

Mat-Town USA Concussion Protocol and Return to Play Procedures

Purpose:

The Mat Town Wrestling Club Athletic Training Staff recognizes the importance of appropriate concussion management. These injuries can be unique in their presentation there is critical need for establishing for individualized care. The Athletic Training Staff will always err on the side of caution when faced with a potential brain injury.

The Mat Town Wrestling Club Athletic Training Staff respects the need for universally accepted regimented protocols for dealing with such potentially serious conditions. To that end, the Athletic Trainers and Team Physicians will follow the plan of care set forth by the Interassociation Consensus: Diagnosis and Management of Sport-Related Concussion Best Practices and the National Athletic Trainers' Association (NATA) Position Statement: Management of Sport Concussion.

Definition of Concussion:

Concussion is defined as a complex pathophysiological process affecting the brain, induced by biomechanical forces to the head. Concussion may be caused by either a direct blow to the head, face, neck or elsewhere on the body with an "impulsive" force transmitted to the head. Concussion typically results in the rapid onset of short-lived impairment of neurological function that resolves spontaneously. However, in some cases, symptoms and signs may evolve over a number of minutes to hours. Concussion may result in neuropathological changes, but the acute symptoms largely reflect a functional disturbance rather than a structural injury and, as such, no abnormality is seen on standard structural neuroimaging studies. Concussion results in a set of clinical symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive symptoms typically follows a sequential course. However, it is important to note that some cases symptoms may be prolonged.

Signs and Symptoms: Physical Cognitive Emotional Sleep Problems Headache Memory Loss Irritability Excessive Sleepiness Blurred Vision/Eye Irritation Difficulty Concentrating/Remembering Sadness Restless Sleep Nausea/Vomiting Reasoning Difficulty Nervousness Decreased Sleep Dizziness Mental Slowing Anxiety Shifted Sleep Cycle Balance Problems Forgetful of Recent Information Loss of Consciousness Confusion of Recent Events

Reducing Exposure to Head Trauma

Mat Town Wrestling Club is committed to a "safety first" approach to sport. This includes adhering to the following Interassociation Consensus statements: • Year-Round Football Practice Contact Recommendations • Independent Medical Care for College Student Athlete Best-Practices Coaching and student athlete education will be provided regarding safe play and proper technique. Efforts will also be made to reduce the amount of contact in practices as able, take the head out of contact.

Education Athletes, parents, administrators, coaches, and healthcare providers must be educated in regards to the detection of a concussion, its clinical features, assessment techniques, and principles of returning to the classroom and sport. Annual concussion education will be provided to all athletes. As a part of the National Collegiate Athletic Association compliance, all students

must review all educational forms that are provided to them, as well as sign a statement in which the Student-Athlete accepts responsibility for reporting their injuries and illnesses to the medical staff (Appendix A). Educational materials will also be provided annually to coaches, athletic trainers, team physicians, and athletic administrators. Each individual will provide a signed acknowledgement that they have been read and understand the educational materials (Appendix B).

Pre-Participation

Concussion History Annually, each athlete will be required to provide a brain injury/concussion history with details of symptoms and length of time to recover.

Baseline Neurocognitive Testing Mat Town Wrestling Club will use ImPACT as a tool to assess neurocognitive function. All incoming freshman and transfer student athletes will be required to take a baseline test prior to the start of their season. This test includes 10 modules that are designed to test the cognitive functioning of the athlete. This data will be recorded and used as baseline information to compare to post injury data as needed. If an athlete does suffer a concussion, a Post Injury ImPACT test will be done within 48-72 hours of the initial injury if symptoms allow. Any athlete who suffers a concussion shall be administered a new baseline test prior to beginning their next athletic season.

Balance Testing All incoming freshmen or transfer students will be required to complete a balance assessment prior to the start of their season. This test is performed using the Balance Master VSR System. The test performed is the Stability Evaluation Test (SET), which is based upon the Balance Error Scoring System (BESS). Instead of the tester counting errors as in the BESS test, the Balance Master System evaluates the subject's Center of Gravity or postural stability and provides results in graphical form.

