

As part of a pre-season concussion education strategy, we recommended:

- Our players and parents/guardians should review as a minimum, the Summary section of this document, OR both the Respond and Recognize sections of this document (recommended) as part of their Lacrosse registration process.
- All participants in our sport should be encouraged to familiarize themselves with the entirety of our Concussion Guidelines.

Baseline (pre-season) testing of youth (<18 years) and adult recreational athletes using any tool or combination of tools is not required for post-injury care of those who sustain a suspected or diagnosed concussion and is not recommended.

For the communication between physicians and Lacrosse coaches, team officials and clubs we recommend using: Lacrosse Canada's Concussion Assessment Report, available at www. calgaryfieldlacrosse.com

Generic concussion reporting letters are also available through Parachute Canada:

**Medical Assessment Letter** 

## SUMMARY

A concussion is a brain injury.

All concussions should be regarded as potentially serious.

Most concussions recover completely with correct management.

Incorrect management of a concussion can lead to further injury.

Concussions should be managed according to current guidelines.

Anyone with suspected concussion following an injury must be immediately removed from playing or training and receive a prompt assessment by a medical doctor or nurse practitioner.

Concussions are managed by licensed health care professionals working within their scope of practice and expertise.

Concussions are managed by a limited period of rest followed by avoiding physical and brain activities that make concussive symptoms worse, and once concussion related symptoms have resolved, a step-wise return to school, work and sports-related activities.

Return to education or work must take priority over return to playing Lacrosse.

Concussion symptoms must have completely resolved and documented medical clearance completed by a medical doctor or nurse practitioner must be received before resuming full contact practice or game play.

The recurrence of concussion symptoms subsequent to the return to full contact practice or game play requires removal from training or playing and reassessment.

# CALGARY FIELD LACROSSE CLUB CONCUSSION POLICY

#### THE FINE PRINT

This policy is intended for those managing concussion in Lacrosse at all levels.

The Policy is based on current evidence and examples of best practice taken from Lacrosse organizations around the world and other sports, including the Football Association, the Scottish FA, World Rugby, and the Canadian Concussion Collaborative. They are consistent with The Canadian Guideline on Concussion in Sport, (Toronto: Parachute, 2017) and the current Consensus Statement on Concussion in Sport issued by the Fifth International Conference on Concussion in Sport, Berlin 2017.

While this policy aims to reflect 'best practice', it must be recognized that there is a current lack of evidence with respect to their effectiveness in preventing long-term harm. Calgary Field Lacrosse Club will continue to monitor research and consensus in the area of concussion and update its policies accordingly.

This version was adopted by Calgary Field Lacrosse Club in 2019.

## **ADDITIONAL RESOURCES**

#### **WEBSITES**

Sport Information Resource Centre (SIRC):

http://sirc.ca/resources/concussion

Coaching Association of Canada: Making Head Way Concussion eLearning Series:

https://www.coach.ca/concussion-awareness-s16361

Parachute:

www.parachutecanada.org/concussion

Concussion Awareness Training Tool:

www.cattonline.com

Ontario Ministry of Health Concussion Resources:

http://www.health.gov.on.ca/en/public/programs/concussions/

#### **VIDEOS**

Dr. Mike Evans Health Lab - Concussions:

https://www.reframehealthlab.com/concussions/

# **RESPOND-**WE ALL NEED TO PLAY A PART IN THE RECOGNITION AND MANAGEMENT OF CONCUSSION

As Canadians, we have a heightened awareness of concussions, related to increased media coverage of this brain injury with its range of outcomes, incidents involving high profile athletes with concussion, and increasing understanding of the consequences of repetitive brain trauma, primarily within professional sports.

#### WHAT IS A "CONCUSSION"?

Concussion is an injury to the brain resulting in a disturbance of brain function involving thinking and behavior.

#### WHAT CAUSES CONCUSSION?

Concussion can be caused by a direct blow to the head or an impact to the body causing rapid movement of the head.

#### **ONSET OF SYMPTOMS**

Symptoms of concussion typically appear immediately but may evolve within the first 24-48 hours.

#### WHO IS AT RISK?

All of our sport's participants (players, but also team staff and officials).

Some Lacrosse participants are at increased risk of concussion:

- Children and adolescents (18 years and under) are more susceptible to brain injury, take longer to recover, and are susceptible to rare dangerous brain complications, which may include death.
- Female Lacrosse players have higher rates of concussion.
- Participants with previous concussion are at increased risk of further concussions which may take longer to recover.

