

**I had a concussion,
I need to ...**

- FIND relaxation methods that work for me, like deep breathing or visualization
- PRACTICE relaxing everyday - practice makes permanent!
- LEARN the stressors that make me feel worse so I can avoid them

RETURNING TO SCHOOL



This is a time when your brain needs all of its energy to heal, so it's very important to rest your brain and limit how hard your brain works until all of your symptoms have gone away.

Slowly returning to school is best. As a student, it can be hard for you to focus, remember and process information, which can affect how well you learn and perform at school. You and your school staff, including your teachers and guidance counselor, can work together to adjust your school work and school environment so you can gradually return to full school activities and performance.

Please share this information with your teacher!

Preparing to return to school

Return to school when your symptoms are gone or when you can go for longer periods of thinking without making your symptoms much worse.

Limit the following activities until symptoms have cleared:

- Reading.
- Using a computer, tablet or cell phone.
- Video gaming.
- Physical activity (e.g. gym class, sports, exercise).
- Walking or taking the bus (avoid noisy environments; a drive to school is a better option).
- Begin brief periods of reading or studying when your symptoms are better or go away (stop activity and rest if symptoms return).



I had a concussion, I need to ...

- SHARE my return to school plan with my teachers
- AVOID gym until I am symptom free

When you're back at school

- Have a contact person at school (e.g. guidance counselor, nurse) who can share information on your behalf about the injury (e.g. severity, necessary needs) with other teachers, the principal, etc.
- Talk to this person daily to discuss making changes at school as you need them.
- Know what you can handle, and attend core classes over non-core classes.
- If your symptoms come back while in the classroom, get help. REST is important and you might need to go to a quiet area at school to manage your symptoms, or go home.
- Try to avoid missing the same classes all the time.
- Avoid gym/physical activity until symptom free or you're approved by your doctor to participate. your doctor to participate.

RETURN TO PHYSICAL ACTIVITIES



Having a concussion and symptoms can make it difficult for you to go back to being physically active. It is critical that you are able to successfully return to school and social activities **before** returning to physical activity or sport.

Going back to activity or sport too soon before your brain heals can:

- Slow down your recovery from your concussion.
- Affect how you perform during the activity.
- Put you at risk for another concussion and for a more serious injury.

This is why it is important for you to rest your brain and your body. Return to physical activity and sport gradually, slowly and as you feel ready.

Work with your doctor to return to activity or sport. Your return to activity or sport must be approved by your doctor.

- Share any symptoms you are experiencing as you return to physical activity with your doctor.
- Your doctor will help you decide on next steps, and help you modify your return to sport to ensure you are safe and comfortable at each level of activity before progressing to the next.
- Most importantly, listen to your body as you go through this process. If your symptoms worsen while being physically active, it is your body's way of telling you that you are not ready.

"If you are having new problems at school and your normal day to day life (i.e. your symptoms get worse) then you aren't ready to return to sports. Your body/brain have to be ready to take on the added demand or risk."

