ALA CONCUSSION POLICY

Version 4.0
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Preamble

1. This Policy is based on the 5th Consensus Statement on Concussion in Sport that was released in April 2017. This Policy interprets the information contained in the report that was prepared by the 2017 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, Remove, Re-Evaluate, Rest, Rehabilitation, Refer, Recover, Return to Sport, Reconsider, Residual Effects, and Risk Reduction.

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

Definitions

4. The following terms have these meanings in this Policy:
    a) "*Participant"* – Coaches, athletes, volunteers, and officials
    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")* – A sport-related concussion is a traumatic brain injury induced by biomechanical forces. 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 head.
        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 a number of minutes to hours.
        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 ALA is committed to ensuring the safety of those participating in the sport of lacrosse. The ALA 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 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

8. The following **observable signs** may indicate a possible concussion:
    a) Lying motionless on the playing 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) Who scored last in this game?
    c) Which period is it?
    d) What team did you play last game?
    e) Did your team win last game?

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 person.

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 ALA must make and keep a record of the removal;
    c) The designated person must inform the Participant's parent or guardian if the Participant is younger than 18 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 ALA'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 – 5th Edition (SCAT5) (for Participants over the age of 12) or the Child SCAT5 (for Participants between 5 and 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 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 vigourous 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.

Stage	Aim	Activity	Stage Goal
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. No resistance training	Increase heart rate
3	Sport-specific exercise	Running drills. No head impact activities	Add movement
4	Non-contact training drills	Harder training 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 sport	Normal participation	

Table 1 – Return to Sport Strategy

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 with regular consultations throughout the process.

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

Reconsider

27. The 2017 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 School strategy before they take part in a Return to Sport strategy. A Return to School strategy is described below.

Stage	Aim	Activity	Stage Goal

1	Daily activities at home that do not give the child symptoms	Typical activities of the child during the day as long as they do not increase symptoms (e.g., reading, texting, screen time). Start with 5–15 min 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 school activities until a full day can be tolerated	Return to full academic activities and catch up on missed work

Table 2 – Return to School Strategy

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 subconcussive impacts cause CTE remains unknown*."

Risk Reduction and Prevention

31. The ALA 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 ALA 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 ALA's *Discipline and Appeal Bylaw*.