



Sports Medicine

Blanchard Valley Hospital

Concussions in Sports Information for Parents

Concussions are disturbances in brain function that occur following some trauma to the head. Basically, the brain is not working well because the connections between brain cells are injured. Concussions are a very common injury seen in sports. Up to 15% of all football players suffer a concussion during a season, but they are not seen only in football. Other sports with increased risk of concussions include soccer, wrestling, basketball, softball, and baseball. While most concussions will resolve on their own and without complications, it is very important to recognize when a concussion has occurred so that it can be properly managed. Most complications from concussions occur due to either not realizing the athlete has a concussion or from improper management of the injury.

Concussions can occur from a direct blow to the head or from a blow to the body that causes the head to be shaken. While some people think that you have to lose consciousness or black out to have a concussion, this is not true. In fact, most athletes with concussions do not have a loss of consciousness. The common injuries that are called “getting your bell rung” or “head dings” are actually mild concussions. Symptoms of concussions include:

Headache	Sensitivity to light & noise
Nausea & vomiting	Irritability or being moody
Dizziness & balance problems	Sadness
Fatigue	Nervousness
Feeling slowed down	Numbness/Tingling
Feeling like “in a fog”	Trouble falling asleep
Difficulty concentrating	Sleeping more or less than usual
Difficulty remembering	Drowsiness

If you suspect your son or daughter might have a concussion, he or she should be removed from practice or the game immediately. They should be watched closely for signs of a more serious injury for two to three hours. In the past, it was recommended to awaken patients with possible concussion every two hours overnight to make sure the symptoms are not worsening, but this has been shown to actually slow the recovery process, so we recommend to let the athlete sleep through the night. Most of the time, athletes with concussions do not need to go to the emergency room and can be seen by a physician for evaluation within 2-3 days. Indications that they need immediate evaluation include:

Unequal pupil size	Slurred speech
Worsening symptoms over time, especially headache	Double vision
Increasing confusion or disorientation	Seizures or convulsions
Recurrent vomiting	Unable to arouse

It is required by all sports that an athlete be cleared by a physician before returning to practice or competition. Your son or daughter should rest and not do any exertion until seen by a physician. This includes mental rest also, so your son or daughter should not do any reading, homework, or do any other activities that require concentration such as using the computer, video games, or texting until he or she is feeling better. Physical and mental rest will actually help speed the recovery from a concussion. It is also recommended to avoid giving the athlete any medicine for the headache as this may mask other symptoms. If you have any questions about concussions, please call the concussion experts at Blanchard Valley Sports Medicine at 419-425-3199.

Concussions in Sports Introduction to ImPACT™

A concussion is a disturbance in brain function that occurs following either a blow to the head or as a result of the violent shaking of the head. Basically, the brain is not working well because the connections between brain cells are injured. While there are many symptoms of concussion (such as headache, dizziness, memory difficulties, feeling “foggy,” difficulty concentrating, and fatigue), there are few objective findings on examination, which often makes it difficult to diagnose and to determine when the brain has recovered adequately to allow return to sports. Even CT scans and MRIs are not helpful in the evaluation of most concussions. If an athlete is allowed to play before he or she has fully recovered, there is an increased risk of serious injury, such as chronic headaches and memory and concentration difficulties, permanent brain damage, or possibly even death.

One of the best ways to diagnose and manage concussions in sports is the use of neurocognitive tests. These tests evaluate how well the brain is functioning. Many concussion experts use these tests to aid in the management of concussion. The best researched and most used of the tests is ImPACT™. This computerized testing is used by the NFL, NHL, MLB, NASCAR, over 600 high schools, over 250 universities, and over 100 sports medicine centers. The concussion experts at Blanchard Valley Sports Medicine and The University of Findlay have been using ImPACT™ for over ten years and have extensive experience in using this important tool in the management of concussion.

What exactly is ImPACT™? It is a computer-based assessment tool that uses a battery of scientifically validated neurocognitive tests. These tests evaluate how the most commonly injured parts of the brain function. The functions of the brain that it measures are attention span, visual and verbal memory, reaction time, and non-verbal problem solving. It is not an IQ test. It takes approximately 20-25 minutes to complete.

For ImPACT™ to be most accurate, it is important for athletes who are at risk for concussions to have baseline testing done. This allows us to see how the athlete’s brain functions normally before an injury. These results will be stored for future use if a concussion occurs. If a concussion is suspected, then a repeat test should be administered, with the results compared to the baseline test. This allows us to determine if a concussion has indeed occurred and how severe the concussion is. Then, the tests can be repeated to follow the healing process and determine when the brain has fully recovered. Only then is it safe to gradually return back to sports. ImPACT™ can also be used in athletes who have not had a baseline test by comparing the results to data from thousands of other athletes, matching for age and gender that are included in the software.

