

# What Providers Need to Know: Behavioral Health and Brain Injury

## What is Brain Injury?

**Acquired brain injury (ABI):** injury to the brain that is not hereditary, congenital, degenerative, or induced by birth trauma. ABI includes both of these injury types:

### Traumatic Brain Injury:

alteration in brain function, or other evidence of brain pathology, caused by external force, such as falls, assaults, motor vehicle crashes, sports injury

*SAMSHA Publication  
NO. PEP21-05-03-001, 2021*

### Non-Traumatic Brain Injury:

damage to the brain by internal factors, such as lack of oxygen, stroke, or brain tumor

*Brain Injury Association of America,  
www.biausa.org*

Approximately one in five American adults have sustained a TBI severe enough to result in some loss of consciousness.



The vast majority of injuries are mild, with more than 90% released from emergency departments. Most will recover from a mild brain injury. However, there is evidence to suggest that individuals with co-occurring behavioral health conditions often have poorer outcomes following injury than those who do not.

*Traumatic Brain Injury and Substance Use Disorders, Lemsky C., 2021, attcnetwork.org*

Not only does brain injury cause behavioral health problems, but associated deficits can also affect the effectiveness of behavioral health treatments. Identifying and supporting those with brain injury can lead to more successful outcomes.

*SAMSHA Publication NO. PEP21-05-03-001, 2021*

## What are Common Symptoms?



### Motor and Sensory Effects:

- Dizziness, lightheadedness, or vertigo
- Fatigue or lethargy
- Changes in walking and coordination
- Headaches and other pain symptoms



### Emotional/Behavioral Dysregulation:

- Increased likelihood of concurrent mental health issues (anxiety)
- Increased likelihood of behavioral problems (anger, irritability, socially inappropriate behavior)



### Cognitive Impairment:

- Slowed thinking (inability to process information efficiently)
- Memory challenges (inability to remember things in the past)
- Issues in attention/concentration (knowing what to do in the present)
- Difficulties multitasking
- Impairments of language and communication



*Traumatic Brain Injury and Substance Use Disorders, Lemsky C., 2021, attcnetwork.org  
<https://attcnetwork.org/sites/default/files/2021-11/TBI%20%20SUD%20Toolkit%20FINAL%2011.05.2021.pdf>*

## What About the Intersection with Substance Use and Behavior?

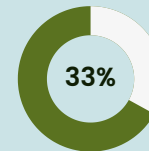
Having one or more brain injuries with loss of consciousness is associated with greater risk for behavioral health problems, including problematic substance use beginning in adolescents and more psychiatric symptoms and a significantly elevated risk of suicide.

*Traumatic Brain Injury and Substance Use Disorders, 2021, attcnetwork.org.*

**2 to 4**

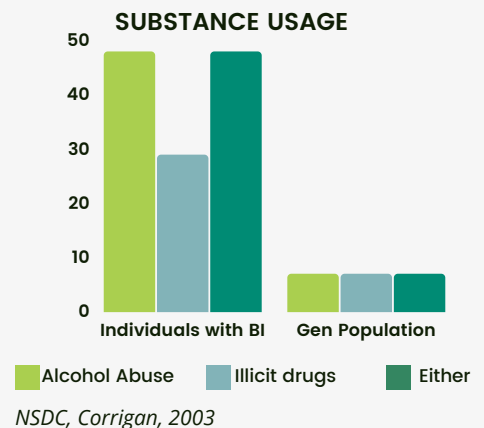
People with brain injury of any severity have 2 to 4 times the risk of attempting or having a death by suicide.

*Dreer, L.E. et. al. 2018*



One-third of individuals with brain injury experience mental health problems 6 months-1 year post injury.

*Fazel, et al. 2014*



## What About Screening for Brain Injury?

Unless an individual has been hospitalized with a severe brain injury, they may not be aware they have a brain injury and that it could be affecting their functioning. A person who has compromised functioning in the frontal areas of the brain (common after TBI):

- Adapts less well in new or stressful situations
- Has greater problems following through on recommendations from professionals
- Has more difficulties making lifestyle changes, particularly when rewards are in the future

Ohio Valley Center for Brain Injury and Rehabilitation:  
<https://wexnermedical.osu.edu/neurological-institute/departments-and-centers/research-centers/ohio-valley-center-for-brain-injury-prevention-and-rehabilitation/osu-tbi-id>

Several brief, easy to use, reliable, valid, and standardized methods are available for screening for brain injury. This information will ensure the clinician is aware of potential consequences that can affect treatment:



The Ohio State University TBI Identification Method (OSU TBI-ID) is the most widely used screening tool, typically requiring 5-7 minutes. It can be administered by any staff with interviewing skills after brief training that is available free, online: [OSU TBI ID](#)



For children and youth, Colorado State University's Life Outcomes after Brain Injury Research Center developed the Brain Check Survey to screen for brain injury in children aged 5-21. This tool is a brief screen which is intended to be completed by a parent or guardian on behalf of the youth. This tool is available free online: [Brain Check Survey](#)

## What Now?

There are simple adjustments that can be made to help support an individual with a history of brain injury.

### Framework of Support:

- You are not treating the brain injury; you are treating the behavioral health concern in the context of brain injury.
- Your aim is to demystify brain injury for non-brain injury professionals.
- The goal is to empower individuals with brain injury and families to advocate for appropriate supports.



### Strategies for Support Should be:

- Easy to implement and appropriate to the environment
- Person centered; the person needs to be integral in recognizing the need for a strategy, developing the strategy, and monitoring progress

## Example Strategies



### Initiation

Looks like: appears unmotivated, needs constant cueing  
Tips: Provide small tangible steps, help the person get started, use checklist and calendars



### Delayed Processing Speed

Looks like: appears confused, slow to respond, doesn't follow instructions  
Tips: Additional time to review, be concise, check for understanding



### Short Term Memory Loss

Looks like: can't remember details, disorganized, appear manipulative  
Tips: Provide written reminders, stick to routine, summarize discussion



### Sensory Motor Skills

Looks like: appears overwhelmed, emotional melt downs, irritable  
Tips: Meet in a quiet, calm environment, schedule breaks, encourage rest

For more info:

<https://attcnetwork.org/centers/mid-america-attc/traumatic-brain-injury-sud-series>