



# Acquired Brain Injuries and Treatment Courts

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# Learning Objectives

01

Gain an understanding of what brain injury is and why it is important in the context of treatment courts

02

Learn about NASHIA and what support NASHIA can provide to your courts

03

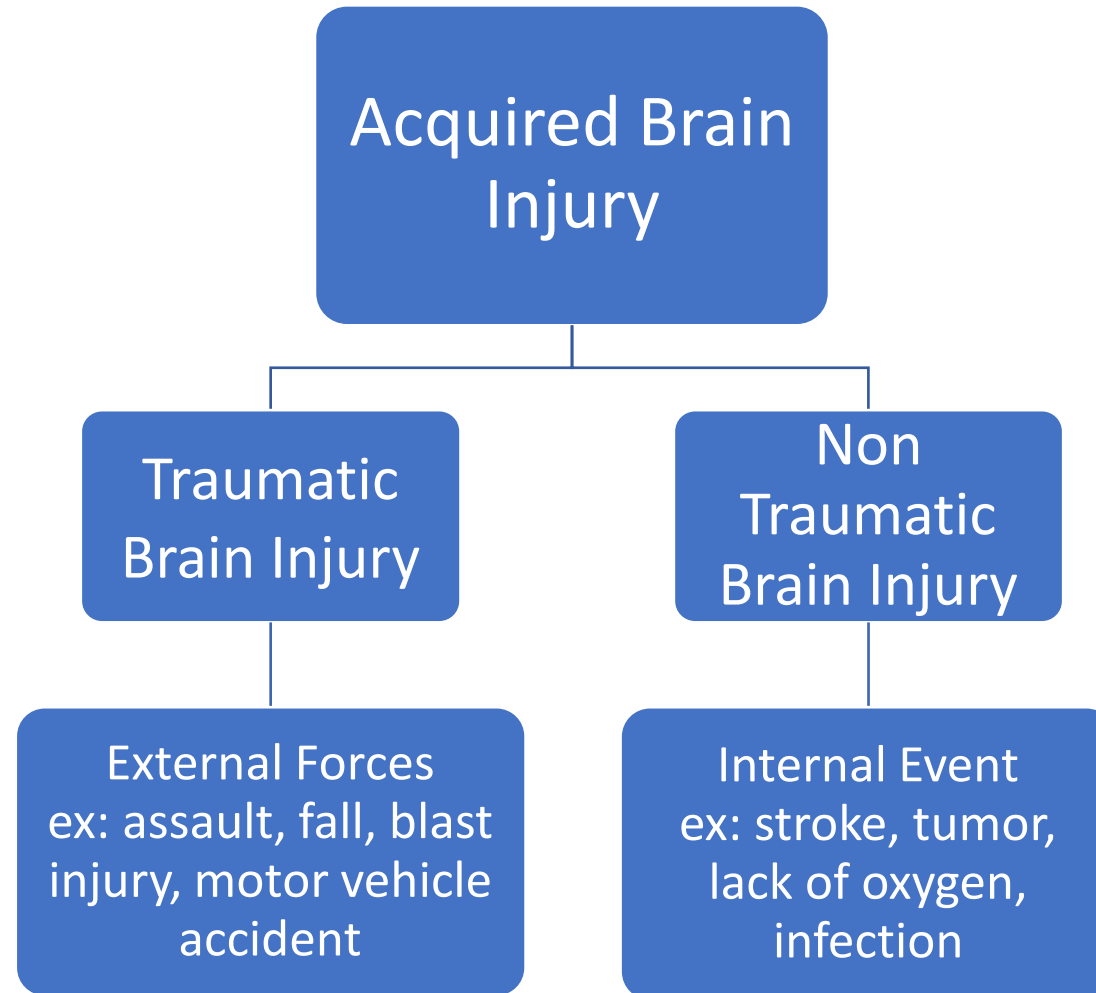
Learn how to find state specific resources to help your clients with brain injury



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# Brain Injury Defined

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# Classification of Severity

