#### CONCUSSION

#### **BACKGROUND**

Westmount Charter School Board is committed to the safety of students and staff. Students and staff who are supported in a healthy environment are better able to achieve the goals of education. Westmount staff will work cooperatively with medical experts, regional health authorities and local partners to promote student health and safety in maintaining a healthy and safe environment where students can learn.

A concussion is most commonly caused by a blow to the head, face or neck that causes the brain to move rapidly within the skull. A concussion can occur even if there has been no loss of consciousness. A concussion is a brain injury that causes change in the way the brain functions and can have a significant impact on a student – cognitively, physically, emotionally and socially. School staff must be reasonably familiar with how to recognize concussions and work with staff, parents/guardians and partners to manage suspected concussions and help students return safely to school and play after experiencing a concussion.

#### **DEFINITIONS**

- 1. Concussion
  - 1.1 A concussion:
    - 1.1.1 is a brain injury that causes changes in how the brain functions, leading to symptoms that can be physical (e.g., headache, dizziness), cognitive (e.g., difficulty concentrating or remembering), emotional/behavioural (e.g., depression, irritability) and/or related to sleep (e.g., drowsiness, difficulty falling asleep).
    - 1.1.2 may be caused either by a direct blow to the head, face or neck, or a blow to the body that transmits a force to the head that causes the brain to move rapidly within the skull;
    - 1.1.3 can occur even if there has been no loss of consciousness (in fact most concussions occur without a loss of consciousness); and
    - 1.1.4 cannot normally be seen on X-rays, standard CT scans or MRIs.

#### **PROCEDURES**

- 1. Prevention will be at the fore of concussion awareness.
  - 1.1 Students participating in extracurricular athletics and other activities will follow safety guidelines.
  - 1.2 Teachers and coaches are expected to follow safety guidelines and work with students to reduce the risk of serious injury, including concussions.
  - 1.3 Supervision must be provided in physical activities that have a risk of concussion to provide vigilant oversight of the activity.
- Schools must follow the Safety Guidelines for Physical Activities in Alberta.
- 3. It is the responsibility of the coaches, field trip lead teachers, officials, parents/guardians and student athletes to adhere to the minimum required standards for safety of equipment.

- 4. If an employee has reason to believe that a student is exhibiting signs and symptoms of a concussion, then the employee should consult with a certified first aid person in the school.
  - 4.1 Concussions can only be diagnosed by a medical doctor.
- Teachers or coaches are responsible for student safety and for educating students/players about concussions
  - 5.1 The teacher supervisor/coach will be required to remove from play, any athlete who exhibits signs or symptoms of concussion. The athlete will not be permitted to return until he or she has received written medical clearance from a doctor.
  - 5.2 The teacher supervisor/ coach or principal must summon an ambulance if a student appears to be seriously injured and cannot be moved.
  - 5.3 To return to a sport or activity after a concussion, the student must be reexamined by a medical doctor
  - 5.4 After permission has been granted to return to a sport or activity, the Return to Play Guidelines must be followed.
- The principal is responsible to ensure that appropriate consultations with medical
  professionals regarding concussion protocols are followed, including the development of the
  plan for a student with a confirmed concussion.
  - 6.1 The principal will inform staff of a student with a confirmed concussion.
- 7. Students are responsible for abiding by the rules and regulations of the sport or activity and to abide by the principles of fair and safe play.
  - 7.1 Students are required to report any blows to the head, face or neck and any symptoms that they might be experiencing to the teachers/coaches.
  - 7.2 Students who have witnessed a peer receiving a blow to the head, face or neck or observing a peer who may be exhibiting symptoms associated with a concussion will report this to the supervising teacher or coach.
- 8. Each student who has been diagnosed with a concussion will have an individualized Return to Learn plan developed in consultation with the school administration and the parent/guardian.
  - 8.1 The Return to Learn plan will include individual recommendations to be implemented immediately as part of the recovery process.
  - 8.2 Accommodations may need to be varied by course.
- 9. Parents are to put the health and safety of their child first.
  - 9.1 Parents/legal guardians will be required to read and sign a Permission and Acknowledgement of risk form in Competitive Sports form before their child attends a try out, a practice or a competitive sports activity.
  - 9.2 Parents/guardians are responsible for cooperating with school personnel when they are informed of a possible concussion to their child by ensuring the child has been diagnosed by a medial professional.
  - 9.3 Parents/guardians are responsible for acting on information provided by the teacher supervisor/coach and for monitoring their child after a suspected concussion.

#### REFERENCE AND LINKS FORMS PROCEDURES

- 1. Physical Activity Letter to Parents
- 2. Medical Information Form
- 3. Permission and Acknowledgement of Risk Form School, Physical Education, Off-Site Activities, Intramurals and Clubs.
- 4. Permission and Acknowledgement of Risk Form –Interschool athletics

- 5. Documentation of Concussion Monitoring Medical Examination
- 6. Summary of Return to Learn Return to Physical Activity Plan
- 7. Documentation for a Diagnosed Concussion Return to Learn & Return to Physical Activity Plan
- 8. Parents Guide for Dealing with Concussions

#### **HANDOUTS**

- 1. Concussion Guidelines for Athletes
- 2. Concussion Guidelines for Coaches
- 3. Concussion Guidelines for Teachers
- 4. Concussion Guidelines for Parents
- 5. Concussion Recognition Tool

Cross Reference: Alberta School Boards Insurance Exchange

Date of Adoption: December 8,2021

Date of Revision:

**Due for Review:** December 8, 2024

#### **Physical Activity Letter to Parents**

#### Dear Parent/Guardian;

Physical activity is essential for normal, healthy growth and development. Growing bones and muscles require not only good nutrition, but also the stimulation of vigorous physical activity to increase the strength and endurance necessary for a physically active lifestyle. Active participation in **physical education** classes, which includes games, fundamental movement skills, body awareness and movement, and outdoor pursuits, provides opportunities for students to develop the skills and confidence necessary to play and work cooperatively with their peers.

#### **Physical Education Curriculum:**

Students will participate in a variety of activities as an integral part of the Physical Education curriculum. These activities **may include but are not limited to**:

*Primary School*: Tag games, fitness building activities and fundamental movement skills (circuits and relays), body awareness and movement/gymnastics, target games.

