

Civic Assets

Fact Sheet

Traumatic Brain Injury, Post Traumatic Stress, and the Modern Combat Veteran

Traumatic brain injury (TBI) is the signature injury among United States military personnel involved in combat in Iraq and Afghanistan. Due in part to advances in protective armor and medical triage that have saved the lives of many who would likely have died otherwise, the rate of brain injuries in Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) is thought to be significantly higher than all other previous wars¹. Additionally, the frequency of explosive or blast attacks in Iraq and Afghanistan has been significantly higher than in past military conflicts. Data from the Defense and Veterans Brain Injury Center² at Walter Reed Army Medical Center indicate that 30% of all OIF/OEF veterans have experienced traumatic brain injuries. According to the Defense Medical Surveillance System of the U.S. Department of Defense, between 2000 and 2012 approximately 266,810 U.S. soldiers have suffered TBIs.³

Combat-related brain injuries can include symptoms such as fatigue, memory issues, confusion, disorientation, inability to focus, cognitive deficits, headaches, balance problems, and anger. Symptoms such as these often overlap with others like extreme irritability, inability to sleep, high anxiety and depression—the classic symptoms of post-traumatic stress.

Post-Traumatic Stress (PTS) and other psychological ailments following Iraq deployment are significantly higher than in other theaters⁴ as revealed in recent studies. According to a recent survey by the Department of Veterans Affairs in 2012, nearly 30% of the 834,463 OIF/OEF veterans treated at V.A. hospitals have been diagnosed with PTS and major depression. With many veterans not served by the V.A. due to huge backlogs, these numbers are probably much higher. A 2013 study by the Veteran's Administration found that veterans filing to receive disability compensation and other benefits from the V.A. wait on average 642 days in New York, 619 days in Los Angeles, and 618 days in Oakland before

¹ Warden, D. (2006). Military TBI during the Iraq and Afghanistan wars. *Journal of Head Trauma Rehabilitation*, 21(5), 398–402.

² Taber, K.H., and Hurley, R.A. (2010). OEF/OIF deployment-related traumatic brain injury. *PTSD Research Quarterly*, 21(1), 1–8. Retrieved from U.S. Department of Veterans Affairs, National Center for PTSD website: <http://www.ptsd.va.gov/professional/newsletters/research-quarterly/v21n1.pdf>

³ Defense Medical Surveillance System, 2012.

⁴ Hoge, C.W., Castro, C.A., Messer, S.C., McGurk, D., Cotting, D.I., & Koffman, R.L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine*, 351(1), 13–22.

receiving their benefits. PTS symptoms often surface in combat veterans who have experienced blast injuries. This suggests that PTS symptoms may result, in part, from traumatic brain injuries, explaining why PTS is so often diagnosed in tandem with TBI.⁵

While PTS continues to be the prevailing acronym, there is growing sentiment among service members to not identify PTS as a “disorder” because it is actually an injury due to trauma, not an organic disorder. Often, soldiers returning with TBI and PTS cannot go back to their former jobs or social lives. Bills start to pile up while they are receiving therapy. Depression, family problems, substance abuse, suicide risk, homelessness, and other complications often follow.

- Substance abuse: A 2011 study of veterans accessing V.A. services found that more than 11% of OEF and OIF veterans have been diagnosed with a substance use disorder, an alcohol use disorder, or both.⁶
- Homelessness: A study by the U.S. Department of Housing and Urban Development in 2012 found that on a single night in January of that year, 62,619 veterans were homeless. Over the course of a year, approximately twice that many experience homelessness. Only 7% of the general population can claim veteran status, but nearly 13% of the homeless adult population is made up of veterans.
- Suicide: A February 2013 report by the Department of Veterans Affairs found that a veteran is committing suicide in the United States every 65 minutes on average.⁷ Veteran suicides hit a record in 2012 at 349, outpacing combat deaths.

These impacts of PTS and TBIs plague hundreds of thousands of soldiers and veterans, exacting an emotional cost on individuals and families and a growing financial burden on our society. Military and veterans agencies struggle to cope with a condition that can often leave soldiers a shadow of their former selves, unable to keep a job or perform accustomed tasks.⁸

Strong Interest in Continued Service, Lack of Understanding How to Engage

Data from a 2009 survey of 779 OIF and OEF veterans entitled “All Volunteer Force: From Military to Civilian Service” found a strong interest in community service opportunities among veterans and a

⁵ Trudeau, D.L., Anderson, J., Hansen, L.M., Shagalov, D.N., Schmoller, J., Nugent, S., & Barton, S. (1998). Findings of mild traumatic brain injury in combat veterans with PTSD and a history of blast concussion. *Journal of Neuropsychiatry*, 10(3), 308–313.

