

# Concussion Management

## For Coaches and Athletes



**CHI St. Alexius Health**

*Imagine better health.<sup>SM</sup>*

**Human Performance Center**

## Coaches Fact Sheet

A concussion is a disturbance in brain function caused by direct or indirect force to the head or body that causes the brain to move suddenly inside the skull. It is a type of traumatic brain injury that can have a serious effect on a young, developing brain. Some concussion symptoms can last for days, weeks, or even months. Not giving the brain enough time to heal after a concussion can be dangerous.

- A concussion is a brain injury and all concussions are serious.
- Concussions can occur in any sport and without loss of consciousness.
- Concussions can still happen with a helmet on.
- Athletes may not report their symptoms for fear of losing playing time or their positions.
- Athletes who have had a concussion at any point in their lives have a greater chance of getting another concussion.
- Young children and teens are more likely to get a concussion and take longer to recover than adults.
- Recognizing and responding properly to concussions when they first occur can help prevent further injury or even death.

### Recognizing a Possible Concussion

To help recognize a concussion, watch for the following two events among your athletes during both games and practices:

1. A forceful blow to the head or body that results in rapid movement of the head;  
AND
2. Any change in the athlete's behavior, thinking or physical functioning (*see signs and symptoms*).

### Signs and Symptoms

Some symptoms might show up right away, while others can show up hours or days after the injury.

#### Signs observed by coaches

- » Appears dazed
- » Confusion
- » Unsure of game, score or opponent
- » Moves clumsily
- » Answers questions slowly
- » Loss of consciousness (event briefly)
- » Shows behavior or personality changes
- » Can't recall events before hit or fall
- » Can't recall events after hit or fall

#### Symptoms reported by athletes

- » Headache or "pressure" in head
- » Confusion
- » Nausea or vomiting
- » Balance problems or dizziness
- » Double or blurry vision
- » Sensitivity to light and/or noise
- » Feeling sluggish, hazy, foggy or groggy
- » Concentration or memory problems
- » Does not "feel right"

## Athletes Fact Sheet

A concussion is a brain injury that:

- Is caused by a blow to the head or body.
- Is contact with another player, hitting a hard surface such as the ground, ice or floor, or being hit by a piece of equipment such as a bat, lacrosse stick or field hockey ball.
- Can change the way your brain normally works.
- Can range from mild to severe.
- Presents itself differently for each athlete.
- Can occur during practice or competition in ANY sport.
- Can happen even if you do not lose consciousness.

### Preventing a concussion

Basic steps you can take to protect yourself from concussion:

- Do not initiate contact with your head or helmet. You can still get a concussion if you are wearing a helmet.
- Avoid striking an opponent in the head. Undercutting, flying elbows, stepping on a head, checking an unprotected opponent, and sticks to the head all cause concussions.
- Follow your athletics department's rules for safety and the rules of the sport.
- Practice good sportsmanship at all times.
- Practice and perfect the skills of the sport.

### Symptoms of a concussion

You can't see a concussion, but you might notice some of the symptoms right away. Other symptoms can show up hours or days after the injury.

Concussion symptoms include:

- Amnesia
- Confusion
- Headache
- Loss of consciousness
- Balance problems or dizziness
- Double or fuzzy vision
- Sensitivity to light or noise
- Nausea (feeling that you might vomit)
- Feeling sluggish, foggy or groggy
- Feeling unusually irritable
- Concentration or memory problems (forgetting game plays, facts, meeting times)
- Slowed reaction time

Exercise or activities that involve a lot of concentration, such as studying, working on the computer, or playing video games may cause concussion symptoms (such as headache or tiredness) to reappear or get worse.

## What should I do if I think I have a concussion?

**Don't hide it.** Tell your athletic trainer, coach and parents. Never ignore a blow to the head. Also, tell your athletic trainer and coach if one of your teammates might have a concussion. Sports have injury timeouts and player substitutions so that you can get checked out.

**Report it.** Do not return to participation in a game, practice or other activity with symptoms. The sooner you get checked out, the sooner you may be able to return to play.

**Get checked out.** Your team physician, athletic trainer, or health care professional can tell you if you have had a concussion and when you are cleared to return to play. A concussion can affect your ability to perform everyday activities, your reaction time, balance, sleep, and classroom performance.

**Take time to recover.** If you have had a concussion, your brain needs time to heal. While your brain is still healing, you are much more likely to have a repeat concussion. In rare cases, repeat concussions can cause permanent brain damage, and even death. Severe brain injury can change your whole life.



