

KARATE CANADA CONCUSSION GUIDELINES

Adapted from: Parachute. (2017). Canadian Guideline on Concussion in Sport.
www.parachute.ca/concussion



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KARATE CANADA CONCUSSION GUIDELINES

Adapted from: Parachute. (2017). Canadian Guideline on Concussion in Sport.
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Karate Canada has developed the **Karate Canada Concussion Guidelines** to help guide the management of athletes who may have a suspected concussion as a result of participation in **Karate Canada** activities.

Purpose

These guidelines cover the recognition, when to obtain medical diagnosis, and management of athletes who may sustain a suspected concussion during a Karate Canada activity. It aims to ensure that athletes with a suspected concussion receive timely and appropriate care and proper management to allow them to return back to karate safely. These guidelines may not address every possible clinical scenario that can occur during karate-related activities but include critical elements based on the latest evidence and current expert consensus.

Who should use these guidelines?

These guidelines are intended for use by all individuals who interact with athletes in connection with organized Karate Canada activities, including athletes, parents, coaches, officials, trainers, and licensed healthcare professionals.

While these guidelines are applicable to Karate Canada activities, they may be adapted and / or utilized by Provincial or Territorial Sport Organizations (PTSO) members of Karate Canada and their clubs / dojos. These guidelines are not intended to replace or supersede provincial concussion legislation where applicable, and it is recommended that all PTSO members ensure their concussion protocols are in compliance with provincial requirements.

For clarity, Karate Canada considers the age of majority to be eighteen (18) years of age. If using these guidelines as above, please note that the age of majority differs between provinces and adjust as necessary.

For a summary of the Karate Canada Concussion Guidelines please refer to the **Karate Canada Sport Concussion Pathway** figure in annex of this document.

1. Pre-Season Education

Despite recent increased attention focusing on concussion there is a continued need to improve concussion education and awareness. Optimizing the prevention and management of concussion depends highly on education of all sport stakeholders (athletes, parents, coaches, officials, trainers, licensed healthcare professionals) on current evidence-informed approaches that can prevent concussion and more serious forms of head injury and help identify and manage an athlete with a suspected concussion.

Concussion education should include information on:

- the definition of concussion,
- possible mechanisms of injury,
- common signs and symptoms,
- steps that can be taken to prevent concussions and other injuries from occurring in sport.
- what to do when an athlete has suffered a suspected concussion or more serious head injury,
- what measures should be taken to ensure proper medical assessment,
- Return-to-Sport Strategies, and
- Return to sport medical clearance requirements

All National Team Roster athletes and parents (for athletes under 18 years old) are required to review and submit a signed copy of the ***Pre-season Concussion Education Sheet***, which will be provided shortly after the naming of the National Team Roster at the start of each competitive season. In addition, all Karate Canada stakeholders (National Team Roster athletes, National Team coaches, Provincial Team coaches supporting athletes at National Championships and national officials) are required to complete the mandatory Karate Canada Concussion Education Seminar (either in-person - i.e. at training camps - or virtual) and acknowledge that they have a clear understanding of the **Karate Canada Concussion Guidelines**.

2. Head Injury Recognition

Although the formal diagnosis of concussion should be made following a medical assessment, all sport stakeholders, including athletes, parents, coaches, officials, and licensed healthcare professionals, are responsible for the recognition and reporting of athletes who may demonstrate visual signs of a head injury or who report concussion-related symptoms. This is particularly important because many sport and recreation venues will not have access to on-site licensed healthcare professionals.

A concussion should be suspected:

- in any athlete who sustains a significant impact to the head, face, neck, or body and demonstrates ANY of the visual signs of a suspected concussion or reports ANY symptoms of a suspected concussion as detailed in the **Concussion Recognition Tool 5**.
- 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.

In some cases, an athlete may demonstrate signs or symptoms of a more severe head or spine injury including convulsions, worsening headaches, vomiting or neck pain. If an athlete demonstrates any of the 'Red Flags' indicated by the **Concussion Recognition Tool 5**, a more severe head or spine injury should be suspected, and Emergency Medical Assessment should be pursued.

