



TAEKWONDO
CANADA

CONCUSSION EDUCATION TOOLKIT

for Coaches, Referees & Safety Personnel

January 2022

Table of Contents

PRE-COMPETITION CONCUSSION EDUCATION CHECKLIST	4
PRE-COMPETITION CONCUSSION EDUCATION ATHLETE MEETING GUIDE	6
PRE-COMPETITION CONCUSSION EDUCATION FACT SHEET	9
WHAT IS A CONCUSSION?	9
WHAT CAUSES A CONCUSSION?	9
WHEN SHOULD I SUSPECT A CONCUSSION?	9
WHAT ARE THE SYMPTOMS OF A CONCUSSION?	9
WHAT ARE THE VISUAL SIGNS OF A CONCUSSION?	10
WHAT SHOULD I DO IF I SUSPECT A CONCUSSION?	10
WHEN CAN THE ATHLETE RETURN TO SCHOOL, WORK AND SPORTS?	10
RETURN-TO-SCHOOL/WORK STRATEGY	10
TAEKWONDO-SPECIFIC RETURN-TO-SPORT STRATEGY	11
HOW LONG WILL IT TAKE FOR THE ATHLETE TO RECOVER?	11
HOW CAN I HELP PREVENT CONCUSSIONS AND THEIR CONSEQUENCES?	12
CONCUSSION CODES OF CONDUCT (OPTIONAL)	13
TIPS TO PREVENT CONCUSSIONS AND OTHER INJURIES IN TAEKWONDO GUIDE	16
CONCUSSION ACTION PLAN GUIDE	17
TAEKWONDO RETURN-TO-SPORT STRATEGY	21
TAEKWONDO RETURN-TO-SCHOOL/WORK STRATEGY	26
CONCUSSION FREQUENTLY ASKED	28
QUESTIONS (FAQ) GUIDE	28
GENERAL	28
CONCUSSION PREVENTION AND MANAGEMENT	31
PROVINCIAL SPECIFICATIONS	32
REFERENCES	33
APPENDIX A – MEDICAL CLEARANCE LETTER	34
APPENDIX B – TAEKWONDO CONCUSSION PATHWAY	35
APPENDIX C – CONCUSSION RECOGNITION TOOL 5 (CRT5)	36

To our valued Taekwondo Canada members,

On behalf of Taekwondo Canada, I am proud to present our new Concussion Education Toolkit to you. This toolkit, created in conjunction with Parachute Canada, will allow our athletes as well as coaches, referees and parents the ability to better understand the realities of concussions and concussion management.

The development of this toolkit is crucial to the safety and development of athletes across Canada, ensuring that safety is the number one priority when training or competing in taekwondo at any age or skill level. It also ensures that coaches, referees and parents are better equipped to assist in the prevention of concussions and to recognize the signs should an athlete be suspected of suffering a concussion, a skill set which is important to the growth and development of the athlete. As additional information on concussion becomes available, the content of this toolkit will be updated.

I would also like to take this opportunity to thank Claire Westmacott, Stephanie Cowle and the staff of Parachute Canada for their tremendous assistance in the development of this project. Parachute is Canada's national charity dedicated to injury prevention. They are an industry leader in the field of concussion management and their assistance has been greatly appreciated.

Once again thank you to our athletes, coaches, referees and parents for your dedication to the sport of taekwondo in Canada. Your efforts are helping to provide a safer environment for all.

Regards,



Dave Harris
Executive Director
Taekwondo Canada



PRE-COMPETITION CONCUSSION EDUCATION CHECKLIST

The Pre-Competition Concussion Education Checklist should be used to identify how Canadian taekwondo coaches should approach concussion education for themselves and their athletes. The checklist breaks down the resources that should be used by coaches at each stage of their concussion education process. It is highly recommended that coaches complete the checklist tasks in the order they are presented prior to the start of each season.

PRE-COMPETITION EDUCATION TASK	REQUIRED RESOURCE(S)	STATUS
Review Taekwondo Canada's concussion education resources to educate yourself on concussion prevention, recognition and management.	<ol style="list-style-type: none"> 1. Pre-Competition Concussion Education Checklist 2. Pre-Competition Concussion Education Athlete Meeting Guide 3. Pre-Competition Concussion Education Fact Sheet 4. Concussion Code of Conduct 5. Tips to Assist in Preventing Concussions and Other Injuries in Taekwondo Guide 6. Concussion Action Plan Guide 7. The Return-to-Sport Strategy 8. The Return-to-School/Work Strategy 9. Concussion FAQ Guide 10. Taekwondo Canada's Concussion Protocol 	
Complete the NCCP Making Head Way in Sport e-Learning Module	The Coaching Association of Canada's Locker (https://thelocker.coach.ca/onlinelearning#MHW-SP-E)	
Develop a Concussion Action Plan (you can create your own or use the sample available in the Concussion Action Plan Guide).	The Concussion Action Plan Guide	
Schedule a Pre-Competition Concussion Education Athlete Meeting before competition at a time that is convenient for coaches, athletes and their parents/caregivers.	Pre-Competition Concussion Education Athlete Meeting Guide	
Include the following information in your Pre-Competition Concussion Education Athlete Meeting: <ul style="list-style-type: none"> ▪ The definition of concussion ▪ Possible causes/mechanisms of injury (i.e. how a concussion might occur) ▪ Common signs and symptoms ▪ Steps that can be taken to prevent concussions and other injuries from occurring in taekwondo ▪ What to do when an athlete suffers a suspected concussion or more serious head injury ▪ What measures should be taken to ensure proper medical assessment, Return-to-School/Work and Return-to-Sport strategies 	<ol style="list-style-type: none"> 1. Pre-Competition Concussion Education Athlete Meeting Guide 2. Pre-Competition Concussion Education Fact Sheet 3. Concussion Action Plan Guide 4. Tips to Assist in Preventing Concussions and Other Injuries Guide 5. Concussion FAQ Guide 	

<ul style="list-style-type: none"> ▪ Return-to-Sport medical clearance requirements ▪ Your Concussion Action Plan for Training and Competitions. ▪ Tips to Prevent Concussions and other injuries for athletes and parents/caregivers 		
<p>Following the meeting, ask that the participants read the Pre-Competition Concussion Education Fact Sheet. As an optional step you can ask that your athletes, parents and referees sign the appropriate stakeholder Concussion Code of Conduct to understand their roles and responsibilities.</p>	<ol style="list-style-type: none"> 1. Taekwondo Canada's Pre-Competition Concussion Education Document 2. Concussion Codes of Conduct (<i>Optional</i>) 	
<p>Explain where the meeting attendees can find the complete Taekwondo Canada Concussion Education Toolkit as well as each individual section discussed to be used for reference or further education.</p>	<p>https://taekwondo-canada.com/safesport/concussion/</p>	

PRE-COMPETITION CONCUSSION EDUCATION ATHLETE MEETING GUIDE

Safety in taekwondo is a shared responsibility. Coaches, referees, athletes, as well as families watching a competition or training session play an important role in keeping all athletes safe and healthy.

