Terrace Blueback Swim Club
Concussion Policy

In this document "Organization" refers to Terrace Blueback Swim Club

Preamble

1. This Policy is based on the 6th Consensus Statement on Concussion in Sport released October 2022. This Policy interprets the information contained in the report that was prepared by the 2022 Concussion in Sport Group (CISG), a group of sport concussion medical practitioners and experts, and adapts concussion assessment and management tools.

2. The CISG suggested 11 'R's of Sport-Related Concussion ("SRC") management to provide a logical flow of concussion management. This Policy is similarly arranged. The 11 R's in this Policy are: Recognize, Reduce, Remove, Refer, Re-Evaluate, Rest, Rehabilitate, Recover, Return-to-Learn/Return-To Sport, Reconsider and Residual Effects.

3. A concussion is a clinical diagnosis that can only be made by a physician or nurse practitioner. The Organization accepts no liability for Participants or other individuals in their use or interpretation of this Policy.

Definitions

4. Terms in this Policy are defined as follows:
    a) ***Participants*** – Refers to all categories of individual members and/or registrants defined in the By-laws of the Organization who are subject to the policies of the Organization, including, but not limited to athletes, coaches, instructors, officials, and volunteers
    b) ***Suspected Concussion*** – means the recognition that an individual appears to have either experienced an injury or impact that may result in a concussion or who is exhibiting unusual behaviour that may be the result of concussion.
    c) ***Sport-Related Concussion ("SRC")*** – is a traumatic brain injury caused by a direct blow to the head, neck or body resulting in an impulsive force being transmitted to the brain that occurs in sports and exercise-related activities Several common features that may be used to define the nature of a SRC may include:
        i. Caused either by a direct blow to the head, face, neck or elsewhere on the body with an impulsive force transmitted to the brain.
        ii. Typically results in the rapid onset of short-lived impairment of neurological function that resolves spontaneously. However, in some cases, signs and symptoms evolve over several minutes to hours and commonly resolve within days, but may be prolonged.
        iii. May result in neuropathological changes, but the acute clinical signs and symptoms largely reflect a functional disturbance rather than a structural injury and, as such, no abnormality may be visibly apparent
        iv. Results in a range of clinical signs and symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive features typically follows a sequential course. However, in some cases symptoms may be prolonged.

Purpose

5. The Organization is committed to ensuring the safety of those participating in the sport of swimming. The Organization recognizes the increased awareness of concussions and their long-term effects and believes that prevention of concussions is paramount to protecting the health and safety of Participants.

6. This Policy provides guidance in identifying common signs and symptoms of a concussion, protocol to be followed in the event of a possible concussion and return to participation guidelines should a concussion be diagnosed. Awareness of the signs and symptoms of concussion and knowledge of how to properly manage a concussion is critical to recovery and helping to ensure the individual is not returning to physical activities too soon, risking further complication.

Recognizing Concussions

7. If any of the following **red flags** are present, an ambulance should be called and/or an on-site licensed healthcare professional should be summoned:
    a) Neck pain or tenderness
    b) Double vision
    c) Weakness or tingling / burning / numbness in arms or legs
    d) Severe or increasing headache
    e) Seizure or convulsion
    f) Loss of consciousness
    g) Deteriorating conscious state
    h) Vomiting more than once
    i) Increasingly restless, agitated, or combative
    j) Getting more and more confused
    k) Slurred speach

8. The following **observable signs** may indicate a possible concussion:
    a) Lying motionless on a training surface
    b) Slow to get up after a direct or indirect hit to the head
    c) Disorientation or confusion / inability to respond appropriately to questions
    d) Blank or vacant look
    e) Balance or gait difficulties, motor incoordination, stumbling, slow laboured movements
    f) Facial injury after head trauma

9. A concussion may result in the following **symptoms**:
    a) Headache or “pressure in head”
    b) Balance problems or dizziness
    c) Nausea or vomiting
    d) Drowsiness, fatigue, or low energy
    e) Blurred vision
    f) Sensitivity to light or noise
    g) More emotional or irritable
    h) “Don’t feel right”
    i) Sadness, nervousness, or anxiousness
    j) Neck pain
    k) Difficulty remembering or concentrating
    l) Feeling slowed down or “in a fog”

10. Failure to correctly answer any of these **memory questions** may suggest a concussion:
    a) What venue are we at today?
    b) What is your name?
    c) What day is it?