3. Onsite Medical Assessment

Depending on the suspected severity of the injury, an initial assessment may be completed by emergency medical professionals or by an on-site licensed healthcare professional where available. In cases where an athlete loses consciousness or it is suspected an athlete might have a more severe head or spine injury, Emergency Medical Assessment by emergency medical professionals should take place (see 3a below). If a more severe injury is not suspected, the athlete should undergo Sideline Medical Assessment or Medical Assessment, depending on if there is a licensed healthcare professional present (see 3b below).

3a. Emergency Medical Assessment

If an athlete is suspected of sustaining a more severe head or spine injury during a competition or practice, an ambulance should be called immediately to transfer the patient to the nearest emergency department for further Medical Assessment.

Coaches, parents, trainers and officials should not make any effort to remove equipment or move the athlete until an ambulance has arrived and the athlete should not be left alone until the ambulance arrives. After the emergency medical services staff has completed the Emergency Medical Assessment, the athlete should be transferred to the nearest hospital for Medical Assessment. In the case of minors (under 18 years of age), the athlete's parents should be contacted immediately to inform them of the athlete's injury. For athletes over 18 years of age, their emergency contact person should be contacted if one has been provided.

3b. Sideline Medical Assessment

If an athlete is suspected of sustaining a concussion and there is no concern for a more serious head or spine injury, the athlete should be immediately removed from the field of play.

Scenario 1: If a licensed healthcare professional is present

A licensed healthcare professional, for the purposes of these guidelines, includes an experienced certified athletic therapist, physiotherapist, medical doctor or other healthcare professional qualified to make a determination as to whether a concussion may have occurred, who is providing medical coverage for the sporting event.

The athlete should be taken to a quiet area and undergo Sideline Medical Assessment using the **Sport Concussion Assessment Tool 5** (SCAT5) or the **Child SCAT5**. The SCAT5 and Child SCAT5 are clinical tools that should only be used by a licensed healthcare professional that has experience using these tools. It is important to note that the results of SCAT5 and Child SCAT5 testing can be normal in the setting of acute concussion. As such, these tools can be used by licensed healthcare professionals to document initial neurological status but should not be used to make sideline return-to-sport decisions for minor athletes. Any minor athlete who is suspected of having sustained a concussion must not return to the competition or practice and must be referred for Medical Assessment.

If a minor athlete is removed from play following an impact and has undergone assessment by a licensed healthcare professional, but there are NO signs or symptoms of a concussion and the athlete reports NO concussion signs or symptoms then the athlete can be returned to play but should be monitored after the event and for delayed symptoms.

In the case of athletes aged 18 years and older, a licensed healthcare professional may determine that a concussion has not occurred based on the results of the Sideline Medical Assessment. In these cases, the athlete may be returned to the practice or competition without a **Medical Clearance Letter** but this should be clearly communicated to the coaching staff by the designated health care provider that a concussion has not occurred. Athletes who have been cleared to return to competitions or practices should be monitored by a Karate Canada designated individual(s) for delayed symptoms. If the athlete develops any delayed symptoms the athlete should be removed from play and undergo medical assessment by a medical doctor.

Scenario 2: If there is no licensed healthcare professional present

The athlete should be referred immediately for medical assessment by a medical doctor and must not return to play until receiving medical clearance.

4. Medical Assessment

In order to provide comprehensive evaluation of athletes with a suspected concussion, the medical assessment must rule out more serious forms of traumatic brain and spine injuries, must rule out medical and neurological conditions that can present with concussion-like symptoms,

and must make the diagnosis of concussion based on findings of the clinical history and physical examination and the evidence-based use of adjunctive tests as indicated (i.e. CT scan). In addition to medical doctors¹, specialists qualified to evaluate patients with a suspected concussion include: nurse practitioners; pediatricians; family medicine, sports medicine, emergency department, internal medicine, and rehabilitation (physiatrists) physicians; neurologists; and neurosurgeons.

