TRAUMATIC BRAIN INJURY AMONG VETERANS:

A Toolkit For Behavioral Health and Social Service Providers

Swords to Plowshares
VETS HELPING VETS SINCE 1974

INSTITUTE FOR VETERAN POLICY
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INTRODUCTION AND CONTEXT FOR TOOLKIT

The brain remains the most mysterious of organs, the most complex structure in all of our biology, and is the most poorly understood in terms of medical and clinical treatments. Traumatic brain injury (TBI) has emerged as a signature wound of the wars in Iraq and Afghanistan, and for all we have learned about this often life altering injury we’ve yet to scratch the surface. The VA has made tremendous strides in medical treatments, but while many veterans with TBI are seeking services from community systems, care providers are often ill equipped to understand this complex injury and how it manifests throughout many aspects of their lives.

**What is a TBI?**

A TBI is a blow or jolt to the head that disrupts the normal function of the brain. It can be classified as mild, moderate, severe or penetrating. The severity is determined by factors at the time of injury.

Providers need to recognize TBI as it presents itself in behavioral and social services contexts in order to deliver trauma informed care. This guide provides a framework of understanding TBI from a community behavioral health perspective, unlike the medical and research approach that is often presented. Background and incidence, as well as behavioral health research is provided, along with screening tools and treatment considerations. Lastly, the resource section provides information for those seeking referrals and resources for their clients.

Behavioral health/mental health service providers, first responders, health and social service organizations such as senior services, primary health clinics, women-specific service organizations and clinics can benefit from this toolkit. Organizations do not need to be veteran-focused, indeed, because many veterans seek services outside of veteran-specific avenues, it is important to screen your clients for veteran status and to be culturally informed.

BACKGROUND AND INCIDENCE

Current/Previous Conflicts and Prevalence

Combat engagement has changed from previous wars, and the use of improvised explosive devices (IEDs), suicide bombers, land mines, mortar rounds and rocket-propelled grenades means that we are seeing brain injuries with far reaching implications for physical, cognitive, and mental health. In the early years of the war, medicine and research didn’t properly understand the impact of such an injury, and TBI was much more widespread than presumed. Screenings weren’t automatic, and too often service members who were far from the impact of blasts were thought to be unaffected. Many military operations both in and out of combat can produce such an injury. Evaluation and treatment of injuries was thus inconsistent.
Once veterans were separated from the military, the initial focus from the Department of Veterans Affairs (VA) was on returning service members with moderate and severe TBI, obvious injuries requiring inpatient rehabilitation. However, providers began to observe an increasing number of service members and veterans with multiple symptoms following deployment. Because this cognitive injury often co-occurs with post-traumatic stress disorder (PTSD), a debate began among providers and researchers to determine true symptoms of TBI, and there was pressure on the Department of Defense and the VA to create proper screening protocols and a systematic response.

Screening tools were deployed by the VA in 2007, and the VA has since screened over one million veterans for possible mild TBI, with 20 percent of veterans screening positive. Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) veterans with blast-related traumatic brain injury (TBI) account for 22 percent of combat injuries. In the last decade, the general knowledge about TBI and screening has improved; therefore, it is not surprising that more recent veterans are diagnosed with TBI than veterans from prior wars. Screening is not universal and service members may believe they have to be less than forthcoming during military-related screenings to avoid being perceived as weak or malingering, or to avoid a forced leave or military separation.

- TBIs are common in the military. According to the Department of Defense, since 2000, more than 360,000 service members worldwide have been diagnosed with a TBI. The vast majority are mild TBIs (also known as concussions).
- Up to five times as many active duty troops endured head trauma during the early stages of the Iraq and Afghanistan wars than was recorded. An increase in recent years of the number of head injuries has been attributed to improved screening methods.
- Certain symptoms of TBI may mimic symptoms of PTSD, leading to a difficulty in diagnosing the veteran. Also, a veteran may experience PTSD as well as TBI.

Non-Combat Related Injuries

It’s also important to mention that the majority of brain injuries are not a result of blasts, or even combat operations. Routine operations and training activities whether during or outside of deployments can put service members at risk of sustaining an injury, and while attention is largely focused on combat-related TBI, these are the cases that tend to go unnoticed. And like civilian TBIs, service members can be injured from non-military-related incidents (car accidents, falls, etc.).

The nature of the recent wars and deployments expose service members to blasts whether they are formally assigned to combat roles or not. The common use of improvised explosive devices (IEDs) and the frequency of shelling and mortar attacks on operating bases means that hundreds of thousands of service members are subjected to blast injury on a regular basis. Many service members experience multiple concussions throughout their tours of duty, which increases the likelihood and severity of TBI.
SYMPTOMS AND PROGNOSIS

Although technically a cognitive injury, TBI results in a broad range of physical, cognitive, behavioral, emotional, and social challenges with implications and comorbidity to mental health diagnoses. TBI may be mild, moderate, or severe, and symptoms include headaches, sleep disturbance, dizziness, balance problems, nausea, fatigue, visual disturbances, sensitivity to light, and ringing of the ears. Cognitive symptoms include problems concentrating, gaps in memory, attention problems, slowed thinking, and difficulty finding words. Emotional issues include irritability, anxiety, depression, and mood swings. Cognitive, physical, mental health, and life impacts will be discussed in this guide.

Those with mild TBI typically recover in the few months following the injury, although a small number (15 percent) do not recover within weeks to months. Those with moderate, severe, or penetrating injury make improvements with intervention, but the recovery process is longer and more unpredictable. About 35 – 60 percent of persons with moderate to severe TBI will develop chronic neurobehavioral and/or physical symptoms related to TBI.\(^5\) The prognosis is often a mystery as the brain is a mystery, and doctors can’t simply look at the brain and give an estimated recovery time. Treatment and recovery depends on many factors, including how the veteran was injured, severity, and what parts of the brain have been affected. Early diagnosis and treatment is always best, and will help speed the recovery process.

HOW ARE TBI SCREENINGS CONDUCTED?

This section discusses mild to moderate TBI diagnoses, less detected and screened for than the more critical closed or penetrating injuries from blunt and blast trauma, which are more easily detected. The VA and DoD have a system-wide assessment for diagnosing mild trauma including a quick evaluation of deployment, leave, or even civilian life activities following deployment and military separation.

Clinicians then establish if there was:

- a loss of consciousness (LOC),
- an alteration of consciousness (AOC),
- post-traumatic amnesia (PTA) associated with the injury or traumatic event, or
- if the event resulted in any neurologic changes or symptoms.\(^6\)

While service members are deployed, the Military Acute Concussion Evaluation (MACE) screening tool evaluates possible mild TBI.\(^7\) This is a pre-assessment that a medic/corpsman or a provider can administer, but it doesn’t in fact diagnose the injury. It will gather event information that will later help providers proceed with screening and evaluation. Ask your veteran if they remember being given this tool.

If mild TBI is not diagnosed while the service member is deployed, it can also be done through post-deployment health assessments (PDHA), which goes over the establishment criteria as listed above, with

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further evaluation if positive answers are given, and a post-deployment health reassessment (PDHRA) following the PDHA to assess for current symptoms.

