



# What You Should Know About Traumatic Brain Injury And Suicide Prevention

## INTRODUCTION/BACKGROUND

- A traumatic brain injury (TBI) can result from a blow or jolt to the head or from a bullet or other object penetrating the skull. Some Service members may experience TBI as a result of blast injury. TBI is classified as mild, moderate, or severe depending on whether the individual experienced an alteration or loss of consciousness, the extent of memory loss for events following the injury, and findings on neuroimaging and a medical exam.
- While each person may experience different types of symptoms after a TBI, common symptoms include cognitive (e.g., changes in memory and thinking), physical (e.g., headaches), emotional (e.g., depression), behavioral (e.g., irritability), changes in sleep (e.g., insomnia symptoms).
- Most individuals with mild TBI (also called a concussion) fully recover within days to weeks.
- Individuals with more moderate and severe TBIs often experience persistent symptoms, which may create challenges at home and with returning to work. Targeted treatments help those living with such injuries. They report an increased ability to independently complete important and meaningful activities over time. Medical management, psychological interventions, and rehabilitation treatments including physical, occupational, and speech therapies, facilitate recovery.

## TBI AND SUICIDE RISK

Many individuals with a history of TBI never experience suicidal thoughts, however research suggests that individuals with a TBI history may be at an increased risk for suicidal thoughts and behaviors (e.g., death by suicide). Nonetheless, prevention is key. A key prevention strategy is to develop a safety plan to cope with suicidal thoughts so they do not progress to suicidal behaviors. Knowing how to provide individuals with support and resources during periods of crisis is key.

There are a few things to keep in mind when thinking about suicide risk following TBI:

- Patients who have experienced a mild TBI have a twice as high risk of suicide than individuals without mild TBI. Patients with mild TBI also appear to have a higher risk of suicide attempt and suicidal ideation.<sup>1</sup>
- History of mild TBI is associated with a higher risk of suicidal ideation and suicide attempt.<sup>2</sup>
- It should be noted that research is limited on suicidality following TBI among minoritized groups, though recent research has found significant differences across racial/ethnic groups in suicide rates in Service Members self-identifying as American Indian/Alaska Native and "Other" who had a history of TBI.<sup>2</sup>
- History of moderate to severe TBI is associated with an increased risk for suicide by firearm.





### WHY IS TBI ASSOCIATED WITH HIGHER SUICIDE RISK?

Factors thought to be related to increased suicide risk among those living with TBI include changes in:

- One's ability to participate in work and homelife. Difficulty returning to work and a change in one's role at home can create financial and social impacts that decrease quality of life and lead to an increased sense of hopelessness.
- Difficulties associated with brain functioning, including:
  1. Processing emotions
  2. Impulse control
  3. Getting stuck in the same thought pattern and being unable to switch thoughts
- Shifts in relationships.
- Changes in sleep, levels of energy, and mood.
- Other factors that are known to contribute to suicide risk in the general population can also impact those with a history of TBI. These can include:
  1. Substance use
  2. Stressful life events
  3. History of prior suicide attempts
  4. Low level of social support
- Seeking treatment, including psychotherapy and counseling can be very helpful in addressing these concerns.

### REFERENCES

<sup>1</sup> Menon DK, Schwab K, Wright DW, Maas AI; Demographics and Clinical Assessment Working Group of the International and Interagency Initiative toward Common Data Elements for Research on Traumatic Brain Injury and Psychological Health. Position statement: definition of traumatic brain injury. *Arch Phys Med Rehabil.* 2010 Nov;91(11):1637-40. doi: 10.1016/j.apmr.2010.05.017. PMID: 21044706.

<sup>2</sup> Fralick M, Sy E, Hassan A, Burke MJ, Mostofsky E, Karsies T. Association of Concussion With the Risk of Suicide: A Systematic Review and Meta-analysis. *JAMA Neurol.* 2019 Feb 1;76(2):144-151. doi: 10.1001/jamaneurol.2018.3487. PMID: 30419085; PMCID: PMC6439954.

\*Reference to any non-federal entities in this document do not constitute an endorsement by the Department of Defense or its officials.

### CONNECT TO PROTECT

- **Get immediate help:** If you or your loved one are having thoughts of suicide, it is important to get help right away. To reach the Military/Veterans Crisis Line, Dial 988 and then press 1. Military/Veterans Crisis Line provides free, confidential support for Service members and veterans in crisis.
- **Seek services:** Individuals with thoughts of suicide should consult a mental health provider about options for therapy and medication management.
- **Lethal Means Safety:** Lethal means are objects (e.g., medications, firearms, sharp instruments) that can be used to inflict self-directed violence ([LMS toolkit](#)).
  - [Lethal Means Safety \(LMS\)](#) is an intentional, voluntary practice to reduce one's suicide risk by limiting access to those lethal means.
  - Some methods include gun locks and storing lethal means outside of the home, such as with a trusted friend/loved one (e.g., medications, firearms).
- **Keep Learning:** Learning more about your brain injury and getting treatment for your symptoms from professionals who understand TBI is very helpful for reducing symptoms that may contribute to suicidal thoughts. Although not an exhaustive list, resources to consider include:
  - [TBI Toolkit](#)
  - [National Intrepid Center of Excellence](#)
  - [Traumatic Brain Injury Center of Excellence](#)
  - [Brain Injury Association of America\\*](#)
  - [TBI Model Systems\\*](#)
  - [Brainline\\*](#)
  - [Psychological Health Center of Excellence](#)

Remember, support is out there, treatment works, and help is within reach.  
**Connect to protect** yourself and those you care about.