

St. John Bosco High School Concussion Management Plan

The goal of the Concussion Management Plan is to ensure that a consistent protocol is established for the care of any student-athlete with a sport-concussion.

I. A Concussion is:

"A complex pathophysiological process affecting the brain, induced by traumatic biomechanical forces...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."

- II. The role of staff within the concussion management plan:
 - a. ATC the role of the athletic trainer will be to provide baseline testing of all student-athletes participating in sports that are at high-risk for sport-concussion. Additionally the athletic trainer will provide assessment of concussion when injury has occurred. This is to include, but is not limited to, documentation of the initial injury and serial assessments (noting the presence of absence of signs and symptoms), a sideline assessment of the student-athlete, continual monitoring, and physician or physician's designee consultation. Consultation with a physician or physician's designee should be made within 24 hours of injury.
 - b. **Physician** the role of the physician will be to consult with the staff athletic trainers on the status of the student-athlete, review results of testing, and meet with the student-athlete when deemed appropriate. In addition the physician or physician's designee will have the sole right and ability to release the student-athlete for return to play.
 - c. Coach the role of the team coaches (head and assistants) will be to assist the medical staff in monitoring the injured student-athlete with athletic trainer's approval. Additionally, the coach will understand that only the medical staff may determine unchallengeable participation levels for injured student-athletes.

III. System for testing

When a student-athlete shows any signs/symptoms or behaviors consistent with a sport-concussion, the athlete shall be removed from practice or competition and evaluated by an athletics healthcare provider (Athletic Trainer and Physician) with experience in the evaluation and management of sport-concussion.

- a. Testing Method
 - i. Computer (online)
 - 1. ImPACT test
 - ii. Pen/Paper
 - 1. Standardized Assessment of Concussion (SAC)
 - a. Includes measurements for orientation, immediate memory, concentration, and delayed recall
 - b. 30 point sum
 - i. Would need to establish a point baseline of what is permissible and what is not for participation in comparison to an individual baseline.
 - 2. Balance Error Scoring System (BESS)
 - 3. Symptom checklist
 - 4. Cranial Nerve Testing

IV. Home care

- a. Send Home Care Card
 - i. Avoid taking medications except acetaminophen after injury
 - ii. Athlete should avoid intake of alcohol, illicit drugs, or other substances that may interfere with cognitive function and neurologic recovery.
 - iii. Rest is recommended, but not complete bed rest.
 - iv. Athlete should resume normal ADLs as tolerated.
 - 1. School
 - 2. Work
 - v. Once symptom free, the athlete may gradually resume physical and mental exertion, up to the point where post-concussive signs/symptoms recur.
 - vi. A well balanced diet both in quality and quantity is recommended.
 - vii. Athlete should only be woken periodically through the night IF he or she has experienced LOC, prolonged episodes of amnesia, or is still experiencing significant symptoms at bed time.
 - viii. Oral and written instructions should be provided to the athlete and to a responsible adult (parents, guardian) who is able to monitor them during the acute phase of the concussion.

V. Follow-up testing

- a. Post-injury
 - i. The first post-injury exam should take place within the first 24-48 hours of injury.
 - ii. Further follow up examination should be done at the discretion of the attending physician.
 - 1. Continued testing
 - 2. Diagnostic imaging
 - 3. Neuropsychologist consultation
- VI. Return to play (RTP) decisions should include
 - a. The physician or physician's designee will have the sole right and ability to release the student-athlete for return to play. This decision should be made based on:
 - i. An asymptomatic presentation by the student-athlete
 - ii. Neurocognitive testing comparison with baseline assessment
 - iii. Post-exertion assessments are within normal baseline limits, and do not create or exacerbate any concussive symptoms.
 - 1. "The RTP decision should be made after an incremental increase in activity with an initial cardiovascular challenge, followed by sport-specific activities that do not place the athlete at risk for concussion."
 - 2. Athlete should follow Graduated Return to Play Protocol. "Generally, each step should take 24 hours so that an athlete would take approximately one week to proceed through the full rehabilitation protocol once they are asymptomatic at rest and with provocative exercise"
 - b. No one factor should determine the RTP decision.
- VII. When to disqualify
 - i. For game or practice
 - 1. Per the CIF anyone assessed with a concussion **shall not return** to activity for the remainder of that day.
 - 2. Medical clearance will be determined by a physician or their designee according to the concussion management plan.

VIII. Documentation

- a. Incident
- b. Evaluation

- i. Sideline testing
- ii. Computerized testing
- c. Continued management
 - i. Physician evaluation
- d. Clearance
 - RTP after concussion should occur only with medical clearance from a medical doctor trained in the evaluation and management of concussions, and a step-wise progression program monitored by an athletic trainer, coach, or other identified school administrator.

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