy.</li> <li>A regular sleeping<br/>schedule supports a<br/>successful return to<br/>work.</li> <li>Work your way up to 2<br/>hours of activity, with<br/>breaks as needed.</li> </ul>  | <ul><li>additional 2 hours of<br/>activity, with breaks as<br/>needed.</li><li>Have a plan to leave work<br/>and return to Stage 2 if<br/>symptoms worsen.</li></ul>  | appropriate.  | day.<br>Adjust workplace  | medical professional<br>(e.g., operating heavy<br>equipment, working from<br>heights, driving).   |
| to discuss driving with a<br>licensed medical professional<br>for safety considerations.   | commute.  | Prepare to return to w   | ork   | Return to work with accommodations  | accommodations,<br>as needed  |   |
| Rest   | Gradually increase<br>activity  |  |   | and a personalized<br><i>Return to Work</i> plan  |   |   |
| When symptoms start to<br>improve OR after resting<br>for 2 days max,<br><b>BEGIN STAGE 2</b>  | When 30 minutes of activity is tolerated, <b>BEGIN STAGE 3</b>  | When 4 hours of a<br>with breaks<br>BEGIN 5  | -   | When ready for regular<br>work hours with<br>accommodations,<br><b>BEGIN STAGE 5</b>  | When regular work hours<br>are tolerated with min.<br>accommodations,<br><b>BEGIN STAGE 6</b>   | Once you have<br>COMPLETED STAGE 6,<br>Return to Work strategy<br>completed   |

Recognizing that workplace environments vary by industry and occupation, returning to work may focus more on a return to cognitive activity, physical activity, or a combination of both. It is normal to experience symptoms during recovery; you do not have to wait to be symptom free before returning to work. However, after Stage 2, if new or worsening symptoms appear at any stage, go back to the previous stage for at least 24 hours. You many need to move back a stage more than once during the recovery process.

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CONCUSSION AWARENESS TRAINING TOOL



Silverberg ND, Iverson GL (2013). doi: 10.1097/HTR.0b013e31825ad658.



### **Medical Assessment Letter**

| Medical Office, please complete: |  |
|----------------------------------|--|
| M.D. / N.P. Name                 |  |
| Medical License #                |  |
| Email / Contact #                |  |
| Date of event / injury           |  |
| Date of assessment               |  |

To Whom It May Concern:

Any individual who sustains a blow or impact to the head, face, neck or body and demonstrates any visual signs of concussion or reports any of the symptoms of concussion is recommended to be assessed by a licensed medical professional. Accordingly, I have personally completed a medical assessment on this patient.

Name of Patient: \_\_\_\_\_

#### **Results of the Medical Assessment**

This patient has not been diagnosed with a concussion or other injury and can return, with full participation to work, school, or physical activities without restriction.

This patient has not been diagnosed with a concussion but the assessment led to the following diagnosis and recommendations:

This patient HAS been diagnosed with a concussion. See below for concussion management protocol.

This patient has been instructed to avoid all activities that could potentially place them at risk of another concussion or head injury, or activities with implications for the safety of others (e.g., driving, dangerous job duties, and contact sports) until a licensed physician or nurse practitioner provides a Medical Clearance Letter.

Yours Sincerely,

Signature

Stamp

M.D / N.P. (Please circle appropriate designation)<sup>1</sup>

1 Depending upon physician or nurse practitioner access, the Medical Assessment Letter may be completed by a nurse with access to a licensed physician or nurse practitioner. Forms completed by other health care professionals (e.g., physiotherapists, chiropractors, and other allied health care professionals) should not be accepted. It is recommended that this document be provided to the patient without charge.

### **Concussion Management**

The goal of concussion management is to allow complete recovery through a safe and gradual return to work, school and physical activities following a staged approach. *Note: a patient's progess through the return to activity stages is unique to the individual.* After Stage 2, if new or worsening symptoms are experienced, the patient may need to return to the previous stage for 24 hours and consider reassessment by their physician/nurse practitioner. For more detailed information on management and resources, please refer to the Concussion Awareness Training Tool (CATT) at <u>cattonline.com</u>.