In geographic regions of Canada with limited access to medical doctors (i.e. rural or northern communities), a licensed healthcare professional (i.e. nurse) with pre-arranged access to a medical doctor or nurse practitioner can facilitate this role.

The medical assessment is responsible for determining whether the athlete has been diagnosed with a concussion or not. Athletes with a diagnosed concussion should be provided with a Medical Assessment Letter indicating a concussion has been diagnosed. Athletes that are determined to have not sustained a concussion must be provided with a **Medical Assessment Letter** indicating a concussion has not been diagnosed and the athlete can return to sports activities without restriction.

5. Concussion Management

When an athlete has been diagnosed with a concussion, it is important that the athlete's parent/legal guardian is informed. All athletes diagnosed with a concussion must be provided with a standardized Medical Assessment Letter that notifies the athlete and their parents/legal guardians/spouse that they have been diagnosed with a concussion and may not return to any activities with a risk of concussion until medically cleared to do so by a medical doctor. Because the **Medical Assessment Letter** contains personal health information, it is the responsibility of the athlete or their parent/legal guardian to provide this documentation to the athlete's coaches. It is also important for the athlete to provide this information to sport organization officials that are responsible for injury reporting and concussion surveillance where applicable.

Athletes diagnosed with a concussion should be provided with education about the signs and symptoms of concussion, strategies about how to manage their symptoms, the risks of returning to sport without medical clearance and recommendations regarding a gradual return to sport activities. Athletes diagnosed with a concussion are to be managed according to the Karate-Specific Return-to-Sport Strategy under the supervision of a medical doctor. When available, athletes should be encouraged to work with the team athletic therapist or physiotherapist to optimize progression through the Karate-Specific Return-to-Sport Strategy. Once the athlete has completed their Karate-Specific Return-to-Sport Strategy and are deemed to be clinically recovered from their concussion, the medical doctor can consider the athlete for a return to full sports activities and issue a **Medical Clearance Letter**.

¹ Medical doctors and nurse practitioners are the only healthcare professionals in Canada with licensed training and expertise to meet these needs; therefore, all athletes with a suspected concussion should undergo evaluation by one of these professionals.

The following is an outline of the Return-to-Sport Strategy that should be used to help athletes, coaches, trainers, and medical professionals to partner in allowing the athlete to make a gradual return to sport activities. An initial period of 24-48 hours of rest is recommended before starting the Karate-Specific Return-to-Sport Strategy. The athlete should spend a minimum duration of 24 hours without symptom increases at each stage before progressing to the next one. If the athlete experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage. It is important that youth and adult student-athletes return to full-time school activities before progressing to stage 5 and 6 of the Karate-Specific Return-to-Sport Strategy. It is also important that all athletes provide their coach with a Medical Clearance Letter prior to returning to semi contact sport activities.

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 <ul style="list-style-type: none"> • Light intensity jogging or stationary cycling for 15-20 minutes at sub-symptom threshold intensity 	Increase heart rate
3	Sport-specific exercise	Shadow boxing in mirror or Kata. No head impact activities <ul style="list-style-type: none"> • Moderate intensity jogging for 30-60 minutes at sub-symptom threshold intensity • Low to moderate impact footwork drills, targets and agility drills 	Add movement
4	Non-contact training drills	Harder training drills. May start progressive resistance training, increase intensity <ul style="list-style-type: none"> • Participation in high intensity drills • Non-contact practice without partner • Participation in resistance training work-outs 	Exercise, coordination and increased thinking
5	Semi contact practice	Following medical clearance <ul style="list-style-type: none"> • Participation in full practice without activity restriction 	Restore confidence and assess functional skills by coaching staff
6	Return to sport	Normal training and return to competition	

McCrory et al. (2017). Consensus statement on concussion in sport – the 5th international conference on concussion in sport held in Berlin, October 2016. British Journal of Sports Medicine, 51(11), 838-847.

