SACO BAY LACROSSE

Concussion Management Plan

This Concussion Management Plan was developed to provide coaches, parents and participants of Saco Bay Lacrosse ("SBL") with an annual review of current and relevant information regarding concussions and head injuries and actions SBL will take in response. The plan is based on the U.S. Lacrosse Concussion Management Plan Guidelines for U-19 Programs and SMHC Sports Performance Center's concussion guidelines.

Introduction

Given the incidence and importance of head injury in the sport of lacrosse, SBL has developed this plan, which will be reviewed and updated annually as necessary or appropriate. The plan is not intended as a standard of care, and should not be interpreted as such; rather, SBL's plan is intended to educate all parents, coaches, and participants about concussion risks and to require compliance with its principles. A copy of the plan will be available to all SBL coaches, parents and participants and will be posted on the SBL website along with other concussion education and information resources.

Head injury, including concussions, continues to be a concern in youth sports. Concussions are among the five most frequent injuries for both boys and girls high school lacrosse. In 2014, among boys high school sports, lacrosse players experienced the second highest rate of concussions (0.3 per 1000 athletic-exposures), with football having the highest rate (0.6 per 1000 athletic-exposures). In 2014 among girls high school sports, lacrosse again had the second highest rate (0.2 per 1000 athletic-exposures), with soccer being highest (0.35 per athletic exposure). Boys have a 50% greater risk of concussion than girls, with concussions resulting from player-to-player contact, often from defenseless hits.

For girls, about half of all concussions result from stick-to-head contact.

It is important to understand that no current helmet can eliminate concussions. All current helmet standards are designed to reduce the risk of severe brain injury and skull fracture, not to prevent concussion. There are substantial efforts towards developing standards and helmets that can reduce the risk of concussions, but this remains a challenge. Additionally, there is no evidence that any helmet or headgear can be used to reduce the risk of a second concussion or allow an earlier return to participation.

A SBL participant who exhibits signs, symptoms or behaviors suggestive of a concussion will be removed from practice or competition and not returned to play until evaluated by a healthcare professional with experience in the evaluation and management of concussions and who is authorized by the State of Maine to return an athlete to play. Athletes diagnosed with or suspected of a concussion will not be allowed to return to SBL activity for the remainder of that day.

Concussion Management Plan

(A) Athletes, parents, coaches, and league administrators will be provided with educational information about concussions, including: the signs and symptoms; possible prevention; mechanisms of injury; treatment; return to activity guidelines; and limitations of protective equipment.
(B) Participants parents, coaches, and league administrators will be required to acknowledge that they have received information about the signs and symptoms of concussions and understand the importance of promptly reporting all signs and symptoms of concussion to a participants coach, parent or qualified healthcare professional.
(C) Participants who exhibit signs, symptoms or behaviors suggestive of a concussion will be removed from SBL activities and will not be allowed to return to SBL activities until the participant is evaluated and cleared (in writing) by a qualified healthcare professional.
(D) Participants diagnosed with a concussion are prohibited from returning to SBL activity for at least the remainder of that day.
(E) Participants will be required to follow a multi-step return-to-play protocol that outlines what participants, coaches and parents should expect if there is a diagnosed concussion.
(F) All SBL coaches will take a concussion management course prior to the season. The course is available at https://www.cdc.gov/headsup/youthsports/coach.html

Definition of Concussion from the Consensus statement on concussion in sport—the 5th international conference on concussion in sport held in Berlin, October 2016

The Berlin expert panel modified the definition as follows:

Sport related concussion is a traumatic brain injury induced by biomechanical forces. Several common features that may be utilized in clinically defining the nature of a concussive head injury include:

- *SRC may be caused either by a direct blow to the head, face, neck or elsewhere on the body with an impulsive force transmitted to the head.*
- *SRC 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.*
- *SRC 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 is seen on standard structural neuroimaging studies.*
- *SRC 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.*

Signs and Symptoms of a Concussion
A concussion should be suspected if any one or more of the following signs or symptoms are present, OR if the coach/evaluator is unsure.

1. *Signs of a concussion may include (ie., what the athlete looks like):*
    - *Confusion*
    - *Disorientation*
    - *Irritability*
    - *Trouble Resting/ Getting Comfortable*
    - *Lack of Concentration*
    - *Slow Response/ Drowsiness*
    - *Incoherent/ Slurred Speech*
    - *Clumsy Movements*
    - *Loss of Consciousness*
    - *Amnesia/ Memory Problems*
    - *Act Silly/ Combative/ Aggressive*
    - *Repeatedly Ask Same Questions*
    - *Dazed Appearance*

- *Restless*
- *Constant Attempts to Return to Play*
- *Constant Motion*
- *Balance Problems*
- *Disproportionate/ Inappropriate Reactions*

2. Symptoms of a concussion may include (i.e., what the athlete reports)

- *Headache or dizziness*
- *Nausea or Vomiting*
- *Blurred or Double Vision*
- *Oversensitivity to Sound/ Light/ Touch*
- *Ringing in Ears*
- *Feeling Foggy or Groggy*

Parents, participants, and coaches will receive preseason concussion education and information from SBL on the website. The education program will include information regarding the signs and symptoms, possible prevention, mechanisms of injury, treatment, return to activity guidelines, and limitations of protective equipment. Coaches are required to register and complete the CDC Concussion in Sports online program, which can be found on the Centers for Disease Control's website at: https://www.cdc.gov/headsup/youthsports/coach.html

Preseason baseline testing

Parents of participants may want to discuss with the participants healthcare provider the advisability and availability of pre-participation baseline evaluation through impact testing.

Evaluation

A participant exhibiting signs and symptoms of a concussion will be removed by the coach, referee or league official from play immediately and must be evaluated by a qualified healthcare provider before being allowed to resume SBL activities. Parents of the participant will be given a suspected headed to reform from the SBL coach or team administrator. If an athlete has a concussion they must go thru the return to sport protocol in table 1 to be eligible to return to game activities.

Table 1
Graduated return-to-sport (RTS) strategy

Stage	Aim	Activity	Goal of each step
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, eg, 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 sport	Normal game play	

- NOTE: An initial period of 24–48 hours of both relative physical rest and cognitive rest is recommended before beginning the RTS progression.

- There should be at least 24 hours (or longer) for each step of the progression. If any symptoms worsen during exercise, the athlete should go back to the previous step. Resistance training should be added only in the later stages (stage 3 or 4 at the earliest). If symptoms are persistent (eg, more than 10–14 days in adults or more than 1 month in children), the athlete should be referred to a healthcare professional who is an expert in the management of concussion.