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- Mild > Loss of consciousness 0-30 minutes (Concussion)
- Moderate > Loss of consciousness 30 minutes to 24hrs
- Severe > Loss of consciousness for over 24 hours

# Mild TBI - Complications

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**75% of TBIs are mild.** MTBI symptoms may appear mild, but can lead to significant, life-long impairment affecting an individual's ability to function physically, cognitively, and psychologically

Symptoms may be subtle

- **90%** of concussions are **not associated with a loss of consciousness**
- Concussive symptoms may develop over days or even months later

Treated in non-hospital setting, not in ED, or not treated at all

- 90% of mTBI may go **unreported**
- Often not visible on CT scan or MRI

Brain Injury can **mirror** other disabilities or conditions

# Mild TBI - Complications

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- Most individuals with one, uncomplicated, mild brain injury will resolve back to baseline
- 2 significant reasons why mild brain injury can result in lasting impairment:
  1. Repeated exposure, e.g., abuse, intimate partner violence, combat, sports.
  2. Underlying co-occurring conditions such as addiction or mental illness.

# Possible Physical Changes

<b>Injury-related problem</b>	<b>How it may affect a person functionally</b>
Coordination	Unsteady gait, poor eye-hand coordination, slow or slurred speech, tremors, paralysis
Visual Deficits	Staring or poor eye contact, blurred or double vision, inability to follow an object with their eyes
Additional Physical Challenges	Seizures, deaf or hard of hearing, fatigue



# Possible Cognitive Changes

<b>Injury-related problem</b>	<b>How it may affect a person functionally</b>
Memory	Trouble following directions, providing requested information, making appointments
Processing (receptive)	Understanding what is being said and reading
Processing (expressive)	Trouble putting thoughts into words — tip of the tongue syndrome
Problem solving (related to frontal lobe and temporal tip injury)	Impulsive, easily frustrated, sexually disinhibited, verbally/physically combative, interpersonally inflexible, poorly organized



# Possible Emotional Changes

<b>Injury-related problem</b>	<b>How it may affect a person functionally</b>
Depression	Flat affect, lack of initiation, sadness, irritability
Unawareness	Unable to take social cues from others
Confabulation	“Making up stories”
Perservation	Gets “stuck” on a topic of conversation or physical action
Anxiety	Can exacerbate other cognitive/behavioral problems

# Behavioral Health and Brain Injury

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## Suicide Attempts

- 28% with suicidal thoughts, 17% attempts
- 4% in general population

## Substance Abuse

- 43% alcohol abuse, 29% illicit drugs, 48% either
- 7% general population (NSDC, Corrigan, 2003)

## Mental Health

- 1/3 of TBI survivors experience mental health after TBI
- 19% general population



# TBI & Criminal Justice: Prevalence

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- A meta-analysis found the prevalence in the justice population to be 60.25% (Shiroma, Ferguson, & Pickelsimer, 2010) vs. 8.5% of the general population with reported history of TBI (Wald, Helgeson, & Langlois, 2008)
- A meta-analysis found that approximately 30% of juvenile offenders have sustained a previous brain injury (Vaughn, Salas-Wright, Delisi, & Perron, 2014)

# TBI & Criminal Justice: Prevalence

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- Criminal behavior appears to increase after TBI (Farrer & Hedges, 2011; Brooks et al., 1986; Fazel et al., 2011; Mclsaac et al., 2016; Timonen et al., 2002; Elbogen et al., 2015)
- In a Colorado study, female offenders endorsed a history of TBI at a rate of 97%
- Rate of TBI is 3 to 8 times higher among juvenile offenders (Hughes et al., 2015)
- Half of youth offenders have a history of loss of consciousness, with repeat injuries being very common (Davies et al., 2012; Koba et al., 2013)