*Middle School*: Low Organizational and Team Building games, body awareness and movement/gymnastics, Lead up Volleyball and Soccer, Target Games, Track and Field and Fitness Activities

High School: Low Organizational and Team Building games, body awareness and movement/gymnastics, Badminton, Basketball, Soccer, Target Games, Track and Field and Fitness Activities;

#### **Daily Physical Activity:**

Every student in our schools will be participating daily in moderate-to-vigorous physical activity. Research has shown that daily sustained physical activity has a positive impact on students' readiness to learn, behaviour, self-esteem, level of physical fitness and academic achievement. This daily physical activity will take place in physical education classes and in other areas of the school on non-physical education class days. Aerobic routines, fitness circuits, and power walks are some examples of daily physical activity sessions.

#### **Intramurals/Clubs:**

Throughout the year students will also have an opportunity to participate in intramural and club activities that **may include but are not limited to**: Ball Hockey; Basketball; Badminton; Volleyball; Dodgeball; Terry Fox Run; running clubs; Track and Field days, Play days and Fun Fairs.

#### In the interest of safety, students must:

- 1. For physical education classes and intramural activities: wear appropriate attire for safe participation (e.g., T-shirt, shorts or track pants). Running shoes that provide good support and traction are a minimum requirement.
- 2. Hanging jewelry (e.g., necklaces, hoop earrings) must not be worn. In many activities (e.g., tag games, climbing, etc.) no jewelry can be worn. Jewelry which cannot be removed and which presents a safety concern (e.g., medical alert identification, religious requirement jewelry) must be taped or securely covered.

3. For the daily physical activities: wear appropriate running shoes and loose-fitting clothing that will not inhibit movement.

#### In the interest of safety, we strongly recommend:

- 1. Students have an annual medical examination.
- 2. Students bring emergency medications (e.g., asthma inhalers, epinephrine pen) to all curricular and co-curricular physical activities.
- 3. Students remove eyeglasses during daily physical activity, physical education classes and intramurals. If eyeglasses cannot be removed, the students must wear an eyeglass strap or shatterproof lenses.
- 4. Students wear/apply environmental protection for all outdoor activities (e.g., sunscreen, hat, insect repellent).
- 5. A safety inspection is carried out at home of any equipment brought to school for personal use in class, or in intramural/club activities (e.g., skis, skates, helmets).

Should your son/daughter/ward sustain an injury where a concussion is suspected then the Westmount Charter School Board Concussion Protocol must be followed. If your son/daughter/ward is diagnosed with a concussion, the "Monitoring/Medical Examination Form" must be completed and the Westmount Charter School Board Concussion Protocol must be followed before the student returns to physical education classes and intramural/club activities. The school administrator or schools lead will provide further information should it be required.

# Medical Information Form School, Physical Education, Off-Site Activities, Intramurals & Clubs

0. 1	.l ar				
	nt's Name:				
	Address:				
	/Guardian Names:				
	Phone #:				
	ione #1:				
	ian Name:				
•	ian Phone #:				
	Card # (optional):				
	ency Contact Name: ency Contact Phone #:				
	An annual medical exa	mination is recomm	nandad		
NUIE	All allitual illeulcal exa	inination is reconni	nenueu.		
MEDIO	CAL INFORMATION				
1.	Date of last complete ex	amination·			
2.	Date of last tetanus imm				
3.	Is your son/daughter/w				NO
ο.	io your son, adagneer, w	ara anorgio to any a	rago, rood or medication	., outer 120	110
4.	Does your son/daughter	r/ward wear a medio	cal alert bracelet, neck c	hain, or carry	a medical
	alert card? YES N	10			
	If yes, provide detail	ls			
5.	Has your son/daughter,	/ward been identifie	d as being anaphylactic	? YES	NO
	If yes, does he/she carry	an EpiPen?		YES	NO
6.	Does your son/daughter	r/ward take any pres	scription drugs?	YES	NO
	If yes, provide detail	ls			
	• What medication(s)	should the participa	nt (son/daughter/ward	l) have availal	ole during
	the sport activity? _				
	Who should administration	ster the medication?			
7.	Does your son/daughte	r/ward wear eyeglas	ses?	YES	NO
	Orthodontic applian	ices? YES / NO	Crowns YES / NO	Bridges? YE	S / NO

8.	Please indicate if your son/daughter/ward has been subject to any of the following and
	provide pertinent details:
	• Epilepsy, diabetes, orthopaedic problems, hearing loss, asthma, allergies, heart disorder
	Head or back conditions or injuries
	Diagnosed concussion (in the past three years)
	<ul> <li>Arthritis or rheumatism, chronic nosebleeds, dizziness, fainting, headaches, dislocated shoulder, hernia, swollen or hyper mobile or painful joints, trick or lock knee, etc.</li> </ul>
9.	Please indicate any other medical condition that will limit participation or require modification to the activity program:

#### NOTE:

If a concussion has been diagnosed over the summer break, the Request to Resume Participation – Concussion Related Injuries form must be completed by a physician before the student returns to class/intramural and interschool activities.

#### Permission and Acknowledgement of Risk School, Physical Education, Off-Site Activities, Intramurals & Clubs

# **ELEMENTS OF RISK NOTICE School, Physical Education, Off-Site Activities, Intramurals & Clubs**

The risk of injury exists in every athletic activity. Falls, collisions and other incidents may occur and cause injury. Due to the very nature of some activities, the risk of injury may increase. Injuries may range from minor sprains and strains to more serious injuries affecting the head, neck or back. Some injuries can lead to paralysis or prove to be life-threatening. These injuries result from the nature of the activity and can occur without fault on either the part of the student, the school board or its employees/agents or the facility where the activity is taking place. The safety and well-being of students is a prime concern and attempts are made to manage, as effectively as possible, the foreseeable risks inherent in physical activity. A student choosing to participate in physical activities assumes the risk of an injury occurring. The chances of an injury can be reduced by carefully following instructions at all times while engaged in the activity. Please call the school to discuss safety concerns related to any physical activity in which your child/ward is participating.

I have read and acknowledge the activity and risk disclosure information provided to me

## Permission and Acknowledgement of Risk Interschool Athletic Program

#### ELEMENTS OF RISK NOTICE Interschool Athletics

The risk of injury exists in every athletic activity. Falls, collisions and other incidents may occur and cause injury. Due to the very nature of some activities, the risk of injury may increase. Injuries may range from minor sprains and strains to more serious injuries affecting the head, neck or back. Some injuries can lead to paralysis or prove to be life-threatening. These injuries result from the nature of the activity and can occur without fault on either the part of the student, the school board or its employees/agents or the facility where the activity is taking place. The safety and well-being of students is a prime concern and attempts are made to manage, as effectively as possible, the foreseeable risks inherent in physical activity. A student choosing to participate in physical activities assumes the risk of an injury occurring. The chances of an injury can be reduced by carefully following instructions at all times while engaged in the activity. Please call the school to discuss safety concerns related to any physical activity in which your child/ward is participating.

