



Pre-Bogu 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 within Kendo include but are not limited to:

- Falling and hitting one's head on the floor.
- A missed men strike that hits the grill (mengane) that causes a rotational jerk to the neck.
- A taiatari (body check) that causes a rotational jerk to the neck and head.
- Excessively hard men strikes without proper Kendo technique, often whilst wearing poorly-fitting men.
- Rotational jerk caused by a fist or shinai handle impacting on the men.

What can I do to prevent concussions in kendo?

As with any full contact activity, Kendo carries an inherent risk of injury, including head and neck injuries. However, there are steps within Kendo that can be taken to minimize the risk of head and neck injuries. Concussion prevention, recognition and management require all Kendo practitioners to follow the rules, regulations, and etiquette of Kendo, respect their opponents, avoid additional head contact and report suspected concussions. Instructors, assistants, and senior students must ensure that those under their care and supervision are executing proper technique when performing full contact drills. Proper steps must be taken to teach and learn proper Kendo cutting technique (tenouchi), ensure that receivers learn to move out of the way of oncoming attackers during drills, and attackers to take care not to hit the men grill (mengane) with their fists by exiting the technique with a sufficiently wide angle. All participants must be aware that when a student hits too hard and/or incorrectly, it could cause injuries to the receiver, of which include concussions, neck injuries, and bruising. All practitioners, especially beginners should be encouraged to notify the instructor, coach, or senior student if one of their fellow students are hitting hard enough to cause excessive shock and discomfort.

Understanding and having the proper education regarding how to properly put on the bogu (armour). Also understanding that no techniques should be used without proper training by your instructor or coach. Checking the state of the practitioner's protective equipment, is very important, whether the equipment is owned by the club or by the individual. All participants are responsible for the care of their equipment. Ill-fitting equipment, especially the men, is often the cause of injuries. Particularly for equipment owned by the club (club bogu), people are encouraged to only wear bogu sets that fit them properly. Due to the heightened risk of injury stemming from ill-fitting equipment, Kendo Ontario member clubs are encouraged to have a policy of "if it doesn't fit, don't wear it", even if it significantly delays the practitioner from beginning to wear bogu.

Kendo Ontario member clubs are encouraged to find ways to prevent head and neck injuries, and suggestions may be made by contacting the Kendo Ontario board.

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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 fellow teammates, parents, instructors/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 24-48 hours after the injury).

Common signs and symptoms of concussion:

A person does NOT need to be knocked out (loss of consciousness) to have had a concussion.

Possible SIGNS observed

A sign is something that is observed/seen by another person.

Physical

- Vomiting
- Slurred speech
- Slowed reaction time
- Poor coordination or balance
- Blank stare/Glassy-eyed/Vacant look
- Decreased playing ability
- Loss of consciousness or lack of responsiveness
- Lying motionless or slow to get up
- Seizure or convulsion
- Grabbing or clutching of head

Cognitive

- Difficulty concentrating
- Easily distracted
- General confusion
- Cannot remember things that happened before/after the injury
- Loss or change in memory (unable to remember person, place, time/date)
- Slowed reaction time (i.e. answering questions or following directions)

Emotional/Behavioural

- Strange or inappropriate emotions (i.e. laughing, crying, getting angry easily)

Sleep Disturbance

- Increased drowsiness (esp. during daytime)
- Insomnia (inability/increased difficulty falling asleep)

Possible SYMPTOMS reported

A symptom is something the athlete feels/reports .