The Glasgow Coma Scale (GCS) is the clinical tool used by the DoD and VA to assess the severity of the TBI. Veterans with GCS scores of 3 – 8 are classified with a severe TBI, those with scores of 9 – 12 are classified with a moderate TBI, and those with scores of 13 – 15 are classified with a mild TBI.8

Once separated from the military, veterans who served in combat operations, separated from service after September 11, 2001 and seek care from the Department of Veterans Affairs (VA) are screened upon enrollment in VA care using a TBI Clinical Reminder tracking system, which identifies these veterans in the electronic record. The four question screen identifies veterans who were exposed to events that increase the risk of TBI and who experience symptoms that may be related to that specific event or events.9

Screenings are done for those who report deployments, and further evaluation is given for those who screen positive.10 A positive screen does not diagnose TBI, but indicates the need for further evaluation with a specialty provider. Veterans who screen positive with the screening tool are offered a Comprehensive TBI Evaluation (CTBIE) with a specialty provider who can determine whether the veteran has suffered a TBI.11

It’s unclear how this is carrying out in practice. A study on clinical patterns for screening veterans for mild TBI sought to determine whether practice patterns vary by patient, provider, or facility characteristics. Veterans (N = 614) who had initial healthcare visits between 2008 – 2011 and who had previously completed the Veteran Health Adminstration’s (VHA) TBI screen and subsequent CTBIE were drawn from a national database. During the study period, 79 percent of patients were screened within one day of their initial healthcare visit and 65 percent were evaluated comprehensively via CTBIE within 30 days of screening. Provider and participant characteristics were generally not associated with timeliness. 12

For more information, see:


Screening Challenges Among Prior Era Veterans

Keep in mind that the majority of screening protocols developed by the VA, including alerting providers of military service dates in order to screen for TBI, is for current era veterans, and that screenings for prior era veterans have not been widely implemented nor were they done adequately during their time in service. Thus, a veteran can have a longtime symptomology but may have never been screened and diagnosed with a TBI. As we emphasized, these symptoms can result in serious changes in the veteran’s
life circumstances, especially if they are unable to keep a job or have socially isolated. A study of 800 veterans seeking homeless services from 2010 – 2011 showed 47 percent had a probable history of TBI, and this may even be an underestimate since they were never properly screened. 13 Keep this in mind when you see a veteran seeking social, behavioral, and homeless services, and incorporate some of the tools that we’ve suggested.

Gulf War Registry Exam
Veterans can be evaluated for brain injuries, as well as possible health problems related to environmental exposures during military service through a Gulf War Registry Exam. Veterans who served in the Gulf during Operations Desert Shield (Gulf War I or Pre-9/11/2001), Desert Storm (Gulf War I or Pre-9/11/2001), Iraqi Freedom (Gulf War II or Post-9/11/2001), or New Dawn (Gulf War II or Post-9/11/2001). This is a free exam that does not require enrollment in the VA healthcare system. Veterans are eligible for this exam if they served during 1990 – 1991 in Operation Desert Storm, Operation Iraqi Freedom, Operation New Dawn, Operation Desert Shield, or the Gulf War. To ask for the Gulf War Registry Exam, call the Environmental Health Coordinator at your local VA medical center or clinic: www.publichealth.va.gov/exposures/coordinators.asp.

VA SERVICE-CONNECTION FOR TBI
It is important to determine whether your veteran is service connected for TBI by the Veterans Benefits Administration. Establishing service-connection opens the door for disability benefits and healthcare which can be life changing. In addition to disability compensation, veterans may qualify for aid and attendance, vocational rehabilitation and other valuable programs and services.

Further, several illnesses have been connected to TBI and 38 CFR 3.310 allows for presumptive service connection.

**38 U.S.C. 1110 and 1131**
(d) Traumatic brain injury. (1) In a veteran who has a service connected traumatic brain injury, the following shall be held to be the proximate result of the service-connected traumatic brain injury (TBI), in the absence of clear evidence to the contrary:

I. Parkinsonism, including Parkinson’s disease, following moderate or severe TBI;
II. Unprovoked seizures following moderate or severe TBI;
III. Dementias of the following types: presenile dementia of the Alzheimer type, frontotemoral dementia, and dementia with Lewy bodies, if manifest within 15 years following moderate or severe TBI;
IV. Depression if manifest within three years of moderate or severe TBI, or within 12 months of mild TBI; or
V. Diseases of hormone deficiency that result from hypothalamo-pituitary changes if manifest within 12 months of moderate or severe TBI.
For example, the veteran need not demonstrate a causal connection between TBI and Parkinson’s disease; the existence of TBI, followed by a Parkinson’s diagnosis is enough to establish additional service connection.\textsuperscript{14}

What does this mean for you as the provider? If you are a behavioral health provider either within or outside of the VA, you typically stay out of the claim process, since diagnosis is determined by compensation and pension psychiatrists or psychologists for mental health diagnoses and primary/specialty care for other injuries. However, regular therapist notes can be (and should be) used in the determination of service-connection and rating. Also, if you know your client is not rated for TBI, refer them to agencies who can help the veteran make a claim at the VA.

**IMPACTS**

As we’ve stressed in this guide, the brain is a mystery, and the impact of the injury can vary greatly from one veteran to another. Head injury survivors may experience a range of neuro-psychological problems following a traumatic brain injury. Some of these impacts may vary over time, and some may arise again months after symptoms have diminished.
# Cognitive and Physical Impacts

## COGNITIVE IMPACTS
- Short term memory loss
- Shortened attention span and poor concentration
- Memory loss, especially with events after the injury
- Difficulties with problem solving
- Changes to reading and writing ability
- Loss of vocabulary and other communication changes
- Inability to understand abstract concepts
- Sleep problems

## PHYSICAL IMPACTS
- Paralysis (quadriplegia) or weakness (quadriparesis) in both the arms and legs
- Paralysis or weakness on one side of the body
- Impaired fine motor skills, sometimes with tremors
- Poor overall body coordination (ataxia)
- Double vision and/or visual field cuts
- Motor speech disorders like dysarthria and difficulties in oral speech planning
- Inability to carry out learned movements (apraxia)\(^{15}\)
- Head, neck and back pain
- Balance issues and dizziness
- Changes in sexual functioning
- Changes in the senses (hearing, sight, touch, etc.)
- Seizures (also called traumatic epilepsy)
- Weight management problems
- Strength, endurance, and energy changes\(^{16}\)

\(^{15}\) Head, neck and back pain
\(^{16}\) Changes in the senses (hearing, sight, touch, etc.)

### New learning presents the greatest challenge for those with memory problems.
In contrast, pre-injury knowledge is more easily retained.\(^{17}\)

### After a head injury, a person may experience changes in their sexual behavior, with either increased or decreased interest in sex. The causes could be a result of brain regulation of hormonal activity or an emotional response to the injury.\(^{19}\)

### Chronic pain is persistent pain and degrades health and ability to function. Chronic pain is often the common sequelae of PTSD and TBI.

### One study showed that veterans aged 55 and older with TBI had a 60 percent greater likelihood of developing dementia than those without TBI.\(^{18}\)

### People with TBI can be unaware of the changes to their body and mind as a result of the injury. It’s important as providers to be mindful of this and remember that it is not simply incompliance or a coping mechanism that causes this behavior but that it can be neurological damage.

