TAC
Treatment Advocacy Center

TBI and Veterans

Can a brain injury cause psychosis?

A traumatic brain injury (TBI) increases a person's risk for psychosis.

Delusions, hallucinations, disorganized thoughts, and atypical movements indicate that the brain has lost its ability to accurately organize sensory information and discern what is real.

Post-TBI psychosis is classified in the DSM-5 as a "psychotic disorder due to another medical condition." Symptoms may begin months to years after the brain has been physically injured, often after a latency period of 1—4 years. Cognitive deficits and neurological findings consistent with the TBI are usually present.

The risk of psychosis after a TBI increases with injury severity, damage specific to the brain's temporal and frontal lobes, and genetic predisposition. Neurological damage from a brain injury has a greater impact when there are psychiatric vulnerabilities from post-traumatic stress disorder (PTSD), depression, substance use, or severe mental illness (SMI). SMI conditions such as schizophrenia and bipolar disorder often emerge during early adulthood—a common age for someone to enlist. A neurological assessment can be critical for accurately diagnosing and treating an individual's condition, especially if there are co-occurring diagnoses.

With any combination of these conditions, the risk for suicide escalates: One in four veterans reported suicidal thoughts within a year.

For a military member's mental health emergency, call 988 and press 1

If there is an expressed threat of suicide, don't wait: Call 988. The nationwide, 24/7 Suicide & Crisis Lifeline includes a call center specifically for service members and veterans, even if they're not enrolled in VA benefits or health care. The Veterans Crisis Line website provides additional information and resources.

To access this service:

- Call 988, then press 1
- Text 838255
- Chat online

Who is at risk for psychosis from a brain injury?

A TBI can occur after a direct blow to the head, a penetrating object, a traffic accident, or a fall. Military service members and veterans, people in correctional facilities, those experiencing homelessness, and those with lower incomes or without health insurance are at increased risk for TBI.

For military service members and veterans, the danger comes not only from enemy fire but from repeated low-level blast exposure during training and missions. Door breaches, heavy weapons, and countless detonations create pressure waves that ripple through the brain. Over time, these waves may leave microscopic scars that can contribute to headaches, memory lapses, dizziness, sleep disturbances, or problems with attention and concentration. For some, these symptoms fade with time. For others, they persist and reshape daily life. Psychotic symptoms in people with TBI may not emerge until 1 to 20 years post-injury, though onset typically occurs within 4 years.

In severe cases, psychosis can result from scarred brain tissues. A challenging additional symptom can be anosognosia, the neurological inability to recognize that something is wrong. A person with anosognosia is not in denial or stubbornly refusing to accept that they are unwell: Their damaged brain cannot perceive its impairment. Anosognosia affects at least half of individuals with SMI. This symptom also affects people with Alzheimer's disease, a history of stroke, and those with TBI.

Although data collection and awareness are insufficient, families are well aware that anosognosia makes a devastating diagnosis much harder to manage. A person may insist that nothing is wrong even as their delusions, paranoia, and disconnection are obvious to the people closest to them. Anosognosia is the most common reason that someone with significant mental health needs will refuse treatment.

Helping someone with significant psychosis combined with anosognosia may require care partners to learn how to:

- Communicate with someone who lacks awareness of illness.
- Plan for an emergency.
- Seek involuntary treatment.
- Share mental health history.
- Improve home safety.

Considerations for system change advocates

Grassroots advocates with knowledge of military risks and protocols are well positioned to share their perspectives with change-makers.

Here are a few initiatives to consider:

- Redefine screening to include a neurological evaluation upon psychiatric intake.
- Restructure military training protocols to incorporate safety thresholds, protective gear, and mandated recovery time to reduce brain injury risks from low-level blasts.

- Make brain injury treatment part of psychiatric stabilization.

Support for service members, veterans, and their families

- Wounded Warrior Project — Warrior Care Network: Provides access to intensive, non-crisis mental health and brain injury programs.
- Home Base Program: Offers free clinical care, education, and wellness programs for veterans and families.
- GI Rights Hotline (877-447-4487): Guidance related to military discharge and counseling, confidentiality, documentation, psychiatric interviews, symptoms to note, and more.
- US Department of Veterans Affairs: Online resources for individuals and family members, including a link to search for a VA facility near you.
- NAMI Homefront Mental Health Resources: Resources and training materials, with links to crisis services.
- Psychiatric Transition Program at the Naval Medical Center in San Diego: Specialized early episode psychosis services built for military personnel.
- CCBHC options in your state: A certified community behavioral health clinic (CCBHC) is required by the Substance Abuse and Mental Health Services Administration (SAMHSA) to offer community-based mental health care for veterans.