# INSTRUCTIONS FOLLOWING A CONCUSSION

IV	ame
has been assessed by:	
D	r
	nd has been diagnosed as having sustained concussion.
se	any of the following symptoms develop, eek urgent medical attention in an emergency epartment:
•	Loss or deterioration in level of consciousness.  Excessive drowsiness; if you find your child extremely sleepy
	or difficult to arouse.
•	Persistent vomiting.
•	Worsening headache, especially if localized.
•	Difficulty seeing, hearing, speaking, or walking.
•	Behavioral changes (persistent irritability in younger children increased agitation in teens).
•	Seizure.
•	Confusion or disorientation (does not recognize people or places).
	you have concerns, please seek medical ttention.
— MI	D SIGNATURE LICENSE

The signs and symptoms following a concussion, also known as a mild traumatic brain injury (MTBI), usually improve over a period of 2-4 weeks, but may occasionally last longer.

## **Common symptoms include:**

- · Headaches, dizziness.
- · Nausea.
- · Difficulty sleeping and fatigue.

# Other symptoms include:

- Behavioural changes (irritability, anxiety/stress).
- · Difficulty with memory, concentration and attention.
- Sensitivity to light, sound and motion.

A period of physical and cognitive activity restrictions until symptoms have fully resolved is extremely important.

This reduces the likelihood of persistent symptoms.

#### **HEADACHES**

Acetaminophen and/or ibuprofen can be taken regularly for 3-5 days as needed. Ibuprofen should not be taken within the first 24 hours following the injury unless otherwise advised by your doctor. **Check labels for dosage instructions and warnings.** If still needed after 3-5 days, **reduce** to no more than **3 doses per week**. If in doubt, consult your pediatrician, family doctor or local clinic.

# GENERAL ACTIVITY MANAGEMENT AND RECOMMENDATIONS DURING THE RECOVERY PERIOD

- Do not attend school for the first 2 days.
   On day 3 return to school for 1 or 2 half- days.
   Continue progression to full days as tolerated.
   (Please see reverse side for more detailed academic recommendations.)
- Inform daycare, school, teachers, and coaches of the concussion sustained and the restrictions and recommendations in place.
- No gym, sports, or other strenuous activities. The student should not be in the same room during these activities.
- Do not attend sport practices or games.
- · Do not attend music, drama, or dance classes.
- No computers, video games, texting, watching television, and playing musical instruments for the first 2 days as these activities may provoke headaches, dizziness, and other symptoms.
- Short leisurely walks of 10-20 minutes are permitted.
- · Adequate rest and breaks are encouraged.

#### ADDITIONAL RECOMMENDATIONS FOR TEENS

- No parties or movies as the excessive noise and light may provoke headaches.
- Avoid driving until symptoms have resolved.
- Absolutely no energy drinks, alcohol or drugs.

If there is no improvement within 10 days following the concussion, further consultation with the:

Mild Traumatic Brain Injury Program (MTBI)/Concussion Clinic is recommended. Please call 514-412-4400 extension 23310.

Please note: A referral from a doctor is required.

# **ACADEMIC RECOMMENDATIONS FOLLOWING A CONCUSSION**

In order to minimize post-concussive symptoms, the following academic recommendations have been implemented to reduce cognitive load. These recommendations will help the student participate in academic activities throughout the recovery period. Accommodations may vary per course as well as according to the individual needs of the student.

The student and parent(s) are encouraged to discuss and determine accommodations with both the school administration and teachers in order to ensure consistency.

# ATTENDANCE RESTRICTIONS No school for 2 days then progress to:

- 1 or 2 half-days, and finally full days as tolerated.
- Allow for late arrival or early departure.

#### **TESTING**

Students who have sustained a concussion can experience an increase in memory and attention problems. Highly demanding activities such as testing can significantly increase these symptoms and cause headaches and fatigue subsequently making testing more difficult. While the student is symptomatic, it is recommended that he/she have:

- No exams, tests or quizzes.
- No oral presentations.

#### WORKLOAD REDUCTION

A concussed student may require more time to complete assignments due to an increase in memory problems and decreased speed of processing. It is therefore recommended to reduce the cognitive load, which may include reducing homework during the first week, and allocating additional time for projects and assignments.

