



CONCUSSION POLICY & PROCEDURES

MILD TRAUMATIC BRAIN INJURY (MTBI)/CONCUSSIONS

GENERAL INFORMATION

Colorado Storm Soccer Association (Storm) recognizes that concussion/mild traumatic brain injuries (MTBI) pose a significant risk for all athletes. These injuries should be taken seriously by all people involved including but not limited to the athletes, their families, and coaches. The management plan for Storm concussions includes: Education, acute injury management for suspected concussion, and treatment of concussion and return-to-play decisions.

ASSESSMENT

Colorado Storm medical staff follows the latest position statements for concussion assessment. This model of concussion assessment involves the use of brief screening tools to evaluate post-concussion signs and symptoms, cognitive function, and postural stability. These three assessment tools can be helpful in making a determination about severity of injury and post injury recovery when baseline data for an individual are available. In addition, a thorough clinical evaluation including history and signs and symptoms check list, formal cognitive and postural-stability testing is recommended to assist in objectively determining injury severity and readiness to return to play (RTP). No one test should be used solely to determine recovery or RTP, as concussions presents in many different ways. Baseline testing provides an indicator of what is “normal” for that particular athlete. The US Club Soccer Association mandates that the boys Development Academy does preseason baseline testing using ImPACT before athletes are exposed to the risk of concussion during sport participation. This test is administered by the Head Athletic Trainer.

ACUTE INJURY MANAGEMENT FOR SUSPECTED CONCUSSION

At the time of the injury, athletes and coaches are required to report any symptoms that are present. Per the “Jake Snakenberg Youth Sports Concussion Act” that Colorado Legislation passed on March 29, 2011, an athlete is to be held out of all activity if a concussion is even **suspected** by a coach.

1. Signs and Symptoms of a Concussion

- Headache
- Acting somewhat confused
- Feeling unable to concentrate, or not thinking clearly
- Drowsiness
- Dizziness
- Loss of consciousness for a fairly short period of time (not always)



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- Memory loss (amnesia) of events before the injury or right after
- Nausea and vomiting
- Visual Problems
- Feeling mentally foggy and/or slowed down
- Irritable
- More emotional
- Balance Problems
- Sensitivity to light and/or noise

*If a concussion is suspected, notify the athlete's parents immediately.

Further evaluation by a medical staff member experienced in the evaluation and management of concussion (Athletic Trainer or Physician) is the only way the athlete will be able to return to play same day. When a medical staff member is present, they shall operate within their scope of professional practice during evaluation and treatment of a concussion. The medical staff member will perform an appropriate evaluation to determine if a MTBI/concussion is present. If a MTBI/concussion is present the athlete is withheld from practice or competition for the remainder of that day. **The medical provider's return to-play decision is final and may not be challenged.** If possible, the athlete will have serial evaluations on the day of the injury as indicated. He/She will then have to be cleared by a Physician prior to returning to active participation in practice or competition. Following the initial evaluation, determination of the severity of the injury, the need for emergent or urgent transportation, medical evaluation or treatment, frequency and duration of serial evaluations will be made.

Medical staff responsibilities at the time of diagnosis:

1. Athlete education: injured athlete will be given written and verbal review of concussions, factors that make symptoms worse, activity restrictions, and warning signs for more serious symptoms or signs that would require emergent treatment and advice to call 911 should those symptoms/signs be observed.

a. Emergency Symptoms/signs:

- Changes in alertness and consciousness
- Confusion that does not go away
- Seizures
- Muscle weakness on one or both sides
- Pupils of the eyes that are not equal in size
- Unusual eye movements
- Repeated vomiting
- Walking or balance problems
- Unconsciousness for a longer period of time or that continues (coma)



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2. Notification and education of person staying with injured athlete. Injured athlete should be discouraged from staying alone following a head injury.
3. Documentation of the injury, evaluation, and plan for the athlete will be kept in their medical record.

TREATMENT OF CONCUSSION AND RETURN-TO-PLAY DECISIONS

An athlete will be evaluated by Athletic Trainer or Physician at intervals while symptomatic and prior to return to any sports participation including exercise, weight training, individual workouts, practice or competition. Evaluation will typically include physical examination, review of symptoms at rest/exertion, as well as review of results of neuropsychological testing (ImPACT program with comparison to their baseline results, and other baseline assessment scores, if applicable). An individualized progression back into sport will be established for each athlete following Storm's return-to-play progression guidelines. Additional testing, evaluation and neuropsychologist consultation will be at the discretion of the Athletic Trainer or Physician.

