



Intersecting Research on Opioid Misuse,  
Addiction, and Disability Services

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## Opioid Use Among People with Traumatic Brain Injury

### What is the relationship between opioid use and traumatic brain injury?

While there has been considerable research about opioid use disorder in general, there has been far less research about specific populations who are at higher risk for misusing prescription opioid painkillers. In this brief, we will discuss the relationship between traumatic brain injuries (TBI), opioid use disorder (OUD), and targeted policy solutions to improve short- and long-term outcomes.

### Risk Factors for OUD Among People with TBI

- Pain is the most common medical condition reported by people who have had TBI. Chronic pain is a common starting point for long-term opioid use and OUD.
- Seventy-two percent of people who have had a moderate to severe TBI were prescribed opioids while receiving inpatient rehabilitation.
- People who have had a TBI are over 10 times more likely to die from accidental overdose than the general population.



A study on people with moderate or severe TBIs found that 90% of accidental overdose deaths were drug-related.



67% percent of those deaths were connected to drugs like opioids.

# Risk Factors for OUD Among People with TBI

- People who have had a TBI are more likely to use drugs and alcohol both before and after the injury: substance use disorders can be contributors to, and results of, TBIs.
- TBI can lead to additional chronic conditions, including sleep apnea, chronic pain, and cognitive disabilities.

TBIs can also lead to other conditions that are associated with OUD, including mental health conditions, misuse of other substances, and barriers to healthcare access. Anxiety and depression may arise after TBIs, and the calming and mood-boosting effects of opioids may lead some people to use these medications to manage these conditions, too. People with co-occurring TBI and OUD need comprehensive support systems, but structural barriers prevent many from accessing these supports.

## What structural barriers prevent people with TBI and OUD from receiving supports?

- Some people who have had a TBI may not receive insurance coverage for adequate substance use services; others may lack access to opioid treatment facilities.
- Some clinicians' policies may also be a barrier; for example, withholding opioid medication without offering reasonable approaches for pain management may be especially harmful for people with limited self-advocacy skills.
- Many people with co-occurring TBI and OUD have no access to specialists familiar with both conditions; if people with both conditions seek care, they may only receive attention for one condition and not the other.

- Physical, cognitive, and financial barriers may make it difficult or impossible for people with co-occurring TBI and OUD to seek care.

## How can policymakers and researchers reduce opioid misuse among people with TBI?

Interventions that support people who have had a TBI who also use opioids should be cognitively accessible, adapting traditional insight-based treatments to account for difficulties in organizing, planning, or self-control. These interventions include:



Addressing all aspects of a person's current problems, taking context and history into account



Receiving support from family, friends, and community members



Avoiding environments that may cause relapse



Developing long-term supports for sustaining lifestyles and routines inconsistent with opioid misuse



Expanding use of medication to treat OUD

Currently, very little research exists about the effectiveness of OUD treatment interventions for people who have had a TBI.

Policies that consider the unique risks among people with both OUD and TBI can avoid their potentially lethal consequences. These consequences include unemployment, social isolation, divorce, homelessness, repeated TBI, violence, and death. The nature of these risks underscores the importance of adopting programs and policies that provide the right supports for people with co-occurring OUD and TBI.

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Adapted from Adams, R.S., Corrigan, J.D., & Dams-O'Connor, K. (2019). Opioid use among individuals with traumatic brain injury: A perfect storm? *Journal of Neurotrauma*, 36:1-6.

#### **How to Give Credit**

Adams, R.S. Corrigan, J.D., Dams-O'Connor, K., & Reif, S. Opioid Use Among People with Traumatic Brain Injury. *INROADS Issue Brief*, March 2020. Brandeis University, Waltham, MA.

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