

WJCC SCHOOLS ATHLETIC CONCUSSIONS PROCEDURES 2019-20

Concussions sometimes occur among athletes in competitive sports programs. At WJCC Schools, careful protocols are utilized, including the use of ImPACT software, to guide management of head injuries. The following will provide background information on concussions and describe the protocols followed at WJCC Schools.

PLEASE NOTE: If a student athlete is suffering from any signs and/or symptoms of concussion resulting from a blow to the head, the athlete *MUST* report to the school's athletics trainers or a physician as soon as possible. The sooner a proper diagnosis can be made, the sooner healing can begin.

Definition of a Concussion

A concussion is a brain injury that is characterized by an onset of impairment of cognitive and/or physical functioning, and can be caused by a blow to the head, face or neck, or a blow to the body that causes a sudden jarring of the head (i.e., a helmet to the head, being knocked to the ground). A concussion can occur with or without a loss of consciousness, and proper management is essential to the immediate safety and long-term future of the injured individual.

It is imperative that the brain have enough time to heal in order to prevent any further trauma or permanent damage.

Major signs (observable behaviors) that may or may not be present with concussions

- Appears to be dazed or stunned
- Is confused about time, date, location
- Is unable to remember what he/she did prior to or after the injury
- Has altered balance
- Is slow to answer questions
- Displays a personality change
- Has altered sleep patterns: is unable to fall asleep or feels like he/she always wants to sleep
- Is vomiting
- Experiences loss of consciousness (not present in all concussions)

Major symptoms (experienced and reported by the athlete) that may or may not be present with concussions

- Headache
- Nausea
- Dizziness
- Double or fuzzy vision or any other visual altercation
- Sensitivity to light and/or noise
- Feeling sluggish or slow
- Feeling "foggy" or in a "funk"

- Difficulty in concentrating when reading, listening or speaking
- Extreme fatigue

Management of a Concussion

Proper management of a concussion is the best form of prevention of a serious injury. Most important is prevention of Second Impact Syndrome – a catastrophic increase in intracranial pressure leading to massive brain swelling, herniation and potentially death. This syndrome occurs in athletes up to 14 days post-concussion and when an athlete returns to competition prior to complete resolution of symptoms. Therefore, the following concussion protocols are utilized at WJCC Schools:

- 1) A student-athlete suspected by the coach, athletic trainer, or team physician of sustaining a concussion or brain injury in a practice or game shall be removed from the activity at that time.
- 2) A student-athlete who has been removed from play, evaluated, and suspected to have a concussion or brain injury shall not return to play that same day nor until:
 - A. Evaluated by and appropriate licensed health care provider and
 - B. In receipt of written clearance to return to play from such licensed health care provider. Student-athletes diagnosed with a concussion will go through return to learn protocol prior to return to play protocol before returning to a full return to athletic participation. Stepwise return to learn – gradual increase of cognitive activities

Mental Activity	Activity at each step	Goal of each step
1. Daily activities that do not give the athlete symptoms	Typical daily activities as long as they do not increase symptoms (e.g. reading, texting, screen time). Start with 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 introductions 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 school activities until a full day can be tolerated	Return to full academic activities and catch up on missed work

- 3) Stepwise return to play- a return to one's baseline preseason testing level will be necessary before return to play progression begins:

Rehabilitation Stage	Functional Exercise	Objective
1.Symptom-Limited Activity	Daily activities that do not provoke symptoms	Gradual reintroduction of work/school activities
2. Light Aerobic Exercise	Walking or stationary cycling at slow to medium pace.	Increase heart rate
3. Sport-specific Exercise	Running or skating drills. No head impact activities	Add movement
4. Non-contact 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, participate in normal training activities.	Restore confidence and assess functional skills by coaching staff
6. Return to Play/Sport	Normal game play	

Each step lasts at least 24 hours. If any symptoms worsen while exercising, the athlete should go back to the previous step after being symptom-free for 24 hours. Resistance training should only be added in phase 3 or 4 at the earliest.

An athlete with a history of multiple concussions may be recommended to see a physician for further evaluation before participation.

More information on concussions can be obtained from one of the WJCC School's athletic trainers.