	MEDICAL SERVICES AUTHORIZATION (Optional)
	In a situation when emergency medical or hospital services are required by the above listed participant, and with the understanding that every reasonable effort will be made by the school/hospital to contact me, my signature on this form authorizes medical personnel and/or hospital to administer medical and/or surgical services, including anesthesia and drugs. I understand that any cost will be my responsibility.
	Parent/Guardian Signature: Date:
a s	We have read and understand the notices of Elements of Risk and Student Accident Insurance. I/We hereby knowledge and accept the risk inherent in the requested activity and assume responsibility for my/our on/daughter/ward for personal health, medical, dental and accident insurance coverage.  We give permission for my son/daughter/ward to try out/participate on the
S	gnature of Parent/Guardian Date:
S	gnature of Parent/Guardian Date:

# **Documentation of Concussion Monitoring/Medical Examination Form**

Guide	elines for Parents and Parents Guide to Dealing w hture is required for this form to be accepted by t	ith Concussions. A parent/guardian	
	(student/athlete name) _	(date)	
	ined a blow to the head, face or neck or a blow to the		
and a	s a result may have suffered a concussion.		
Resu	lts of the Concussion Recognition Tool to identify	y a suspected concussion:	
	NO SIGNS OR SYMPTOMS OBSERVED AT THE T	TIME OF INCIDENT.	
partio moni <i>Parer</i>	ever, signs or symptoms can occur later within a 24 lecipate in physical activity for a 24 hour period. While tor their child/ward using the information found in the state of the decimal property and the state of	e at home the parent/guardian is to the Concussion Guidelines for Parents and	
	ONS: If no signs/symptoms occur during the monito plete the following Results of Monitoring section prices.		
Resu	lts of Monitoring		
	As the parent/guardian, my child/ward has been signs/symptoms have been observed.	observed for the 24 hour period, and no	
Parer	nt/Guardian signature:	Date:	
Comr	ments:		
Resu	lts of Medical Examination		
	My child/ward has been examined and no concussion has been diagnosed and therefore may resume full participation in learning and physical activity with no restrictions.		
	My child/ward has been examined and a concussion has been diagnosed and therefore must begin a medically supervised, individualized and gradual Return to Learn/Return to Physical Activity Plan. I understand that the school has a documentation process for this plan.		
Parer	nt/Guardian signature:	Date:	
Comr	ments:		

#### Summary of Plan for Return to Learn/Return to Physical Activity

- The Return to Learn / Return to Physical Activity Plan is a collaborative effort between home and school to support the student's progress through the plan following a diagnosed concussion. The 6 Step Plan is necessary and identifies the sequence of supporting return to normal learning and physical activity.
- A minimum of 24 hours is necessary for EACH step.
- Please contact the school if you have any questions about the following.

#### **SUMMARY OF STEPS**

#### Return to Learn/Return to Physical Activity - Step 1

- Completed at home; student requires cognitive **and** physical rest
- If symptom free, student may go directly to Return to Learn Step 2b and Return to Physical Activity Step 2

#### Return to Learn - Step 2a

- Symptoms improving
- Return to school with monitored re-integration to classroom and cognitive effort; and Physical Rest

#### Return to Learn - Step 2b

#### Note: Return to Learn Step 2b and Return to Physical Activity Step 2 occur concurrently

- Symptom free
- Return to regular school routine and learning activities

#### **Return to Physical Activity - Step 2**

• Light aerobic physical activity and regular learning activities

#### Return to Physical Activity - Step 3

• Begin sport specific type of physical activities

#### **Return to Physical Activity - Step 4**

• Greater range of physical activity options permitted, but no body contact

#### **Return to Physical Activity - Step 5**

• Full participation in all non-contact type physical activities, and return to training in contact sports

#### Return to Physical Activity - Step 6

• Full participation, no restrictions

#### BUT

If after Return to Learn Step 2a, concussion symptoms return, the student will return to the designated step as directed by the physician – this may include return to step 1.

## Documentation for a Diagnosed Concussion Return to Learn/Return to Physical Activity Plan

This form is to be used by parents/guardians and the school contact, to communicate the student's progress through the plan.

The Return to Learn/Return to Physical Activity Plan is a combined approach, with collaborative effort between the home and school.

Return to Learn Step 2a must be completed prior to the student returning to physical activity.

Each step must take a minimum of 24 hours (Note: step 2 and 2b can occur concurrently).

All steps must be followed.

#### Return to Learn/Return to Physical Activity - Step 1

(Must be completed prior to Step 2a)

- Completed at home
- Cognitive Rest includes limiting activities that require concentration and attention (e.g. reading, texting, television, computer, video/electronic games)
- Physical Rest includes restricting recreational/leisure and competitive physical activities

	My child/ward has completed Step 1 of the Return to Learn/Return (cognitive and physical rest at home) and his/her symptoms have child/ward is ready to proceed to Return to Learn – Step 2a.	
	My child/ward has completed Step 1 of the Return to Learn/Return (cognitive and physical rest at home) and is symptom free. My child proceed directly to Return to Learn – Step 2b and Return to Physic	d/ward is ready to
Parent	nt/Guardian signature:	Date:
Comme	nents:	
Princip	ipal/School Contact Signature:	

Return of Symptoms		
	My child/ward has experienced a return of concussion signs and/or symptoms and has been examined by a medical doctor/nurse practitioner, who has advised a return to:	
	Return to Learn/Return to Physical Activity - Step of the Plan.	
Parent	Parent/Guardian signature: Date:	
Comm	ents:	

If at any time during the following steps symptoms return, please refer to the "Return of Symptoms" section on page 2.