Work to ensure that everyone involved with your taekwondo team understands that a concussion is a brain injury, requiring adequate rest to recover. As a first step, make sure everyone knows they have a role in preventing concussions and knows what to do if one occurs.

This guide should be used by coaches to plan, schedule and execute their club's Pre-Tournament Concussion Education Athlete Meeting.

WHO

The attendees at each pre-competition athlete meeting should include:

- Coaches
- Referees and officials
- Safety and medical personnel
- All athletes
- All parents and/or caregivers

We encourage coaches to invite all stakeholders to attend these concussion education meetings so that everyone in and around the club is prepared with the basic knowledge to recognize a concussion, know the steps to take when one is suspected and manage athlete recovery.

These meetings can be specific to each coach and their athletes, athlete age group or the club as a whole.

WHAT

The information that should be covered during the Pre-Competition Concussion Education Athlete Meeting is:

- The definition of concussion
- The possible mechanisms of injury (general and taekwondo-specific)
- 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-School/Work and Return-to-Sport strategies
- Return-to-Sport medical clearance requirements

In addition to reviewing information on concussion, it is also important that all sport stakeholders have a clear understanding of the concussion protocol and policies at the beginning of each taekwondo season and agree to follow it.

WHEN

The Concussion Education Athlete Meeting should take place prior to a competition at a time that is convenient for its attendees.

Concussion education should occur at least once a year, regardless of whether the coach or their athletes remain the same.

WHERE

The Pre-Competition Concussion Education Athlete Meeting can take place in a variety of venues including a training club, competition space, participating school, or in a virtual meeting online.

HOW

Provide concussion education using the Pre-Competition Concussion Education Checklist and the Pre-Tournament Concussion Education Sheet included in this kit.

Have the sheet reviewed and signed by all stakeholders at the time of registration or before the beginning of each hockey season.

This will confirm that the key information has been received and understood by all participants.

Be sure to provide all necessary handouts to athletes and parents at the end of the education session.

Review the Concussion Code of Conduct with your athletes and be sure to cover the key components of the concussion protocol and policies.

Ensuring everyone knows this information and commits to acting accordingly will support decision-making should any incidents come up during the season.

PRE-COMPETITION CONCUSSION EDUCATION FACT 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, including physical, cognitive, emotional and sleep-related symptoms. Continuing to participate in an activity when you may have a concussion increases the risk of more severe, longer-lasting concussion symptoms, and increases the risk of other injury. Anyone with a suspected concussion should be seen by a medical doctor or nurse practitioner as soon as possible.

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 receiving a headshot during competition or practice, falling hard on the floor, or experiencing whiplash in a car crash.

When should I suspect a concussion?

A concussion should be suspected in anyone 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, teachers, or coaches or if anyone witnesses a player 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 mat
- Slow to stand back up or move back into position after a direct or indirect hit to the head
- Disorientation or confusion or inability to respond appropriately to questions
- Blank or vacant stare
- Balance and gait difficulties, poor co-ordination, stumbling, slow laboured 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 taekwondo training or competition, they should be immediately removed from sport activity. Any athlete who is suspected of having sustained a concussion must not be allowed to return to the same training session or competition.

Continuing to train or compete with a possible concussion puts the athlete at risk of further injury, including Second Impact Syndrome (SIS). SIS is a swelling of the brain that can occur when an athlete sustains a second head injury before a previous head injury has healed. Although rare, SIS can lead to permanent injury and death.

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.

When can the athlete return to school, work and sports?

It is important that all athletes diagnosed with a concussion follow a step-wise return to school, work and sports-related activities, guided by the following Return-to-School/Work and Return-to-Sport Strategies. It is important that youth and adults return to full-time school activities before progressing to stage 5 and 6 of the Return-to-Sport Strategy.

Return-to-School/Work Strategy

STAGE	AIM	ACTIVITY	GOAL OF EACH STEP
1	Daily activities at home that do not give the player 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 or work activities at home.	Homework, reading or other cognitive activities outside of the classroom/workplace.	Increase tolerance to cognitive work.
3	Return to school/work 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/work full-time.	Gradually progress.	Return to full academic activities and catch up on missed schoolwork.

Taekwondo-Specific Return-to-Sport Strategy

Below is a summary of the Taekwondo Return-to-Sport Strategy.

An initial period of 24-48 hours of rest is recommended before starting the Taekwondo-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 before trying again.

STAGE	AIM	ACTIVITY	GOAL OF EACH STEP
1	Symptom-limiting activity	Daily activities that do not provoke symptoms.	Gradual reintroduction of work/school activities
2	Light aerobic activity	Light jog 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	Low intensity sport-specific exercises. No head impact activities. <ul style="list-style-type: none"> Moderate intensity jogging for 30-60 minutes at sub-symptom threshold intensity Low intensity poomsae Low intensity target kicking 	Add movement.
4	Non-contact training drills	Higher intensity sport-specific exercises with no contact Harder training drills with moderate resistance May start progressive resistance training <ul style="list-style-type: none"> Participation in high intensity running and drills Paddle sparring Moderate intensity poomsae - no freestyle 	Exercise, coordination and increased thinking.
5	Full contact practice	Following medical clearance <u>Part A)</u> <ul style="list-style-type: none"> Training with controlled contact Eliminating situations of hard impact Sparring drills with partners <u>Part B)</u> <ul style="list-style-type: none"> Participation in full practice without activity restriction Freestyle and high intensity poomsae 	Restore confidence and assess functional skills by coaching staff.
6	Return to sport	Resume normal sport activities.	

How long will it take for the athlete to recover?

Concussion healing time varies from person to person. While an exact timeline is not possible to provide, most athletes will make a complete recovery within one to two weeks, while most youth athletes will recover within one to four weeks. In some cases, it can take weeks or months to heal. If a person has had a concussion before, it may take them longer to heal the next time.

Approximately 15 to 30 per cent of patients will experience persistent symptoms (symptoms that last longer than typical) that may require additional medical assessment and management.