– DR. PETER RUMNEY



**I had a concussion,
I need to ...**

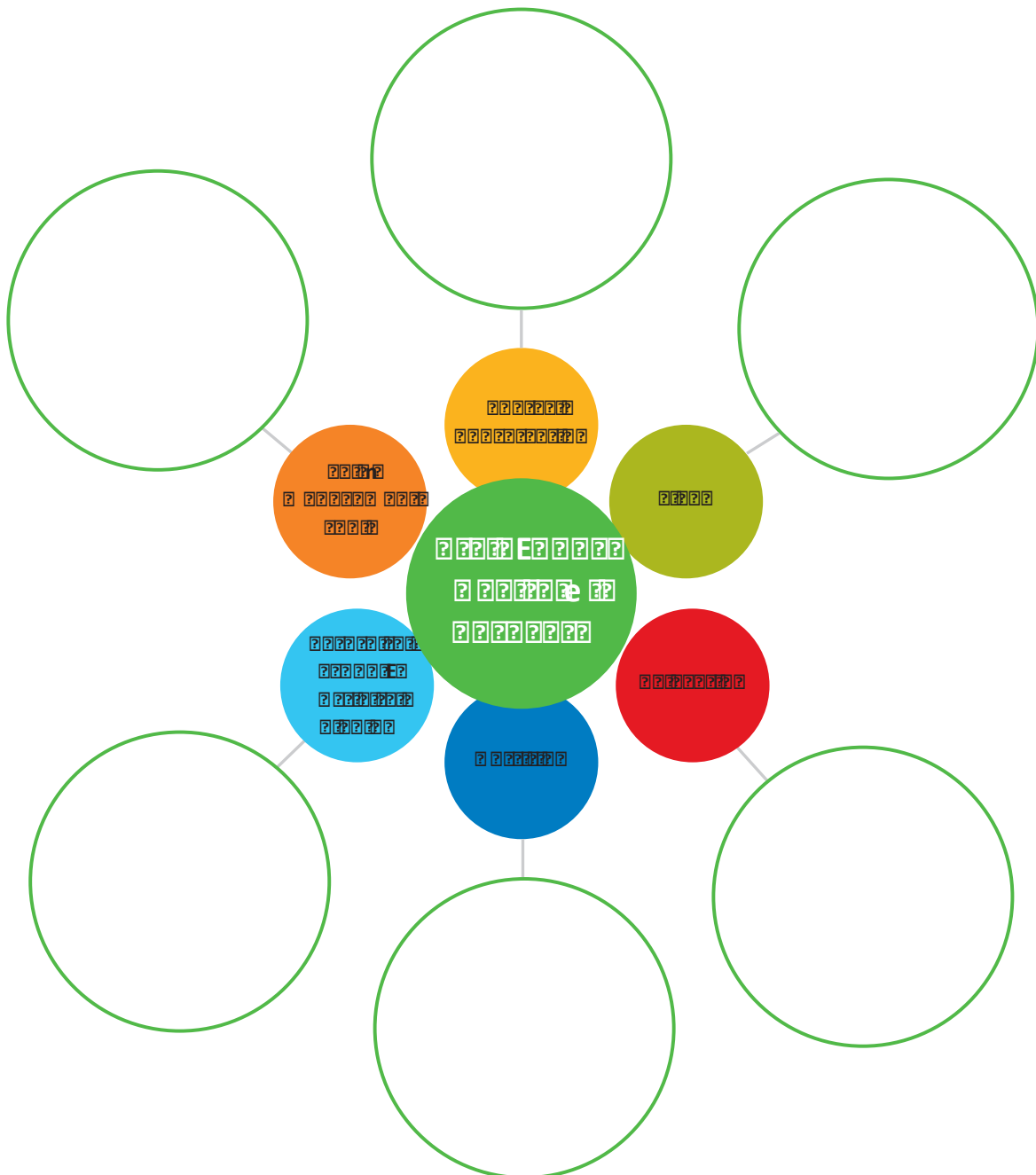
- WORK with my doctor on a return to sports plan
- MODIFY my activities to make sure I am safe
- SHARE my symptoms as I gradually return



SELF-MANAGEMENT TOOLKIT

MAKE A PLAN. WHAT STRATEGIES WILL YOU USE?

Each of the six topics covered in this handbook are important for your brain, body health and recovery. Think of some strategies you could use for each topic and write them down in the circles. Setting goals, making a plan and regularly updating that plan to meet your needs will help you work towards a successful concussion recovery.



ENERGY CONSERVATION

Here is a list of questions that you should ask yourself when planning your daily activities and before performing a particular activity. Asking these questions will help to make sure you have enough energy to do the activities you need to throughout the day and to help your brain recover from the concussion.

Step 1

What is the activity?

Step 2

Apply the 4 P's

1. PRIORITIZE

Is the activity:

- ☐ Urgent (must be done today)
- ☐ Important (must be done in next few days)
- ☐ For later (must be done this week or month)
- ☐ Don't need to/can't do (think big picture - can it wait until you are feeling better)
- ☐ Can someone do it for you

2. PLANNING

When am I going to do the activity?

*Consider: energy levels, when feeling best, other activities during the day, etc.

3. PACING

How am I going to do the activity?

- *Consider:
- how your body feels (headaches, etc. = stop and rest)
 - can I do the activity over different stages?
 - can I break the activity down into easier steps

4. POSITIONING

Where am I going to do the activity?

What position will my body be in while I am doing the activity?

- *Consider:
- is the environment going to make me use more energy (distractions, stairs vs. escalator, etc.)
 - is my body position going to make me use more energy (standing vs. sitting, taking breaks to change body position, etc.)

Step 3

Evaluation of your plan and the activity

- did you perform the activity in a way that you are satisfied with?
- do you need to make changes to your plan to perform it differently?

For more information about energy conservation and the 4 P's, see page 8 & 9.