#### WHAT ARE THE DANGERS OF BRAIN INJURY?

Failure to recognize and report concussive symptoms or returning to activity with ongoing concussion symptoms set the stage for:

- Cumulative concussive injury
- 2. Second Impact Syndrome'

Second impact syndrome is a rare occurrence. An athlete sustains a brain injury and while still experiencing symptoms (not fully recovered), sustains a second brain injury, which is associated with brain swelling and permanent brain injury or death. Brain swelling may also occur without previous trauma.

Recurrent brain injury is currently implicated in the development of Chronic Traumatic Encephalopathy

Chronic Traumatic Encephalopathy (CTE) is a progressive degenerative brain disease seen in people with a history of brain trauma. For athletes, the brain trauma has been repetitive. Originally described in deceased boxers, it now has been recognized in many sports. Symptoms include difficulty thinking, explosive and aggressive behavior, mood disorder (depression), and movement disorder (parkinsonism).

# **RECOGNIZE -** LEARN THE SIGNS AND SYMPTOMS OF A CONCUSSION SO YOU UNDERSTAND WHEN A LACROSSE PLAYER MIGHT HAVE A SUSPECTED CONCUSSION.

Everyone involved in the game (including side-line staff, coaches, officials, players, parents and guardians of children and adolescents) should be aware of the signs, symptoms and dangers of concussion. If any of the following signs or symptoms are present following an injury the player should be suspected of having concussion and immediately removed from play or training.

"If in doubt, sit them out."

"It is better to miss one game than the whole season."

#### **VISIBLE CLUES OF CONCUSSION - WHAT YOU MAY SEE:**

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

- · Dazed, blank or vacant look
- · Lying motionless on ground / slow to get up
- Unsteady on feet / balance problems / falling over / poor coordination
- Loss of consciousness or responsiveness
- Confused or not aware of play or events
- · Grabbing, clutching, or shaking of the head
- Seizure
- Injury event that could have caused a concussion

#### SYMPTOMS OF CONCUSSION - WHAT YOU MAY BE TOLD BY AN INJURED PLAYER:

The presence of any one or more of the following symptoms may suggest a concussion:

- · Headache or "Pressure in head"
- · Dizziness or balance problems
- · Mental clouding, confusion, or feeling slowed down
- · Trouble seeing
- · Nausea or vomiting
- Fatigue
- Drowsiness or feeling like "in a fog" or difficulty concentrating
- · Sensitivity to light or noise
- · Difficulty with reading, learning or work
- Sleep problems: getting asleep, too much or too little
- Emotional / anger / sad / anxious

The Concussion Recognition Tool 5 is valuable for all first responders in recognizing suspected concussion and responding to more severe brain injury or potential neck injury.

## **CONCUSSION RECOGNITION TOOL 5®**

To help identify concussion in children, adolescents and adults



FIFΔ°







#### RECOGNISE & REMOVE

Head impacts can be associated with serious and potentially fatal brain injuries. The Concussion Recognition Tool 5 (CRT5) is to be used for the identification of suspected concussion. It is not designed to diagnose concussion.

#### STEP 1: RED FLAGS - CALL AN AMBULANCE

If there is concern after an injury including whether ANY of the following signs are n there is correlated an exported that the player should be safely and immediately observed or many are reported then the player should be safely and immediately removed from playgame/activity. In o licensed healthcare professional is available, call an ambulance for upon the dictal sassessment:

- Neck pain or tenderness
   Severe or increasing
- Double vision
- · Weakness or tingling/ burning in arms or legs
- headache
- Seizure or convulsion Loss of consciousness
- conscious state Vomiting
  - - Increasingly restless, agitated or combative

Deteriorating

#### Remember:

- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- · Assessment for a spinal cord injury is critical.
- Do not attempt to move the player (other than required for airway support) unless trained to so do.
- · Do not remove a helmet or any other equipment unless trained to do so safely.

If there are no Red Flags, identification of possible concussion should proceed to the following steps:

#### STEP 2: OBSERVABLE SIGNS

#### Visual clues that suggest possible concussion include:

- · Lving motionless on the playing surface
- · Slow to get up after a direct or indirect hit to the head
- · Disorientation or confusion, or an inability to respond appropriately to questions
- Blank or vacant look
- · Balance, gait difficulties. motor incoordination. stumbling, slow laboured movements
- · Facial injury after head trauma

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#### STEP 3: SYMPTOMS

- Headache · Blurred vision
- "Pressure in head" · Sensitivity to light
- Balance problems Sensitivity
- Nausea or vomiting
- Drowsiness Dizziness
- to noise
- · Fatigue or low energy
- · "Don't feel right"

More emotional

· More Irritable

Sadness

Nervous or

anxious

Neck Pain

- · Difficulty concentrating
- Difficulty remembering
- · Feeling slowed down
- · Feeling like "in a fog"

#### STEP 4: MEMORY ASSESSMENT

(IN ATHLETES OLDER THAN 12 YEARS)

Failure to answer any of these questions (modified appropriately for each sport) correctly may suggest a concussion:

- · "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?"

