



Veterans Affairs

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Director

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TRAUMATIC BRAIN INJURY (TBI)

Traumatic brain injury is defined as damage to the brain resulting from external force, such as rapid acceleration or deceleration, impact, blast waves, or penetration by a projectile. Brain function is temporarily or permanently impaired and structural damage may or may not be detectable with current technology.

TBI can cause a host of physical, cognitive, emotional, and behavioral effects, and outcome can range from complete recovery to permanent disability or death. The treatment required may be minimal or may include treatments such as medications and emergency surgery. Physical therapy, speech therapy, recreation therapy, and occupational therapy may also be employed.

While TBI are by no means a new type of injury, the numbers of survivors of moderate and severe TBI have increased dramatically in Operations Iraqi Freedom and Enduring Freedom. This is mainly due to improvements in battlefield medical techniques and expedited evacuation to emergency medical centers.

Severity and Symptoms

Severity of traumatic brain injury			
	GCS	PTA	LOC
Mild	13–15	<1 day	0-30 minutes
Moderate	9–12	>1 to <7 days	>30 min to <24 hours
Severe	3–8	>7 days	>24 hours

Head injuries are initially classified into mild, moderate, and severe categories. There are currently 3 common scales for rating initial TBI severity. The Glasgow Coma Scale (GCS), grades a person's level of consciousness on a scale of 3–15 based on verbal, motor, and sensory reactions. The lower the score, the more severe the initial TBI. Another model developed by the Department of Defense and Department of Veterans Affairs uses all three criteria of GCS after resuscitation, duration of post-traumatic amnesia (PTA), and loss of consciousness (LOC). With these, the longer the amnesia and loss of consciousness last the more severe the initial TBI. Symptoms are dependent on the part of the brain that is affected and the injury's initial severity.

The VA does not consider the initial severity of the TBI when rating the condition for service connected disability compensation. They consider the long term residual effects that the initial TBI leaves behind.

With mild TBI, the patient may remain conscious or may lose consciousness for a few seconds or minutes. Other symptoms of mild TBI include headache, nausea, dizziness, vision problems, ringing in the ears, fatigue, and changes in sleep patterns. Behavioral symptoms include mood changes, confusion, and trouble with memory, or concentration.

The long term effects of mild TBI range from full recovery to intermittent headache, fatigue, nausea, tinnitus, and memory issues. Mild TBI symptoms may also be present in moderate and severe injuries.

A person with a moderate or severe TBI may have persistent headache, frequent nausea, convulsions, an inability to awaken, pupil dilation, speech problems, weakness or numbness in the limbs, loss of coordination, restlessness, or agitation. Common long-term symptoms of moderate to severe TBI are changes in social behavior, deficits in social judgment, and cognitive changes, especially problems with sustained attention, processing speed, and executive functioning. Alexithymia, a deficiency in identifying, understanding, processing, and describing emotions occurs in 60% of individuals with TBI. Those who suffer moderate and severe TBI may never fully recover.

How do I get help?

Visit your local County Veterans Service Office so that a representative can help you enroll in VA Health Care and apply for other benefits that you may be entitled to.

Veterans Affairs Office Locations:

- 222 W. Hospitality Lane, Third Floor, San Bernardino, CA 92415-0470 (909) 382-3290
- 15900 Smoke Tree Street, Hesperia, CA 92345 (760) 995-8010
- 8575 Haven Ave., Rancho Cucamonga, CA 91730 (909-948-6470
- **Or call Toll Free from anywhere in San Bernardino County : 1-866-4SB-Vets (1-866-472-8387)**