



**RED FLAGS** are signs and/or symptoms that suggest an injury more sinister than a concussion. If one or more are present, you should be going to the hospital immediately.

**RED FLAGS** include severe/worsening headache, decreasing alertness, difficulty speaking or swallowing, loss of balance and coordination, vision changes, weakness, numbness, and tingling in the extremities, and/or repeated vomiting.

When managed properly, the brain can return to its pre-injury state.

## Concussion Myths

**Myth #1: Concussion severity is determined by loss of consciousness.**

Concussion severity cannot be determined until resolution of the concussion is achieved. It is based on the length of time needed for full symptom recovery.

**Myth #2: My symptoms have gone away so I'm no longer concussed.**

While symptom resolution usually occurs in 5-10 days, metabolic recovery doesn't occur for 21-30 days, sometimes longer.

**Myth #3: If I've had a previous concussion, future concussions result in more damage than before.**

If full recovery occurs before subsequent concussions, the results may be equal to having an injury on a previously uninjured brain.

For questions about concussion management, contact

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## Concussion Management & Baseline Testing



Lack of severe symptoms does not indicate the absence of a concussion.  
**Get informed, be prepared, and stay safe!**



# What is a Concussion?

A concussion occurs from the rapid acceleration and deceleration of the brain inside the skull. These forces cause shearing (stretching) of the functional units (neurons) of the brain. This results in widespread firing of the neurons, causing a number of symptoms commonly seen at the onset of a head injury (dizziness, confusion, loss of balance, etc.).

While initial symptoms tend to decrease within 5-30 minutes, the widespread firing of neurons takes a lot of energy which is why many concussed patients experience a delay in symptoms such as fatigue, reduced alertness, and increased confusion. When treated properly, an individual with a mild concussion can fully recover with no permanent damage in roughly 20-30 days.

## Baseline Testing

Baseline testing involves performing a series of tests when the athlete is **HEALTHY** to determine what is considered normal for that individual. If that individual later experiences an impact to the head, tests are re-run to determine if a concussion has occurred and what symptoms and/or deficiencies are present.

Baseline testing is unique in that it documents a number of different areas, including existing symptoms, memory, balance, reaction time, speed of mental processing, visual tasks, etc.

## Sample Scenario

During baseline testing, an athlete reports occasional mild headaches located in the temples and scores low in both memory and visual tracking. The athlete sustains an impact to the head six months later. The athlete reports severe headaches located at the base of the skull, dizziness, and fatigue. Tests are re-run and show the athlete lacks balance and scores low on memory and visual tracking tests. The concussion management professional reviews the baseline scores and compares the results to post-concussion scores to determine what symptoms can be attributed to the concussion.

A customized program is created for the athlete that includes stretching, mild exercise, and nutritional guidance. The roadmap to recovery highlights areas of focus for rehabilitation. On-going testing tracks improvements in recovery and allows the athlete to return to activity safely and in good health.

## Concussion Management

If you suspect you have a concussion, stop your activity and schedule an assessment with an experienced concussion management professional.

Once a roadmap to recovery has been established, patients progress through stages of recovery as symptoms improve. Following a customized recovery plan is key to regaining full physical and mental capacity.