### Some symptoms of TBI such as dizziness, slurred speech, poor concentration, and emotional lability can mimic alcohol use.
The Mental Health Link

**BEHAVIOR IMPACTS**

- Socially isolating and difficulty with relationships
- Lack of empathy and a self-centered attitude
- Lack of emotional control
- Impulse control issues
- Irritability/frustration
- Aggressiveness
- Mood swings
- Depression

Personality changes can be prominent. It may be, for example, that the head injury survivor used to be easygoing, energetic, and thoughtful and now seems easily angered, self-absorbed, and unable to show enthusiasm for anything.  

Especially common shortly after an injury, certain emotional responses may be lacking such as smiling, laughing, crying, anger, or enthusiasm.

Veterans with TBI are considered to be at high risk for depression.

Changes in abstract thinking (taking things as said, thinking about information and understanding information in a “concrete” way, taking things literally) may result in the veteran appearing to lack empathy for others. They may appear thoughtless or make hurtful remarks. This awareness of other people’s feelings may need to be relearned.

A veteran with TBI may become emotionally volatile because of neurological damage after a head injury. They may experience intense mood swings, impulsivity, or extreme reactions such as angry outbursts, sudden tears, or laughter in inappropriate moments.

TBI and post-traumatic stress disorder (PTSD) often are co-occurring and have overlapping symptoms, making the conditions and consequences difficult to differentiate.

Impaired judgment can lead to high risk behavior and atypical moral responses.

Women with TBI are more than two times more likely than men with TBI to be diagnosed with depression, as well as 1.3 times more likely to suffer from non-post-traumatic stress disorder anxiety disorders and 1.5 times more likely to suffer from PTSD and depression.

Non-Hispanic Blacks and Hispanics have shown higher odds of moderate or severe TBI than non-Hispanic Whites, and combat exposure is associated with higher odds of mild TBI in non-Hispanic Blacks and Hispanics than in non-Hispanic Whites.
The association between PTSD and TBI can be confusing since there are many symptoms in common, such as sleep difficulties, behavioral dysfunction, depression, anxiety, irritability, and memory problems. TBI and PTSD produce behavioral dysfunction through an exaggerated startle response, inability to control reflexive behavior, irritability, or attraction to high-risk behavior. Veterans with TBI and PTSD endorse significantly higher PTSD scores than those with PTSD only, with more intense (but not necessarily more frequent) symptoms, and higher overall anxiety. Interference with social and occupational functioning is a primary measure of the severity of TBI and PTSD. Keep in mind as a provider that the injury was possibly sustained during a traumatic event, and rehabilitation efforts will likely need to address this.
Clinicians: Do You Treat TBI and PTSD Together or Separately?

There is often a diagnostic confusion among psychologists because of the shared symptoms of TBI and PTSD, which can impact how the two are treated as well. Many practitioners recommend integrating TBI and PTSD treatment to ensure that the overlapping symptoms are managed, including emotional dysregulation that might manifest itself as anger or outbursts or impulsivity, anxiety because of the trauma as well as changes to physical health, functioning, and behavior; ability to concentrate, hypervigilance, and sleeplessness. Be mindful that symptoms of TBI and PTSD may fluctuate: there may be periods where symptoms are relieved as well as more challenging times. We suggest you explore this approach and look at tools such as Brainline’s videos where they discuss care approaches with both psychologists and veterans. Visit www.brainline.org/military-veterans for more information.

Depression

People with TBI are at substantially greater risk for depression. Treatment of and recovery from TBI can be hindered by depression; comorbid TBI and depression can lead to adverse outcomes and negatively affect multiple aspects of individuals' lives. About half of all people with TBI are affected by depression within the first year after injury. Even more (nearly two-thirds) are affected within seven years after injury. This is especially alarming given the propensity for veterans to experience depression. The co-occurrence of TBI, PTSD and depression in recent era veterans has increased research and clinical interest. Of particular relevance are areas of the brain involved in mood regulation and memory integration, which are shown to be affected in veterans with PTSD, TBI, and depression. Again, evidence shows reintegration efforts should carefully assess and target depression, which is a modifiable factor.

Suicide

Like the general population, veterans with brain injuries are at increased risk of suicide. A 2011 study showed clinically significant suicidal ideation in 22 percent of the TBI population. Another 2011 study examining suicide risk in 49,626 VA patients with a history of TBI show that overall veterans with TBI have an increased risk of dying by suicide compared with veterans without brain injuries. Another study showed executive dysfunction, as a multidimensional construct (i.e.: decision-making, impulsivity, aggression, concept formation), and suicide attempts were closely related. Successful interventions focused on overall distress reduction and means restriction were recommended.
Life Impacts

Independent Living
Post acute rehabilitation for individuals with moderate to severe brain injuries mean they likely will need some level of long-term services and supports to help maintain or improve their physical functioning and quality of life. The need may vary over time as their condition changes, and is generally defined by limitations on a veteran’s ability to independently perform basic personal care activities—known as activities of daily living (ADLs)—over an extended period of time.

**Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs)**
Activities of daily living (ADLs) include eating, using the toilet, bathing, dressing, getting in and out of a bed or chair, and walking across a small room, among other activities. Individuals with difficulties performing ADLs may require environmental modifications (e.g., handrails), assistive devices (e.g., wheelchairs), or assistance from another person. A caregiver may help with ADLs directly (e.g., by dressing the individual) or indirectly (e.g., by reminding the individual of the next step in dressing himself or herself).

Instrumental activities of daily living (IADLs) are more cognitively complex activities that generally involve developing and executing a plan. IADLs include preparing meals, taking medications as prescribed, using a telephone, performing housework, doing laundry, getting around outside the home, shopping, and managing money, among other activities. A caregiver may help with IADLs directly (e.g., by preparing a meal) or indirectly (e.g., by reminding the individual of the next step in preparing a meal).

Unemployment and Homelessness
Long-term disability and even injuries which end a service member’s career are unfortunately a recipe for long-term economic consequences. Veterans with TBI face higher rates of unemployment, even years after the injury. As we will later discuss, psychosocial impacts of TBI can affect their performance on the job as much as the cognitive and physical challenges they experience. This extends to their ability to maintain a stable living situation as well. The incidence of TBI among prior era homeless veterans should be explored, as these veterans represent a large proportion of veteran homeless and are less likely to have been adequately screened for possible injuries. As we mentioned, a study of 800 veterans seeking homeless services from 2010 – 2011 showed 47 percent had a probable history of TBI, almost four times the rate of TBI among the general population, and that this may even be an underestimate since they were never properly screened.