Remember to always take the time you need to recover, as recommended by your medical doctor or nurse practitioner. Recovering from concussion is a process that takes patience. Going back to activities before you are ready is likely to make your symptoms worse, your recovery may take longer, and returning to active play before full recovery also puts you at higher risk of sustaining another concussion.

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 illegal, unnecessary, or unsafe head contact and report suspected concussions.

To learn more about concussions please visit: <https://taekwondo-canada.com/safesport/concussion/> or <https://parachute.ca/concussion>.

Concussion Codes of Conduct (optional)

Please note that some provinces and/or territories have their own Codes of Conduct with specific requirements. This Taekwondo Concussion Education Toolkit does not replace any requirements under the law in those regions. The Concussion Education Toolkit was designed to provide you and other coaches, referees, athletes and parents across Canada with concussion resources that are Taekwondo-specific and meet your unique role to support athlete development while providing a safe participation environment. **If your province or territory has an existing Code of Conduct, this will carry the legal role for athletes in those areas. Please be sure to always consult with your sport governing body for more information.**

CONCUSSION CODE OF CONDUCT FOR TAEKWONDO COACHES

I will help the athletes I train to prevent concussion.

- I will ensure all athletes on my team wear the proper equipment and wear it correctly.
- I will help athletes develop their skills and strength so they can train to the best of their ability.
- I will respect the rules of taekwondo and ensure all athletes on my team do as well.
- I will respect other coaches, trainers, safety personnel, referees and all those involved with my club and team.
- I will ensure athletes on my team respect others and play fair and safe.

I will take concussions seriously and educate my athletes to help ensure their health and safety.

- I understand a concussion is a brain injury that can have both short- and long-term effects.
- I understand that any blow to the head, face, or neck, or a blow to the body that causes a sudden jarring of the head may cause a concussion.
- I understand that an athlete doesn't need to lose consciousness to have had a concussion.
- If I suspect an athlete may have a concussion, I will stop them from participating in training or sparring immediately. I understand that if I think I have a concussion, I should stop coaching, training, or safety person responsibilities/activities immediately.
- I understand continuing to participate in taekwondo and other physical activity with a suspected concussion increases an athlete's risk of more severe, longer-lasting symptoms, and increases their risk of other injuries.
- I will make concussion education a priority on my team.
- I will follow and enforce the concussion protocols and policies that have been established by Taekwondo Canada, the provincial/territorial sport organization, and provincial/territorial guidelines.

I will create an environment where athletes on my team feel safe and can always speak up.

- I will encourage athletes not to hide any concussion symptoms or continue to participate through the pain.
- I will ensure my athletes know to tell me, another coach, referee, official, parent or other adult they trust if they, or a teammate, experience any concussion symptoms after an impact.
- I will lead by example. I will tell a fellow coach, referee, official, safety person, or healthcare professional if I am experiencing any concussion symptoms.
- I will create opportunities for athletes to speak with me about any concerns related to concussion before or after each training session or competition.
- I will support all athletes to take the time they need to recover.
- I understand and respect that any athlete with a suspected concussion must be removed from the training session or competition immediately and not be permitted to return until they undergo a medical assessment by a doctor and have been medically cleared to return to training or competition.
- I understand athletes will have to follow the Taekwondo Return-to-Sport strategy.
- I understand athletes will have to be cleared by a doctor before returning to taekwondo or other physical activity after a concussion.
- I will respect my fellow coaches, referees, safety personnel, parents and medical professionals and any decisions made with regards to the health and safety of my team.

Signature of Coach

Date

CONCUSSION CODE OF CONDUCT FOR TAEKWONDO REFEREES AND SAFETY PERSONNEL

I will help athletes to prevent concussion.

- I will ensure all athletes wear the proper equipment and wear it correctly.
- I will respect and enforce the rules of taekwondo.
- I will respect other referees, coaches, safety personnel and all those involved with taekwondo.
- I will refrain from any behaviour that may cause the appearance of bias.
- I will ensure athletes respect others and participate in a fair and safe manner.

I will take concussions seriously and support athletes to ensure their health and safety.

- I understand a concussion is a brain injury that can have both short- and long-term effects.
- I understand that any blow to the head, face, or neck, or a blow to the body that causes a sudden jarring of the head may cause a concussion.
- I understand that an athlete doesn't need to lose consciousness to have had a concussion.
- If I suspect an athlete may have a concussion, I will stop them from participating in competition immediately and inform their coach or other responsible adult.
- I understand that if I think I have a concussion, I should stop referee activities immediately.
- I understand continuing to participate in taekwondo and other physical activity with a suspected concussion increases an athlete's risk of more severe, longer-lasting symptoms, and increases their risk of other injuries.
- I will follow and enforce the concussion protocols and policies that have been established by Taekwondo Canada, the provincial/territorial sport organization, and provincial/territorial guidelines.

I will create an environment where athletes feel safe and can always speak up.

- I will encourage athletes not to hide any concussion symptoms or continue to participate through the pain.
 - I will ensure athletes know to tell me, their coach, parent or other adult they trust if they, or a teammate, experience any concussion symptoms after an impact.
 - I will lead by example. I will tell a fellow referee, coach, organizer, or healthcare professional if I am experiencing any concussion symptoms.
 - I understand and respect that any athlete with a suspected concussion must be removed from the competition immediately and not be permitted to return until they undergo a medical assessment by a doctor and have been medically cleared to return to training or competition.
 - I understand athletes will have to follow the Taekwondo Return-to-Sport strategy.
 - I understand athletes will have to be cleared by a doctor before returning to taekwondo or other physical activity after a concussion.
-
- I will respect my fellow referees, coaches, safety personnel, parents and medical professionals and any decisions made with regards to the health and safety of athletes.

Signature of Referee/Safety Personnel

Date

TIPS TO PREVENT CONCUSSIONS AND OTHER INJURIES IN TAEKWONDO GUIDE

Be sure to enforce and integrate these tips for athletes into training sessions and competitions wherever possible. This will help your athletes build critical skills, respect themselves and others, and stay safe.