Return	to	Learn	- Step	<b>2</b> a
--------	----	-------	--------	------------

- Student returns to school
- Student requires individualized classroom strategies and/or approaches which gradually increase cognitive activity
- Physical rest includes restricting recreational/leisure and competitive physical activities

	My child/ward has been receiving individualized and is symptom free. My child/ward is ready to p 2b and Return to Physical Activity – Step 2.	0 , 11
Parent	/Guardian signature:	Date:
Comme	ents:	

#### Return to Learn - Step 2b

• Student returns to regular learning activities at the school

## Return to Physical Activity - Step 2

- Student can participate in individual light aerobic physical activity only
- Student continues with regular learning activities

	My child/ward is symptom free after participating in light aerobic pl child/ward is ready to proceed to Return to Physical Activity – Step	
Parent/Guardian signature: Date:		_ Date:
Comments:		

If at any time during the following steps symptoms return, please refer to the "Return of Symptoms" section on page 2.

# **Return to Physical Activity - Step 3**

• Student may begin individual sport-specific physical activity only

Return to Physical Activity – Step 4		
•	Student may begin activities where there is no body contact (e.g., dance, badminton); light resistance/weight training; non-contact practice; and non-contact sport-specific drills	
	Student has successfully completed Steps 3 and 4 and is symptom free	
	This form has been returned by the school contact to the parent/guardian to obtain medical doctor/nurse practitioner diagnosis and signature	
Medi	cal Examination	
	I, (medical doctor/nurse practitioner name)	
	have examined (student name) and confirm	
	he/she continues to be symptom free and is able to return to regular physical education	
	class/intramural activities/interschool activities in non-contact sports and full	
	training/practices for contact sports.	
Medical Doctor/Nurse Practitioner signature: Date:		
Comments:		

This form, with medical doctor/nurse practitioner signature, is to be returned to the School Contact before the student may proceed to Step 5.			
	If at any time during the following steps symptoms return, please refer to the "Return of Symptoms" section on page 2.		
Retu	ırn to Physical Activity – Step 5		
•	Student may resume regular physical education/intramural activities/interschool activities in non-contact sports and full training/practices for contact sports		
This f	form is to be returned to the parent/guardian for final signature:		
	My child/ward is symptom free after participating in activities, in practice, where there is body contact and has my permission to participate fully, including participation in competition.		
Paren	t/Guardian signature: Date:		
Comm	nents:		

# **Return to Physical Activity - Step 6**

• The student may resume full participation in contact sports with no restrictions

# A parent's guide to dealing with concussions

# Heads Up!



# **Be Alert:** Know that concussions are brain injuries

Concussions pose a significant injury risk to Canadians. They are often viewed as minor events that are tacitly accepted as part of sports. In reality, concussions are injuries to the brain that can have lasting effects. A group of world-renowned researchers recently defined concussion as a complex issue, in which one's brain is injured as the result of a direct force to the body, such as a blow to the head or elsewhere that causes a shaking or jarring to the brain<sup>1</sup>.

As a busy parent, you may not understand the full complexity of concussions – they are a tricky topic! It's easy to identify your child's bruise or scrape, but it's not always as simple to identify an injury inside the head. If your child has experienced a sudden blow or impact, some signs of concussion include: headache, nausea, difficulty concentrating and various emotional issues – a full list of symptoms is available on the Parachute website<sup>2</sup>. You

need to be alert to these symptoms – just as you would treat a sprained ankle, you also need to make sure you treat and respond to "sprained brains"!

Another way to be alert is to understand your role - parents are key influences on children's risk-taking patterns, particularly through the knowledge they have about their children's lives and experiences<sup>3,4,5</sup>. As a parent, you may wonder how you can help reduce your child's risk of concussion. First, be aware of the behaviours you display to your children as they are constantly looking to you for examples. fact, research demonstrated that parents' risk-taking behaviours are strong predictors of children's behaviours in the present and future<sup>6</sup>. Setting proper examples and encouraging safe practices will help ensure your children are learning and viewing the best ways to keep their most important body part safe and healthy!



www.parachutecanada.org

36 Eglinton Ave. W., suite 704 Toronto, ON M4R 1A1 647.776.5100 info@parachutcanada.org

# **Be Safe:** Have the tools that help to prevent and identify concussions

Beyond being alert to the symptoms and being a good role model, parents can also find the tools and information to prevent, identify and manage concussions. These tools are available online and include:

- Pocket Concussion Recognition Tool<sup>7</sup>
- Hockey Canada's Concussion App<sup>8</sup>
- Things to Know About Concussions Tip Sheet<sup>2</sup>

Another important way to prevent concussions is ensuring that you teach children to respect the rules of sports and the players. As a parent, you should talk with your children about the meaning of good sportsmanship. One helpful example is the *Player Code of Conduct* form<sup>9</sup>, which was developed for hockey players but could be adapted for other activities.

Here are some common myths about concussions that might surprise you...

# **Concussions:** Myths and Facts

Myth	Fact
Helmets can protect against concussions	There is no helmet available to make your child concussion-proof
My child didn't get hit on the head, so there's no way he has a concussion	A hit does not have to be directly to the head in order to result in a concussion
As long as I keep my child out of sports until she's better, she can do anything else	Concussions require mental and physical rest, beyond avoiding the activity where the concussion occurred
As long as my child rests, it is not necessary to see a doctor	Concussions are injuries - they are best treated by someone with experience
If my child did not lose consciousness, he probably doesn't have a concussion	Concussions do not always include a loss of consciousness and symptoms can take time to emerge

# Be Aware: Know how to manage concussions

Even when following the rules of fair play, concussions can still happen. In the event that your child suffers a concussion, you need to be aware of how to best manage and treat this injury. First, it's always better to be safe than sorry – when in doubt, sit them out. It's better to miss a few games or classes and have a healed brain! Second, if you are unsure whether your child may have suffered a concussion or if they are healing properly, see a doctor – when in doubt, check them out.

Even if your child says they feel better, specific guidelines and recommendations outline how best to return to sports and education:

- Return to Play Guidelines<sup>10</sup>
- Return to school: information for teachers and parents<sup>11</sup>

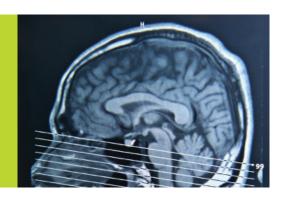
Concussions are not always a one-time event: symptoms may reappear or get worse, and after the first concussion, a child may be more susceptible to a second and subsequent concussions. It is important to be aware that multiple concussions can add increased strain to your child. Repeated concussions should be taken seriously and activities may need to be altered or even permanently stopped. The advice of a physician is important to consider when making these decisions.