DAILY SCHEDULE AND ACTIVITY LOG

Planning out what you will do each day, and when you will do it, can help you make sure you don't take on too much too soon and that rest and relaxation are a priority within your daily routine. You can make your plan the night before and record what you actually did at the end of each day, including how what you did made you feel. This can help you organize your day and allow you to know what activities make you feel best.

Time	Planned Activities	Actual Activities	Post-concussion Symptoms
7:00 am-8:00 am			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
8:00 am-9:00 am			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
9:00 am-10:00 am			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
10:00 am-11:00 am			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
11:00 am-12:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
12:00 pm-1:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
1:00 pm-2:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
2:00 pm-3:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
3:00 pm-4:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
4:00 pm-5:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
5:00 pm-6:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
6:00 pm-7:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
7:00 pm-8:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
8:00 pm-9:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:
9:00 pm-10:00 pm			<input type="checkbox"/> No change: <input type="checkbox"/> Up <input type="checkbox"/> Down Primary symptoms:

For more information on planning physical activity see page 9.

RETURN TO PLAY – PHYSICAL ACTIVITY LOG

After you successfully return to school and social activities, this Physical Activity Log can be used to help you slowly return to physical activity or sport. Log the type of activity (e.g. walking, running) and other details to know what your body can handle as you work towards returning to sports.

Date	Activity (Be specific)	Duration (Minutes)	Exertion (Scale 1-10)	Outcome
		____mins	____/10	<input type="checkbox"/> No rise in symptoms <input type="checkbox"/> Rise in symptoms <input type="checkbox"/> During; <input type="checkbox"/> After (how long after? _____) Which symptoms: Symptom 1: _____/6 Symptom 2: _____/6 Symptom 3: _____/6
Additional notes:				

Date	Activity (Be specific)	Duration (Minutes)	Exertion (Scale 1-10)	Outcome
		____mins	____/10	<input type="checkbox"/> No rise in symptoms <input type="checkbox"/> Rise in symptoms <input type="checkbox"/> During; <input type="checkbox"/> After (how long after? _____) Which symptoms: Symptom 1: _____/6 Symptom 2: _____/6 Symptom 3: _____/6
Additional notes:				

Date	Activity (Be specific)	Duration (Minutes)	Exertion (Scale 1-10)	Outcome
		____mins	____/10	<input type="checkbox"/> No rise in symptoms <input type="checkbox"/> Rise in symptoms <input type="checkbox"/> During; <input type="checkbox"/> After (how long after? _____) Which symptoms: Symptom 1: _____/6 Symptom 2: _____/6 Symptom 3: _____/6
Additional notes:				

For more information on return to physical activities see page 18.

NOTES

HELPFUL RESOURCES AND LINKS

As part of this handbook, we are including some helpful links and additional resources to help guide your return to daily activities, school, sport and work. The links and resources that we are providing you do not represent all of the valuable information that is available, but provides key sources that can help you in your recovery:

Holland Bloorview Kids Rehabilitation Hospital – Concussion Centre

Free concussion education sessions, groundbreaking research information, and information about Holland Bloorview’s clinical services.
www.hollandbloorview.ca/concussionresearch

Ontario Neurotrauma Foundation – Pediatric Concussion Guidelines

New, comprehensive pediatric concussion guideline. Holland Bloorview researchers and doctors contributed to the ONF guidelines:
<http://onf.org/documents/guidelines-for-pediatric-concussion>

Canadian Paediatric Society

Information for parents, coaches and trainers:
http://www.caringforkids.cps.ca/handouts/sport_related_concussion#.UtQwZDVWN-o.email

Position Statement on Management of Children with Sport-Related Concussion

<http://www.cps.ca/documents/position/sport-related-concussion-evaluation-management>

CanChild

Mild Traumatic Brain Injury (Concussion) Education:
<http://canchild.ca/en/canchildresources/ABI-Resources.asp>

Centers for Disease Control and Prevention

Injury prevention and control - Traumatic Brain Injury: <http://www.cdc.gov/Concussion/>

Montreal Children’s Hospital/McGill University Health Centre

Trauma concussion kit: <http://www.thechildren.com/health-info/safety-and-wellness/mch-trauma-concussion-kit>

Ontario Physical Health and Education (OPHEA)

Safety Guidelines: <http://safety.ophea.net/concussion-protocolsParachute>

Parachute

Concussion toolkit:
<http://www.parachutecanada.org/active-and-safe>
<http://www.parachutecanada.org/resources>

Children’s National Medical Centre – Post-Concussion Symptom Inventory for Children

http://childrensnational.org/departments/safe-concussion-outcome-recovery--education-score-program/for-parents?sc_lang=en