Tips to teach and enforce with your athletes:

- Commit to strong skill and strength development
- Understand proper technique and follow the rules of the sport
- Ensure you are correctly wearing the appropriate equipment (e.g. protective helmet, pads, mouthguards)
- Avoid violent contact with an opponent if they are in a vulnerable position, such as with their back facing you
- Never hit, strike, kick or head-butt an opponent from behind
- Never hit, strike, kick or head-butt an opponent with intent to harm
- Practice fair sparring and respect the safety of yourself and your opponent
- Be aware and stay alert
- Practice and compete with self-control and integrity
- Communicate with your fellow athletes. If you think a teammate may have a concussion, report symptoms to your coach, referee, safety personnel or another adult you trust
- Remove yourself from training or competition if you experience any concussion symptoms after a hard hit. Report symptoms to your coach, referee, safety personnel, or another adult you trust

Tips to help prevent concussions among athletes on your team:

- Focus on good technique defensively to decrease the odds of sustaining a blow
- Ensure that athletes are matched with other athletes of equal strength and abilities in sparring drills
- Check mats and remove hazards to ensure athletes have space to spar, jump and move safely
- Ensure all athletes are wearing appropriate equipment, in good working condition, during all training sessions

CONCUSSION ACTION PLAN GUIDE

Having a Concussion Action Plan will ensure that all those involved with your taekwondo team know what to do and what their role is when a concussion is suspected in a training session or competition. The Concussion Action Plan will serve as a step-by-step guide to help your team respond to concussions properly. To make sure concussions are managed safely and effectively, implement an action plan that coaches, athletes and their parents/caregivers are all involved in.

Steps to create a Concussion Action Plan:

1. Identify safety personnel who can assist with managing the health of the team and are knowledgeable about concussions, know the action plan and know what to do when a concussion is suspected. This might include a team instructor, athletic therapist, doctor, designated first aider or another person responsible for ensuring concussion protocol is followed.

***Note:** In Ontario, Rowan's Law protocol requires that there is a designated individual responsible for ensuring that concussion protocol is followed.

2. Provide athletes and families with concussion resources so everyone knows what to look for to keep players safe.
3. Always have a **Concussion Recognition Tool (CRT)** at training sessions and competitions so that you have a list of concussion signs and symptoms available, and information on the first steps to take when a concussion is suspected.
4. Use the sample practice and game action plan templates at the end of this document to create a Concussion Action Plan for your taekwondo team.

If you suspect a concussion has occurred:

1. Coach removes the athlete from practice or training session.
2. Coach ensures the athlete is not left alone. Monitor signs and symptoms using the **Concussion Recognition Tool (CRT)** and do not administer any medication unless it's needed for a medical condition (e.g., insulin). The athlete must not return to practice or training that day.
3. Coach informs the athlete's parent/caregiver or emergency contact about the suspected concussion and provides them with all relevant concussion resources and links at <https://taekwondo-canada.com/safesport/concussion/>.
4. Parent/caregiver or emergency contact ensures the athlete is evaluated by a medical doctor or nurse practitioner as soon as possible.

Coaches and parents/caregiver share the responsibility to communicate with the athlete to ensure that if they are diagnosed with a concussion, they are following Taekwondo Canada's concussion protocol, the policies and protocol of their relevant provincial/territory and provincial/territorial sport organization, and while medically-supervised, Taekwondo Canada's Return-to-Sport strategy. Athletes may only return to full training when they have been cleared by their doctor.

If you notice any “red flag” symptoms:

“Red flag” symptoms can be signs of a more serious injury. Get medical help immediately if you notice that an athlete has any of the following symptoms:

- Neck pain or tenderness
- Repeated vomiting
- Growing confusion
- Seizures or convulsions
- Weakness, tingling or burning in their arms or legs
- Increasingly restless, agitated or combative
- Double vision
- Severe or increasing headache
- Deteriorating conscious state or loss of consciousness
- If there is loss of consciousness, initiate the Emergency Action Plan and call an ambulance.

If the athlete is unconscious or you suspect a neck injury, continue to monitor airway, breathing and circulation. Do not attempt to remove any equipment.

SAMPLE CONCUSSION ACTION PLAN FOR PRACTICES OR TRAINING SESSIONS

Club Name: _____ **Athletes:** Senior / Junior / Cadet

Coach: _____ **Safety Personnel:** _____

Start off your taekwondo season by setting your team up for a safe, healthy and successful season. Fill in the below table to create your team's Concussion Action Plan for Practices and/or Training Sessions.

Be aware of "red flag" symptoms, which can be signs of a more serious injury. If any are present, initiate the Emergency Action Plan. If an athlete is unconscious or a neck injury is suspected, do not attempt to move the athlete or remove equipment unless there is a concern for their breathing and/or you are appropriately trained to do so.

If you suspect a concussion has occurred:

ACTION	PERSONNEL RESPONSIBLE (NAME, TITLE)	EMERGENCY CONTACT NUMBER	STATUS
1. Coach removes the athlete from the practice or training session.			
2. Coach ensures the athlete is not left alone. Monitor signs and symptoms using the CRT and do not administer any medication. The athlete must not return to practice, training or other physical activity that day.			
3. Coach informs the athlete's parent/caregiver or emergency contact about the suspected concussion and provides them with all relevant concussion resources and links to https://taekwondo-canada.com/safesport/concussion/ and https://parachute.ca/concussion .			
4. Parent/caregiver ensures the athlete is assessed by a medical doctor or nurse practitioner as soon as possible.			
5. Coaches and parents share the responsibility to communicate with the player to ensure that if they are diagnosed with a concussion, they are following Taekwondo Canada's, their provincial/territorial policies, and their provincial/territorial sport organization's concussion protocol and policies and while medically supervised, Taekwondo Return-to-Sport Strategy. Athletes may only return to full practice and competition when they have been cleared by their doctor.			

SAMPLE CONCUSSION ACTION PLAN FOR COMPETITIONS

Athletes: Senior / Junior / Cadet

Coach: _____

Referee: _____ **Safety Personnel:** _____

Start off your Taekwondo competition season by setting your team up for a safe, healthy and successful season. Fill in the below table to create your team's Concussion Action Plan for Competitions.

Be aware of "red flag" symptoms, which can be signs of a more serious injury. If any are present, initiate the Emergency Action Plan. If an athlete is unconscious or a neck injury is suspected, do not attempt to move the athlete or remove equipment unless there is a concern for their breathing and/or you are appropriately trained to do so.

If you suspect a concussion has occurred:

ACTION	PERSONNEL RESPONSIBLE (NAME, TITLE)	EMERGENCY CONTACT NUMBER	STATUS
1. Referee stops the competition when an injury is suspected.			
2. Coach removes the athlete from the game.			
3. Coach ensures the athlete is not left alone. Monitor signs and symptoms and do not administer any medication. The athlete must not return to the game or other physical activity that day.			
4. Coach informs the athlete's parent/caregiver or emergency contact about the suspected concussion and provides them with all relevant concussion resources and links to https://taekwondo-canada.com/safesport/concussion/ and https://parachute.ca/concussion .			
5. Parent/caregiver ensures the athlete is evaluated by a medical doctor as soon as possible.			
6. Coaches and parents share the responsibility to communicate with the athlete to ensure that if they are diagnosed with a concussion, they are following Taekwondo Canada's protocol, their provincial/territorial policies, and their provincial/territorial sport organization's concussion protocol and policies and while medically supervised, Taekwondo Canada's Return- to-Sport strategy. Athletes may only return to training and competition when they have been cleared by their doctor.			

