Basic Information

A concussion is a traumatic brain injury (TBI) that can result from a “direct blow to the head or body contact that causes the head to snap forward, backward, or rotate to the side.”¹ Athletes can sustain concussions in many different ways while playing sports, and it is important to recognize it doesn’t always take a “hard hit” to cause a concussion nor does every concussion result in a loss of consciousness. An athlete reporting concussion symptoms should not be undermined and should be referred to the athletic trainer for further evaluation.

Each athlete will respond differently to a concussion. Many athletes will have few symptoms that last a short length of time. Some athletes will have more severe symptoms or lingering symptoms (post concussive syndrome). Other athletes will have trouble returning to the classroom. It is better to be cautious when returning an athlete to play from a concussion because the effects of returning too soon can last a lifetime or can be fatal.

Participating with a concussion can increase the intensity and severity of symptoms and can prolong the duration of symptoms on a short-term scale. When concussions are not allowed adequate time to heal, subsequent blows with less force can cause long-term damage. Second Impact Syndrome is a possible fatal condition that can result from a secondary hit to the head or force on the body that results in head movement. The second impact causes rapid swelling of the brain that results in respiratory failure. Those that survive Second Impact Syndrome have permanent brain damage. Concussions must be treated conservatively and this protocol is based on athletes’ best interest.

Concussion Protocol

Preseason

All coaches are required to take the Sport Safety International online concussion training course annually. The course is called ConcussionWise- Coach (free version) and can be found on the Sport Safety International website. This training helps coaches better understand concussions and ensures the athletes’ safety when an athletic trainer is not present. The course must be completed prior to the first practice of the season and proof of completion must be submitted to the club sports coordinator or athletic trainer for clearance to begin practice.

A baseline concussion test is completed prior to any practice or competition. In the event an athlete is evaluated for a concussion, the test at the time of injury is compared to the baseline test to determine if there is cognitive impairment. The baseline test will include a Standard Assessment of Concussion (SAC), a Balance Error Scoring System (BESS), and a brief medical history related to concussions. All contact sports will be required to do baseline concussion testing. This includes:

- Men’s Hockey
- Men’s Rugby
- Men’s Lacrosse
- Men’s Soccer
- Men’s Water Polo
- Women’s Rugby
- Women’s Lacrosse
- Women’s Soccer
- Equestrian
- Cycling

It is recommended that any athlete with a history of multiple concussions or a concussion within 6 months of the start of practice also get a baseline test. Any team or athletes that are not required to get a baseline test but would like to have one may contact the athletic trainer to be tested. Athletes will need to be tested one time while at the University of Wyoming, and the baseline test will be kept on file for future reference. First-year students and first-time UW club sports athletes will need to complete a baseline test before participation in any sport related activity. Athletes that participate on multiple teams do not need to complete multiple baselines. However, the athletic trainer does need to be notified so that the information is saved with each sport.

At the Time of Injury

In the event an athlete is suspected of having a concussion, he/she should be removed from play immediately and referred to the athletic trainer covering the game for further evaluation. If an athletic trainer is not present, a coach or the club president will complete the Pocket Concussion Recognition Tool (CRT) with the injured athlete. If the athlete does not present with a concussion according to the Pocket CRT, then he/she should be tested with exertional maneuvers (push ups, sit ups, mountain climbers, jumping jacks, and jogging). If the athlete remains asymptomatic and has no evidence of altered cognitive functioning, he/she may return to play. If a concussion is suspected, then the athlete is removed from play for the rest of the game or practice and a CDC symptom checklist will be completed. Coaches must keep the Pocket CRT and CDC symptom checklist with them at all times.

All concussions will require a follow up with a physician. Athletes with “mild” concussions will be referred to a physician as soon as possible. A team representative should travel with the injured athlete. If the athletic trainer is not present at the time of injury, he/she should be notified as soon as possible. The athletic trainer will send the baseline test with the athlete and team representative to give to the physician or it will be sent directly to the physician.

Some concussions warrant immediate transportation to a hospital. Emergency situations include:

- worsening headaches
- increased pressure in head
- seizures
- cranial nerve impairment\(^2\)
- severe drowsiness (unable to be awakened)
- vomiting
- slurred speech
- unable to recognize familiar people or places
- increased confusion
- extremity weakness or numbness
- neck pain over the spine
- unusual behavior change
- decreased level of consciousness
- irregular respirations
- mental status changes
- sign and symptoms of a spine or skull fracture or bleeding
- increased irritability

Visiting teams will be provided with a copy of the UW Club Sports Concussion Protocol by the Club Sports Coordinator prior to travel. Teams visiting UW will receive the same treatment unless an athletic trainer or physician is traveling with the team and they have their own protocol. The athletic trainer will be informed by the Club Sports Coordinator of any visiting team protocols.

\(^2\) Alteration in sense of smell, eye movement, vision, imitation of facial expressions, chewing, swallowing, sticking tongue out, balance, strength of shrugging shoulders
Athletes suspected of having or diagnosed with a concussion should not take any NSAIDs (non-steroidal anti-inflammatory drugs) such as Ibuprofen/Aleve/Motrin. Acetaminophen/Tylenol is okay to take, but it is not recommended to take until a physician has seen the athlete. Medications that help with pain can mask other concussion symptoms as well. This can be dangerous because the athlete does not know when symptoms are getting worse and can miss warning signs or do too much of an activity. In addition to physical activity, athletes should refrain from texting, computer screens, televisions, video games, and an activity that causes an increase or return in symptoms. Athletes are responsible for communicating with their teachers in case the concussion begins to affect schoolwork.

Post Concussion Plans of Action

All concussions will require clearance by a physician. The athlete may not participate in any physical activity on their own or with the team until cleared. The responsibility of keeping the athlete out of play falls on the Club President with support from their coach(s) (if applicable), athletic trainer and physician. The injured athlete needs to follow up with the athletic trainer regularly to monitor symptoms.

Once the athlete has been cleared for return to play, the following progression must be completed:
Step 1: Light aerobic exercise (jogging, swimming, stationary bike, etc) for 15-20min
Step 2: Moderate cardio workout with the addition of agility and stationary sport specific skills (throwing and catching, shooting) for approximately 30-40 min
Step 3: Heavy cardio workout with partnered sport specific drills and beginner level jumps and dives for 45-60 min
Step 4: Non contact practice (heavy cardio workout with dynamic sport specific drills, jumps and dives—only 2-hand touch with dummies or stationary players)
Step 5: Full contact practice (cannot be a game or scrimmage)

The Gradual Return to Play Protocol chart must be filled out for each step completed. Only one step can be completed every 24 hrs in case symptoms return after activity. If any sign or symptoms return, activity should be stopped immediately and the athlete will need to rest for at least 24 hrs. Once the athlete is symptom free, return to the previous asymptomatic step. If an athlete fails a step three times, he/she needs to follow up with the physician and athletic trainer before continuing the progression. When the athlete completes the progression, follow up with ATC and the physician is required to be cleared without restrictions. The athletic trainer will complete the SAC and BESS after the return to play has been completed and will send it to the physician. The physician will determine final clearance for an athlete to return to play. If an athlete’s sport season finishes before he/she is able to return to play, then the athlete must continue to follow up with their physician until fully cleared. The ATC will be available for the athlete to follow up with and to help with the progression.

The progressions will be set up for each athlete by the athletic trainer and their physician. Athletes are responsible for checking in with the athletic trainer each day of the progression to monitor any changes. All club sports teams are required to abide by this protocol. Sanctions will be in place for any teams that violate the protocol. The sanctions include but are not limited to loss of funding and potential loss of club sports status.