#### Athletes with suspected concussion should:

- Not be left alone initially (at least for the first 1-2 hours).
- · Not drink alcohol.
- Not use recreational/ prescription drugs.
- Not be sent home by themselves. They need to be with a responsible adult.
- Not drive a motor vehicle until cleared to do so by a healthcare professional.

The CRT5 may be freely copied in its current form for distribution to individuals, teams, groups and organisations. Any revision and any reproduction in a digital form requires approval by the Concussion in Sport Group. It should not be altered in any way, rebranded or sold for commercial gain.

ANY ATHLETE WITH A SUSPECTED CONCUSSION SHOULD BE IMMEDIATELY REMOVED FROM PRACTICE OR PLAY AND SHOULD NOT RETURN TO ACTIVITY UNTIL ASSESSED MEDICALLY, EVEN IF THE SYMPTOMS RESOLVE

# **REMOVE** - IF A LACROSSE PLAYER HAS A SUSPECTED CONCUSSION, HE OR SHE MUST BE REMOVED FROM ACTIVITY IMMEDIATELY.

Team-mates, staff, coaches, players or parents and guardians who suspect that a player may have concussion MUST work together to ensure that the player is removed from play in a safe manner.

If a neck injury is suspected the player should not be moved and should only be removed from the field of play by emergency healthcare professionals with appropriate spinal care training. Call 911. Activate your emergency action plan.

More severe forms of brain injury may be mistaken for concussion. If **ANY** of the following are observed or reported within 48 hours of an injury, then the player should be transported for urgent medical assessment at the nearest hospital (symptoms below). **Call 911.** Activate your emergency action plan.

- · Neck pain or tenderness
- · Deteriorating consciousness (more drowsy)
- · Increasing confusion or irritability
- Severe or increasing headache
- Repeated vomiting
- Unusual behavior change
- Seizure
- Double vision
- · Weakness or tingling / burning in arms or legs

#### ANYONE WITH A SUSPECTED CONCUSSION SHOULD NOT:

- be left alone until they have been assessed medically
- consume alcohol or recreational drugs in the first 24 hours, and thereafter should avoid alcohol or recreational drugs until free of all concussion symptoms
- drive a motor vehicle until cleared to do so by a medical doctor or nurse practitioner

**RE-ENTRY** – A LICENSED HEALTHCARE PROFESSIONAL WITH EXPERTISE IN THE EVALUATION AND MANAGEMENT OF HEAD INJURY AND CONCUSSIONS MAY REVIEW A PLAYER WITH SUSPECTED CONCUSSION AT FIELD SIDE.

A player who has been removed from play who reports NO concussion symptoms and NO visual clues of a concussion can be returned to play. Any such player should be monitored for delayed symptoms, which may appear over the next 24-48 hours. If there is any doubt whether a player has sustained a concussion, they should be removed from play and undergo medical assessment by a medical doctor or nurse practitioner.

# REFER - ONCE REMOVED FROM PLAY, THE PLAYER WITH SUSPECTED CONCUSSION MUST BE REFERRED TO A MEDICAL DOCTOR OR NURSE PRACTITIONER WITH TRAINING IN THE EVALUATION AND MANAGEMENT OF HEAD INJURY AND CONCUSSIONS

All cases of suspected concussion require referral to medical doctors or nurse practitioners for diagnosis, even if the symptoms resolve.

In geographic regions of Canada with limited access to medical doctors (rural or northern communities), a licensed healthcare professional (i.e. nurse) with support from a medical doctor or nurse practitioner can provide this diagnostic evaluation.

# **REPORT** – COMMUNICATION BETWEEN PLAYERS, PARENTS, TEAM STAFF, AND THEIR HEALTH CARE PROVIDERS IS VITAL FOR THE WELFARE OF THE PLAYER.

Players, parents and guardians must disclose the nature of, and status of all active injuries (including concussions) to coaches and team staff.

Players need to be responsible for one another and encourage the disclosure of concussion symptoms.