TAEKWONDO RETURN-TO-SPORT STRATEGY

This taekwondo specific Return-to-Sport Strategy ensures that the appropriate activities are completed at the correct stages of an athlete's return-to-sport journey. This is an important tool for stakeholders to use to establish the alignment necessary throughout this process.

Return-to-Sport Summary:

1: Rest (24-48 Hours)

An initial period of 24-48 hours of rest is recommended before starting the taekwondo specific Return-to-Sport strategy.

***CAUTION:** If the athlete experiences new symptoms or worsening symptoms at any stage, they should go back to the previous stage.

2: Follow the Taekwondo Return-to-School/Work Strategy and Return-to-Sport Strategy

These strategies are designed to work in conjunction with each other. Therefore, please review both strategies to understand the correct stage sequencing for a safe, step-wise return to school, work and sports after a concussion.

3: Return to Full Contact Sport Activities

Once the athlete has completed their Return-to-School/Work strategy and is working through their step-wise Return-to-Sport, a medical doctor or nurse practitioner can consider the athlete for a return to full contact training and competition activities, and issue a [Medical Clearance Letter](#) (found in [Appendix A](#)) if the athlete is ready to return. Never return to full contact sport activities until medically cleared by a doctor or nurse practitioner.

The final decision to medically clear an athlete to return to full contact training or competition should be based on the clinical judgment of the medical doctor or nurse practitioner taking into account the athlete's past medical history, clinical history, physical examination findings, and the results of other tests and clinical consultations where indicated (i.e. neuropsychological testing, diagnostic imaging).

Prior to returning to full contact training 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 or nurse practitioner 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.

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 training, they should be instructed to stop immediately, notify their parents/caregivers, coaches, trainer or teachers, and undergo follow-up Medical Assessment.

The Medical Clearance Letter can be found on in [Appendix A](#) and on the Taekwondo Canada website.

A visual representation of the Taekwondo Canada Concussion Pathway can be seen in [Appendix B](#).

RETURN-TO-SPORT STRATEGY – ATHLETES

STAGE 1: SYMPTOM-LIMITING ACTIVITY

After an initial short period of rest of 24 to 48 hours, light cognitive and physical activity can begin as long as these don't worsen symptoms. You can start with daily activities like moving around the house, simple chores, and gradually introducing school and work activities at home.

ACTIVITIES: Daily activities that do not provoke symptoms or make symptoms worse

GOAL OF THE STAGE: Gradual reintroduction of work/school activities

STAGE 2 : LIGHT AEROBIC ACTIVITY

Light exercise such as walking or stationary cycling, for 10 to 15 minutes. The duration and intensity of the aerobic exercise can be gradually increased over time if symptoms don't worsen and no new symptoms appear during the exercise or in the hours that follow. No resistance training or other heavy lifting.

ACTIVITIES:

Light jog or stationary cycling at slow to medium pace. No resistance training.

- Light intensity jogging or stationary cycling for 15-20 minutes at sub-symptom threshold intensity

NO RESISTANCE TRAINING OR OTHER HEAVY LIFTING.

GOAL OF STAGE: Increase heart rate

STAGE 3: SPORT-SPECIFIC EXERCISE

Activities such as running can begin for 20 to 30 minutes. There should be no body contact or other jarring motions, such as jumping. No resistance training.

ACTIVITIES:

Low intensity sport-specific exercises. No head impact activities.

- Moderate intensity jogging for 30-60 minutes at sub-symptom threshold intensity
- Low intensity poomsae
- Low intensity target kicking

NO HEAD IMPACT ACTIVITIES

GOAL OF THE STAGE: Add movement

STAGE 4: NON-CONTACT TRAINING DRILLS

Add in more challenging drills. There should be no impact activities (no kicking, jumping kicks, striking etc.). Start to add in progressive resistance training.

ACTIVITIES:

Higher intensity sport-specific exercises with no contact

Harder training drills with moderate resistance

May start progressive resistance training

- Participation in high intensity running and drills
- Paddle sparring
- Moderate intensity poomsae - no freestyle

MAY START PROGRESSIVE RESISTANCE TRAINING

GOAL OF THE STAGE: Exercise, coordination and increased thinking.

STAGE 5 : FULL CONTACT PRACTICE (FOLLOWING MEDICAL CLEARANCE)

ACTIVITIES:

Following medical clearance

Part A)

- *Training with controlled contact*
- *Eliminating situations of hard impact*
- *Sparring drills with partners*

Part B)

- *Participation in full practice without activity restriction*
- *Freestyle and high intensity poomsae*

***CAUTION:** This stage should not be started unless the athlete has completed all of the stages of the Return-to-School/Work Strategy

GOAL OF THE STAGE: Restore confidence and assess functional skills by coaching staff.

STAGE 6 : RETURN-TO-SPORT

ACTIVITIES: Normal training & return to competition

TAEKWONDO RETURN-TO-SCHOOL/ WORK STRATEGY

The following is an outline of the Return-to-School Strategy that should be used to help student-athletes, parents/caregivers and teachers to collaborate in allowing the player 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. Athletes should also be encouraged to ask their school if they have a school-specific Return-to-Learn Program in place to help student-athletes make a gradual return to school.

REST (24 – 48 hours)

STAGE 1: DAILY ACTIVITIES AT HOME

ACTIVITIES:

Typical activities during the day, as long as they do not increase symptoms (i.e. reading, texting, screen time). Start with 5-15 minutes at a time and gradually build up.

GOAL OF THIS STAGE: Gradual return to typical activities

STAGE 2: SCHOOL ACTIVITIES

ACTIVITIES:

Homework, reading or other cognitive activities outside of the classroom

GOAL OF THIS STAGE: Increase tolerance to cognitive work.

STAGE 3: RETURN-TO-SCHOOL/WORK PART-TIME

ACTIVITIES:

Gradual introduction of schoolwork. May need to start with a partial school day or with increased breaks during the day.

GOAL OF THIS STAGE: Increase academic activities.

**STAGE 4:
RETURN-TO-SCHOOL/WORK FULL-TIME**

ACTIVITIES:

Gradually progress, reduce modifications or adaptations until the student can handle a full day and full workload with no modifications or adaptations.

