

# Concussion Safety Protocol

## Introduction

Aviator Baseball LLC (Aviator Baseball) is committed to protecting the health of and providing a safe environment for each of its participating athletes. To this end, Aviator Baseball has adopted the following Concussion Safety Protocol. This protocol identifies expectations for institutional concussion management practices as they relate to (1) the definition of sport-related concussion\*; (2) independent medical care\*; (3) preseason education; (4) pre-participation assessment; (5) recognition and diagnosis; (6) initial suspected concussion evaluation; (7) post-concussion management; (8) return-to-learn; (9) return-to-sport; (10) limiting exposure to head trauma; and (11) written certificate of compliance signed by the athletics health care administrator.

## 1. Definition of Sport-Related Concussion\*

The Consensus Statement on Concussion in Sport, which resulted from the 5th international conference on concussion in sport, defines sport-related concussion as follows:

Sport-related concussion (SRC) is a traumatic brain injury induced by biomechanical forces. Several common features that may be utilized to clinically define the nature of a concussion 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.
- The clinical signs and symptoms cannot be explained by drug, alcohol or medication use, other injuries (such as cervical injuries, peripheral vestibular dysfunction, etc.) or other comorbidities (e.g., psychological factors or coexisting medical conditions).

## 2. Independent Medical Care\*

Physicians and athletic trainers shall have unchallengeable autonomous authority to determine medical management and return-to-activity decisions, including those pertaining to concussion and head trauma injuries, for all athletes.

### **3. Education**

All athletes or their guardians will be provided this Concussion Safety Protocol and be required to sign an acknowledgement, that they have reviewed and understood Aviator Baseball's Concussion Safety Protocol.

### **4. Pre-Participation Assessment**

All athletes should undergo a pre-participation baseline concussion assessment before playing baseball or any sports activity. This pre-participation assessment at a minimum, should include assessment for the following:

- History of concussion or brain injury, neurologic disorder, and mental health symptoms and disorders.
- Symptom evaluation. (Identify tool to be used, e.g., Symptom evaluation in SCAT5)
- Cognitive assessment. (Identify and describe, e.g., ImPACT, Axon, paper and pencil)
- Balance evaluation. (Identify and describe, e.g. BESS, modified BESS, SCAT5, other)

A physician should determine pre-participation clearance and any need for additional consultation or testing and will consider for a new baseline concussion assessment at six months or beyond for any athlete with a documented concussion, especially those with complicated or multiple concussion history.

### **5. Initial Suspected Concussion Evaluation**

An initial concussion evaluation should include:

- Clinical assessment for cervical spine trauma, skull fracture, intracranial bleed and catastrophic injury.
- Symptom assessment.
- Physical and neurological exam.
- Cognitive assessment.
- Balance exam.

### **6. Post-concussion Management**

Activation of emergency action plan, including immediate assessment for any of the following scenarios:

- If performed, Glasgow Coma Scale < 13 on initial assessment, or GCS <15 at 2 hours or more post-initial assessment.
- Prolonged loss of consciousness.
- Focal neurological deficit suggesting intracranial trauma.
- Repetitive emesis.
- Persistently diminished/worsening mental status or other neurological signs/symptoms.
- Spine injury.

Emergency action plan may require transportation for further medical care.

Because concussion may evolve or manifest over time, for all suspected or diagnosed concussions, there will be in place a mechanism for serial evaluation of the student-athlete.

For all cases of diagnosed concussion, there must be documentation that post-concussion plan of care was communicated to both the student-athlete and another adult responsible for the student-athlete, in oral and/or written form.

Any athlete with atypical presentation or persistent symptoms should be re-evaluated by a physician in order to consider additional diagnoses, best management options, and consideration of referral. Additional diagnoses may include, among others: fatigue and/or sleep disorder; migraine or other headache disorders; mental health symptoms and disorders; ocular dysfunction; vestibular dysfunction; cognitive impairment and autonomic dysfunction.

## **7. Return-to-Sport**

Final determination of unrestricted return-to-sport should be made by a physician following implementation of an individualized, supervised stepwise return-to-sport progression that includes:

1. Symptom-limited activity.
2. Light aerobic exercise without resistance training.
3. Sport-specific exercise and activity without head impact.
4. Non-contact practice with progressive resistance training.
5. Unrestricted training.
6. Unrestricted return-to-sport.

The above stepwise progression should be supervised by a health care provider with expertise in concussion, with it being typical for each step in the progression to last at least 24 hours.

**NOTE:** If at any point the athlete becomes symptomatic (more symptomatic than baseline), a physician should be notified, and adjustments will be made to the return-to-sport progression. \*

## **8. Limiting Exposure to Head Trauma**

Aviator Baseball is committed to protecting the health of and providing a safe environment for each of its participating athletes. To this end, Aviator Baseball will limit athlete head trauma exposure in a manner consistent with Interassociation Recommendations. For example:

- Aviator Baseball will adhere to existing ethical standards in all practices and competitions.
- Using playing or protective equipment (including the helmet) as a weapon will be prohibited during all practices and competitions.
- Deliberately inflicting injury on another player will be prohibited in all practices and competitions.
- All playing and protective equipment (including helmets), as applicable, will meet relevant equipment safety standards and related certification requirements.