Removal from Sport Protocol

11. In the event of a Suspected Concussion where there are **observable signs** of a concussion, **symptoms** of a concussion, or a failure to correctly answer **memory questions**, the Participant should be immediately removed from participation by a designated first aid attendant/ lifeguard.

12. After removal from participation, the following actions should be taken:
    a) The Designated person who removed the Participant should consider calling 9-1-1

    b) The Designated person should make a record of the removal in the form of the first aid record and will ensure a copy is given to the Organization for record keeping.

    c) The designated person should immediately debrief with a club official once the Participant has been removed.

    c) The designated person must inform the Participant's parent or guardian if the Participant is younger than 19 years old, and the designated person must inform the parent or guardian that the Participant is required to undergo a medical assessment by a physician or nurse practitioner before the Participant will be permitted to return to participation; and

    d) The designated person will remind the Participant, and the Participant's parent or guardian as applicable, of the Organization's Return-to-Sport protocol as described in this Policy.

13. Participants who have a Suspected Concussion and who are removed from participation should:
    a) Be isolated in a dark room or area and stimulus should be reduced
    b) Be monitored
    c) Have any cognitive, emotional, or physical changes documented
    d) Not be left alone (at least for the first 1-2 hours)
    e) Not drink alcohol
    f) Not use recreational/prescription drugs
    g) Not be sent home by themselves
    h) Not drive a motor vehicle until cleared to do so by a medical professional

14. A Participant who has been removed from participation due to a suspected concussion should not return to participation until the Participant has been assessed medically, preferably by a physician who is familiar with the Sport Concussion Assessment Tool – 6th Edition (for Participants over the age of 13) or the Child SCAT6 (for Participants between 8 to 12 years old), even if the symptoms of the concussion resolve.

Re-Evaluate

15. A Participant with a Suspected Concussion should be evaluated by a licensed physician or nurse practitioner who should conduct a comprehensive neurological assessment of the Participant and determine the Participant's clinical status and the potential need for neuroimaging scans.

Rest and Rehabilitation

16. Participants with a diagnosed SRC should rest during the acute phase (24-48 hours) but can gradually and progressively become more active so long as activity does not worsen the Participant's symptoms. Participants should avoid vigorous exertion.

17. Participants must consider the diverse symptoms and problems that are associated with SRCs. Rehabilitation programs that involve controlled parameters below the threshold of peak performance should be considered.

Refer

18. Participants who display persistent post-concussion symptoms (i.e., symptoms beyond the expected timeline for recovery – 10-14 days for adults and 4 weeks for children) should be referred to physicians with experience handling SRCs.

Recovery and Return to Sport

19. SRCs have large adverse effects on cognitive functioning and balance during the first 24-72 hours after injury. For *most* Participants, these cognitive defects, balance, and symptoms improve rapidly during the first two weeks after injury. An important predictor of slower recovery from an SRC is the severity of the Participant's initial symptoms following the first few days after the injury.

20. The table below represents a graduated return to sport for most Participants, in particular those that did not experience high severity of initial symptoms after the following the first few days after the injury.

Table 1 – Return to Sport Strategy

Stage	Aim	Activity	Stage Goal
1	Symptom-limited activity	Daily activities that do not exacerbate symptoms	Gradual reintroduction of work/school activities
2	Aerobic exercise **2a**. Light (up to approximately 55% max HR) **then** **2b**. Moderate (up to approximately 70% maxHR)	Stationary Cycling or walking at slow to medium pace. May start light resistance that does not result in more than mild and brief exacerbation* of concussion symptoms.	Increase heart rate
3	Individual Sport-specific exercise Note: If sport specific training involves any risk of inadvertent head impact, medical clearance should occur prior to Step 3.	Sport-specific training away from the team environment. No head impact activities	Add movement, change of direction
		Steps 4-6 should begin after the resolution of any concussion symptoms	
4	Non-contact training drills	More challenging training drills Can integrate into a team environment	Resume usual intensity of 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 sport	Normal participation	