#### References

- 1 McCrory, P., Meeuwisse, W.H., Aubry, M. et al. (2013). Consensus statement on concussion in sport: the 4th international conference on concussion in sport held in Zurich, November 2012. *British Journal of Sports Medicine*, 47, 250-258.
- 2 "Things to Know About Concussions' Retrieved May 6, 2013, at <a href="https://www.parachutecanada.org/downloads/programs/safekidsweek/Concussion\_supplement\_e06-handout.pdf">https://www.parachutecanada.org/downloads/programs/safekidsweek/Concussion\_supplement\_e06-handout.pdf</a>
- 3 Morrish, J., Kennedy, P. and Groff, P. (2011). Parental influence over teen risk-taking: A review of the literature. SMARTRISK: Toronto, ON
- 4 Stattin, H., & Kerr, M. (2000). Parental Monitoring: A reinterpretation. Child Development, 71,1072-1085.
- Willoughby, T. & Hamza, C. (2011). A longitudinal examination of the bidirectional associations among perceived parenting behaviors, adolescent disclosure and problem behavior across the high school years. *Journal of Youth and Adolescence*, 40, 463-478.
- 6 Morrongiello, B., Corbett, M. & Bellissimo, A. (2008). 'Do as I say, not as I do?': Family influences on children's safety and risk behaviours. *Health Psychology*, 27, 4, 498-503
- 7 Pocket Concussion Recognition Tool. Retrieved May 6, 2013, at: <a href="http://www.parachutecanada.org/downloads/programs/safekidsweek/Pocket-Concussion-Recognition-Tool2013.pdf">http://www.parachutecanada.org/downloads/programs/safekidsweek/Pocket-Concussion-Recognition-Tool2013.pdf</a>
- 8 Hockey Canada Concussion Mobile App. Information retreived May 6, 2013, at: http://www.hockeycanada.ca/en-ca/mobile-apps.aspx,
- 9 Smart Hockey Pledge Form. Retrieved May 6, 2013, at <a href="https://www.parachutecanada.org/downloads/programs/activeandsafe/">https://www.parachutecanada.org/downloads/programs/activeandsafe/</a> Concussion\_PlayerPledge.pdf,
- 10 Return to Play Guidelines. Retrieved May 6, 2013, at <a href="http://www.parachutecanada.org/downloads/programs/activeandsafe/Concussion Guidelines for the Coach:Trainer.pdf">http://www.parachutecanada.org/downloads/programs/activeandsafe/Concussion Guidelines for the Coach:Trainer.pdf</a>
- 11 Concussion guidelines. Retrieved May 6, 2013, at <a href="http://www.parachutecanada.org/active-and-safe">http://www.parachutecanada.org/active-and-safe</a>

# **Concussion Guidelines for**

# THE ATHLETE



## WHAT IS A CONCUSSION?

A concussion is a brain injury that cannot be seen on routine x-rays, CT scans, or MRIs. It affects the way a person may think and remember things for a short time, and can cause a variety of symptoms.

## WHAT ARE THE SYMPTOMS AND SIGNS OF CONCUSSION?

YOU DON'T NEED TO BE KNOCKED OUT (LOSE CONSCIOUSNESS) TO HAVE HAD A CONCUSSION.

THINKING PROBLEMS	ATHLETE'S COMPLAINTS	OTHER PROBLEMS
<ul> <li>Does not know time, date, place, period of game, opposing team, score of game</li> <li>General confusion</li> <li>Cannot remember things that happened before and after the injury</li> <li>Knocked out</li> </ul>	<ul> <li>Headache</li> <li>Dizziness</li> <li>Feels dazed</li> <li>Feels "dinged" or stunned; "having my bell rung"</li> <li>Sees stars, flashing lights</li> <li>Ringing in the ears</li> <li>Sleepiness</li> <li>Loss of vision</li> <li>Sees double or blurry</li> <li>Stomachache, stomach pain, nausea</li> </ul>	<ul> <li>Poor coordination or balance</li> <li>Blank stare/glassy eyed</li> <li>Vomiting</li> <li>Slurred speech</li> <li>Slow to answer questions or follow directions</li> <li>Easily distracted</li> <li>Poor concentration</li> <li>Strange or inappropriate emotions (ie. laughing, crying, getting mad easily)</li> <li>Not playing as well</li> </ul>

# WHAT CAUSES A CONCUSSION?

Any blow to the head, face or neck, or a blow to the body which causes a sudden jarring of the head may cause a concussion (ie. a ball to the head, being checked into the boards in hockey).

# WHAT SHOULD YOU DO IF YOU GET A CONCUSSION?

#### You should stop playing the sport right away.

Continuing to play increases your risk of more severe, longer lasting concussion symptoms, as well as increases your risk of other injury. You should tell your coach, trainer, parent or other responsible person that you are concerned you have had a concussion, and should not return to play that day. You should not be left alone and should be seen by a doctor as soon as possible that day. You should not drive. If someone is knocked out, call an ambulance to take them to a hospital immediately. Do not move them or remove athletic equipment such as a helmet until the paramedics arrive.



Parachute is bringing attention to preventable injury and helping Canadians reduce their risk of injury and enjoy long lives lived to the fullest.

# CONCUSSION GUIDELINES FOR THE ATHLETE

#### **HOW LONG WILL IT TAKE TO GET BETTER?**

The signs and symptoms of a concussion often last for 7-10 days but may last much longer. In some cases, athletes may take many weeks or months to heal. Having had previous concussions may increase the chance that a person may take longer to heal.

## **HOW IS A CONCUSSION TREATED?**

#### CONCUSSION SYMPTOMS ARE MADE WORSE BY EXERTION, BOTH PHYSICAL AND MENTAL. THE MOST IMPORTANT TREATMENT FOR A CONCUSSION IS REST.

You should not exercise or do any activities that may make you worse, like driving a car, reading, working on the computer or playing video games. No snow shoveling, cutting the lawn, moving heavy objects, etc. If mental activities (eg: reading, concentrating, using the computer) worsen your symptoms, you may have to stay home from school. You may also have to miss work, depending on what type of job you have, and whether it worsens your symptoms. If you go back to activities before you are completely better, you are more likely to get worse, and to have symptoms last longer. Even though it is very hard for an active person to rest, this is the most important step.