WOMEN, RACIAL AND ETHNIC CONSIDERATIONS IN TBI
Women fare far worse than men in terms of psychiatric symptoms as a result of traumatic brain injury (TBI). This extends to their economic situations as well. Women with TBI are more likely than men to be unemployed and much more likely to become homeless.
Further research is needed to understand racial differences in the effect of TBI and on interventions to prevent TBI across severity levels. One thing to keep in mind when working with minority veterans is that culturally competent care significantly affects their treatment outcomes, most specifically that treatment which takes into account their racial, ethnic, and gender identity.³⁶

### Women, Racial and Ethnic Considerations by the Numbers

- Women with TBI are more than two times more likely than men with TBI to be diagnosed with depression, as well as 1.3 times more likely to suffer from non-post-traumatic stress disorder anxiety disorders and 1.5 times more likely to suffer from PTSD and depression.³⁷
- Women with traumatic brain injury are 2.7 times more likely than men with TBI to be unemployed and are almost 7 times more likely to be homeless.³⁸
- Substance abuse is 4 times more common among women with TBI than men.³⁹
- Hispanic ethnicity is positively associated with higher mortality risk among veterans clinically diagnosed with traumatic brain injury. More research is needed to understand the reasons for this disparity.⁴⁰
- A study of racial and ethnic differences in combat and noncombat associated TBI severity among veterans from 2004 – 2010 showed non-Hispanic Blacks and Hispanics had higher odds of moderate or severe TBI than did non-Hispanic Whites. Combat exposure was associated with higher odds of mild TBI in non-Hispanic Blacks and Hispanics than in non-Hispanic Whites. ⁴¹

### AGING VETERANS AND TBI

Older veterans are prone to falls as well as other age and health-related injuries which can result in a traumatic brain injury. Adults aged 75 and older have the highest rates of TBI-related hospitalization and death.⁴² They may also have military-related brain injuries that have sequelae into dementia and other cognitive effects. As we mentioned, one study showed that veterans aged 55 and older with TBI had a 60 percent greater likelihood of developing dementia than those without TBI.⁴³

Older adults experience more frequent and more severe cognitive impairment when compared to younger adults with similar severity of TBI. This is primarily due to a higher incidence of premorbid dementia.⁴⁴ Older individuals with TBI also have slower rates of drug metabolism and excretion, which creates a greater propensity for cognitive side effects from medications including agitation, somnolence, and increased confusion. To complicate matters, many aging veterans are chronically on regular prescription medications. Of major concern, in the older patient a relatively mild TBI can disrupt the normal circadian sleep-wake cycle and result in a reversible post-traumatic dementia accompanied by transient psychotic symptoms at night.⁴⁵
TRAUMA AND COMMUNITY RE-INTEGRATION

Military to civilian transition is complicated by health, cognitive, and psychosocial factors even in the best of circumstances. Trauma that may have resulted in cognitive, behavioral, and physical changes and can even end the service member’s career may set further hurdles for the veteran to manage. A study of veterans separated from the military as a result of acquired mild traumatic brain injury showed the crisis of unplanned, involuntary separation from the military was universally perceived as a crisis equal to that of the precipitating injury itself.

Importantly for healthcare providers, their perception that civilians lack understanding of the military experience and the specific injuries they’ve acquired set up expectations for provider-patient interactions, and may negatively impact their relationships with providers. Expectations of lack of cultural knowledge, distrust, and other stigma may affect this relationship. These same expectations affected their relationships with their loved ones. This is a preceding circumstance for social isolation and depression. In fact, while factors contributing to community reintegration among veterans with TBI are poorly understood among the research, evidence shows efforts to support reintegration should carefully assess and target depression, which is a modifiable factor. Also keep in mind that successful return to work and/or school is inversely related to the severity of chronic neurobehavioral and physical symptoms which persist among 35 – 60 percent of veterans with TBI.

Family Factors

Family is often the conduit to care, playing the most important role in recovery and adapting to lifestyle changes. Research has found a direct relationship between a family’s ability to adapt and cope with trauma and the patient’s success with rehabilitation and reintegration. Providers should integrate the family to treatment course, and ensure that they have the resources and treatment they need to prevent caregiver burden.

The stress of learning to adapt to behavioral and physical changes, new communication techniques, and expectations can be overwhelming. Added to this, spouses must often be the sole financial provider for the family when the veteran is unable to work. This is especially burdensome when they must also juggle caring for them and navigating their care.

Considerations:

- Families can often provide the best perspective on changes in the veteran as a result of the injury.
- Encourage caregivers to seek counseling, pursue respite and self-care.
- Encourage family to spend quality time together often, moving focus away from the TBI.
- Parents should communicate changes to their children openly, integrating them into the new changes while doing best to get them back to their routine as well.
- Family members and caregivers may request support from DVBIC’s TBI Recovery Support Program at http://dvbic.dcoe.mil/tbi-recovery-support-program.
Currently, many educational institutions misunderstand the challenges and experiences student veterans may face. Educators and student affairs professionals may not be aware of potential barriers student veterans are experiencing which hinder their ability to do well in school. They may wish to incorporate structured supports for veterans on campus but don’t know where to begin. This lack of understanding makes it difficult for student veterans to access the right resources and find the necessary support for academic success and overall well-being.

While veteran students are diverse regarding demographic and economic lines, a large population of military-connected undergraduates face life circumstances that research shows are associated with postsecondary non-completion. Added complexities of TBI on their cognitive, physical, and psychosocial functioning impacts their educational experience and the ability to do well in school.

Understanding their veteran benefits such as the G.I. Bill and vocational rehabilitation is crucial as they navigate the transition to school. Bear in mind that while these benefits will enable them to focus on their academic pursuits by alleviating some financial challenges, the veteran would do well to ensure they are absolutely ready to attend school. As a provider, talk to your veteran client about support systems at their college campus.

**Necessary Steps for College Transition**

- Have veterans talk with academic advisors about transferrable courses.
- Direct them to disability services to inquire about accommodation in classes such as notetakers, extra time for tests, and the ability to take break during tests.
- Search for a Veteran Resource Center on campus with staff who may help them navigate educational benefits and the transition to school.
- Ask if there is an alumni or peer support network available for veterans.
- Have them meet with VA Certifying Officials on campus to process education benefit claims.
Back to Work

The road to recovery most often has an end goal of returning to work. The rehabilitation process can be tough, unpredictable, and long, and often when veterans return to work, their recovery isn’t complete. Recovery at work means adjusting to their new work routines, abilities, accommodations, and expectations of the workplace in light of their injury.

For those still in the military, both TBI and PTSD can significantly impact or end a military career. While there is a tendency to hide symptoms, with many professionals working with service members noticing they are especially reticent to report or discuss symptoms. This can hold true for veterans wishing to speed up their recovery and return to the civilian workforce as well.

Employers who hire veterans with TBI, and employers of Guard and Reservists who’ve been injured during drills or active duty assignments are required by the Americans with Disabilities Act (ADA) to provide reasonable accommodations to veterans with disabilities, including a modification of a job, the job site, or the manner of performing the job. Very often, these accommodations are straightforward and easy to implement.

TBI symptoms that most often impact the veteran on the job are most often memory deficits, including verbal memory loss and visual memory loss; visual field loss; and social cognition, including impacted social skills and difficulty navigating interpersonal relationships at work. 52

Considerations for Going Back to Work

- What symptoms does the veteran have which may affect their employment and job performance? How can I work with the veteran to overcome these challenges?
- Is the veteran reticent to discuss ongoing symptoms that may impact their ability to work? How can I encourage self-disclosure?
- Which specific tasks may require modification of the job?
- Is the employer aware of the veteran’s injury?
- Has the veteran been given information about possible accommodations? What accommodations can I recommend to the employer, or inform the veteran about?
- How can I ensure the veteran has access to counseling and social services while they enter the workforce?
SCREENING METHODS

Screening for Veteran Status

Now that you have gained an understanding of the unique needs of veterans with TBI, you can now identify appropriate ways to screen your clients for both veteran status, and to inquire about a possible TBI.