#### **NOTE TAKING**

As a result of impaired multitasking abilities and increased symptoms, taking notes may become a difficult task. Provide the student with lecture notes/outlines ahead of time in order to assist with organization and reduce multi-tasking demands. If this is not possible, permit the student to photocopy notes from another student.

#### **BREAKS**

If headaches worsen during class time, allow the student to be excused from class in order to seek a quiet area to rest until symptoms have decreased.

- Allow breaks as needed in order to control symptom levels (i.e. rest for an entire period in between classes as needed).
- Allow the student to leave class early to avoid hallway noise.
- Allow the student to eat lunch away from the cafeteria.
- The student should not participate in, or observe extracurricular activities.

# **OTHER ACCOMMODATIONS/** RESTRICTIONS

- Limit reading, using computers, and looking at smart boards while the student is very symptomatic.
- Allow the use of audio books if the student is very symptomatic while reading.
- No music, drama and physical education. The student should not be in the same room during these activities.
- Allow the student to bring a water bottle to class and wear sunglasses if light-sensitive.
- Students may have been advised to take analgesics for headache management, please allow them to do so if consent has been given.

# WHEN THE STUDENT IS SYMPTOM-FREE FOR A FEW DAYS, A GRADUAL APPROACH TO TESTING IS IMPORTANT

- Additional time to complete tests.
- Testing in a quiet environment.
- Allow testing across multiple sessions.
- Reduced length of tests.
- Open book/take home tests when possible.
- Allow 1-2 days between tests.
- Reformat from free response to multiple choice.

Note: Most students will require these accommodations for a period of 2 weeks.

# RETURNING TO PHYSICAL ACTIVITY/SPORTS **FOLLOWING A CONCUSSION**

If you have sustained a concussion, it is recommended to follow these steps before fully returning to physical activity.

- You must complete your recommended period of activity restrictions.
- You should be symptom-free for a few days and fully returned to cognitive and academic activities; or have been advised by a doctor or a Concussion Specialist before you are ready to start the following progressive steps.
- Written authorization may be requested prior to a return to full activity/competition.
- There should be approximately 24 hours or longer in between each step. If any symptoms return at any time, stop working out. Rest until you are symptom-free for 24 hours, then return to the previous step. If symptoms do not resolve or get worse, seek the expertise of a doctor or a concussion specialist.

## **STEP 1** LIGHT GENERAL CONDITIONING **EXERCISES - 50% effort**

- NO CONTACT.
- Begin with a warm up (stretching/flexibility) for 5-10 minutes.

Start a cardio workout of 15-20 minutes which can include: stationary bicycle, elliptical, treadmill, fast paced walking, light jog, rowing or swimming.

# **STEP 2 GENERAL CONDITIONING** AND SPORT SPECIFIC SKILL WORK DONE **INDIVIDUALLY - 50%-60% effort**

- Begin with a warm up (stretching/flexibility) for 5-10 minutes.
- Increase intensity and duration of cardio workout to 20-30 minutes.
- Begin sport specific skill work within the workout, but no spins, dives or jumps.

#### STEP 3 GENERAL CONDITIONING, SKILL WORK **DONE WITH A TEAM-MATE - 75% effort**

- NO CONTACT.
- Increase duration of session to 60 minutes. Begin resistance training including neck and core strengthening exercises.
- Continue practicing sport specific individual
- Begin general shooting, kicking or passing drills with a partner.
- Start beginner level spins, dives and jumps.

#### **STEP 4 GENERAL CONDITIONING, SKILL WORK** AND TEAM DRILLS - 75%-90% effort

- NO CONTACT. NO SCRIMMAGES.
- Resume pre-injury duration of practice and team drills.
- Increase resistance training and skill work as required.
- Gradually increase skill level of spins, dives and jumps.

Progress to step 5 only following full return to cognitive and academic activities without accommodations.

## **STEP 5 FULL PRACTICE WITH BODY CONTACT - 90%-100% effort**

- CONTACT. SCRIMMAGES
- Participate in a full practice. If completed with no symptoms, discuss returning to activity with the coach.

## Do not progress until the following is achieved:

- Coaches make sure that the athlete has regained his/her pre-injury skill-level.
- The child or teen is confident in his/her ability to return to activity.

**STEP 6 RETURN TO FULL ACTIVITY/ COMPETITION - 100% effort**