Thorbeckes Athletic Club

Concussion Safety Protocol

Introduction

Thorbeckes Athletic Club is committed to protecting the health of and providing a safe environment for each of its participating athletes. We recognize that gymnastics is a high-risk sport for concussion. To this end, Thorbeckes Athletic Club has adopted the following Concussion Safety Protocol for all athletes. This protocol identifies expectations for the club's concussion management practices as they relate to (1) the definition of sport-related concussion; (2) preseason education; (3) recognition and diagnosis; (4) post-concussion management; (5) return-to-learn & sport; and (6) limiting exposure to head trauma.

1. Definition of Sport-Related Concussion

The Consensus Statement on Concussion in Sport, which resulted from the 6th International Conference on Concussion in Sport-Amsterdam, 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, neck, or body resulting in an impulsive force transmitted to the brain.
- 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.

2. Preseason Education

All athletes and parents of minor athletes will be provided and allowed an opportunity to discuss educational material (e.g., the USA Gymnastics Sports Concussion Overview) and be required to sign an acknowledgement, on an annual basis and prior to participation, that they have been provided, reviewed and understood the concussion education material.

All coaches involved in athlete health and safety decision making are required to complete concussion education training prior to coaching and annually thereafter. Coaches must be allowed an opportunity to discuss educational material (e.g., the USA Gymnastics Sports Concussion Guidelines, the USA Gymnastics Sports Concussion Overview) and be required to sign an acknowledgement, on an annual basis, that they have been provided, reviewed and understood the concussion education material.

Concussion education should include:

- The definition of concussion
- Possible mechanisms of injury
- Common signs and symptoms

- Steps that can be taken to prevent concussions and other injuries from occurring in gymnastics
- What to do when an athlete has suffered a suspected concussion or more serious head injury
- What measures should be taken to ensure proper medical assessment
- Return-to-School and Return-to-Sport Strategies (See USAG return to sport progression for gymnastics-specific progressions for each discipline)
- Return to sport medical clearance requirements

3. Recognition and Diagnosis of Concussion

All coaches in a member club must be able to recognize the potential mechanism of injury of a concussion and the signs and symptoms of acute concussion. Coaches must immediately discontinue training or competition for anyone who is suspected of having a concussion and must monitor the athlete until a parent arrives. Coaches must be able to recognize red flag signs and symptoms and must activate 911 if these signs and symptoms are present. (See USA Gymnastics Concussion Injury Report & Sports Concussion Overview)

Medical personnel with training in the diagnosis, treatment and initial management of acute concussion will be present at all high-risk USAG sanctioned competitions (see Rules & Procedures for definition of high-risk for your discipline).

Any athlete that exhibits signs, symptoms or behaviors consistent with concussion:

- Must be removed from practice or competition until they are evaluated by a medical professional.
- Must be evaluated by a physician (or physician designee) with concussion experience.
- May only return to play the same day if onsite medical personnel determine that concussion is no longer suspected.

4. Post-concussion Management

Activation of emergency action plan must occur for any of the following scenarios following a suspected concussion:

- Severe or worsening headache
- Weakness or numbness in the arms or legs
- Repeated vomiting
- Slurred speech
- Neck pain or tenderness
- Loss of vision or double vision
- Seizure activity or convulsions
- Increasing agitation or combative behavior
- Increasing confusion
- Loss of consciousness or deteriorating conscious state (going in and out of consciousness)
- Visible deformity of the skull

Because concussion may evolve or manifest over time, for all suspected or diagnosed concussions, athlete should be monitored by club personnel trained in concussion until a parent arrives. An athlete should never be allowed to drive him/herself home after a suspected concussion.

For all cases of suspected or diagnosed concussion, there must be documentation that post-concussion plan of care was communicated to both the athlete and another adult responsible for the athlete, using the USA Gymnastics Concussion Home Care Guide.

5. Return-to-Learn & Sport

Prior to return to gymnastics after a concussion event, the athlete must be symptom free with all activities of daily living and academic activities. Performance of academic activities must be back to the athlete's baseline and without modification.

Early return to aerobic and light strength and flexibility training can be considered, as directed by a treating physician. Progression back to gymnastics-specific activity should not begin until the athlete is symptom free and has completed an unrestricted return-to-learn progression. Initiation of the return-to-sport protocol must be approved by a physician or his/her medically qualified designee.

The timeline for return-to-sport varies based on individuals and other medical conditions including prior history of concussion. It generally takes longer for children and adolescents to return-to-sport than it does for adults.

Final determination of unrestricted return-to-sport will be made by a physician or his/her medically qualified designee following implementation of an individualized, supervised stepwise return-to-sport progression detailed in the USA Gymnastics Gymnastics-Specific Return-to-Sport Strategy document that includes:

1. Early return to light aerobic activity, strength, and flexibility training.
2. Return to early sport training: Inversion.
3. Progress sport specific training: Flipping.
4. Progress sport specific training: Twisting.
5. Progress sport specific training: Advanced Skills (physician clearance required to move to step 6).
6. Return to full training.

The above stepwise progression will 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.

6. Limiting Exposure to Head Trauma

Thorbeckes Athletic Cub is committed to protecting the health of and providing a safe environment for each of its participating athletes. We will provide a safe environment for our athletes by:

1. Ensuring gymnasts have completed proper progressions prior to trying a new skill.
2. Using proper mats and equipment setup.
3. Having spotters in place at practice and during competition.
4. Ensuring the area is clear prior to beginning a skill to prevent collisions.
5. Ensuring equipment is properly maintained and inspected.