Return to school should not happen until you feel better, and these activities do not aggravate your symptoms. It is best to return to school part-time at first, moving to full time if you have no problems. Once you are completely better at rest, you can start a stepwise increase in activities (see "When can I return to sport?") It is important that you are seen by a doctor before you begin the steps needed to return to activity, to make sure you are completely better. If possible, you should be seen by a doctor with experience in treating concussions.

## WHEN SHOULD I GO TO THE DOCTOR?

Anyone who gets a head injury should be seen by a doctor as soon as possible. You should go back to the doctor IMMEDIATELY if, after being told you have a concussion, you have worsening of symptoms like:

- 1. being more confused
- 2. headache that is getting worse
- 3. vomiting more than twice
- 4. not waking up
- 5. having any trouble walking
- 6. having a seizure
- 7. strange behaviour

# WHEN CAN I RETURN TO SPORT?

It is very important that you do not go back to sports if you have any concussion symptoms or signs.

Return to sport and activity must follow a step-wise approach:

**STEP 1)** No activity, complete rest. Once back to normal and cleared by a doctor, go to step 2.

**STEP 2)** Light exercise such as walking or stationary cycling, for 10-15 minutes.

**STEP 3)** Sport specific aerobic activity (ie. skating in hockey, running in soccer), for 20-30 minutes. NO CONTACT.

**STEP 4)** "On field" practice such as ball drills, shooting drills, and other activities with NO CONTACT (ie. no checking, no heading the ball, etc.).

**STEP 5)** "On field" practice with body contact, once cleared by a doctor.

STEP 6) Game play.

Note: Each step must take a minimum of one day. If you have any symptoms of a concussion (e.g. headache, feeling sick to your stomach) that come back either with activity, or later that day, stop the activity immediately and rest until symptoms resolve, for a minimum of 24 hours. See a doctor and be cleared before starting the step wise protocol again.

You should not go back to sport until you have been cleared to do so by a doctor.

**Concussion Guidelines for** 

# COACHES & TRAINERS



## WHAT IS A CONCUSSION?

A concussion is a brain injury that cannot be seen on routine x-rays, CT scans, or MRIs. It affects the way a person may think and remember things, and can cause a variety of symptoms.

## WHAT ARE THE SYMPTOMS AND SIGNS OF CONCUSSION?

A STUDENT DOES NOT NEED TO BE KNOCKED OUT (LOSE CONSCIOUSNESS) TO HAVE HAD A CONCUSSION.

THINKING PROBLEMS	ATHLETE'S COMPLAINTS	OTHER PROBLEMS
<ul> <li>Does not know time, date, place, period of game, opposing team, score of game</li> <li>General confusion</li> <li>Cannot remember things that happened before and after the injury</li> <li>Knocked out</li> </ul>	<ul> <li>Headache</li> <li>Dizziness</li> <li>Feels dazed</li> <li>Feels "dinged" or stunned; "having my bell rung"</li> <li>Sees stars, flashing lights</li> <li>Ringing in the ears</li> <li>Sleepiness</li> <li>Loss of vision</li> <li>Sees double or blurry</li> <li>Stomachache, stomach pain, nausea</li> </ul>	<ul> <li>Poor coordination or balance</li> <li>Blank stare/glassy eyed</li> <li>Vomiting</li> <li>Slurred speech</li> <li>Slow to answer questions or follow directions</li> <li>Easily distracted</li> <li>Poor concentration</li> <li>Strange or inappropriate emotions (ie. laughing, crying, getting mad easily)</li> <li>Not playing as well</li> </ul>

# WHAT CAUSES A CONCUSSION?

Any blow to the head, face or neck, or a blow to the body which causes a sudden jarring of the head may cause a concussion (ie. a ball to the head, being checked into the boards in hockey).

# WHAT SHOULD YOU DO IF AN ATHLETE GETS A CONCUSSION?

The athlete should stop playing the sport right away. They should not be left alone and should be seen by a doctor as soon as possible that day. If an athlete is knocked out, call an ambulance to take them to a



# CONCUSSION GUIDELINES FOR COACHES & TRAINERS



hospital immediately. Do not move the athlete or remove athletic equipment like a helmet as there may also be a cervical spine injury; wait for paramedics to arrive.

An athlete with a concussion should not go back to play that day, even if they say they are feeling better. Problems caused by a head injury can get worse later that day or night. They should not return to sports until he/she has been seen by a doctor.

# HOW LONG WILL IT TAKE FOR THE STUDENT TO GET BETTER?

The signs and symptoms of a concussion often last for 7-10 days but may last much longer. In some cases, athletes may take many weeks or months to heal. Having had previous concussions may increase the chance that a person may take longer to heal.

# **HOW IS A CONCUSSION TREATED?**

IT IS VERY IMPORTANT THAT AN ATHLETE DOES NOT GO BACK TO SPORTS IF THEY HAVE ANY CONCUSSION SYMPTOMS OR SIGNS.

Return to sport and activity must follow a step-wise approach:

**STEP 1)** No activity, complete rest. Once back to normal and cleared by a doctor, go to step 2.

**STEP 2)** Light exercise such as walking or stationary cycling, for 10-15 minutes.

**STEP 3)** Sport specific aerobic activity (ie. skating in hockey, running in soccer), for about 20-30 minutes. NO CONTACT.

**STEP 4)** "On field" practice such as ball drills, shooting drills, and other activities with NO CONTACT (ie. no checking, no heading the ball, etc.).

**STEP 5)** "On field" practice with body contact, once cleared by a doctor.

STEP 6) Game play.

Note: Each step must take a minimum of one day. If the athlete has any symptoms of a concussion

(e.g. headache, feeling sick to his/her stomach) that come back at any step, STOP activity, wait 24-48 hours, and resume activity at previous step. This protocol must be individualized to the athlete, their injury and the sport they are returning to.

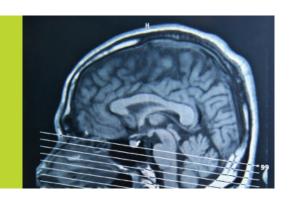
# WHEN CAN AN ATHLETE WITH A CONCUSSION RETURN TO SPORT?

It is very important that an athlete not play any sports if they have any signs or symptoms of concussion. The athlete must rest until he/she is completely back to normal. When he/she is back to normal and has been seen by a doctor, he/she can then go through the steps of increasing activity described above. When the athlete has progressed through these steps with no symptoms or problems, and has received clearance from a doctor, he/she may return to play. If you are unsure if an athlete should play, remember...

when in doubt, sit them out!

