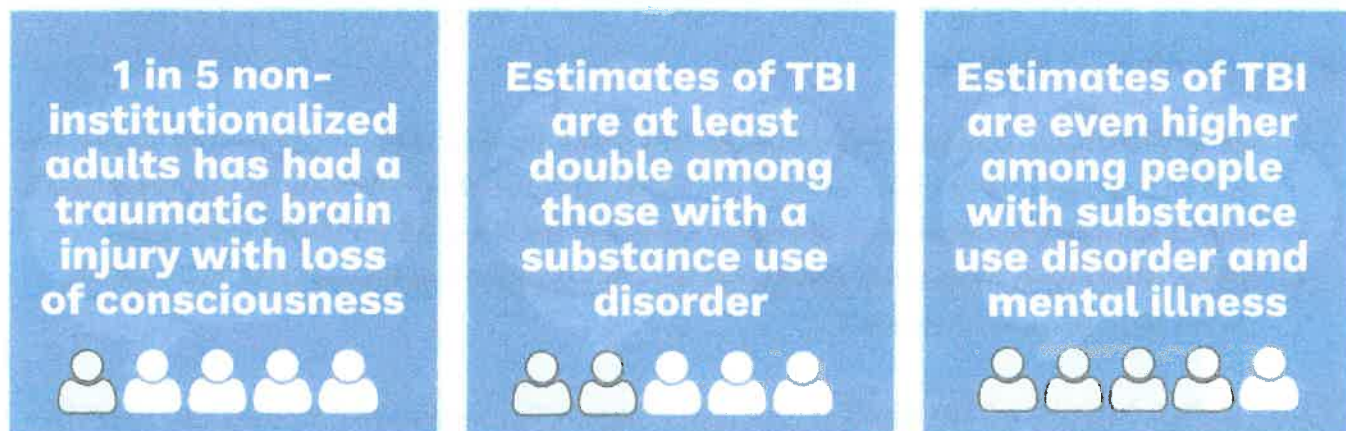


## INTERSECTION BETWEEN TRAUMATIC BRAIN INJURY AND OPIOID USE DISORDER

### RECOMMENDATIONS FOR SUBSTANCE USE TREATMENT PROVIDERS

**History of traumatic brain injury (TBI) is common among clients being treated for opioid use disorder, and standard treatment approaches can be challenging. Adaptations for people with TBI increase the likelihood of successful recovery from opioid use disorder.**

Traumatic brain injury (TBI) is common among people who have a substance use disorder. Over 20% of non-institutionalized adults in the United States have had at least one TBI with a loss of consciousness, and this estimate more than doubles among people with a substance use disorder. Individuals with co-occurring substance use disorders and mental health problems are even more likely to have a history of TBI. The increased vulnerability for misuse and addiction to other substances (e.g., alcohol) among people with TBI suggests the same may be true with opioids.



**People with a history of TBI have risk factors for opioid use disorder.**

- More frequent headaches
- More likely to experience chronic pain
- More likely to be prescribed opioids
- Increased impulsive behavior that makes it difficult to self-regulate substance use, due to damage to the prefrontal cortex during the traumatic brain injury

## Opioid use disorder may increase risk for future brain injury.

- Opioid overdoses can cause “anoxic” brain damage due to lack of oxygen to the brain, often leading to repeated brain injuries
- Opioid overdose can also lead to falls due to loss of consciousness, causing TBI

The defining feature of TBI is damage to the frontal lobes of the brain which can reduce concentration, memory, planning, problem-solving or communication, as well as self-regulation skills like impulse control, emotional inhibition and self-awareness. **These executive function skills are the building blocks for *successful* opioid use disorder treatment.**

## Additional physical and mental health conditions may be present.

It is also important to remember that TBI and opioid use disorder may not be the only disabilities or health conditions your clients have. They may also live with mental health conditions, pain, sleep disorders, and other physical health conditions.

## Strategies for determining the unique needs of clients with co-occurring TBI and opioid use disorder include:

- Identifying clients’ communication and learning styles. Do your clients comprehend written and spoken language? What other forms of communication can they use? How do they learn best?
- Finding out what compensatory strategies worked or did not work for clients in the past.
- Asking clients what helps them accomplish specific executive functioning tasks. For example, “What helps you pay attention?”

## Clients with a history of TBI need long-term support for successful opioid use disorder treatment. “When you think you’re done with treatment, you’re likely not.”

Insight and the intention to stop using opioids will not ensure that clients sustain recovery and healthy functioning. Other factors should be taken into account, including medication treatment, organizational supports, trigger-free environments, and more time to allow remission to become recovery.

## Strategies to address specific executive functioning problems include:

- For people who struggle with paying **attention**, presenting information in smaller chunks, providing simple and straightforward instructions, and offering opportunities for hands-on learning can help them stay engaged with their treatment program.
- People who have difficulties **processing** information may benefit from extra time, repetition, and simple instructions.
- People who have problems **remembering** things can benefit from written summaries, repetition of important material, and other forms of reminders.
- **Initiating** tasks can be hard for some people with TBI. Break tasks down into manageable portions.
- Sometimes people with TBI can be **impulsive**. Work with clients on anticipating impulses, goal-setting and thinking about the consequences of their actions.
- People with TBI can struggle with **planning and organization**. Help clients by working with them to keep routines, use organization systems (e.g., smartphone apps), and make lists.
- **Mental flexibility** can also be a challenge for people with TBI. Remember that clients may get stuck on one way of thinking, and may struggle to come up with solutions to unexpected problems.
- TBI can affect people's **self-awareness and ability to make good decisions**. Work with clients to plan ahead, and practice positive social interactions.

## Adapted from:

John D. Corrigan and Rachel Sayko Adams (2019). The Intersection of Lifetime History of Traumatic Brain Injury and the Opioid Crisis. *Addictive Behaviors*; 90: 143-145.

<https://doi.org/10.1016/j.addbeh.2018.10.030>

*Accommodating the Symptoms of TBI*. Ohio Valley Center for Brain Injury Prevention and Rehabilitation. <http://heller.brandeis.edu/ibh/pdfs/accommodating-tbi-booklet-1-14.pdf>

## Traumatic Brain Injury Resources

Brain Injury Association of America. <https://www.biausa.org/>

BrainLine. <https://www.brainline.org/>

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