Physician Clearance The team physician determines pre-participation clearance and any need for additional consultation or testing based upon athlete concussion history and/or testing results.

Recognition and Diagnosis of Concussion

Medical personnel with training in the diagnosis, treatment, and initial management of acute concussion shall be "present" at all NCAA varsity competitions in the following contact/collision sports: Basketball; Field Hockey; Football; Lacrosse; Pole Vault; Soccer; Wrestling. To be "present" means to be on site at the campus or arena of the competition. Medical personnel may be from either team, or may be independently contracted for the event.

Medical personnel with training in the diagnosis, treatment and initial management of acute concussion must be "available" at all NCAA varsity practices in the following contact/collision sports: Basketball; Field Hockey; Football; Lacrosse; Pole Vault; Soccer; Wrestling. To be "available" means that, at a minimum, medical personnel can be contacted at any time during the practice via telephone, messaging, email, beeper or other immediate communication means. Further, the case can be discussed through such communication, and immediate arrangements can be made for the athlete to be evaluated.

Removal from Play/Evaluation In any circumstance where a concussion is suspected, the athlete shall be removed from further participation until a thorough sideline assessment has been completed. The Athletic Training staff has the authority to remove an athlete from practice or competition if they suspect a concussion under their standing orders through the team physician.

Once the athlete has been removed from activity, the athlete's head and cervical spine shall be evaluated to rule out any secondary injury (including but not limited to intracranial bleed, skull fracture, or spinal trauma). If a secondary injury has occurred to the head or neck, the Emergency Action Plan will be activated.

Other severe signs and symptoms that would warrant a referral to the nearest Emergency Department include:

- Loss of Consciousness
- Amnesia lasting longer than 15 minutes
- Deterioration of neurologic function
- Glasgow Coma Scale < 13
- Decreasing levels of consciousness
- Irregularity in respirations, blood pressure, or pulse
- Unequal, dilated, or non-reactive pupils
- Declining cranial nerve assessment
- Seizure activity
- Repeated vomiting
- Decreasing motor, sensory, or balance deficits
- Increase in number and/or severity of symptoms

If there is no secondary injury to the head or neck and the athlete presents without any of the above signs or symptoms, the athlete will be evaluated and treated by the team's Athletic Trainer or Team Physician if available.

Post-Sideline Management A thorough history should be taken where the athlete will be asked to rate their signs and symptoms, and answer questions about the initial injury (Appendix C). Along with taking a history, the athlete should have a full cranial nerve and balance assessment and be asked questions as seen on a Standardized Concussion Assessment Tool 5 (SCAT5). If the athlete is diagnosed with a concussion, they will be removed from participation for that calendar day. If referral to an Emergency Department is not warranted, the athlete will be sent home with oral and written instructions for home care. These instructions should also be given to a responsible adult (e.g., parent or roommate) who will continue to monitor and supervise the athlete (Appendix D). The athlete should be advised to check in with their Athletic Trainer daily to complete a concussion symptom scoresheet (Appendix E).

Post Injury Testing Within 48-72 hours after a concussion, the athlete shall be administered Post-Injury ImPACT and balance testing if symptoms allow. These results will be compared to their baseline and included in the return to play decision.

Communication/Referral to Team Physician The team physician will be made aware of any concussed athletes under the care of the Mat Town Wrestling Club Athletic Training Staff. This

communication will be made via a referral form, which must be completed and signed by the team physician. An example can be found in Appendix F.

The concussed athlete will be referred to the team physician or their designee for a face-to-face evaluation if they have sustained multiple concussions during the present season, if any symptoms linger for 7 days or more, or if there is an atypical testing response.

Documentation

All concussions will be recorded as injuries.. This will cause the area around the athlete's name on their profile to turn red, so it will be easy to identify the athlete as having a history of concussion upon opening their file. All paper documentation relating to the athlete's concussion will be scanned/uploaded.