How do you start? Simply asking, “Are you a veteran?” during an intake assessment is complicated for many reasons. The questions we’ve developed have been found to be most impactful to identify veterans. We recommend implementing the screening at any time during your treatment, as you see fit. The following questions are meant to be a quick inquiry and reference point. The questions have been found to be most impactful to identify veteran clients. If you would like to perform a more in-depth screening to inquire about veteran status, additional questions are included in the worksheet.

Case Profile: Kevin Miller, U.S. Marine Corps Iraq Veteran

“I served in the U.S. Marine Corps from 2002 - 2006. I had three deployments: one to Baghdad for four months; the second to Bahrain, Saudi Arabia, and Djibouti, Africa totaling six months; and the third deployment to Ramadi, Iraq for seven months. When I separated from the military and enrolled at the VA in 2006 I had not been screened for TBI. It wasn’t until 2010 that I was screened after I spoke with my primary care physician and a county veteran service officer in Humboldt County. They informed me I could do a tele-screen by phone, which I did, and then was referred for a comprehensive evaluation.

“I get my care at the VA in San Francisco for a wide range of chronic issues, mainly focused around traumatic brain injury and degenerative arthritis in my neck and spine. I see an orthopedic specialist for my neck, spine, shoulder, and for my head injuries; as well as a mental health therapist, chronic pain specialist, chronic pain clinic, and a number of other specialists that deal with arthritis, a podiatrist, and any other care that overlaps with those conditions. I’ve lost track of how many providers I have.

“Since I’ve been diagnosed with traumatic brain injury, post-traumatic stress disorder, and chronic pain, there's a lot of overlap in symptoms and conditions, so it's very hard to pinpoint the difference and the nuance in which one might be affecting me. Providers outside the VA might be specializing in one but not two or all three. At the VA, they do recognize that and talk as a team for your care and procedures.”

Kevin’s treatment underscores the importance of integrated care to handle multiple issues stemming from his injury, as well as the importance of reaching rural populations which may be geographically distanced from both veteran-specific and non-veteran resources. The tele-screen he mentioned is available at rural Community Based Outpatient Clinics (CBOC) through the VA.
Veteran Status Screening Intake Worksheet

Preliminary Questions/Basic Intake Questions to Ask the Veteran

1. Have you ever been in the U.S. Armed Forces?
   - Yes  - No

2. In what branch(es) of the Armed Forces were you in? (Check all that apply)
   - Army  - Marines  - Navy  - Coast Guard  - Merchant Marines

3. Were you in the National Guard or Reserves?
   - No  - Yes, National Guard  - Yes, Reserves

4. Did you deploy? Did you go to a combat/war zone?
   - Yes  - No  - Yes  - No

5. Date you were last discharged? ______ - ______ - ______

6. What type of discharge did you receive?
   - Honorable  - General (Under Honorable Conditions)  - Other than Honorable
   - Bad Conduct  - Dishonorable

Optional additional questions to ask the veteran: These questions may help the organization better determine eligibility for services.

7. Current service obligation:
   - None  - Individual Ready Reserve  - Reserves  - National Guard

8. Are you enrolled in VA healthcare?
   - Yes  - No  - Don’t Know  - Refused

9. Are you receiving benefits from the VA?
   - Yes  - No  - Don’t Know  - Refused

   If yes, what type of benefits?
   __________________________________________________________

10. If you are receiving service-connected disability compensation, what is your rating?
    Percent _________  - Don’t Know  - Refused

11. What are you rated for?
    __________________________________________________________
Purpose and Use of the DVBIC 3 Question TBI Screen

The purpose of this screening is to identify service members who may need further evaluation for mild traumatic brain injury mTBI.

Tool Development

The 3 Question DVBIC TBI Screening Tool, also called The Brief Traumatic Brain Injury Screen (BTBIS), was validated in a small, initial study conducted with active duty service members who served in Iraq/Afghanistan between January 2004 and January 2005. 53

Who to Screen

Screen should be used with service members who were injured during combat operations, training missions or other activities.

Screening Instructions

**Question 1:** A checked (√) response to any item A – F verifies injury.

**Question 2:** A checked (√) response to A – E meets criteria for a positive (+) screen. Further interview is indicated. A positive response to F or G does not indicate a positive screen, but should be further evaluated in a clinical interview.

**Question 3:** Endorsement of any item A – H verifies current symptoms which may be related to an mTBI if the screening and interview process determines a mTBI occurred.

Significance of Positive Screen

A service member who endorses an injury (Question 1), as well as an alteration of consciousness (Question 2 A – E), should be further evaluated via clinical interview because he/she is more highly suspect for having sustained an mTBI or concussion. The mTBI screen alone does not provide diagnosis of MTBI. A clinical interview is required.


For more information contact DVBIC at:
info@DVBIC.org
(800) 870-9244
3 Question TBI Screening Tool

1. Did you have any injury (ies) during your time in the military from any of the following? (check all that apply):
   - a. Fragment
   - b. Bullet
   - c. Vehicular (any type of vehicle, including airplane)
   - d. Fall
   - e. Blast (improvised explosive device, RPG, land mine, grenade, etc.)
   - f. Other (specify):

2. Did any injury received while you were deployed result in any of the following? (check all that apply):
   - a. Being dazed, confused or “seeing stars”
   - b. Not remembering the injury
   - c. Losing consciousness (knocked out) for less than a minute
   - d. Losing consciousness for 1 – 20 minutes
   - e. Losing consciousness for longer than 20 minutes
   - f. Having symptoms of concussion afterward (such as headache, dizziness, irritability, etc.)
   - g. Head injury
   - h. None of the above

*NOTE:* Endorsement of A – E meets criteria for positive TBI Screen

*NOTE:* F and G needs to be confirmed through clinical interview

3. Are you currently experiencing any of the following problems that you think might be related to a possible head injury or concussion? (check all that apply):
   - a. Headaches
   - b. Dizziness
   - c. Memory problems
   - d. Balance problems
   - e. Ringing in the ears
   - f. Irritability
   - g. Sleep problems
   - h. Other (specify):
Incorporating Screening into Existing Treatment Plans

We encourage this guide to be used in coordination of services for veterans, but by no means are we instructing you on how to properly treat your clients. We hope the information in this guide can be used at your discretion, and you can decide within your own process when you’d like to implement these practices. We also hope that within the conversation you may introduce the possibility of seeking veteran-specific services in order to augment the existing treatment plan.

CONSIDERATIONS TO APPROACH, PRACTICE, AND PROCEDURES

Outreach Materials

Creating outreach materials may seem like a straightforward task, but many organizations have expressed difficulty creating appropriate language and engaging veterans for services. This may be a challenge for both organizations that are serving veterans for the first time, and even those who have longstanding programs. Many veterans do not access care from the VA or veteran serving organizations; most seek care in the community where their veteran status is not so easily identified. This makes outreach and identifying veterans difficult in civilian agencies.

