

WHAT IS A CONCUSSION?

A concussion is a disturbance in brain function that occurs following either a blow to the head or as a result of rapid acceleration of the head from a hit elsewhere on the body.

Adapted from the Zurich 2008 Concussion Consensus Statement, a concussion is further defined as follows:

- A concussion may be caused either by a direct blow to the head or other part of the body that results in “impulsive” forces transmitted to the head.
- A concussion may not involve a loss of consciousness (LOC).
- A concussion can cause a disturbance in normal brain function, but there is no detectable structural damage (e.g., MRIs or CT Scans).
- A concussion typically results in clinical symptoms, which may vary among individuals but more commonly include dizziness, headaches, etc.
- A small percentage of cases may result in post-concussive symptoms that may be prolonged and, at times, result in long term consequences.

Head Injury/Concussion

(Source: http://resourcesonbalance.com/clinical_info/prevalence/neurologic.aspx#Head)

- 400,000-500,000 Americans suffer serious head injuries annually. A majority of these individuals complain of dizziness for up to five years following the injury, and many are disabled by this symptom.¹
- 79% of patients hospitalized for two days or less, with a normal neurological examination will experience dizziness within three months following a head injury.²
- One in five high school football players sustains a concussion each year; 50% of college athletes have a history of concussion; 11% of ice hockey players, 17% of wrestlers, and 19% of baseball and softball players sustain concussions every season; 90% of boxers show neurological dysfunction.³
- In cases where an athlete experiences a second concussion before fully recovering from a prior concussion, second impact syndrome may occur.³
- Athletes demonstrate decreased stability until 3 days post minor head injury due to a sensory interaction problem whereby the injured athlete fails to use their visual system effectively. A more severe injury can take up to five or six days.⁴
- Complaints of dizziness and unsteadiness are frequent problems in accidental and job related mild head injuries.⁵
- About 5.3 million people in the United States live with a disability that was caused by a traumatic brain injury.⁶
- The National Center for Disease Control and Prevention reports that people over 75 years old have the highest rate of TBI. About 191 out of every 100,000 people in that age group suffer a TBI each year; the most common cause is falls.⁶
- Among elderly persons, brain injury is among the top 3 common types of injury.⁷
- Falls are reported to be a leading cause of TBI among those 65 and older.⁸
- Approximately 10% of occupants of the stricken vehicle in rear-end automobile collisions will develop "whiplash syndrome." The chronic symptoms may include dysequilibrium.⁹
- A high percentage of patients in a study of whiplash victims were found to have faulty inner ear functioning leading to inefficient muscular control of balance and erect posture.⁹
- The presence of cervical vertigo has been noted in whiplash patients with abnormal postural control response and subjective dizziness to rotational movements of the body under a stationary head.⁹
- Dizziness is often mentioned as a symptom in whiplash associated disorder. The incidence of dizziness has been reported as 21% to 85%.¹⁰

References:

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