NOTE: This is a guideline for the management of MTBI/concussion, based on the medical knowledge and experience of our staff, available guidelines, and recommendations by the US Club Soccer Association. All injuries, including MTBI/concussion, are unique to the events surrounding the injury and to the person sustaining the injury. Each case will be managed with awareness of this uniqueness and with the goal of ensuring the athlete's health and wellness.

ACUTE ASSESSMENT GUIDELINES

Sideline Evaluation (Note: Whenever possible the athlete should be moved to a quiet area to be assessed.)

- a. Thorough History
- b. Clinical Evaluation
- c. Symptoms Check List
- d. Standardized Assessment of Concussion (SAC)
- e. BESS test, modified, stable surface only
- f. Immediately refer athlete to a physician if above assessment warrants, and/or if post-concussive symptoms worsen.
- g. Athlete who sustained a concussion should be sent home with another person and educated regarding the Concussion Home Instruction sheet
- h. Return to Play
 - i. Same Day
 - (a) The athlete will be held from participation until it can be determined if they have or have not sustained a concussion



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(b) If the athlete is deemed to have sustained a concussion, the athlete will not be allowed to return to play that day

(c) If it is determined the athlete did not sustain a concussion after all testing, they may return to play

RETURN-TO-PLAY PROGRESSION GUIDELINES

1. After injury, the athlete shall receive follow-up evaluation testing:
 - i. Concussion Symptoms Check List
 - ii. ImPACT (if applicable)
 - iii.. Physician evaluation
2. Once an athlete has sustained a concussion a physician (i.e. primary care physician, or other specialist) will be consulted and a treatment plan devised.
3. No activity, complete rest. Monitor athlete and follow-up regularly. Treatment plan will be adjusted accordingly.
4. Once symptom free per Concussion Symptoms Check List and cognitive recovery is demonstrated (ImPACT), athlete is considered Self Report Asymptomatic (SRA).
5. Generally each step should take 24 hours so that the athlete can safely proceed through the full rehabilitation protocol once they are asymptomatic at rest and with provocative exercise. However, at the discretion of the Athletic Trainer and/or a physician the progression can be expedited and the timeline progressed more quickly or more conservatively based upon the athletes' symptoms and injury presentation.
6. **If any post-concussion symptoms occur while in the step wise program, the athlete should drop back to the previous asymptomatic level and try to progress again after a further 24 hour period of rest has passed.**

Day 1 SRA

- Concussion Symptoms Check List
 - ImPACT (if applicable)
 - BESS (if applicable)
 - If athlete had reached normal baseline levels on the ImPACT and BESS testing the athlete is now considered "Asymptomatic (ASY) Day 1". If baseline levels on ImPACT and BESS are not attained the athlete is considered SRA and follows up with rest, daily Concussion Symptoms Check Lists and periodic ImPACT and BESS testing until they are ASY.
- a. Step 1 ASY
 - i. 20-30 minutes of cardio activity (e.g. walking, stationary bike) Light intensity weight training (no bench, no squat)
 - ii. Goal: 30-50% max Heart Rate. Activity for up to 30 minutes.



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- iii. Monitor symptoms
- d. Step 2 ASY
 - i. Start with 30 minutes of cardio activity (e.g. jogging at medium pace, sport specific agility drills), sit ups, pushups, lunge walks (30-50 reps each); begin regular, light weight lifting.
 - ii. No head impact activities
 - iii. Goal: 50-80% max Heart Rate; movement, endurance, coordination
 - iv. Monitor symptoms
- e. Step 3 ASY
 - i. Begin intense, *non-contact*, sport-specific training. Duration 45-60 minutes (including 10 minute warm up and stretch). Resume regular weightlifting. Progression to more complex training drills.
 - ii. Goal: 80-100% max Heart Rate; “Game Speed”, Increase cognitive load
 - iii. Monitor symptoms
- f. Step 4 ASY
 - i. Participate in full contact practice. Following medical clearance, the athlete may participate in normal training activities.
 - ii. Goal: to restore confidence and assess functional skills by coaching staff
 - iii.. Monitor symptoms
- g. Step 5 ASY
 - i. Resume full participation in competition
 - ii. Monitor symptoms