

BRAIN INJURY

BRAIN INJURY AMONG THE VETERAN COMMUNITY



WHAT IS A BRAIN INJURY?

The Centers for Disease Control and Prevention (CDC) defines a traumatic brain injury (TBI) as *"a disruption in the normal function of the brain that can be caused by a bump, blow, or jolt to the head, or penetrating head injury."*

KEY FACTS

Studies show that individuals with TBI are **4 to 9** times more likely to die by suicide.

SYMPTOMS OF BRAIN INJURY

- Headaches
- Blurred vision
- Confusion
- Light sensitivity
- Dizziness
- Memory loss

MILITARY EXPOSURES

- Shoulder-fired weapons
- Blast waves
- Chronic stress
- Airborne operations
- Diving

BRAIN INJURY IN THE VETERAN COMMUNITY

Traumatic brain injuries are known as the **signature injury** in the veterans who have served in the Global War on Terror due to increased use of improvised explosive devices in urban operating environments.

Recent Department of Defense statistics estimated that between 2000-2020 (Q3) that 430,720 service members received treatments for a diagnosed brain injury at a DoD facility, and of those, **82.4%** were considered "mild" in severity.

Studies show that this number is inaccurate and the number of service members who've experienced any form of brain injury is **drastically higher** because many are not treated or recorded.

Brain injuries can cause underlying physiological dysfunction that extend far beyond the brain, impacting hormone regulation, sleep/wake cycles, sex drive, amongst other life-altering issues.



BRAIN INJURY

TRAINING EXPOSURES

Reports state that as high as 85% of operators experience TBI from training alone.

- DoD found higher rates of concussion and post-concussion associated symptoms among individuals with a history of prolonged exposure to low-level blasts from breaching and shoulder-fired weapons.
- Mild brain injuries can occur from jumps, dives, and other vehicle-related jerk movements.

DEPLOYMENT AND COMBAT EXPOSURES

Blast injuries were associated with insomnia and elevated anxiety, where as blunt-force injuries were more commonly associated with obstructive sleep apnea.

- Of those deployed that experienced mTBI, **77%** reported sleep disorders.
- Soldiers with at least one deployment are 5.2 times more likely to have TBI vs. non-deployed.
- Current evidence supports a strong causal relationship between military-related exposure to specific neurotoxins and the development of serious medical conditions and higher rates of suicide among service members.

RECOMMENDATIONS & RESOURCES

David LeMay, MD
Regenesis Performance Center



"Our brain health is at risk! There is a large brain-body connection and prevention with nutrition is key."

Visit the Defense Health Agency website for more brain injury resources.



Did You Know?

- Service members with a brain injury are more likely to experience a sleep disorder and potentially suffer from **chronic insomnia**.
- TBI increases the incidences of sleep disorders which hinder brain injury healing and can increase symptoms of PTS.
- Insomnia rates in service members are up **650%** since 2003.
- Sleep disorders increase the risk of suicide ideation by **2.5 times**.
- Cognitive rehabilitation can still work despite the number of concussions.

ARTICLES

- ["Shoulder-Fired Weapons Can Cause Traumatic Brain Injury"](#) - May 1, 2018
- ["Can a Brain Injury Cause a Relationship Breakdown?"](#) - March 10, 2021

PODCASTS

- Groundtruth Podcast - Ep. 4: SFC Ryan Hendrickson *"Tip of the Spear"*
- Groundtruth Podcast - Ep. 2: *"Operator Syndrome"*