ImPACT™ is a very important part of the state-of-the-art management of concussions in sports. Proper management of concussion is the best form of prevention of serious injury after a concussion. If you are interested in more information or would like to schedule an appointment to see the concussion experts at Blanchard Valley Sports Medicine, please call 419-425-3199.

Findlay Area Hockey Association Concussion Management Plan

Coach Training:

- FAHA coaches will receive a copy of the concussion management plan, a fact sheet on concussions in sport, and attend education on recognition and management of concussions annually. Parents will be encouraged to attend the education session.

Obtain Baseline Testing:

- For players 12 years of age or older, baseline symptom checklist, ImPACT cognitive testing, and balance testing is recommended.
- (For players younger than 12, other cognitive testing may be considered.)

Concussion Identified and Assessed:

- When a player shows any signs, symptoms or behaviors consistent with a concussion, the player will be removed from practice or competition. Common symptoms of concussion include:

Headache	Sensitivity to light & noise
Nausea & vomiting	Irritability or being moody
Dizziness & balance problems	Sadness
Fatigue	Nervousness
Feeling slowed down	Numbness/Tingling
Feeling like "in a fog"	Trouble falling asleep
Difficulty concentrating	Sleeping more or less than usual
Difficulty remembering	Drowsiness

- If removed by a coaching staff member, the coach will recommend to the parents of the player be evaluated by a physician. Parents will be given written home instructions before leaving the rink.
- The player will not be allowed to return to practice or competition without a clearance note from a physician. Ideally, the player should also undergo repeat cognitive and balance testing that demonstrates return to baseline cognitive and balance functioning.

Return to Play:

- Once released by physician, the player may start a graduated increase in physical activity as listed below. If at any time during this activity progression, symptoms recur, the player is to be returned to the physician for further evaluation
 - Day 1- Light physical activity- such as jogging, light skating, and stretching
 - Day 2- Light skating, agility, and shooting drills
 - Day 3- Non-contact drills of normal intensity
 - Day 4- Full contact drills
- After completion of the activity progression, the player should be seen by the physician again for unrestricted clearance.

Brain Functional Testing

Orientation

Ask the athlete the following questions:

- Where are we playing? Who scored last?
- Who is the opposing team? What period is it?
- Who did we play last week?

Immediate Memory

Ask the athlete to repeat the following words:

Dog, wagon, umbrella

Concentration

Ask the athlete to do the following:

Repeat the months of the year in reverse order, starting with the current month.

Repeat these numbers backwards:

312 (213 is correct) 6158 (8516 is correct)

Balance

Ask the athlete to stand on one leg with hands on hips and eyes closed for 20 seconds. If unable to do this athlete fails.



Delayed Memory

Ask the athlete to repeat the three words from earlier.

Dog, wagon, umbrella

Any failure should be considered abnormal. The athlete needs to be assessed by a physician for a possible concussion.



Sports Medicine

Blanchard Valley Regional Health Center

419-425-3199

Concussion Assessment Tips

Signs and Symptoms

Observations

- Dazed or stunned
- Confused about assignment
- Forgets plays
- Moves clumsily
- Answers questions slowly
- Loses consciousness
- Behavior or personality change
- Forgets events prior to hit
- Forgets events after hit

Symptoms

- Headache
- Nausea
- Balance problems or dizziness
- Double or fuzzy vision
- Sensitivity to light or noise
- Feeling sluggish
- Feeling "foggy"
- Change in sleep pattern
- Concentration or memory problems

Any of the above signs or symptoms suggest the possibility of a concussion and the athlete needs evaluation by a physician.



Findlay Amateur
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CONCUSSION RETURN TO PLAY FORM

NAME OF ATHLETE _____

Please check the current status of the above named athlete:

- The athlete is showing signs and/or symptoms of a concussion and should not practice/play until released.
- The athlete is showing no signs or symptoms of a concussion and may proceed through the following gradual activity progression. Please indicate dates on which each step can be completed. It is recommended to allow at least 24 hours for each step in the progression. If the athlete has a recurrence of symptoms at any point in this progression, he/she must stop all physical activity and contact his/her doctor for further instructions.

Date

Light physical activity (jogging, stretching, light skating)

Light sports-specific drills (skating, agility, & shooting drills)

Non-contact drills at full intensity

Full-contact drills

- The athlete is showing no signs or symptoms of a concussion, has completed the above activity progression, and is released to participate in games and competitions without limitations on the date indicated.

Physician Name (printed)

Physician Signature

Date