# **Concussion Guidelines for**

# **TEACHERS**



## WHAT IS A CONCUSSION?

A concussion is a brain injury that cannot be seen on routine x-rays, CT scans, or MRIs. It affects the way a person may think and remember things, and can cause a variety of symptoms.

## WHAT ARE THE SYMPTOMS AND SIGNS OF CONCUSSION?

A STUDENT DOES NOT NEED TO BE KNOCKED OUT (LOSE CONSCIOUSNESS) TO HAVE HAD A CONCUSSION.

THINKING PROBLEMS	STUDENT'S COMPLAINTS	OTHER PROBLEMS
<ul> <li>Does not know time, date, place, period of game, opposing team, score of game</li> <li>General confusion</li> <li>Cannot remember things that happened before and after the injury</li> <li>Knocked out</li> </ul>	<ul> <li>Headache</li> <li>Dizziness</li> <li>Feels dazed</li> <li>Feels "dinged" or stunned; "having my bell rung"</li> </ul>	<ul> <li>Poor coordination or balance</li> <li>Blank stare/glassy eyed</li> <li>Vomiting</li> <li>Slurred speech</li> <li>Slow to answer questions or follow directions</li> <li>Easily distracted</li> <li>Poor concentration</li> <li>Strange or inappropriate emotions (ie. laughing, crying, getting mad easily)</li> <li>Not playing as well</li> </ul>

# WHAT CAUSES A CONCUSSION?

Any blow to the head, face or neck, or a blow to the body which causes a sudden jarring of the head may cause a concussion (ie. a ball to the head, being checked into the boards in hockey).

# WHAT SHOULD YOU DO IF A STUDENT GETS A CONCUSSION?

You will most often have students who have sustained a concussion outside of school, but it is important to know how to deal with a student whom you suspect has sustained a concussion while participating in



# CONCUSSION GUIDELINES FOR TEACHERS



a sport or activity at school. IF YOU SUSPECT A CONCUSSION, THE STUDENT SHOULD STOP PLAYING THE SPORT OR ACTIVITY RIGHT AWAY. He/she should not be left alone and should be seen by a doctor as soon as possible that day. If a student is knocked out for more than a minute, call an ambulance to take him/her to a hospital immediately. Do not move him/her or remove athletic equipment like a helmet;; wait for paramedics to arrive.

Anyone with a concussion should not go back to play that day, even if he/she says he/she is feeling better. Problems caused by a head injury can get worse later that day or night. He/she should not return to activity until he/she has been seen by a doctor.

# HOW LONG WILL IT TAKE FOR THE STUDENT TO GET BETTER?

The signs and symptoms of a concussion often last for 7-10 days but may last much longer. In some cases, children may take many weeks or months to heal. Having had previous concussions may increase the chance that a person may take longer to heal.

## **HOW IS A CONCUSSION TREATED?**

IT IS CLEAR THAT EXERTION, BOTH PHYSICAL AND MENTAL, WORSENS CONCUSSION SYMPTOMS AND MAY DELAY RECOVERY. THUS, THE MOST IMPORTANT TREATMENTFOR CONCUSSION IS REST.

Many students find that attending school aggravates their symptoms, and may have to stay home and rest. It is not possible to know when symptoms will improve, as each concussion is unique. Therefore, a specific return date to school may not initially be possible for the student, their parents, or doctor to provide. Once they feel better, they can try going back to school, initially part time (e.g. half days at first) and, if their symptoms do not return, full time. Remember that mental exertion can make symptoms worse, so the student's workload may need to be adjusted accordingly.

IT IS VERY IMPORTANT THAT A STUDENT DOES NOT GO BACK TO ACTIVITY IF HE/SHE HAS ANY CONCUSSION SYMPTOMS OR SIGNS.

Return to sport and activity must follow a step-wise approach:

**STEP 1)** No activity, complete rest. Once back to normal and cleared by a doctor, go to step 2.

**STEP 2)** Light exercise such as walking or stationary cycling, for 10-15 minutes.

**STEP 3)** Sport specific aerobic activity (ie. skating in hockey, running in soccer), for about 20-30 minutes. NO CONTACT.

**STEP 4)** "On field" practice such as ball drills, shooting drills, and other activities with NO CONTACT (ie. no checking, no heading the ball, etc.).

**STEP 5)** "On field" practice with body contact, once cleared by a doctor.

STEP 6) Game play.

# WHEN CAN A STUDENT WITH A CONCUSSION RETURN TO SPORT?

It is very important that a student not play any sports, including P.E. class activities if he/she has any signs or symptoms of concussion. The student must rest until he/she is completely back to normal. When he/she has been back to normal and has been seen by a doctor, he/she can then go through the steps of increasing activity described above. When the student has progressed through these steps with no symptoms or problems, and has received clearance from a doctor, he/she may return to play. If you are unsure if a student should participate, remember...

when in doubt, sit them out!

**Concussion Guidelines for** 

# PARENTS & CAREGIVERS



## WHAT IS A CONCUSSION?

A concussion is a brain injury that cannot be seen on routine x-rays, CT scans, or MRIs. It affects the way a child may think and remember things, and can cause a variety of symptoms.

## WHAT ARE THE SYMPTOMS AND SIGNS OF CONCUSSION?

A CHILD DOES NOT NEED TO BE KNOCKED OUT (LOSE CONSCIOUSNESS) TO HAVE HAD A CONCUSSION.

THINKING PROBLEMS	CHILD'S COMPLAINTS	OTHER PROBLEMS
<ul> <li>Does not know time, date, place, period of game, opposing team, score of game</li> <li>General confusion</li> <li>Cannot remember things that happened before and after the injury</li> <li>Knocked out</li> </ul>	<ul> <li>Headache</li> <li>Dizziness</li> <li>Feels dazed</li> <li>Feels "dinged" or stunned; "having my bell rung"</li> <li>Sees stars, flashing lights</li> <li>Ringing in the ears</li> <li>Sleepiness</li> <li>Loss of vision</li> <li>Sees double or blurry</li> <li>Stomachache, stomach pain, nausea</li> </ul>	<ul> <li>Poor coordination or balance</li> <li>Blank stare/glassy eyed</li> <li>Vomiting</li> <li>Slurred speech</li> <li>Slow to answer questions or follow directions</li> <li>Easily distracted</li> <li>Poor concentration</li> <li>Strange or inappropriate emotions (ie. laughing, crying, getting mad easily)</li> <li>Not playing as well</li> </ul>

## WHAT CAUSES A CONCUSSION?

# WHAT SHOULD YOU DO IF YOUR CHILD GETS A CONCUSSION?

Any blow to the head, face or neck, or a blow to the body which causes a sudden jarring of the head may cause a concussion (ie. a ball to the head, being checked into the boards in hockey).