6. Multidisciplinary Concussion Care

This section is for information only and has been provided by Parachute for reference. Please consult your medical doctor if you require more information about multidisciplinary concussion care.

Most athletes who sustain a concussion while participating in sport will make a complete recovery and be able to return to full sport activities within 1-4 weeks of injury. However, approximately 15-30% of individuals will experience symptoms that persist beyond this time frame. If available, individuals who experience persistent post-concussion symptoms (>4 weeks for minor athletes, >2 weeks for adult athletes) may benefit from referral to a medically supervised multidisciplinary concussion clinic that has access to professionals with licensed training in traumatic brain injury that may include experts in sport medicine, neuropsychology, physiotherapy, occupational therapy, neurology, neurosurgery, and rehabilitation medicine.

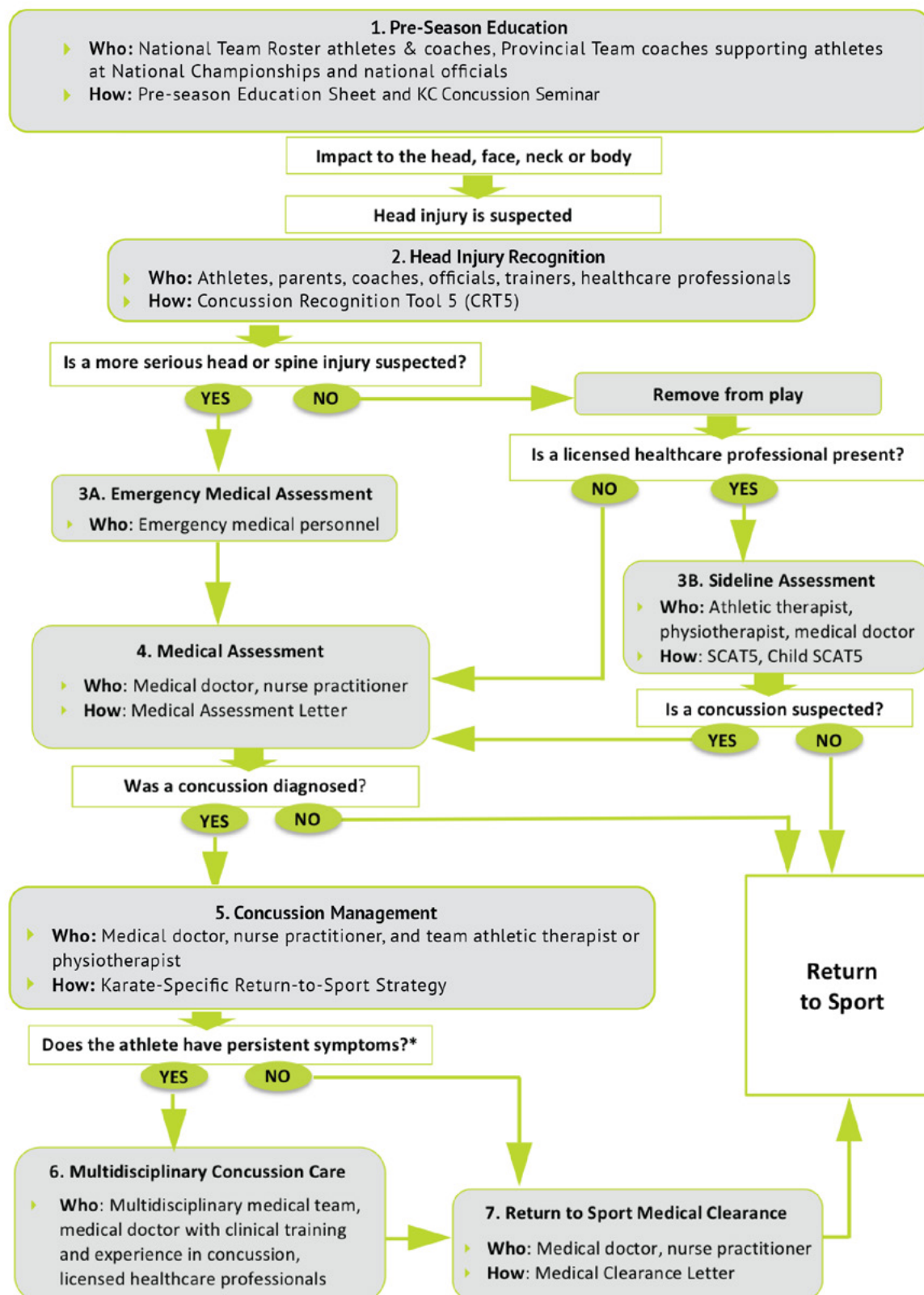
Referral to a multidisciplinary clinic for assessment should be made on an individualized basis at the discretion of an athlete's medical doctor. If access to a multidisciplinary concussion clinic is not available, a referral to a medical doctor with clinical training and experience in concussion (e.g. a sport medicine physician, neurologist, or rehabilitation medicine physician) should be considered for the purposes of developing an individualized treatment plan. Depending on the clinical presentation of the individual, this treatment plan may involve a variety of health care professionals with areas of expertise that address the specific needs of the athlete based on the assessment findings.