HANDBOOK DEVELOPMENT AND SOURCES

This handbook is based on a Concussion Education Toolbox developed by:

- **Christine Provvidenza**, BPHE, MSc, R.Kin, Knowledge Translation Specialist and Kinesiologist, Evidence to Care and the Concussion Centre, Holland Bloorview Kids Rehabilitation Hospital.
- **Nick Reed**, PhD, MScOT, OT Reg. (Ont). Clinician Scientist and Occupational Therapist, Concussion Centre, Bloorview Research Institute, Holland Bloorview Kids Rehabilitation Hospital, Assistant Professor, Department of Occupational Science and Occupational Therapy, University of Toronto.

The handbook was adapted by **Claire Florentin**, Senior Communications Associate, Bloorview Research Institute.

This handbook has also been reviewed and approved by the Bloorview Research Institute Family Engagement Committee.

Research and clinical input provided by:

Ryan Hung, MD, MSc, FRCPC
(Neurology, Pediatrics)

Neurologist, Brain Injury Rehabilitation Team
Holland Bloorview Kids Rehabilitation Hospital

Elaine Widdgett, OT Reg (Ont), MSc (Rehab)

Operations Manager, Brain Injury Rehabilitation Team
Holland Bloorview Kids Rehabilitation Hospital

Michelle Keightley, PhD, CPsych

Senior Clinician Scientist, Holland Family Chair
in Acquired Brain Injury
Bloorview Research Institute, Holland Bloorview Kids
Rehabilitation Hospital
Associate Professor, Department of Occupational Science
and Occupational Therapy, University of Toronto

Peter Rumney, MD, FRCP(C)

Physician Director, Brain Injury Rehab Team
Holland Bloorview Kids Rehabilitation Hospital

Beverly Solomon RN, BScN, CRN (c)

Ambulatory Care Nurse,
Brain Injury Rehabilitation Outpatient Team
Holland Bloorview Kids Rehabilitation Hospital

Concussion Centre Team

Talia Dick, MScOT, OT Reg. (Ont.)

Dayna Greenspoon, B.Sc (hons), MScOT, OT Reg. (Ont.)

Katherine Mah, BScN, MScOT, OT Reg. (Ont.), PhD student

James Murphy, R.Kin, MSc.

Melissa Panaccia, MScOT, OT Reg. (Ont.), PhD Student

Lee Verweel, Masters student

Anne Hunt, PhD, OT Reg. (Ont.), Post-Doctoral Fellow

Jason Carmichael, MBA, Director of Business Development & Operations

Katherine Wilson, MSc

Stephanie McFarland, MScOT, OT Reg. (Ont.)

Andrea Hickling, MScOT, OT Reg. (Ont.)

Holland Bloorview

Holland Bloorview Kids Rehabilitation Hospital is Canada's largest children's rehabilitation hospital dedicated to improving the lives of children with disability. As a fully affiliated hospital with the University of Toronto, we are home to the Bloorview Research Institute and the Teaching and Learning Institute, allowing us to conduct transformational research and train the next generation of experts in childhood disability. For more information please visit www.hollandbloorview.ca

Bloorview Research Institute

The Bloorview Research Institute is dedicated to improving the lives of children with disabilities through client and family-centred rehabilitation research.

Located onsite at the Holland Bloorview Kids Rehabilitation Hospital, the Bloorview Research Institute is recognized in Canada and around the world for its unique client population and leadership in the field of childhood disability. The Research Institute brings together a multi-disciplinary team of scientists who work collaboratively with clinical staff, clients, and families to generate clinically-linked and applied pediatric rehabilitation research.

Concussion Centre

The Holland Bloorview Concussion Centre is one of the first in the world dedicated exclusively to pediatric concussion. Our centre includes clinicians specifically trained in pediatric brain injury and researchers who are leading experts in the field of youth concussion care, research, and education. The Concussion Centre is focused on getting kids back to doing what they need, want and love to do after sustaining a concussion.

Proudly supported by:  **Scotiabank**[®]

Holland Bloorview
Kids Rehabilitation Hospital

Concussion
Centre

A TEACHING
HOSPITAL FULLY
AFFILIATED WITH



Holland Bloorview Kids Rehabilitation Hospital, 150 Kilgour Road, Toronto, ON M4G 1R8
T: 416-425-6220 F: 416-425-4531 E: info@hollandbloorview.ca www.hollandbloorview.ca