GOAL OF THIS STAGE: Return to full academic activities and catch-up on missed schoolwork.

***CAUTION:** *A signed medical clearance letter is required prior to the athlete entering stage 5 of the return-to-sport strategy!!!*

***NOTE:** It is important that youth and adult student-athletes return to full-time school/work activities before progressing to stage #5 & 6 of the taekwondo specific Return-to-Sport Strategy!!!

NOTE: These steps can also be used as a Return-to-Work Strategy* for those taekwondo athletes that train in taekwondo club programs, compete in taekwondo tournaments, or for coaches, officials and trainers.

*A more tailored and detailed Return-to-Work strategy is available for stakeholders on Parachute's website in both of Canada's official languages ([English](#) and [French](#)).

A visual representation of the Taekwondo Canada's Concussion Pathway can be seen in [Appendix B](#).

CONCUSSION FREQUENTLY ASKED QUESTIONS (FAQ) GUIDE

This guide provides a list of Frequently Asked Questions (FAQs) on a variety of topics that have not been explained in Taekwondo Canada's other concussion education resources or important information that Taekwondo Canada would like to emphasize for our members. These questions have been subdivided into smaller sections for ease. It is recommended that this guide be reviewed by coaches to the Pre-Season Concussion Education Team Meeting and referred to when necessary.

GENERAL

1. Who is responsible for recognizing a suspected concussion?

Although the formal diagnosis of concussion should be made following a medical assessment, all sport stakeholders including athletes, parents, teachers, 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 suspected concussion or reports ANY symptoms of a suspected concussion as detailed in the **Concussion Recognition Tool 5 (CRT5)**, a copy of which can be found in [Appendix C](#).
- If an athlete reports ANY concussion symptoms to one of their peers, parents, teachers, or coaches or if anyone witnesses an athlete exhibiting any of the visual signs of concussion.

In some cases, an athlete may demonstrate signs of 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 CRT, a more severe head or spine injury should be suspected, and Emergency Medical Assessment should be pursued. The Emergency Medical Assessment is located within Taekwondo Canada's Concussion Protocol.

2. Can a coach/instructor diagnose a concussion?

No, a coach/instructor is not qualified to diagnose a concussion. In addition to nurse practitioners, medical doctors that are qualified to evaluate patients with a suspected concussion include:

- Pediatricians;
- Family medicine physicians;
- Sport medicine physicians;
- Emergency department physicians;
- Internal medicine physicians;
- Rehabilitation physicians (physiatrists);
- 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.

Note: In Quebec, nurse practitioners cannot make a clinical diagnosis. Diagnosis must be made by a medical doctor.

3. How are concussions treated?

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 gradual return to school and sport activities. Athletes diagnosed with a concussion are to be managed according to their Return-to-School/Work and Taekwondo Return-to-Sport Strategy. When available, athletes should be encouraged to work with the team athletic therapist or physiotherapist to optimize progression through their Sport-Specific Return-to-Sport Strategy.

4. What should I do if I suspect a concussion?

- **As an athlete:** if you as an athlete receive a blow to the head, face, neck, or elsewhere on your body or are experiencing any of the concussion symptoms you should stop practicing or playing and immediately notify your coach, instructor, teacher or parent/caregiver.
- **As a coach:** If you suspect an athlete may have suffered a concussion during a training session or competition, remove the athlete from play and consult your Concussion Action Plan for next steps.
- **As a parent/caregiver:** If you suspect a concussion in your child or another athlete, notify a coach, teacher or their parent/caregiver immediately. If your child is demonstrating visual signs of a concussion or experiencing concussion symptoms, suspect a concussion and have your child assessed by a medical doctor or nurse practitioner.
- **As a teammate:** If you see one of your teammates or fellow athletes receive a blow to the head, face, neck or elsewhere on their body, if they are acting peculiarly, showing visual signs of a concussion as outlined in the WPC Pre-Season Concussion Education Fact Sheet, or if they inform you that they are experiencing one of the symptoms commonly associated with a concussion you should inform your coach or instructor immediately.
- **As a referee/official:** If an athlete receives a blow to the head, face, neck or elsewhere on their body and is exhibiting any of the visual signs associated with concussions during a competition, a referee can stop the match for a period of 1 minute. During this time, the coaches and medical professionals are able to assess the injured athlete.

5. When should the athlete see a doctor?

If an athlete loses consciousness during a practice or game or exhibits any of the other “Red flag” symptoms they should be transported to a hospital immediately.

- Neck pain or tenderness
- Repeated vomiting
- Growing confusion
- Seizures or convulsions
- Weakness, tingling or burning in their arms or legs
- Increasingly restless, agitated or combative
- Double vision
- Severe or increasing headache
- Deteriorating conscious state or loss of consciousness
- If there is loss of consciousness, initiate the Emergency Action Plan and call an ambulance

Note: If the athlete is unconscious or you suspect a neck injury, continue to monitor airway, breathing and circulation. Do not attempt to remove any equipment.

If the athlete does not exhibit any “Red flag” symptoms during the practice or competition, their parents/caregivers should be notified and the athletes should be closely monitored until their parents/caregivers

arrive. If the athlete experiences constant or worsening concussion symptoms, they should make an appointment with their medical doctor or nurse practitioner.

6. What type of information should be provided to the doctor?

Details about how and when the injury happened, the athlete's signs and symptoms, any changes in the athlete's condition since the injury, and the athlete's personal concussion history are helpful for the medical assessment. Taekwondo Canada has created a Personal Concussion Record for Athletes sheet for our registrants to use to provide an overview of the athlete's concussion history, which doctors may find useful. However, it is not a legal medical document and as such should be used solely as a tool for athletes and parents/caregivers to use and refer to throughout the Return-to-School/Work and Return-to-Sport period and in the future.

7. How long does it take for a concussion to heal?

Most athletes who sustain a concussion while participating in sport will make a complete recovery and be able to return to full school and sport activities within 1-4 weeks of injury. However, approximately 15-30% of individuals will experience symptoms that persist beyond this time.

If available, individuals who experience persistent post-concussion symptoms (>4 weeks for youth 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, rehabilitation medicine as well as optometry and kinesiology.

Referral to a multidisciplinary clinic for assessment should be made on an individualized basis at the discretion of an athlete's medical doctor or nurse practitioner. 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.

8. What happens when an athlete returns too quickly to sport, school or work?

It is important that athletes, coaches and officials take the necessary time to heal when they have been diagnosed with a concussion. Concussions affect each individual differently and there can be severe consequences to those individuals who return too quickly to sport, school or work when they have a concussion. Going back to activities before you are ready is likely to make your symptoms worse, your recovery may take longer, and returning to active play before full recovery also puts you at higher risk of sustaining another concussion.