Physical

- Headache
- Pressure in head
- Neck pain
- Feeling off/not right
- Ringing in ears
- Seeing double/blurred vision/loss of vision
- Seeing stars or flashing lights
- Pain at physical site of injury
- Nausea and/or vomiting
- Difficulty with balancing
- Dizziness
- Feeling tired or fatigued (more so than the athletes' norm)
- Sensitivity to light or noise

Cognitive

- Difficulty concentrating or remembering
- Feeling slowed down, more fatigued or having low energy
- Feeling dazed or 'in a fog'

Emotional/Behavioural

- Feeling more irritable, sad or more emotional than usual
- Feeling nervous, anxious or depressed

Sleep Disturbance

- Feeling increased drowsiness
- Sleeping more or less than usual
- Having difficulty falling asleep or staying asleep

Additional Information:

- Signs and symptoms can appear right after the injury or may appear within hours/days of the injury
- Signs and symptoms may be different for every individual
- An individual may be reluctant to report symptoms because of fear of removal from the sport
- Younger children, individuals with special needs or individuals with language barriers may have a difficult time communicating their symptoms
- Signs of concussion may not be as obvious in younger children compared to older children/adults

When 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 practice/match.

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

When can the athlete return to 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 that includes the following *Return-to-School* and *Return-to-Sport Strategies*. It is important that youth and adult student-athletes return to full-time school/work activities before progressing to stage 5 and 6 of the *Return-to-Sport Strategy*.

Return-to-School Strategy

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 (e.g. reading, texting...) Start 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

Kendo-Specific Return-to-Sport Strategy

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	<ul style="list-style-type: none"> ● Walking or stationary cycling at slow to medium pace. ● No resistance training. <p>Permitted Kendo activities:</p> <ul style="list-style-type: none"> ● Light/slow suriashi; light footwork drills. ● Nihon Kendo kata. ● Bokuto ni yoru Kendo kihon keiko ho. ● Light suburi. <p>Kendo activities not permitted:</p> <ul style="list-style-type: none"> ● Fumikomi. ● Heavy kiai/kakegoe. ● Any contact with other practitioners other than kata. ● Putting on any bogu components. 	Increase heart rate
3	Sport-specific exercise	<p>Running drills. No head impact activities</p> <p>Permitted Kendo activities in addition to permitted activities in Stage 2:</p> <ul style="list-style-type: none"> ● Moderate to fast suriashi footwork drills. ● Hayasuburi. ● Wearing of any bogu components other than men. ● Light footwork drills with fumikomi without contact with other practitioners. <p>Kendo activities not permitted:</p> <ul style="list-style-type: none"> ● Hitting other practitioners. ● Being hit by other practitioners or any body contact (i.e. taiatari) even while wearing bogu. 	Add movement
4	Non-contact training drills	<p>Harder training drills. May start progressive resistance training.</p> <p>Permitted Kendo activities in addition to permitted activities in Stage 3:</p> <ul style="list-style-type: none"> ● Kirikaeishi - attacking only. Contact with any target area is not recommended at this stage and receivers are to block all attacks. Receiving kirikaeshi is not permitted at this stage. ● Any waza practice or uchikomi that makes contact with shinai, uchikomi targets (ex. tires, sticks, etc) or any other non-human targets. 	Exercise, coordination and increased thinking
5	Full contact practice	<p>Following medical clearance. Can participate in full practice with only few activity restrictions soon after obtaining medical clearance.</p> <p>Until the practitioner feels comfortable doing the full set of Kendo drills and activities, the following activities are recommended to be permitted after medical clearance:</p> <ul style="list-style-type: none"> ● Wearing of the protective mask "men". ● Waza practice drills with human targets. ● One sided kakarigeiko or uchikomi. <p>Keiko, kakarigeiko, or any other Kendo drill or activity that has a significant amount of unpredictability should be discouraged for at least a week after obtaining full medical clearance. A gradual return to full contact activity even after obtaining medical clearance is advised.</p>	Restore confidence and assess functional skills by instructor and coaching staff
6	Return to Sport	Normal game play	

How long will it take the athlete to recover?

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

Signatures

The following signatures certify that the Kendo practitioner and his/her parent/legal guardian have reviewed the above information related to concussion.

_____	_____	_____
Printed name of athlete	Signature of athlete/legal guardian	Date
_____	_____	_____
Printed name of parent	Signature of parent/legal guardian	Date