For veterans with TBI, outreach materials need to be made all the more clear. Written materials should be in large print, with clear steps for accessing care.

Office Space

As far as the physical space goes, here are some tips for creating an accessible and considerate office space:

- Install ramps, handrails, and provide accessible parking spaces.
- Elevators can create dizzying spells; install handrails in the elevator and upon exit.

Self-Assessment Tool for Outreach Materials

What images do you include? Do you have a picture of a flag or a person in uniform? While these may be eye catching and create a quick visual cue for veterans, it may also be a reminder of a negative experience while in the military, especially if they have experienced a TBI from a psychologically traumatic event and/or an injury that has ended their career.

What language do you include? Do your outreach materials convey that you have a cultural knowledge and understanding of their military and veteran experience? Are they simple and easy to understand?

Do you provide clear steps for accessing care? Is your contact information front and center, and is there a direct line or email address with a contact person listed? Do you have a veteran web page? Is it easy to find? Do you have a veteran campaign on your social media platforms? Are you engaging veteran groups through social media?

Is it clear what services you will provide? Is written information in large print with clear steps for accessing care? Is eligibility for services clear to understand? Are they sure what services and support they will receive? If you provide flexible hours, is this mentioned? Are there referral networks that can cover a comprehensive level of care, so if you can’t provide the service, you can refer out – and is that clear?
• Clear pathways of travel of any unnecessary equipment and furniture.
• Provide written information in large print and provide clear direction signs.
• Use high intensity, white lights instead of fluorescent, and increase natural lighting.
• Make sure forms are clear to understand and that they have enough time to complete them.
• Make sure the space is quiet and free of distractions. If the office space is public, ask if they’d like to move to a more private room.

Considerations should be made to your office space beyond the expected accommodations. Your office itself may also be uncomfortable for someone who has experienced brain injury and trauma. Make sure there are clear exit signs and clear paths for the veteran to leave and not feel cornered. Make sure their backs are not facing a door and make sure they can see most of the space. If you have personal items on display in your office that allude to your family life and your client is discussing that they have been isolated from their family, this may be a painful reminder. They may feel further disconnected from you because of this and be distrustful.

Creating a Culturally-Informed Approach

Providers within the community are often ill-equipped to understand military and veteran culture, the circumstances of their possible trauma, and how that may impact their treatment seeking behavior. As research suggests, veterans with TBI feel more comfortable seeking services from a provider who understands their experiences. Understanding military/veteran culture and terms, understanding the dynamics of how brain injuries are sustained, and the impact of TBI on their behavior is fundamental to your care approach. Referral channels and resources are equally important. (See the Resources section for more information.) Unique needs often require a coordinated response.

• At minimum, staff and volunteers should be educated on veteran issues and experiences. Further education on TBI symptomology is highly recommended.
• For resources on veteran cultural competency, learn more about Swords to Plowshares’ Combat to Community™ training program at www.combattocommunity.org and contact us if you would like to schedule a training for your staff.
• For larger organizations, having veterans on staff or to act as peer mentors is something to also consider when possible. Current or past veteran clients can be empowered to help other peers seek care. They may act as a conduit to care and help bridge a cultural divide that often exists. They can also help with cognitive tasks, manage medications and appointments, and discussing care with family members and other caretakers.
• Consider creating a veteran working group or steering committee to empower veteran clients. Ask “alumni” of your program for their feedback about safety, cultural competency, and treatment considerations. If possible, have a veteran lead the project.

The Care Team

Ongoing rehabilitation programs means the veteran may likely work with a team of specialists. Keep this in mind, and wherever possible, communicate and coordinate services with these professionals to ensure wrap-around support is being provided. Also keep in mind that integrated care for this population
is crucial. These injuries extend beyond the cognitive and physical effects, but to social-emotional, psychological, and economic effects as well.

Specialists include:  

- Physiatrists: Doctors who are experts in rehabilitation medicine who typically oversee the rehabilitation process.
- Neurologists: Doctors who are trained in the diagnosis and treatment of nervous system disorders, including diseases of the brain, spinal cord, nerves, and muscles.
- Occupational, physical, speech, and language therapists: Therapists who help the person regain thinking skills, communication skills, physical abilities, and behavioral skills.
- Neuropsychologists: Specialized psychologists who focus on thinking skills and behavior problems.
- Vocational rehabilitation experts: Employment coaches who help with regaining job skills.
- Social workers and case management teams: Handle ongoing case management needs including counseling, housing, social services, and employment.

Unique Treatment Considerations

Veterans who have experienced the trauma of a TBI may have other psychological trauma as well as special circumstances that may require you to consider unique treatment needs. The nature of their injury stemming from a possibly violent and horrific event may lead them to be hyper-vigilant, aware of their surroundings and quick to defend themselves. They may maintain a highly alert and nervous emotional state, and may find it difficult to feel relaxed and safe with a new provider. Your role is to help them feel safe, in control, and be able to turn off that hyper-vigilance they’ve learned to maintain.

It is important for you as the provider to explore what feeling safe may mean to the veteran. Be sure to discuss confidentiality and resources you can offer, and try to understand their experiences as unique compared to civilian clients.

Separating the Trauma from the Veteran

It is important as a provider and advocate to distinguish the veteran from the trauma they experienced. TBI and PTSD have emerged as the defining issues among veterans. Despite the alarming numbers, it is important as a treatment provider and advocate to distinguish the veteran from the trauma they have experienced. Often to be a “victim” is counter to being a “warrior.” Veterans may struggle with this and it may impact the way they seek and receive treatment. While the clinical diagnostic code for PTSD is a mental health disorder, it can be contrary to anti-stigmatization efforts and care to call a response to extremely traumatic events a disorder, especially when discussing it with your patient. Further, calling a TBI an injury does not fully encompass the trauma they’ve experienced to their brain, body, and mind. We are not advocating for different diagnoses but we do advise you to be aware of the stigma associated with having a disorder and injury and how that might affect care seeking behavior and treatment.
Communication Techniques

While many veterans with TBI don’t require a specific approach in social service or behavioral health settings, it’s important to consider your interactions with them, and to keep in mind how they are processing the information:

- It’s normal for veterans with TBI to feel overwhelmed with changes to their lifestyle, relationships, and health as a result of the injury. These problems can distract from therapy or cause them to refuse or put off their treatment. It may also add stress that may interfere with resolving symptoms.\(^\text{57}\)
- Encourage veterans to stay focused on their treatment course, and help them to manage the stresses that even getting treatment may cause. But also adjust to any resistance they may have, and let them be in control of seeking services.
- Recognize that irritability and emotional lability may be common following an injury, and the veteran’s ability to manage stress can be impacted as well.
- Increase power, predictability and control for the client.\(^\text{58}\) If you are collecting information, discuss why you need it and what will be done with it. Discuss confidentiality and what worries the veteran may have in disclosing information. Be explicit about when you will be talking about trauma, and when you won’t be.\(^\text{59}\)
- Try focusing on short-term goals, as longer-term goals may overwhelm the veteran and lead them to believe their life will be forever changed.
- Give multiple opportunities to make or contribute to decisions and emphasize choice.
- Answer questions openly without judgment. Beware of statements such as, “thank you for your service” which some veterans may not wish to hear or know how to respond.
- Reassure the veteran that you’re listening. An important therapeutic tool, especially with this population, is silence. Avoid interrupting the person, and ensure the veteran has enough time to gather their thoughts. This is especially important for those who have vocabulary effects.
- Some of their stories might be hard to understand if you’re unaware of military culture and experiences. If you are a civilian, they get that you won’t understand everything, but they want to know that you have a vested interest. Acknowledge the trauma as well as the disjointed experience of military culture and civilian life. Also acknowledge the possibility that you might misunderstand some of their experiences. Pay attention to ways of establishing trust with the client, who may have trouble trusting you and being open. Speak informally and offer personal details about yourself. Be open and honest.
- Keep in mind that pre-injury memories may conjure emotions of the person they were before the TBI. If they are having trouble recalling certain events post-injury, this can be even more challenging.
- Pay attention to whether the veteran understands what you are saying to them. They may appear to, but while they have the social cues to know how to appropriately respond, they may have cognitive dissonance which impacts how they process information. You may often need to repeat what you say orally and in writing. Be patient, flexible, and understanding.
- Provide written instructions whenever possible, and offer assistance in completing forms. Offer extra time for making decisions.
- If possible, assign a peer mentor to assist the veteran in determining goals and provide daily guidance.
- Be aware there may be some inconsistencies with the veteran’s memory and recall of the trauma. Especially with an injury where they may have lost consciousness, they may not recall certain parts of the event. And even in typical circumstances, veterans may remember different details at different times. They may also feel pressure or stigma to tell their story in a certain way.

Ongoing Symptom Management

Poor Concentration
- Giving veterans gentle reminders and repeating the question can help get their attention if they have trouble concentrating.
- Cueing can help, but be mindful to not interrupt their train of thought.
- Don’t overload them with information, and give them time to form their thoughts.
- Focus on one step or task at a time.
- Veterans should be encouraged to develop self-checks by asking themselves questions such as whether they understood everything explained to them, whether they wrote down key information, and whether they are taking the necessary steps to respond to the information. Cue them on these steps if needed, and encourage them to slow down and concentrate if they didn’t do the above steps.  

Memory Problems Management
- Make sure the veteran writes down key information, such as appointment times, tasks, or reminders from their caretaker and family members. Divide larger assignments or tasks into smaller steps. Provide pen and paper readily.
- Keep to the same routine of appointment times, and appointment location. Alert a caretaker of key dates for appointments as well as anything work or school related that they mention.
- Label doors and key areas in large offices in case the veteran gets lost.

Sleep Problems
- Help the veteran keep a sleep diary, taking a look at when they go to sleep each night and wake each morning, evening habits, eating patterns, etc.

Pay particular attention to whether the veteran understands what you are saying to them. They may appear to, but while they have the social cues to know how to appropriately respond, they may have cognitive dissonance which impacts how they process information.

Effective Skills in Session
- Listen reflectively
- Be supportive/empathic
- Complimentary, not punitive
- Reassurance
- Acknowledge trauma/stress/disjointed experience of military culture/life
- Adjust to resistance
- Create mutual authentic relationships
- Specifically related to grief: Be present and say nothing
Advise them to go to sleep and wake up at the same time every day, and to schedule seven to eight hours of sleep each night.

Encourage them to relax before bedtime, and limit exercise and screen time at night.

Urge them to limit caffeine, alcohol, and energy drinks.

Physical Activity Limitations and Exercise

Encourage veterans to maintain their daily routine as much as possible, or find a new daily routine that works for their physical abilities.

Even with physical activity limitations, exercise has shown to be helpful after an injury, especially for those who have issues with weight management, stress management, emotional regulation, strength, endurance, or changes to their energy levels following the injury. Encourage the veteran to pursue an exercise plan that works for them. 61

People with TBI who exercise three times per week for 30 minute intervals reported less depression, improved perception of physical abilities, and increased community integration as compared to people with TBI who did not exercise regularly. 62

Studies show regular exercise can positively influence cognition in people with TBI. 63

Balance Issues and Dizziness

Encourage the veteran to limit alcohol and caffeine and drink plenty of water.

Also remember some symptoms of TBI, including dizziness and balance issues, can mimic alcohol use. Be mindful of this, especially when doing a symptom check.

Work on sleep management issues, as balance issues may worsen if they also have problems with sleep.

Talk to them about any medications or supplements they are taking.

Headache and Neck Pain Management

Headaches after TBI can be long-lasting, coming and going even past one year. 64

Headaches can compound other issues such as memory loss, concentration problems, irritation, and make it difficult to carry out daily activities.

Headaches can be caused by a variety of conditions related to the injury, including a change in the brain caused by the TBI, neck and skull injuries that have not yet fully healed, tension and stress, or side effects from medication. 65

Service members with a continuous headache have almost four times the odds of a medically related discharge/retirement compared to patients without such a headache. A study showed veterans with headache histories with severe holocephalic pain who medicate to keep functioning had the highest probability of medical discharge/retirement. 66

Communicate the danger of over the counter medications that might interfere with their other prescriptions. Encourage them to seek information from their doctor.
- Keep in mind that some medications for TBI can cause headaches.
- Encourage the veteran to keep a headache diary, noting the time of day they experience the pain, their eating and sleeping habits, and any medications they’re taking.
- Encourage the veteran to limit caffeine and alcohol.
- For neck pain, be aware of how the veteran is positioned during the appointment, make sure they are sitting forward and not looking at you sideways, and that they aren’t bent forward for long periods of time. Take short breaks when needed and allow them to stretch.

**Lack of Emotion or Emotional Lability**
- Recognize that this is part of the injury; it is unintentional, and the veteran has lost some control over emotional responses.
- Help the veteran recognize when their emotional responses are under control, and support/reinforce techniques that work.
- Make a specific mention of your emotional reactions or a typical reaction to a common situation so the veteran can recognize typical and appropriate responses.
- Realize that awareness of feelings and empathy may have to be relearned.

**Impaired Judgment**
- Impaired judgment can result in changes to the veteran’s lifestyle, especially when they act impulsively or have cognitive challenges with problem solving.
- Recognize that impaired judgment which leads to engaging in high risk behavior or atypical moral responses is a result of the injury.
- Encourage veterans to create safety plans with their loved ones.
- Even nutrition can be affected by impaired judgment. Veterans might impulsively eat junk food rather than thinking about healthy eating. Ingredient and recipe delivery services may help, which organize meal ingredients and provide clear steps for cooking. Work on nutrition plans with the veteran, and encourage them to self-regulate junk food seeking behavior.

**Aggressive Behaviors**
*The following information is adapted from Family Caregiver Alliance*

Provided a situation does not present a physical threat, various approaches may be used to diffuse hostile behavior:
- Establish and maintain safety for yourself first (you as the provider or caretaker).
- Remain as calm as you can.
- Validate the emotion by identifying the feelings and letting the person know these feelings are legitimate. Frustration over the loss of functional and/or cognitive abilities can reasonably provoke anger.
- Offer alternative ways to express anger (e.g., a punching bag, a gripe list).
- Try to understand the source of the anger. Is there a way to address the person’s need/frustration? (e.g., make a phone call, choose an alternative activity).
- Help the person regain a sense of control by asking if there is anything that would help him/her feel better.
- Isolate the disruptive impaired person. Consider your own safety and his/hers. Treat each incident as an isolated occurrence, as the survivor may not remember having acted this way before or may need to be prompted to remember.
- Try to establish consistent, non-confrontational responses from all family members (children may need to learn some “dos” and “don’ts” in reacting to the survivor).

