

Traumatic Brain Injury (TBI)

The common term "concussion" is used when someone receives a direct blow or a jolt to their head that disrupts the function of their brain, such as during a football game or car accident. When a direct blow occurs to the head, the skull may be damaged or fractured and may, in turn, damage the brain (known as an open head injury).¹ When the head is shaken back and forth, the brain hits the inside of the skull which can pull apart nerve fibers and cause damage to brain tissue (known as a closed head injury).¹ Both closed and open head injuries can produce a concussion, which is the most common type of traumatic brain injury (TBI).¹

There are three different levels of TBIs (mild, moderate and severe) based on the severity of damage to the brain.¹ Service members may sustain concussions or TBIs when exposed to a blast or explosion, sometimes on multiple occasions, which may lead to serious symptoms.² The more concussions a service member suffers from, the more likely he/she may have behavior or personality changes and/or lasting brain damage without even knowing it.²

Prevalence:

- Two percent (5.3 million) of the U.S. population currently live with disabilities from a TBI³
- 1.5 million people will sustain a TBI every year³
- 10% to 20% of Marines and Soldiers returning from Afghanistan and Iraq may have experienced brain injuries⁵
- Approximately 30% of all patients with combat-related injuries treated at Walter Reed Army Medical Center (2003 to 2005) sustained a TBI⁴
- From October 2001 through September 2007, 4,471 service members were diagnosed with TBI-injuries⁶

Because people are unique, they may experience injuries differently with symptoms presenting themselves at any time.² Each person also will recover from the symptoms at their own pace.² People with a TBI may experience changes in mental abilities, vision, emotions, and behavior.¹ People may also experience headaches, dizziness and/or ringing in the ears.¹

Treatment and Recovery

The road to recovery is different for everyone. Some things that may help in the recovery process are getting plenty of sleep, increasing activity slowly, carrying a notebook to write things down, establishing a regular daily routine, doing only one thing at a time and making decisions with a trustworthy individual.¹ Things to avoid include activities that could lead to another brain injury, alcohol as it may slow healing of the injury, caffeine or "energy-enhancing" substances, pseudo ephedrine-containing medicines and excessive use of over the counter sleeping aids.¹ Rehabilitation programs will cater to each person's unique needs.⁷ Medical staff will work with the injured service member and family members to take all their needs into consideration to help regain the most independent level of functioning possible.⁷



References:

- 1. "Types of Brain Injury." <u>Brain Injury Association of America</u>. 15 Oct. 2008. ">http://www.biausa.org/Pages/types_of_brain_injury.html#tbi>
- 2. "Force Health Protection & Readiness Quick TBI and PTSD Facts." <u>Force Health Protection and Readiness</u>. 15 Oct. 2008. http://fhp.osd.mil/image/outreach/quick_white.pdf>.
- 3. "Traumatic Brain Injury in the United States: A Report to Congress." <u>Centers for Disease Control</u>. Dec. 1999. 15 Oct. 2008. http://www.cdc.gov/ncipc/tbi/tbi_congress/TBI_in_the_US.PDF>.
- 4. "Emerging Health Concerns: Traumatic Brain Injury." PDHealth. Deployment Health Clinical Center. 15 Oct. 2008. http://www.pdhealth.mil/TBI.asp.
- 5. Report to The [Army] Surgeon General Traumatic Brain Injury Task Force, May 15, 2007.
- 6. United States. Cong. House. Subcommittee on Oversight and Investigations. 109 Cong. <u>Traumatic Brain Injury and Vision Issues</u>. By Thomas Zampieri. <u>House Committee on Veteran Affairs</u>. 2 Apr. 2008. http://veterans.house.gov/hearings/Testimony.aspx?TID=16960&Newsid=219&Name=%20Th omas%20%20Zampieri,%20Ph.D>
- 7. "What is the Rehabilitation Process?" <u>Brain Injury Association of America</u>. 15 Oct. 2008 http://www.biausa.org/Pages/what_is_the_rehab_process.html