

## **What is a Concussion (MTBI)?**

The term mild traumatic brain injury (MTBI) is used interchangeably with the term concussion. An MTBI or concussion is defined as a complex pathophysiologic process affecting the brain, induced by traumatic biomechanical forces secondary to direct or indirect forces to the head. Concussion, in Latin, means "to shake violently" and MTBI is caused by a blow or jolt to the head that disrupts the normal function of the brain. Disturbance of brain function is related to neurometabolic dysfunction, rather than structural injury, and is typically associated with normal structural neuroimaging findings (i.e., CT scan, MRI). MTBI may or may not involve a loss of consciousness (LOC). In fact, recent research suggests that up to 90% of concussions do not involve an LOC (ref). MTBI results in a constellation of physical, cognitive, emotional and sleep-related symptoms. Duration of symptoms are highly variable and may last for as short as several minutes and last as long as several days, weeks, months, or even longer in some cases.<sup>1-3</sup> Concussion is a highly variable process and differential outcomes are associated with multiple factors, including the associated biomechanical forces of injury, pre-existing risk factors, and likely other unknown factors or considerations.

*Information provided by ImPact.com*