Stage 1: Initial Rest

In the first 24-48 hours the patient has been instructed to have complete physical and cognitive rest prior to initiating a return to work or activity.

Not yet completed Completed on (dd/mm/yyyy) \_\_\_\_\_ Time period has passed

Stage 2: Prepare to return to activity at home

The patient can begin the return to activity process at home by undertaking brief familiar tasks until no new or worsening concussion symptoms are experienced.

Not yet completed Completed on (dd/mm/yyyy) \_\_\_\_\_ Time period has passed

Stage 3 & 4: Prepare to return to work, school, and physical activity and gradually resume daily activities

The patient can initiate a graduated return to work, school, and physical activities on a part-time basis, by increasing and gradually resuming usual activities (supported with accommodations, modifications, and restrictions as needed) as tolerated and only at a level that does not bring on new or worsening concussion symptoms.

Not yet completed Completed on (dd/mm/yyyy) \_\_\_\_\_ Time period has passed

| Restrictions/Accommodations | Details | Timeline |
|-----------------------------|---------|----------|
|                             |         |          |
|                             |         |          |
|                             |         |          |
|                             |         |          |
|                             |         |          |
|                             |         |          |
|                             |         |          |
|                             |         |          |

Stage 5 & 6: Full return to work, school, and physical activities

The patient can return with full participation to work, school, and physical activities.

Not yet completed Completed on (dd/mm/yyyy) \_\_\_\_\_ Time period has passed

| Restrictions/Accommodations | Details | Timeline |
|-----------------------------|---------|----------|
|                             |         |          |
|                             |         |          |
|                             |         |          |
|                             |         |          |
|                             |         |          |
|                             |         |          |

Yours Sincerely,

Signature

M.D / N.P. (Please circle appropriate designation)<sup>2</sup>

Stamp

2 Depending upon physician or nurse practitioner access, the Medical Assessment Letter may be completed by a nurse with access to a licensed physician or nurse practitioner. Forms completed by other health care professionals (e.g., physiotherapists, chiropractors, and other allied health care professionals) should not be accepted. It is recommended that this document be provided to the patient without charge.



### Medical Clearance Letter

| Medical Office, please complete: |  |  |
|----------------------------------|--|--|
| M.D. / N.P. Name                 |  |  |
| Medical License #                |  |  |
| Email / Contact #                |  |  |
| Date of Clearance Letter         |  |  |

| M.D. / N.P. / Patient please complete:                  |  |  |
|---|--|--|
| Date of Concussion                                      |  |  |
| Date of Concussion Diagnosis                            |  |  |
| Organization/Individual Requesting<br>Medical Clearance |  |  |

To Whom It May Concern:

Patients with a concussion should be assessed and managed by a medical professional. The goal of concussion management is to support the patient's complete recovery from concussion by promoting a safe and gradual return to activity following a staged approach. For more detailed information and resources, please refer to the Concussion Awareness Training Tool (CATT) at <u>cattonline.com</u>.

As part of the strategy, this patient had previously been instructed to avoid all activities that could potentially place them at risk of another concussion or head injury until a medical clearance letter is provided (due to organizational requirements, dangerous job duties, contact sports, etc.). This patient has explained the organizational requirements and the duties/ activities they participate in, and I have personally completed a medical clearance on this patient.

Name of Patient:

Note that the patient's recovery is individual. After Stage 2, if new or worsening concussion symptoms are experienced the patient has been instructed to return to the previous stage of the strategy for 24 hours.

This patient can return with full participation to work, school, or physical activities without restriction.

This patient can return to work, school, or physical activities with the following restriction(s):

| Restriction(s)<br>Physical & Cognitive | Details | Timeline |
|--|---------|----------|
|  |         |          |
|  |         |          |
|  |         |          |
|  |         |          |

This patient can return with full participation to work, school, or physical activities without accommodation.