***Mild and brief exacerbation of symptoms (ie, an increase of no more than 2 points on a 0–10 point scale for less than an hour when compared with the baseline value reported prior to physical activity). Athletes may begin Step 1 (ie, symptom- limited activity) within 24 hours of injury, with progression through each subsequent step typically taking a minimum of 24 hours. If more than mild exacerbation of symptoms (ie, more than 2 points on a 0–10 scale) occurs during Steps 1–3, the athlete should stop and attempt to exercise the next day. Athletes experiencing concussion- related symptoms during Steps 4–6 should return to Step 3 to establish full resolution of symptoms with exertion before engaging in at- risk activities. Written determination of readiness to RTS should be provided by an HCP before unrestricted RTS as directed by local laws and/or sporting regulations. HCP, healthcare professional; maxHR, predicted maximal heart rate according to age (ie, 220- age).**

21. An initial period of 24-48 hours of both physical rest and cognitive rest is recommended before beginning the Return to Sport strategy.

22. There should be at least 24 hours (or longer) for each step. If symptoms reoccur or worsen, the Participant should go back to the previous step.

23. Resistance training should only be added in the later stages (Stage 3 or Stage 4).

24. If symptoms persist, the Participant should return to see a physician.

25. The Participant's Return-to-Sport strategy should be guided and approved by a physician or nurse practitioner with regular consultations throughout the process.

26. The Participant must provide the Organization with a medical clearance form, signed by a physician or nurse practitioner, following Stage 5 and before proceeding to Stage 6.

Reconsider

27. The 2022 Concussion in Sport Group (CISG) considered whether certain populations (children, adolescents, and elite athletes) should have SRCs managed differently.

28. It was determined that all Participants, regardless of competition level, should be managed using the same SRC management principles.

29. Adolescents (13 to 18 years old) and children (5 to 12 years old) should be managed differently. SRC symptoms in children persist for up to four weeks. More research was recommended for how these groups should be managed differently, but the CISG recommended that children and adolescents should first follow a Return to Learn strategy before they take part in a Return to Sport strategy. A Return to Learn strategy is described below.

Table 2 – Return to Learn

Step	Mental Activity	Activity at Each Step	Goal
1	Daily activities that do not result in more than a mild exacerbation* of symptoms related to the current concussion	Typical activities during the day (eg. reading) while minimizing screen time. Start with 5-15 min at a time and increase gradually.	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 school activities until a full day can be tolerated without more than mild* symptom exacerbation.	Return to full academic activities and catch up on missed work

***Following an initial period of relative rest (24–48 hours following an injury at Step 1), athletes can begin a gradual and incremental increase in their cognitive load. Progression through the strategy for students should be slowed when there is more than a mild and brief symptom exacerbation. *Mild and brief exacerbation of symptoms is defined as an increase of no more than 2 points on a 0–10 point scale (with 0 representing no symptoms and 10 the worst symptoms imaginable) for less than an hour when compared with the baseline value reported prior to cognitive activity.**

Residual Effects

30. Participants should be alert for potential long-term problems such as cognitive impairment and depression. The potential for developing chronic traumatic encephalopathy (CTE) should also be a consideration, although the CISG stated that "*a cause-and-effect relationship has not yet been demonstrated between CTE and SRCs or exposure to contact sports. As such, the notion that repeated concussion or sub concussive impacts cause CTE remains unknown*."

Risk Reduction and Prevention

31. The Organization recognizes that knowing a Participant's SRC history can aid in the development of concussion management and the Return to Sport strategy. The clinical history should also include information about all previous head, face, or cervical spine injuries. The Organization encourages Participants to make coaches and other stakeholders aware of their individual histories.

Non-Compliance

32. Failure to abide by any of the guidelines and/or protocols contained within this policy may result in disciplinary action in accordance with the *Discipline and Complaints Policy*.