Your child should stop playing the sport right away.

They should not be left alone and should be seen by a doctor as soon as possible that day. If your child is knocked out, call an ambulance to take him/her to the hospital immediately. Do not move your child or remove any equipment such as helmet, in case of a cervical spine injury. Wait for paramedics to arrive.



# CONCUSSION GUIDELINES FOR PARENTS & CAREGIVERS



# HOW LONG WILL IT TAKE FOR MY CHILD TO GET BETTER?

The signs and symptoms of a concussion often last for 7-10 days but may last much longer. In some cases, children may take many weeks or months to heal. Having had previous concussions may increase the chance that a person may take longer to heal.

#### **HOW IS A CONCUSSION TREATED?**

# THE MOST IMPORTANT TREATMENT FOR A CONCUSSION IS REST.

The child should not exercise, go to school or do any activities that may make them worse, like riding a bike, play wrestling, reading, working on the computer or playing video games. If your child goes back to activities before they are completely better, they are more likely to get worse, and to have symptoms longer. Even though it is very hard for an active child to rest, this is the most important step.

Once your child is completely better at rest (all symptoms have resolved), they can start a step-wise increase in activities. It is important that your child is seen by a doctor before he/she begins the steps needed to return to activity, to make sure he/she is completely better. If possible, your child should be seen by a doctor with experience in treating concussions.

## WHEN CAN MY CHILD RETURN TO SCHOOL?

Sometimes children who have a concussion may find it hard to concentrate in school and may get a worse headache or feel sick to their stomach if they are in school. Children should stay home from school if their symptoms get worse while they are in class. Once they feel better, they can try going back to school part time to start (eg. for half days initially) and if they are okay with that, then they can go back full time.

#### WHEN CAN MY CHILD RETURN TO SPORT?

It is very important that your child not go back to sports if he/she has any concussion symptoms or signs. Return to sport and activity must follow a step-wise approach:

**STEP 1)** No activity, complete rest. Once back to normal and cleared by a doctor, go to step 2.

**STEP 2)** Light exercise such as walking or stationary cycling, for 10-15 minutes.

**STEP 3)** Sport specific aerobic activity (ie. skating in hockey, running in soccer), for 20-30 minutes. NO CONTACT.

**STEP 4)** "On field" practice such as ball drills, shooting drills, and other activities with NO CONTACT (ie. no checking, no heading the ball, etc.).

**STEP 5)** "On field" practice with body contact, once cleared by a doctor.

STEP 6) Game play.

Note: **Each step must take a minimum of one day.** If your child has any symptoms of a concussion (e.g. headache, feeling sick to his/her stomach) that come back at any step, STOP activity, wait 24-48 hours, and resume activity at previous step.

# When should I take my child to the doctor?

Every child who gets a head injury should be seen by a doctor as soon as possible. Your child should go back to the doctor IMMEDIATELY if, after being told he/she has a concussion, he/she has worsening of symptoms such as:

- 1. being more confused
- 2. headache that is getting worse
- 3. vomiting more than twice
- 4. strange behaviour
- 5. not waking up
- 6. having any trouble walking
- 7. having a seizure

Problems caused by a head injury can get worse later that day or night. The child should not be left alone and should be checked throughout the night. If you have any concerns about the child's breathing or how they are sleeping, wake them up. Otherwise, let them sleep. If they seem to be getting worse, you should see your doctor immediately. NO CHILD SHOULD GO BACK TO SPORT UNTIL THEY HAVE BEEN CLEARED TO DO SO BY A DOCTOR.

#### Pocket CONCUSSION RECOGNITION TOOL

To help identify concussion in children, youth and adults











#### **RECOGNIZE & REMOVE**

Concussion should be suspected if one or more of the following visible clues, signs, symptoms or errors in memory questions are present.

#### 1. Visible clues of suspected concussion

Any one or more of the following visual clues can indicate a possible concussion:

Loss of consciousness or responsiveness Lying motionless on ground/Slow to get up Unsteady on feet / Balance problems or falling over/Incoordination Grabbing/Clutching of head Dazed, blank or vacant look Confused/Not aware of plays or events

#### 2. Signs and symptoms of suspected concussion

Presence of any one or more of the following signs & symptoms may suggest a concussion:

- Loss of consciousness
- Seizure or convulsion
- Balance problems
- Nausea or vomiting
- Drowsiness
- More emotional
- Irritability
- Sadness
- Fatigue or low energy
- Nervous or anxious
- "Don't feel right"
- Difficulty remembering

- Headache
- Dizziness
- Confusion
- Feeling slowed down
- "Pressure in head"
- Blurred vision
- Sensitivity to light
- Amnesia
- Feeling like "in a fog"
- Neck Pain
- Sensitivity to noise
- Difficulty concentrating

#### 3. Memory function

Failure to answer any of these questions correctly may suggest a concussion.

- "At what venue are we at today?"
- "Which half is it now?"
- "Who scored last in this game?"
- "What team did you play last week/game?"
- "Did your team win the last game?"

Any athlete with a suspected concussion should be IMMEDIATELY REMOVED FROM PLAY, and should not be returned to activity until they are assessed medically. Athletes with a suspected concussion should not be left alone and should not drive a motor vehicle.

It is recommended that, in all cases of suspected concussion, the player is referred to a medical professional for diagnosis and guidance as well as return to play decisions, even if the symptoms resolve.

#### **RFD FLAGS**

If ANY of the following are reported then the player should be safely and immediately removed from the field. If no qualified medical professional is available, consider transporting by ambulance for urgent medical assessment:

- Athlete complains of neck pain
- Increasing confusion or irritability
- Repeated vomiting
- Seizure or convulsion
- Weakness or tingling/burning in arms or legs
- Deteriorating conscious state
- Severe or increasing headache
- Unusual behaviour change
- Double vision

#### Remember:

- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Do not attempt to move the player (other than required for airway support) unless trained to so do
- Do not remove helmet (if present) unless trained to do so.

from McCrory et. al, Consensus Statement on Concussion in Sport. Br J Sports Med 47 (5), 2013