Human Performance Center



## Prevention and Preparation

Coaches play a key role in preventing concussions and responding to them properly when they occur. Here are some steps you can take to ensure the best outcome for your athletes:

- Educate athletes and coaching staff about concussion. Explain your concerns about concussion and your expectations of safe play to athletes, athletics staff and assistant coaches. Create an environment that supports reporting, access to proper evaluation and conservative return-to-play.
- Review and practice your emergency action plan for your facility.
- Know when you will have sideline medical care and when you will not, both at home and away.
- Emphasize that protective equipment should fit properly, be well maintained, and be worn consistently and correctly.
- Review the Concussion Fact Sheet for Athletes with your team to help them recognize the signs of a concussion.
- Review with your athletics staff the NCAA Sports Medicine Handbook guideline: Concussion or Mild Traumatic Brain Injury (mTBI) in the Athlete.
- Insist that safety comes first.
- Teach athletes safe-play techniques and encourage them to follow the rules of play.
- Encourage athletes to practice good sportsmanship at all times.
- Encourage athletes to immediately report symptoms of concussion.
- Prevent long-term problems. A repeat concussion that occurs before the brain recovers from the previous one (hours, days or weeks) can slow recovery or increase the likelihood of having long-term problems. In rare cases, repeat concussions can result in brain swelling, permanent brain damage and even death.



Human Performance Center



*A concussion can happen at home, school, or play. Everyone from parents to coaches, to sports league officials and school professionals, plays an important role in learning how to spot a concussion, and knowing what to do if they think a child or teen has a concussion.*

## Coaches Action Plan

*If you think your athlete has sustained a concussion:*

Take him/her out of play immediately and allow adequate time for evaluation by a healthcare professional experienced in evaluating for concussion.

An athlete, who exhibits signs, symptoms or behaviors consistent with a concussion, either at rest or during exertion, should be removed immediately from practice or competition or should not return to play until cleared by an appropriate healthcare professional. Sports have injury timeouts and player substitutions so that student-athletes can get checked out.

1. Remove the athlete from play. Look for the signs and symptoms of concussion if your athlete has experienced a blow to the head. Do not allow the athlete to just “shake it off.” Each individual athlete will respond to concussions differently.
2. Ensure the athlete is evaluated right away by an appropriate healthcare professional. Do not try to judge the severity of the injury yourself. Immediately refer the athlete to the appropriate athletics medical staff, such as a certified athletic trainer, team physician or healthcare professional experienced in concussion evaluation and management.
3. Allow the athlete to return to play only with permission from a healthcare professional with experience in evaluating for concussion. Allow athletics medical staff to rely on their clinical skills and protocols in evaluating the athlete to establish the appropriate time to return to play. A return-to-play progression should occur in an individualized, step-wise fashion with gradual increments in physical exertion and risk of contact.
4. Develop a game plan. Athletes should not return to play until all symptoms have resolved both at rest and during exertion. Many times that means they will be out for the remainder of that day. In fact, as concussion management continues to evolve with new science, the care is becoming more conservative and return-to-play time frames are getting longer. Coaches should have a game plan that accounts for this change.



Human Performance Center



## Concussion Services

CHI St. Alexius Health Human Performance Center (HPC) provides cutting edge physical therapy and athletic training services dedicated to serving the athletic participants of central North Dakota. Our physical therapists and athletic trainers specialize in sports injury rehabilitation, biomechanical analysis, athletic injury prevention and sports medicine coverage.

Physical therapy and athletic training intervention emphasizes evidence based practice to guide treatment protocol through the deliverance of therapeutic modalities, manual therapy technique, exercise and education to ensure the most rapid recovery possible. Our team of physical therapists and athletic trainers has the opportunity to watch an athlete's injury progress on a day-to-day basis and are dedicated to returning the region's athletes to complete functional activity.

Some of our athletic training services include onsite practice coverage two to three days per week which include injury screening, taping, bracing, and return to sport planning between physician, athlete, coach, parents and the athletic trainer. In addition, the athletic training services provide sports medicine coverage for varsity sporting events which provides on-field assessment and management of all injuries occurring in the competition. Specific work has been done with a local high school to implement the ImPACT™ program for concussion management. Our physical therapists and athletic trainers pride themselves on being personable, professional and available to all athletes participating in sports.

**For more information, please contact CHI St. Alexius Health Human Performance Center at 701.530.8100 or 800.222.7858.**



*Imagine better health.<sup>SM</sup>*

## **Human Performance Center**

310 North 9th Street  
Bismarck, ND 58504  
Phone: 701.530.8102  
Web: [CHISTAlexiusHealth.org](http://CHISTAlexiusHealth.org)