There is also the possibility, although minimal, that an athlete who returns too quickly to sport can be diagnosed with Second Impact Syndrome (SIS). SIS is a swelling of the brain that can occur when an athlete sustains a second head injury before a previous head injury has healed. Although rare, SIS can lead to permanent injury and death.

9. Can a concussion be classified as severe or mild?

No, concussions cannot be classified as severe or mild. There is no recognized system for classifying concussions. The full extent of the consequences of a concussion are difficult to predict at the outset and may change over time. Each concussion should be taken seriously and anyone who sustains a concussion should carefully follow step-wise Return-to-School/Work and Return-to-Sport Strategies to support a safe and healthy recovery.

10. How can athletes help their teammate who is suffering from a concussion feel included?

Athletes who are suffering from a concussion may find it difficult, at times, to feel included on their sport team. It is important that the athlete's teammates are aware of this and endeavor to increase the athlete's inclusion in team activities while respecting the that accompany their stage of concussion recovery. One method of increasing feelings of inclusion would be for the athlete's teammates to spend time with or communicate with the injured athlete. However, large gatherings may cause the symptoms of the athlete suffering from a concussion to worsen due to the amount of noise and the high level of concentration required. Therefore, individual support from teammates is preferred.

Teammates may also support the athlete by demonstrating empathy and understanding that, even though you can't see it, a concussion is a brain injury, which takes adequate time to recover safely. Often, athletes may want to return to sport before they are ready or fully recovered. Teammates should encourage the concussed athlete to take the time they need to recover and be there to support them through their recovery process.

11. Should an athlete take medication to help with their symptoms if they may have a suspected concussion (i.e. acetaminophen for a headache)?

Athletes removed from play due to a suspected concussion should not ingest or be given any type of medication, unless it is essential (e.g. insulin for diabetes). Their doctor will provide further guidance on medication use during recovery.

CONCUSSION PREVENTION AND MANAGEMENT

1. Why are pre-competition concussion education meetings important?

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 annual education of all stakeholders (athletes, parents, coaches, officials, teachers, trainers and integrated support staff) 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. The Pre-Competition Concussion Education Meetings are extremely important in ensuring that taekwondo clubs across Canada are aligned in the Taekwondo Canada safe sport pillar of concussion prevention and management.

2. If an athlete wears a mouthguard, helmet, and padding, can they still receive a concussion?

Mouthguards, helmets and padding do not prevent concussions. Currently, there is limited research into the mechanisms of concussion in taekwondo, and as such, there is no proof to support the notion that specific equipment worn by taekwondo athletes can prevent concussion. The evidence on whether mouthguards can reduce the risk of concussion is inconclusive. Wearing proper equipment is important for other reasons: mouthguards can help protect the teeth from direct impact, helmets can help protect the skull or prevent other head injuries, and pads can help absorb the impact of a strike and reduce injury to the lower and upper extremities. But, an athlete can still receive a concussion while wearing equipment as a very rapid movement of the head with or without physical contact is often sufficient to cause a concussion.

Review [mouthguard, taping and bracing rules for competitions](#) to ensure equipment is worn correctly.

3. What should stakeholders, particularly coaches, referees, athletes and parents/caregivers, do during the season to help prevent and manage concussions?

Athletes:

- Use the tips to prevent concussions and other injuries sheet to ensure that you and your teammates are practicing awareness and safety in all practices and games.

- If you or your teammate are experiencing concussion symptoms, notify a coach, teacher or parent/caregiver immediately.
- Ensure that prior to returning to full contact practice and competition, you provide a signed Medical Clearance Letter to your coach.
- Follow the proper stage sequencing of the Return-to-School/Work and Return-to-Sport strategies and identify whether you are experiencing any new or worsening symptoms throughout or following each stage.

Parents/Guardians:

- If you suspect a concussion in your child or another athlete, notify a coach, teacher or their parent/caregiver immediately.
- Ensure that your child is following the proper stage sequencing of the Return-to-School/Work and Return-to-Sport strategies.
- Be aware of your child's team's/club's Concussion Action Plan.

Coaches:

- Use the tips to prevent concussions and other injuries sheet to help plan safe practices for your team. Ensure that you are aware of your Concussion Action Plan during practices and competitions and if there are differences based on club facilities.
- If you suspect an athlete may have suffered a concussion during a training session or competition, remove the athlete from play and consult your Concussion Action Plan for next steps.
- Create an emergency contact sheet with parent contact information for each athlete on your team in the event you need to contact them.
- Ensure you have the CRT5 in an easily accessible location for when you need to reference the information.
- Ensure any athlete diagnosed with a concussion is following the proper Return-to-Sport sequencing.
- Ensure prior to an athlete returning to full contact practice and games that you receive a signed Medical Clearance Letter from the athlete.

Referees:

- Ensure all athletes wear the proper equipment and wear it correctly.
- Enforce the rules of taekwondo and ensure all athletes participate in a fair and safe manner.
- If you suspect an athlete may have suffered a concussion during a competition, remove the athlete from play and consult your Concussion Action Plan for next steps.
- Ensure you have the CRT5 in an easily accessible location for when you need to reference the information.

PROVINCIAL SPECIFICATIONS

1. How is Rowan's Law being addressed for Ontario residents?

In Ontario, Rowan's Law is a mandatory legislation that sport organizations must adhere to and it addresses the prevention and management of concussions. As a result of this legislation, Taekwondo Canada requires that each taekwondo registrant who resides in Ontario and is under the age of 26 to sign their Concussion Code of Conduct and provide annual verification to their provincial sport organization that the Government of Ontario concussion awareness resources have been reviewed. In addition, coaches, officials and trainers of teams, which include athletes who are under the age of 26, must also complete these tasks.