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Seal, K. H., Cohen, G., Waldrop A., Cohen, B. E., Maguen, S., & Ren, L. (2011). Substance use disorders in Iraq and Afghanistan veterans in VA healthcare 2001–2010: Implications for screening, diagnosis and treatment. *Drug and Alcohol Dependence*, 116(1-3), 93–101.

⁷ Department of Veterans Affairs, February 2013. “Suicide Data Report, 2012, Department of Veterans Affairs Mental Health Services Suicide Prevention Program.” Data from 2012.

<http://www.va.gov/opa/docs/Suicide-Data-Report-2012-final.pdf>

⁸ De Luce, D. (2010, August 29). For Iraq war veterans, ‘invisible wounds’ that never heal. *Yahoo News*. Retrieved from http://news.yahoo.com/s/afp/20100829/ts_alt_afp/iraqmilitarywounds

corresponding lack of awareness of how to uncover those opportunities. According to survey respondents:

- 92% of veterans strongly agreed or agreed that serving their community is important to them
- 90% strongly agreed or agreed that service was a basic responsibility of every American
- 69% said they had not been contacted by a community institution, local nonprofit or place of worship
- 69% had not yet volunteered because they had not been asked to serve or did not have enough information on meaningful service opportunities

Research Points to Physiological and Emotional Benefits from Service and Volunteerism

There is growing evidence that engagement in community is good for mind, body, and spirit. Recent scientific studies have uncovered the phenomenon known as neuroplasticity—the brain's ability to revitalize itself by forming new neural connections throughout life to compensate for injury and disease based on the finding that the brain is ‘plastic’ and malleable. Neuroplasticity can lead to improved recovery of neurological and other functions, and this may be possible even years after an initial injury. Research is now focusing on how to leverage neuroplasticity to optimize recovery. Current therapy within clinical settings focuses on stimulating relearning via the brain’s capacity for neuroplasticity.

A program that engages veterans with TBI and PTS in community service with appropriate supports can help veterans practice and translate the skills learned in therapy into their daily lives in a community service setting. Service has long been acknowledged to be a proven therapeutic modality that holds great potential for enhancing the recovery of veterans suffering from a wide array of physical and emotional ailments. Lessons learned from organizations that work closely with individuals recovering from TBI and PTS (such as the New York State Apprentice Program and HeadStrong for Life), offer a guide toward future development of an initiative focused on veterans.

Key program design principles include:

- **Regaining a Positive Identity:** Individuals facing challenges in physical, verbal, and emotional functioning that result from TBI require skilled support to practice and establish a new identity in the community. Engaging in community service and projects that are meaningful to the individual recovering from TBI is an excellent way to redevelop a positive identity in relation to the community. Skilled support for the recovering individual is critical to success in community service projects. Support that allows for small initial successes creates the foundation for larger successes. This process optimizes the potential for the recovering individual to regain skills that can lead to increased independence and the ability to help others. Regaining the ability to contribute to others is critical to a healthy identity.
- **Training:** Special training is necessary for mentors and others who work with persons recovering from TBI and PTS, especially in the areas of communication, crisis de-escalation and conflict resolution.

- **Safety:** Challenges in physical, cognitive, and emotional functions that result from TBI require that supports for community reintegration include a safety plan that is carried out by persons with training in communication, conflict resolution, and crisis de-escalation. When veterans with TBI and PTS have support from people who model these skills as they undertake service projects, they can apply these skills to become increasingly independent.
- **Adaptive Management:** For each veteran, the recovery process can be a continually moving target with new issues arising as a result of gains in recovery. For example, regaining mobility can result in the increased need for support to avoid additional injury. And regaining social relationships may require additional support in effective communication skills to increase successful social interactions. Therefore, an adaptive management approach to program design for individuals recovering from TBI and PTS is necessary.

Veteran Quotes on Service

“The majority of my wounds are inside my head. I would tell others that deal with this sort of thing to first be relieved that they are not the only ones going through it. We did the desert together; we can do this together. Just because you don’t wear the uniform anymore doesn’t mean that you can hang up your obligation. Reach out to others. When you help others, you help yourself.”

—Mike Pereira, OIF/OEF veteran

“Helping other Vet Corps members helps me because I can learn more about post-traumatic stress. I can learn more about traumatic brain injury. I can learn more about these things so that I can not only help myself, but at the same time help other people going through it. That’s therapeutic in itself.”

—Timm Lovitt, OIF/OEF veteran