7. Return to Sport

Athletes who have been determined to have not sustained a concussion and those that have been diagnosed with a concussion and have successfully completed their Karate-Specific Return-to-Sport Strategy can be considered for return to full sports activities. The final decision to medically clear an athlete to return to full sport activity should be based on the clinical judgment of the medical doctor. Prior to returning to semi contact practice and competition, each athlete that has been diagnosed with a concussion must provide their coach with a standardized **Medical Clearance Letter** that specifies that a medical doctor has personally evaluated the patient and has cleared the athlete to return to sports. In geographic regions of Canada with limited access to medical doctors (i.e. rural or northern communities), a licensed healthcare professional (such as a nurse) with pre-arranged access to a medical doctor or nurse practitioner can provide this documentation. A copy of the Medical Clearance Letter should also be submitted to sports organization officials that have injury reporting and surveillance programs where applicable. Without the Medical Clearance Letter, Karate Canada can prevent an athlete from participating in trainings and/or competitions.

Athletes who have been provided with a Medical Clearance Letter may return to full sport activities as tolerated. If the athlete experiences any new concussion-like symptoms while returning to play, they should be instructed to stop playing immediately, notify their parents, coaches, trainer, and undergo follow-up Medical Assessment. In the event that the athlete sustains a new suspected concussion, the **Karate Canada Concussion Guidelines** should be followed as outlined here.

Karate Canada Concussion Pathway



*Persistent symptoms: lasting > 4 weeks in children & youth or > 2 weeks in adults

ANNEX 1

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.

ANNEX 1

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 Strategy¹

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.

¹Source: McCrory et al. (2017). Consensus statement on concussion in sport – the 5th international conference on concussion in sport held in Berlin, October 2016. *British Journal of Sports Medicine*, 51(11), 838-847.

ANNEX 1

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

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

ANNEX 2

Medical Assessment Letter

Date: _____ Athlete's Name: _____

To whom it may concern,

Athletes who sustain a suspected concussion should be managed according to the *Canadian Guideline on Concussion in Sport*. Accordingly, I have personally completed a Medical Assessment on this patient.

Results of Medical Assessment

- ☐ This patient has not been diagnosed with a concussion and can resume full participation in school, work, and sport activities without restriction.
- ☐ This patient has not been diagnosed with a concussion but the assessment led to the following diagnosis and recommendations:

- ☐ This patient has been diagnosed with a concussion.