For more information about Rowan's Law, please visit the following website: [Ontario.ca/concussions](https://ontario.ca/concussions)

REFERENCES

Parachute. (2017). Canadian Guideline on Concussion in Sport. www.parachute.ca/guideline

Parachute. (n.d.). Pre-Season concussion education checklist. <https://www.parachute.ca/wp-content/uploads/2019/08/Smart-Hockey-Pre-Season-Concussion-Education-Checklist.pdf>

Parachute. (n.d.). Pre-Season concussion education team meeting guide. <https://www.parachute.ca/wp-content/uploads/2019/08/Smart-Hockey-Pre-Season-Concussion-Education-Team-Meeting-Guide.pdf>

Parachute. (n.d.). Smart Hockey online guide. <https://www.parachute.ca/wp-content/uploads/2019/08/Smart-Hockey-Online-Guide.pdf>

Taekwondo Canada. (n.d.) Taekwondo Canada Concussion Protocol. <https://taekwondo-canada.com/wp-content/uploads/2021/02/Taekwondo-Canada-Policy-Concussion-Protocol.pdf>

APPENDIX A – MEDICAL CLEARANCE LETTER

MEDICAL SUSPENSION FORM FOR CONCUSSION/KNOCKDOWN

MUST BE COMPLETED BY A MEDICAL DOCTOR

- Indication: Any athlete who had head injury and/or diagnosed with concussion by TAEKWONDO CANADA commissioned MEDICAL doctor during the competition

Athlete Name:

Date of Competition:

Weight Class:

Province:

- Please send (1) Medical Certificate AND (2) SCAT5 form for this certificate to the Taekwondo Canada medical advisor email medical@taekwondo-canada.com to be released from the suspension and return to competition.

Your athlete Mr./Ms. _____ had sustained a head injury (or knockdown by a significant injury).

Following the injury, the event medical team: completed a SCAT 5 assessment and a physical examination. The medical doctor on site has diagnosed this athlete with concussion.

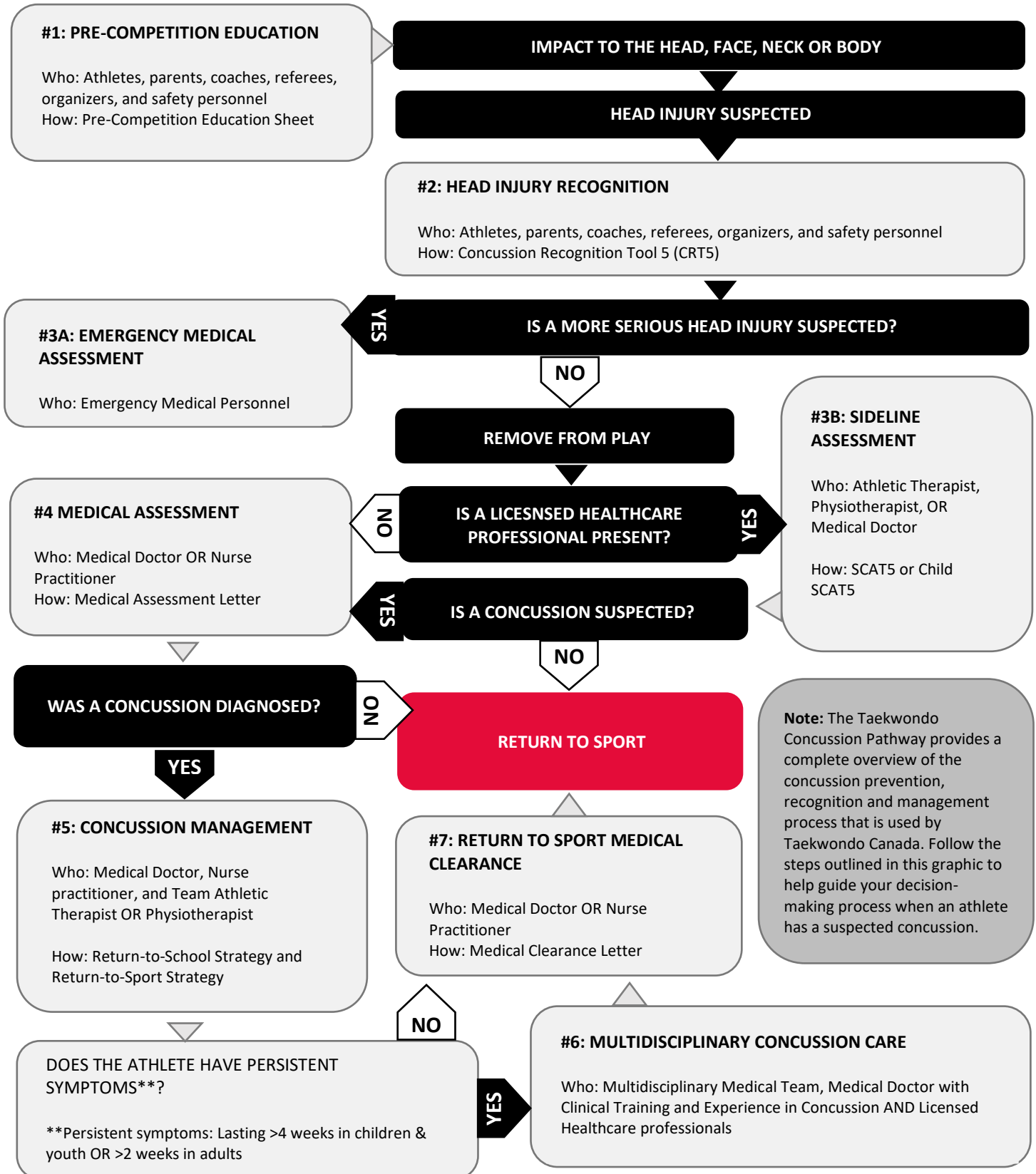
Prior to participation in any further taekwondo competitions in Canada the athlete must provide

1. A repeat SCAT5 assessment completed by a qualified therapist, DC or MD
2. A medical certificate issued by an MD that the concussion has resolved on a particular date
3. Written report that a return to learn process and a return to play process has been successfully completed and the athlete has remained symptom free

Terry DeFreitas MD CCFP
Chief Medical Advisor
Taekwondo Canada

Event Medical Doctor

APPENDIX B – TAEKWONDO CONCUSSION PATHWAY



APPENDIX C – CONCUSSION RECOGNITION TOOL 5 (CRT5)

CONCUSSION RECOGNITION TOOL 5 ©

To help identify concussion in children, adolescents and adults



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 observed or complaints are reported then the player should be safely and immediately removed from play/game/activity. If no licensed healthcare professional is available, call an ambulance for urgent medical assessment:

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

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 do so.
- 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:

- Lying 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
- Balance, gait difficulties, motor incoordination, stumbling, slow laboured movements
- Blank or vacant look
- Facial injury after head trauma

STEP 3: SYMPTOMS

- Headache
- "Pressure in head"
- Balance problems
- Nausea or vomiting
- Drowsiness
- Dizziness
- Blurred vision
- Sensitivity to light
- Sensitivity 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

© Concussion in Sport Group 2017

Source: Davis GA, et al. Br J Sports Med 2017;51:872. Doi:10.1136/bjsports-2017-097508CRT5