

## Pre-Season Concussion Education Sheet

### WHAT IS A CONCUSSION?

A concussion is a brain injury that can't be seen on x-rays, CT or MRI scans. It affects the way an athlete thinks and can cause a variety of symptoms.

### WHAT CAUSES A CONCUSSION?

Any blow to the head, face or neck, or somewhere else on the body that causes a sudden jarring of the head may cause a concussion. Examples include getting punched or kicked in the head or hitting one's head on the tatami.

### WHEN SHOULD I SUSPECT A CONCUSSION?

A concussion should be suspected in any athlete who sustains a significant impact to the head, face, neck, or body and reports ANY symptoms or demonstrates ANY visual signs of a concussion. A concussion should also be suspected if an athlete reports ANY concussion symptoms to one of their peers, parents, or coaches or if anyone witnesses an athlete exhibiting ANY of the visual signs of concussion. Some athletes will develop symptoms immediately while others will develop delayed symptoms (beginning 24 to 48 hours after the injury).

### WHAT ARE THE SYMPTOMS OF A CONCUSSION?

A person does not need to be knocked out (lose consciousness) to have had a concussion. Common symptoms include:

- ▶ Headaches or head pressure
- ▶ Dizziness
- ▶ Nausea and vomiting
- ▶ Blurred or fuzzy vision
- ▶ Sensitivity to light or sound
- ▶ Balance problems
- ▶ Feeling tired or having no energy
- ▶ Not thinking clearly
- ▶ Feeling slowed down
- ▶ Easily upset or angered
- ▶ Sadness
- ▶ Nervousness or anxiety
- ▶ Feeling more emotional
- ▶ Sleeping more or sleeping less
- ▶ Having a hard time falling asleep
- ▶ Difficulty working on a computer
- ▶ Difficulty reading
- ▶ Difficulty learning new information

### WHAT ARE THE VISUAL SIGNS OF A CONCUSSION?

Visual signs of a concussion may include:

- ▶ Lying motionless on the tatami
- ▶ Slow to get up after a direct or indirect hit to the head
- ▶ Disorientation or confusion or inability to respond appropriately to questions
- ▶ Blank or vacant stare
- ▶ Balance, gait difficulties, motor incoordination, stumbling, slow labored movements
- ▶ Facial injury after head trauma
- ▶ Clutching head

### WHAT SHOULD I DO IF I SUSPECT A CONCUSSION?

If any athlete is suspected of sustaining a concussion during sports they should be immediately removed from play. Any athlete who is suspected of having sustained a concussion during sports must not be allowed to return to the same match or practice.

**It is important that ALL athletes with a suspected concussion undergo medical assessment by a medical doctor or nurse practitioner, as soon as possible. It is also important that ALL athletes with a suspected concussion receive written medical clearance from a medical doctor or nurse practitioner before returning to sport activities.**

### WHEN CAN THE ATHLETE RETURN TO KARATE?

It is important that all athletes diagnosed with a concussion follow a steps wise return to sports-related activities that includes the following Return-to-Sport Strategies. It is important that minor and adult student-athletes return to full-time school activities before progressing to stage 5 and 6 of the Return-to-Sport Strategy.

#### Karate-Specific Return-to-Sport Strategy<sup>1</sup>

Stage	Aim	Activity	Goal of each step
1	Symptom-limiting activity	Daily activities that do not provoke symptoms.	Gradual re-introduction of work/school activities.
2	Light aerobic activity	Walking or stationary cycling at slow to medium pace. No resistance training.	Increase heart rate.
3	Sport-specific exercise	Shadow boxing in mirror or Kata. No head impact activities.	Add movement.
4	Non-contact training drills	Harder training drills. May start progressive resistance training, increase intensity.	Exercise, coordination and increased thinking.
5	Semi contact practice	Following medical clearance.	Restore confidence and assess functional skills by coaching staff.
6	Return to sport	Normal training and return to competition.	

### HOW LONG WILL IT TAKE FOR THE ATHLETE TO RECOVER?

Most athletes who sustain a concussion will make a complete recovery within 1-2 weeks while most minor athletes will recover within 1-4 weeks. Approximately 15-30% of patients will experience persistent symptoms (>2 weeks for adults; >4 weeks for minors) that may require additional medical assessment and management.

<sup>1</sup>Source: McCrory et al. (2017). Consensus statement on concussion in sport – the 5th international conference on concussion in sport held in Berlin, October 2016. *British Medical Journal* (352), 838-847.

**HOW CAN I HELP PREVENT CONCUSSIONS AND THEIR CONSEQUENCES?**

Concussion prevention, recognition and management require athletes to follow the rules and regulations of their sport, respect their opponents, avoid head contact, and report suspected concussions.

**TO LEARN MORE ABOUT CONCUSSIONS PLEASE VISIT:**

Parachute Canada: [www.parachute.ca/concussion](http://www.parachute.ca/concussion)

**SIGNATURES :** The following signatures certify that the athlete and his/her parent or legal guardian have reviewed the above information related to concussion and that the athlete participated in the Karate Canada Concussion Seminar.

\_\_\_\_\_  
Printed name of athlete

\_\_\_\_\_  
Signature of athlete

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name of parent

\_\_\_\_\_  
Signature of parent

\_\_\_\_\_  
Date