The goal of concussion management is to allow complete recovery of the patient's concussion by promoting a safe and gradual return to school and sport activities. The patient has been instructed to avoid all recreational and organized sports or activities that could potentially place them at risk of another concussion or head injury. Starting on _____ (date), I would ask that the patient be allowed to participate in school and low-risk physical activities as tolerated and only at a level that does not bring on or worsen their concussion symptoms. The above patient should not return to any full contact practices or games until the coach has been provided with a *Medical Clearance Letter* provided by a medical doctor or nurse practitioner in accordance with the *Canadian Guideline on Concussion in Sport*. Athletes and their parents/caregivers should check the return to play strategy of their sport governing body to ensure they meet the necessary requirements.

Other comments:

Thank-you very much in advance for your understanding.

Yours Sincerely,

Signature/print _____ M.D. / N.P. (circle appropriate designation)*

**In rural or northern regions, the Medical Assessment Letter may be completed by a nurse with pre-arranged access to a medical doctor or nurse practitioner. Forms completed by other licensed healthcare professionals should not otherwise be accepted.*

We recommend that this document be provided to the athlete without charge.

Canadian Guideline on Concussion in Sport | Medical Assessment Letter
parachute.ca/guideline

ANNEX 2

Return-to-School Strategy¹

The following is an outline of the *Return-to-School Strategy* that should be used to help student-athletes, parents, and teachers to partner in allowing the athlete to make a gradual return to school activities. Depending on the severity and type of the symptoms present, student-athletes will progress through the following stages at different rates. If the student-athlete experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage.

Stage	Aim	Activity	Goal of each step
1	Daily activities at home that do not give the student-athlete symptoms	Typical activities during the day as long as they do not increase symptoms (i.e. reading, texting, screen time). Start at 5-15 minutes at a time and gradually build up.	Gradual return to typical activities.
2	School activities	Homework, reading or other cognitive activities outside of the classroom.	Increase tolerance to cognitive work.
3	Return to school part-time	Gradual introduction of schoolwork. May need to start with a partial school day or with increased breaks during the day.	Increase academic activities.
4	Return to school full-time	Gradually progress.	Return to full academic activities and catch up on missed school work.

Sport-Specific Return-to-Sport Strategy¹

The following is an outline of the *Return-to-Sport Strategy* that should be used to help athletes, coaches, trainers, and medical professionals to partner in allowing the athlete to make a gradual return to sport activities. Activities should be tailored to create a sport-specific strategy that helps the athlete return to their respective sport.

An initial period of 24-48 hours of rest is recommended before starting their *Sport-Specific Return-to-Sport Strategy*. If the athlete experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage. It is important that youth and adult student-athletes return to full-time school activities before progressing to stage 5 and 6 of the *Sport-Specific Return-to-Sport Strategy*. It is also important that all athletes provide their coach with a *Medical Clearance Letter* prior to returning to full contact sport activities.

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	Running or skating drills. No head impact activities.	Add movement.
4	Non-contact training drills	Harder training drills, e.g. passing drills. May start progressive resistance training.	Exercise, coordination and increased thinking.
5	Full contact practice	Following medical clearance and complete return to school.	Restore confidence and assess functional skills by coaching staff.
6	Return to sport	Normal game play.	

¹Source: McCrory et al. (2017). Consensus statement on concussion in sport – the 5th international conference on concussion in sport held in Berlin, October 2016. *British Journal of Sports Medicine*, 51(11), 838-847. <http://dx.doi.org/10.1136/bjsports-2017-097699>

ANNEX 3

Medical Clearance Letter

Date: _____ Athlete's Name: _____

To whom it may concern,

Athletes who are diagnosed with a concussion should be managed according to the *Canadian Guideline on Concussion in Sport* including the *Return-to-School* and *Return-to-Sport Strategies* (see page 2 of this letter). Accordingly, the above athlete has been medically cleared to participate in the following activities as tolerated effective the date stated above (please check all that apply):