This patient can return to work, school, or physical activities with the following accommodation(s):

| Accommodation(s)<br>Physical & Cognitive | Details | Timeline |
|--|---------|----------|
|  |         |          |
|  |         |          |
|  |         |          |
|  |         |          |

Your understanding and support are critical components in this patient's continuing recovery.

\_\_\_\_

Yours Sincerely,

Signature \_\_\_\_\_

M.D / N.P. (Please circle appropriate designation)<sup>1</sup>

Stamp

1 Depending upon physician or nurse practitioner access, the Medical Clearance Letter may be completed by a nurse with access to a licensed physician or nurse practitioner. Forms completed by other health care professionals (e.g., physiotherapists, chiropractors, and other allied health care professionals) should not be accepted. It is recommended that this document be provided to the patient without charge.

### **Additional Resources**

### Brain Injury Guidelines (Ontario Neurotrauma Foundation)

https://braininjuryguidelines.org/

British Journal of Sports Medicine- International Consensus Statement on Concussion in Sport (2017) https://bjsm.bmj.com/content/bjsports/51/11/838.full.pdf

British Journal of Sports Medicine- The Child Sport Concussion Assessment Tool 5th Edition (Child SCAT5) (2017) https://bjsm.bmj.com/content/bjsports/51/11/862.full.pdf

British Journal of Sports Medicine- The Sport Concussion Assessment Tool 5th Edition (SCAT5) https://bjsm.bmj.com/content/bjsports/51/11/851.full.pdf

Canadian C-Spine Rule (2001) https://www.mdcalc.com/canadian-c-spine-rule

Canadian Concussion Collaborative - 4 Characteristics of a Good Concussion Clinic http://casem-acmse.org/wp-content/uploads/2018/06/CCES-PUB-CCC-4Qs-E-FINAL.pdf

Canadian Head CT Rule (2001)

https://www.mdcalc.com/canadian-ct-head-injury-trauma-rule

CATT - SCAT 5 and Child SCAT5 Online

https://cattonline.com/scat/

### Concussions Ontario - Referral Indicators (2017)

https://concussionsontario.org/healthcareprofessionals/standards/tools-resources/referral-indicators/

#### **Concussions Ontario (Ontario Neurotrauma Foundation)**

https://concussionsontario.org/

### Heads Up Clinicians - Acute Concussion Evaluation (ACE) (2006)

https://www.cdc.gov/headsup/pdfs/providers/ace\_v2-a.pdf

#### **ONF Standards for Post-Concussion Care**

https://concussionsontario.org/healthcareprofessionals/standards/

# Ontario Neurotrauma Foundation - Guideline for Concussion/Mild Traumatic Brain Injury & Persistent Symptoms 3rd Edition (2018)

http://braininjuryguidelines.org/concussion/

### Parachute - Canadian Guideline on Concussion in Sport (2017)

https://www.parachute.ca/en/professional-resource/concussion-collection/canadian-guideline-on-concussion-in-sport/

### Parachute- Concussion Resources for Health Professionals

https://www.parachutecanada.org/en/professional-resource/concussion-collection/concussion-resources-for-health-professionals/

### PECARN Pediatric Head CT Rule (2 years or older)

https://drive.google.com/file/d/0B96hLlM4rbvueVM0OGZSbjJiMHM/view?resourcekey=0-e3HgO1OyKFexFn11huWFqQ

### **Additional Resources**

PECARN Pediatric Head CT Rule (younger than 2 years)

https://drive.google.com/file/d/0B96hLlM4rbvuMzFVbndLa1hWeTQ/view?resourcekey=0-rlWNx2RDv5IFb1BgA50kGA

PedsConcussion - Living Guideline for Pediatric Concussion Care https://pedsconcussion.com/