For children and adolescents with suspected concussion who have not been directly transferred for medical management, coaches must communicate their concerns directly with the parents or guardians.

# RECOVER – AVOIDING PHYSICAL AND BRAIN ACTIVITIES THAT MAKE CONCUSSIVE SYMPTOMS WORSE IS THE CORNERSTONE OF CURRENT CONCUSSION MANAGEMENT.

The management of a concussion involves an initial limited period (<24-48 hours) of physical and brain rest.

Stage 1 of the Return-to-Lacrosse Strategy (see Return to Lacrosse Strategy, page 11) involves avoiding or limiting physical and brain activities that make concussive symptoms worse.

Once concussion related symptoms have resolved, the player may start Stage 2 and continue to proceed to the next level when he/she completes the stage without a recurrence of concussion-related symptoms.

In conjunction with your school and educational professionals and health care provider, recommendations will be made about whether it is appropriate to take time away from school, or whether returning to school should be done in a graded fashion, this is called "return to learn".

Your health care provider will also make recommendations about whether it is appropriate to take time away from work, or whether returning to work should be done in a graded fashion, this is called "return to work".

## **RETURN TO PLAY**

Players who have been removed from play and referred for medical assessment for a suspected concussion who provide a completed Concussion Assessment Medical Report that is signed by a medical doctor or nurse practitioner which documents NO active concussion may participate in training sessions and game play.

Players who have been removed from play and referred for assessment for a suspected concussion who provide a completed Concussion Assessment Medical Report that is signed by a medical doctor or nurse practitioner which documents a concussion diagnosis may participate in training sessions (Stage 3 and 4) within the Return-to-Lacrosse Strategy (next page), once they or their parents/guardians report NO concussion symptoms and successfully completing Stage 2 (15 minutes of light aerobic activity).

Players who have concluded Stage 4 within a Return-to-Lacrosse Strategy who provide a second completed Concussion Assessment Medical Report that is signed by a medical doctor or nurse practitioner which documents recovered concussion may participate in full contact training sessions (Stage 5) and subsequently, game play within the Return- to-Lacrosse Strategy (next page), if they remain clear of concussion symptoms.

## **REASSESS**

A player with prolonged concussion recovery (>4 weeks for youth athletes, >2 weeks for adult athletes), or recurrent or complicated concussions, should be assessed and managed by a medical doctor with experience in sports-related concussions, working within a multidisciplinary team.

# RETURN TO LACROSSE STRATEGY

Depending on the severity and type of the symptoms, players may progress through the following stages at different rates. Stages 2-4 should each take a minimum of 24 hours in adults, and longer in those 18 years and under.

If the player experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage and attempt to progress again after being free of concussion-related symptoms for 24 hour or seek medical attention.

	EXERCISE ALLOWED	% MAX HEART RATE	DURATION	OBJECTIVE
STAGE 0 REST	<ul><li>Rest</li><li>NO activities</li></ul>	No training	< 1-2 Days	Rest
STAGE 1 SYMPTOM LIMITED	Daily activities that do not provoke symptoms		Until concussion symptoms clear	Recovery Symptom free
STAGE 2 LIGHT EXERCISE	<ul> <li>Walking, light jogging, swimming, stationary cycling or at slowtmedium pace</li> <li>NO Lacrosse</li> <li>NO resistance training, weight lifting, jumping or hard running</li> </ul>	< 70%	< 15 min	Increase heart rate
STAGE 3 LACROSSE-SPECIFIC EXERCISE	<ul> <li>Simple movement activities ie. running drills</li> <li>Limit body and head movement</li> <li>NO head impact activities</li> <li>NO heading</li> </ul>	< 80%	< 45 min	Add movement
STAGE 4 NON-CONTACT TRAINING	<ul> <li>Progression to more complex training activities with increased intensity,</li> <li>coordination and attention e.g. passing, change of direction, shooting, small-sided game</li> <li>May start resistance training</li> <li>NO head impact activities including NO heading</li> <li>goalkeeping activities should avoid diving and any risk of the head being hit by a ball</li> </ul>	< 90%	< 60 min	Exercise, coordination and skills/tactics
	Youth (<18 years) and adult student-athletes have returned to full-time school activities at this time			
	Repeat medical assessment with second Concussion Assessment Medical Report			
STAGE 5 FULL CONTACT PRACTICE	Normal training activities ie tackling, heading, diving saves	< 100%		Restore confidence and assess functional skills by coaching staff
STAGE 6 GAME PLAY	Normal game play.	< 100%		Player rehabilitated