Recovery

The cornerstone of concussion management is physical and cognitive rest until the acute symptoms resolve, and then a graded program of exertion prior to medical clearance and return to play. An appropriate approach involves the gradual return to school and social activities (prior to athletics) in a manner that does not result in a significant exacerbation of symptoms. Low level exercise for those who are slow to recover may be of benefit, although the optimal timing following injury for initiation of this treatment is currently unknown. The majority of concussions will recover spontaneously over several days. In these situations, it is expected that an athlete will proceed progressively through a stepwise return to play strategy as suggested by The NCAA Sport Science Institute Interassociation Guidelines.

The Head Athletic Trainer will navigate the Return to Learn process with the concussed student athlete. Additionally, a multidisciplinary team will be utilized to assist in this process. This team may vary from case to case, but may include and is not limited to:

- Team Physician
- Team Athletic Trainer
- Counseling Services representative
- Neuropsychologist consultant
- Athletic Coaches

Not all concussed student athletes will require a referral to disability services; however, it is important to inform all concussed athletes that they have the option. If the athlete receives accommodations from ODSS, the athletic training staff must inform ODSS once the athlete has fully recovered and accommodations are longer needed.

Return to Play Once the athlete has returned to his/her baseline scores on ImPACT and balance testing, and has been symptom free without the use of pain medication for 24 hours (or 7 days if necessary), the graduated Return To Play (RTP) protocol can be initiated. *If the athlete has sustained multiple concussions during the present season OR if the concussed athlete required a day-of-injury referral to the physician or Emergency Department, return to play will be considered after the athlete is 100% asymptomatic for a period of seven days, and return to baseline on ImPACT and baseline. The athlete will also be required to be seen by the team

physician to be evaluated and cleared. Once cleared, the concussed athlete will follow the return to play progression outlined below.

The ultimate return to play decision rests with the Athletic Trainer responsible for that particular team. This decision will be made with direction from the team physician. The athletic trainer may choose to be increasingly cautious and delay return to play when considering collision and high-risk sports.

Return to Play Progression Each step of the Return to Play Protocol will take place on a separate day. Following each step, the athlete will be assessed for post-concussion signs and symptoms. The progression through the protocol will be recorded on the RTP Log (Appendix I).

The Return to Play Protocol consists of 5 steps of increasingly challenging physical activity. Suggested activities for each step are listed below.

- **Step 1- Light, Aerobic Exercise (Walking, Swimming, or Stationary Bike)**
- **Step 2- Sport Specific Exercise (Sprinting, Adding Movement)**
- **Step 3- Non-Contact Training Drills (Exercise, Coordination, Cognitive Load; May begin Weight Lifting)**
- **Step 4- Full-Contact Practice (Restore Confidence, Assess Functional Skills)**
- **Step 5- Return to Competition (Normal Game Play)**

If any post-concussion symptoms return when progressing through the Return to Play Protocol, activity will be suspended until the athlete has been symptom free for 24 hours. After 24 hours without symptoms, the athlete will be returned to the activity level of the previous step and progress accordingly. Return of symptoms will be reported to the Team Physician.

Summary

The Mat Town Wrestling Club Athletic Training staff are committed to handling all concussions with the utmost care. They will be proactive in the assessment and management of a concussion, as well as assist in tailoring accommodations for the individual since concussions are not all the same. The goal of this policy is to educate athletes, coaches, parents, and healthcare providers on what a concussion is, how to limit the risks of sustaining a concussion, and how to manage a concussion.

Mat Town Wrestling Club Athletic Training

Concussion Evaluation/Checklist Sheet

Athlete: _____ Sport: _____ DOI: _____
Date of Evaluation: _____

Sign/Symptom (+/-)

Amnesia (Retrograde/Anterograde)

Confusion

Disorientation

Irritability

Incoordination

Dizziness

Headache

Blurred Vision

Photophobia

Nystagmus

Tinnitus

Nausea

Vomiting

Unusually Fatigue

Cranial Nerve (+/-)

I: Olfactory

II: Optic

III: Oculomotor

IV: Trochlear

V: Trigeminal

VI: Abducens

VII: Facial

VIII: Vestibulocochlear

IX: Glossopharyngeal

X: Vagus

XI: Accessory

XII: Hypoglossal

Blood Pressure: _____ Pulse: _____ Respiration: _____