**RESOURCES**

**Brain Injury Association of America**  
www.biausa.org  
A national advocacy and awareness organization that develops and distributes educational information about brain injury and resources, legal rights and services. The association provides a variety of information regarding brain injury and has state affiliates throughout the U.S.

**BrainLine.org**  
www.brainline.org  
BrainLine.org is a national multimedia project offering information and resources for preventing, treating and living with traumatic brain injury. BrainLine.org is a service of WETA, the public television and radio station in Washington, D.C.

**Brain Trauma Foundation**  
www.braintrauma.org  
The Brain Trauma Foundation is dedicated to improving the outcomes for traumatic brain injury patients worldwide by developing best practices guidelines, conducting clinical research and educating medical professionals and consumers. Its efforts also focus on public education aimed at increasing awareness and understanding of the symptoms of a concussion. The group's goal is to better educate coaches, nurses, athletes, parents and all citizens about the importance of recognizing concussions and taking the appropriate steps to ensure people receive appropriate care.

**Centers for Independent Living (CIL)**  
www.virtualcil.net/cils  
CILs exist nationwide to help people with disabilities live independently in the community and may have resources to help veterans reach a goal of living alone. CIL services include advocacy, peer counseling, case management, personal assistance and counseling, information and referral, and independent living skills development.

**CEMM Traumatic Brain Injury (TBI)**  
www-traumaticbraininjuryatoz.org  
This website is developed by the Center of Excellence for Medical Multimedia (CEMM) and provides an informative and sensitive exploration of traumatic brain injury, including information for patients, family members, and caregivers. Topics include types and symptoms of brain injury, TBI treatment and recovery, and helpful insights about the potential long-term effects of brain injury.

**Defense and Veterans Brain Injury Center**  
dvbic.dcoe.mil  
Serves active duty military, their dependents, and veterans with traumatic brain injury. Offers evaluation, treatment, follow-up care, educational materials and research.
Department of Veterans Affairs (VA) Vet Center Programs
www.vetcenter.va.gov
The Vet Centers are a system of community-based counseling centers that are staffed by small multidisciplinary teams of providers, many of whom are combat veterans themselves. Vet Center staff is available toll free during normal business hours at (800) 905-4675 (eastern) and (866) 496-8838 (pacific). They provide readjustment counseling and outreach services to all returning soldiers and veterans who served in any combat zone or experienced military sexual trauma. Services also are available to family members for military-related issues. There are 232 community-based Vet Centers located in all states, the District of Columbia, Guam, Puerto Rico and the U.S. Virgin Islands.

Family Caregiver Alliance
www.caregiver.org
Family Caregiver Alliance (FCA) seeks to improve the quality of life for caregivers through education, services, research, and advocacy. Through its National Center on Caregiving, FCA offers information on current social, public policy, and caregiving issues and provides assistance in the development of public and private programs for caregivers. For more information, call (800) 445-8106 or go to their website.

Military OneSource
www.militaryonesource.mil
Sponsored by the Department of Defense, Military OneSource provides resources to help military families face everyday challenges. The support services offer 24/7 personal non-medical counseling services online, via telephone, or face-to-face. For information, call (800) 342.9647 or go to their website.

National Association of State Head Injury Administrators (NASHIA)
http://www.nashia.org
The National Association of State Head Injury Administrators (NASHIA) is a nonprofit organization created by state government employees administering public programs for individuals with traumatic brain injury and their families. NASHIA assists state governments in promoting partnerships and building systems to meet the needs of individuals with brain injury. NASHIA provides information on state contacts, public programs and resources within states; hosts a website containing materials and information; sponsors an annual national conference; provides training through webcasts and radiocasts; monitors state and federal public policies and legislation; and advocates for public policies and funding to assist states in better meeting the needs of individuals with traumatic brain injury and their families.

National Center for Injury Prevention and Control (NCICP)
http://www.cdc.gov/injury
National Center for Injury Prevention and Control (NCICP), at the Centers for Disease Control and Prevention, supports data collection and follow-up studies in more than 15 states to track and monitor traumatic brain injury (TBI) in the U.S., link people with TBI to information about services and find ways to prevent TBI-related disabilities. The center’s website offers fact sheets about traumatic brain injury, including information on the problem, consequences, causes, cost, groups at risk, collaborating organizations and references.

National Disability Rights Network Protection and Advocacy for Individuals with Disabilities
www.ndrn.org
Protection and Advocacy (P&A) System and Client Assistance Program (CAP). This nationwide network of congressionally mandated disability rights agencies provides various services to people with disabilities, including TBI. P&A agencies provide information and referral services and help people with disabilities find solutions to problems involving discrimination and employment, education, healthcare and transportation, decision-making, and Social Security disability benefits. These agencies also provide individual and family advocacy. CAP agencies help clients seeking vocational rehabilitation.
National Institute of Neurological Disorders and Stroke  

Created in 1950, the National Institute of Neurological Disorders and Stroke aims to reduce the burden of neurological disease—found in every age group, every segment of society and all over the world. The group’s traumatic brain injury information page includes extensive resources and links to related websites.

Student Veterans of America (SVA)  
www.studentveterans.org

A nonprofit coalition of student veterans groups on more than 265 college campuses nationwide that provides peer-to-peer networks for veterans attending those schools. SVA coordinates campus activities, provides information unique to veterans and facilitates the transition process to help support veteran success in higher education.

Traumatic Brain Injury Model Systems  
www.tbindsc.org

Funded through the National Institute on Disability and Rehabilitation Research, the TBI Model Systems consist of 16 TBI treatment centers throughout the U.S. The TBI Model Systems have extensive experience treating people with traumatic brain injury and are linked to well-established medical centers that provide high quality trauma care from the onset of head injury through the rehabilitation process.

Crisis Call Lines

Department of Veterans Affairs  
Military and Veterans Crisis Line  
(800) 273-8255, press 1  
www.veteranscrisisline.net

This service connects veterans who are facing a crisis, as well as their families and friends, with qualified VA responders through a confidential toll-free hotline, online chat or text. Veterans and anyone concerned can call (800) 273-8255 and choose option 1. They can also chat online or send a text message to 838255 to receive confidential support 24/7. Calls can be referred to local Suicide Prevention Coordinators and other VA providers who specialize in traumatic brain injury.

TBI & Psychological Health Information  

DCoE Outreach Center (24/7) | (866) 966-1020

Women Veteran Call Center  
www.womenshealth.va.gov/

The WVCC staff is trained to provide women veterans, their families, and caregivers about VA services and resources. The Call Center is available Monday to Friday 8:00 am –10:00 pm, and Saturdays 8:00 am – 6:30 pm.
14 Accessed: https://www.ecfr.gov/cgi-bin/retrieveECFR?n=se38.1.3_1310.


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