- ☐ **Symptom-limiting activity (cognitive and physical activities that don't provoke symptoms)**
- ☐ **Light aerobic activity (Walking or stationary cycling at slow to medium pace. No resistance training)**
- ☐ **Sport-specific exercise (Running or skating drills. No head impact activities)**
- ☐ **Non-contact practice (Harder training drills, e.g. passing drills. May start progressive resistance training. Including gym class activities without a risk of contact, e.g. tennis, running, swimming)**
- ☐ **Full-contact practice (Including gym class activities with risk of contact and head impact, e.g. soccer, dodgeball, basketball)**
- ☐ **Full game play**

What if symptoms recur? Any athlete who has been cleared for physical activities, gym class or non-contact practice, and who has a recurrence of symptoms, should immediately remove himself or herself from the activity and inform the teacher or coach. If the symptoms subside, the athlete may continue to participate in these activities as tolerated.

Athletes who have been cleared for full contact practice or game play must be able to participate in full-time school (or normal cognitive activity) as well as high intensity resistance and endurance exercise (including non-contact practice) without symptom recurrence. Any athlete who has been cleared for full-contact practice or full game play and has a recurrence of symptoms, should immediately remove himself or herself from play, inform their teacher or coach, and undergo medical assessment by a medical doctor or nurse practitioner before returning to full-contact practice or games.

Any athlete who returns to practices or games and sustains a new suspected concussion should be managed according to the *Canadian Guideline on Concussion in Sport*.

Other comments:

Thank-you very much in advance for your understanding.

Yours Sincerely,

Signature/print _____ M.D. / N.P. (circle appropriate designation)*

*In rural or northern regions, the Medical Clearance Letter may be completed by a nurse with pre-arranged access to a medical doctor or nurse practitioner. Forms completed by other licensed healthcare professionals should not otherwise be accepted.

We recommend that this document be provided to the athlete without charge.

ANNEX 3

Return-to-School Strategy¹

The following is an outline of the *Return-to-School Strategy* that should be used to help student-athletes, parents, and teachers to partner in allowing the athlete to make a gradual return to school activities. Depending on the severity and type of the symptoms present, student-athletes will progress through the following stages at different rates. If the student-athlete experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage.

Stage	Aim	Activity	Goal of each step
1	Daily activities at home that do not give the student-athlete symptoms	Typical activities during the day as long as they do not increase symptoms (i.e. reading, texting, screen time). Start at 5-15 minutes at a time and gradually build up.	Gradual return to typical activities.
2	School activities	Homework, reading or other cognitive activities outside of the classroom.	Increase tolerance to cognitive work.
3	Return to school part-time	Gradual introduction of schoolwork. May need to start with a partial school day or with increased breaks during the day.	Increase academic activities.
4	Return to school full-time	Gradually progress.	Return to full academic activities and catch up on missed school work.

Sport-Specific Return-to-Sport Strategy¹

The following is an outline of the *Return-to-Sport Strategy* that should be used to help athletes, coaches, trainers, and medical professionals to partner in allowing the athlete to make a gradual return to sport activities. Activities should be tailored to create a sport-specific strategy that helps the athlete return to their respective sport.

An initial period of 24-48 hours of rest is recommended before starting their *Sport-Specific Return-to-Sport Strategy*. If the athlete experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage. It is important that youth and adult student-athletes return to full-time school activities before progressing to stage 5 and 6 of the *Sport-Specific Return-to-Sport Strategy*. It is also important that all athletes provide their coach with a *Medical Clearance Letter* prior to returning to full contact sport activities.

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	Running or skating drills. No head impact activities.	Add movement.
4	Non-contact training drills	Harder training drills, e.g. passing drills. May start progressive resistance training.	Exercise, coordination and increased thinking.
5	Full contact practice	Following medical clearance and complete return to school.	Restore confidence and assess functional skills by coaching staff.
6	Return to sport	Normal game play.	

¹Source: McCrory et al. (2017). Consensus statement on concussion in sport – the 5th international conference on concussion in sport held in Berlin, October 2016. *British Journal of Sports Medicine*, 51(11), 838-847. <http://dx.doi.org/10.1136/bjsports-2017-097699>