**Rivermead Post-Concussion Questionnaire (1995)** http://braininjuryguidelines.org/concussion/fileadmin/media/appendices/appendix-1-5.pdf

### **Physiotherapists**

Clearance to return to sports activities following a mild TBI or concussion: Update regarding the participation of physiotherapists. Joint Announcement of the Collège des Médecins du Québec and the Ordre professionnel de la physiothérapie du Québec

http://www.cmq.org/pdf/activites-partages-physio/avis-conjoint-cmq-oppq-commotions-sports-en-def.pdf

Concussion Management: A Toolkit for Physiotherapists. Physiotherapy Alberta College + Association https://www.physiotherapyalberta.ca/files/concussion\_toolkit.pdf

Living Guideline for Diagnosing and Managing Pediatric Concussion. PedsConcussion. Section B Managing Concussion Symptoms. Domain 10 Vision, Vestibular and Oculomotor Function https://pedsconcussion.com/section/b/#domain-10

Physical Therapy Evaluation and Treatment after Concussion/Mild Traumatic Brain Injury (2020). J Orthop Sports Phys Ther. 2020;50(4).

https://www.jospt.org/doi/pdfplus/10.2519/jospt.2020.0301

Sports Concussions A Complete Guide to Recovery and Management. 2018. Ed. I Gagnon and A Ptito. Chapter 8 Physiotherapy and concussion: What can the physiotherapist do? KJ Schneider, I Gagnon. https://www.routledge.com/Sports-Concussions-A-Complete-Guide-to-Recovery-and-Management/Gagnon-Ptito/p/ book/9780367871451

The Role of the Physiotherapist in the Assessment and Management of Concussions. Position Statement by the Canadian Alliance of Physiotherapy Regulators (CAPR) https://www.alliancept.org/announcement/capr-launches-position-statement-regarding-concussions/

## **Occupational Therapists**

Occupational Therapy and Concussion Management. Canadian Association of Occupational Therapists, British Columbia (CAOT BC) https://caot.ca/document/6994/CAOTBC\_OTConcussionManagment\_Final.pdf

Occupational Therapy and Concussion. Canadian Association of Occupational Therapists (CAOT) https://www.caot.ca/document/4049/Concussion%20-%20Fact%20Sheet.pdf

Living Guideline for Diagnosing and Managing Pediatric Concussion. PedsConcussion. Section B Managing Concussion Symptoms. Domain 10 Vision, Vestibular and Oculomotor Function. https://pedsconcussion.com/section/b/#domain-10

### **Additional Resources**

Sports Concussions A Complete Guide to Recovery and Management. 2018. Ed. I Gagnon, A Ptito. Chapter 10: The role of the occupational therapist in concussion management: What can the occupational therapist do? C DeMatteo, N Reed.

https://www.routledge.com/Sports-Concussions-A-Complete-Guide-to-Recovery-and-Management/Gagnon-Ptito/p/book/9780367871451

### **Patient Resources**

### CATT & Parachute Patient Information Sheet: Caring for Your Concussion

https://cattonline.com/wp-content/uploads/2019/10/Parachute-Caring-for-Your-Concussion-2018.pdf

#### **CATT Concussion Pathway**

https://cattonline.com/wp-content/uploads/2021/06/CATT-Poster-Concussion-Pathway-V3-2021-11x17-WEB.pdf

#### **CATT Managing Mental Health Symptoms**

https://cattonline.com/wp-content/uploads/2019/06/CATT-Managing-Mental-Health-Symptoms-V2-Sep-2020.pdf

#### **Concussion and You Handbook**

https://hollandbloorview.ca/concussion-handbook

#### The Concussion Legacy Foundation Canada HelpLine

https://www.concussionfoundation.ca/helpline

#### University of Georgia - Driving after a Concussion: Is It Safe to get Behind the Wheel?

https://cattonline.com/wp-content/uploads/2020/07/Driving-After-Concussion-Is-It-Safe-to-Get-Behind-The-Wheel-2020.pdf

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