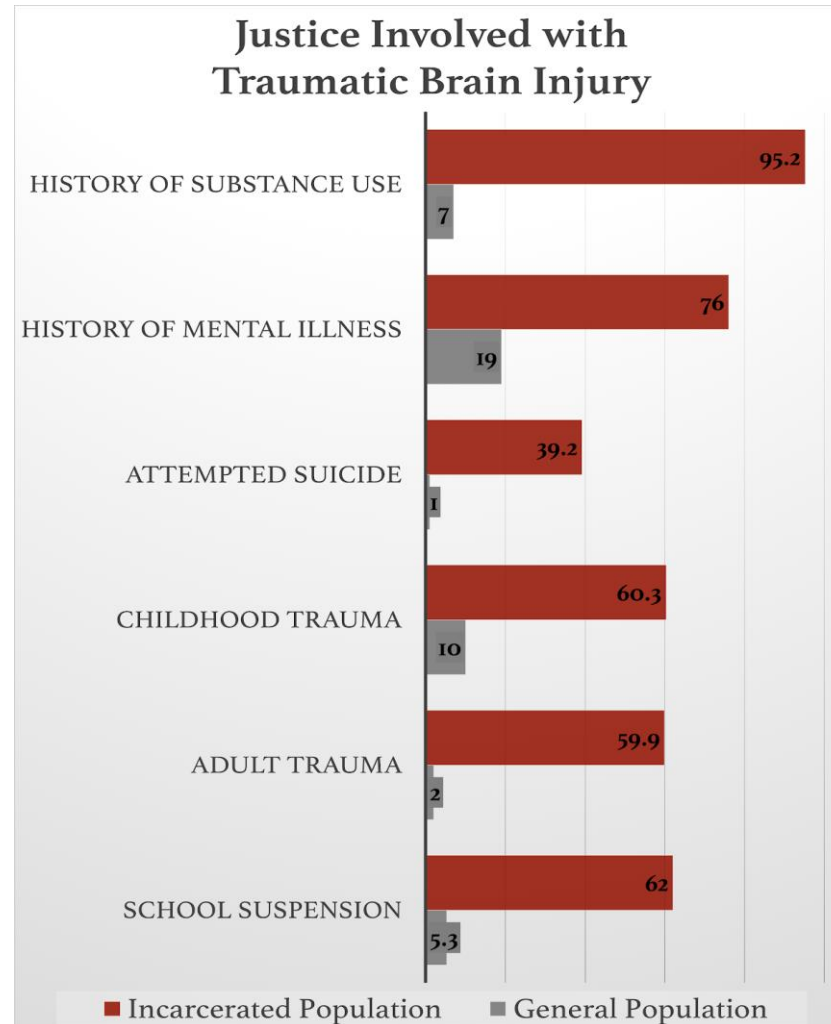


# TBI & Criminal Justice: Negative Outcomes

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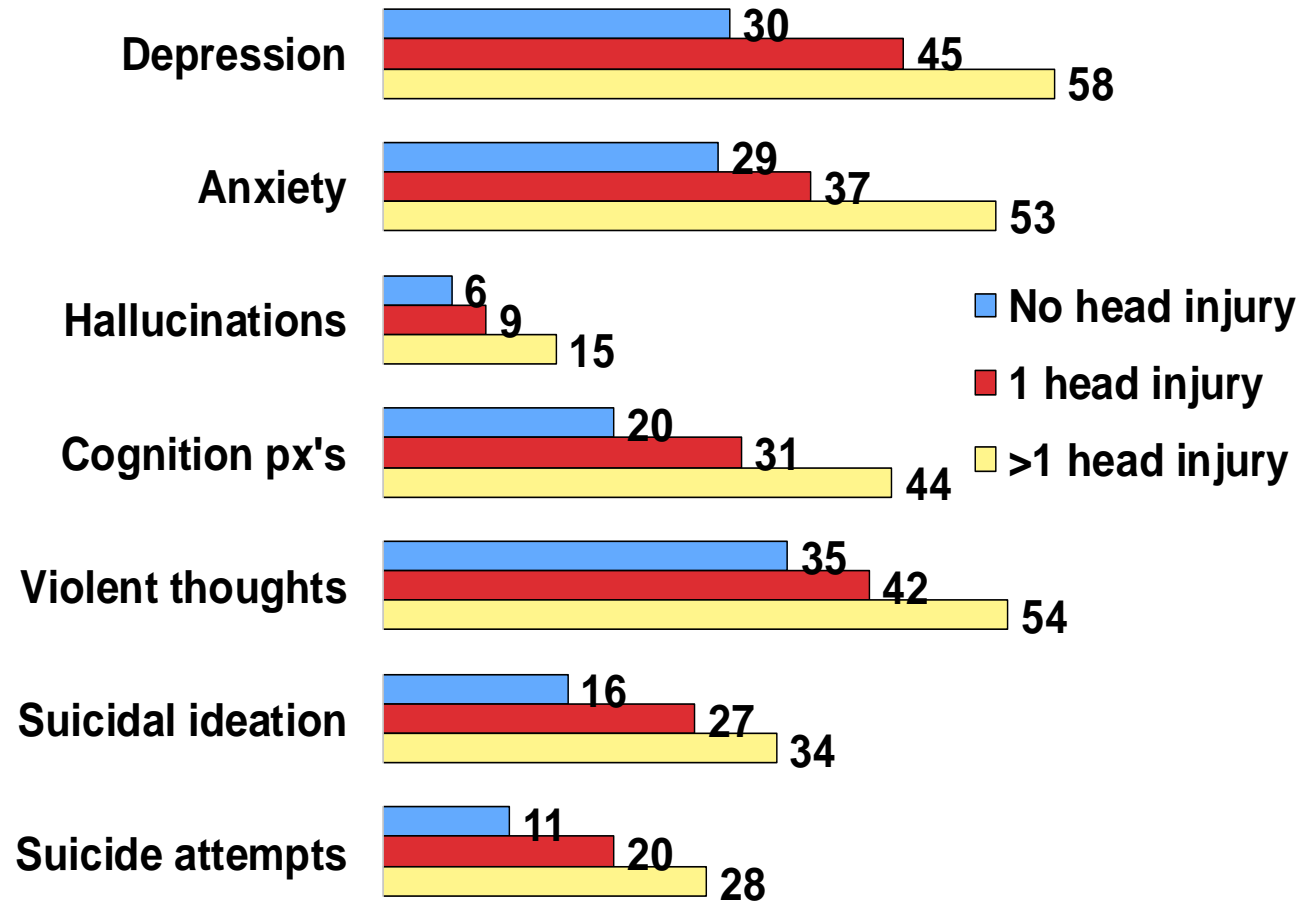
- Increased utilization of services while incarcerated (health and psychological)
- Lower treatment completion rates and higher rates of disciplinary incidents
- Lower ability to maintain rule-abiding behavior during incarceration
- More prior incarcerations
- Higher rates of recidivism, 69% compared to 37% of peers without TBI (Piccolino & Solberg, 2014)
- Criminal behavior can increase after TBI (especially severe TBI)
  - Farrer & Hedges, 2011; Brooks et al., 1986; Fazel et al., 2011; McIsaac et al., 2016; Timonen et al., 2002; Elbogen et al., 2015

# Psycho-Social Vulnerabilities



Data from Colorado Pilot Program  
University of Denver 2014-2018

# Problems Worsen with Each New Injury



Behavioral Health  
Symptoms in Kentucky  
Prisoners  
(Walker, Hiller, Staton, &  
Leukefeld, 2003)

# **NASHIA can be a Resource for Your Court**







**NATIONAL  
ASSOCIATION OF  
STATE HEAD  
INJURY  
ADMINISTRATORS**

**NASHIA'S  
MISSION**

**NASHIA is a nonprofit organization created to assist State government in promoting partnerships and building systems to meet the needs of individuals with brain injury and their families.**



# NASHIA

## Provides

NASHIA is a nonprofit organization created to assist State government in promoting partnerships and building systems to meet the needs of individuals with brain injury and their families.



Resources  
and Leading  
Trends



Training and  
Professional  
Development



State  
Connections



Technical  
Assistance



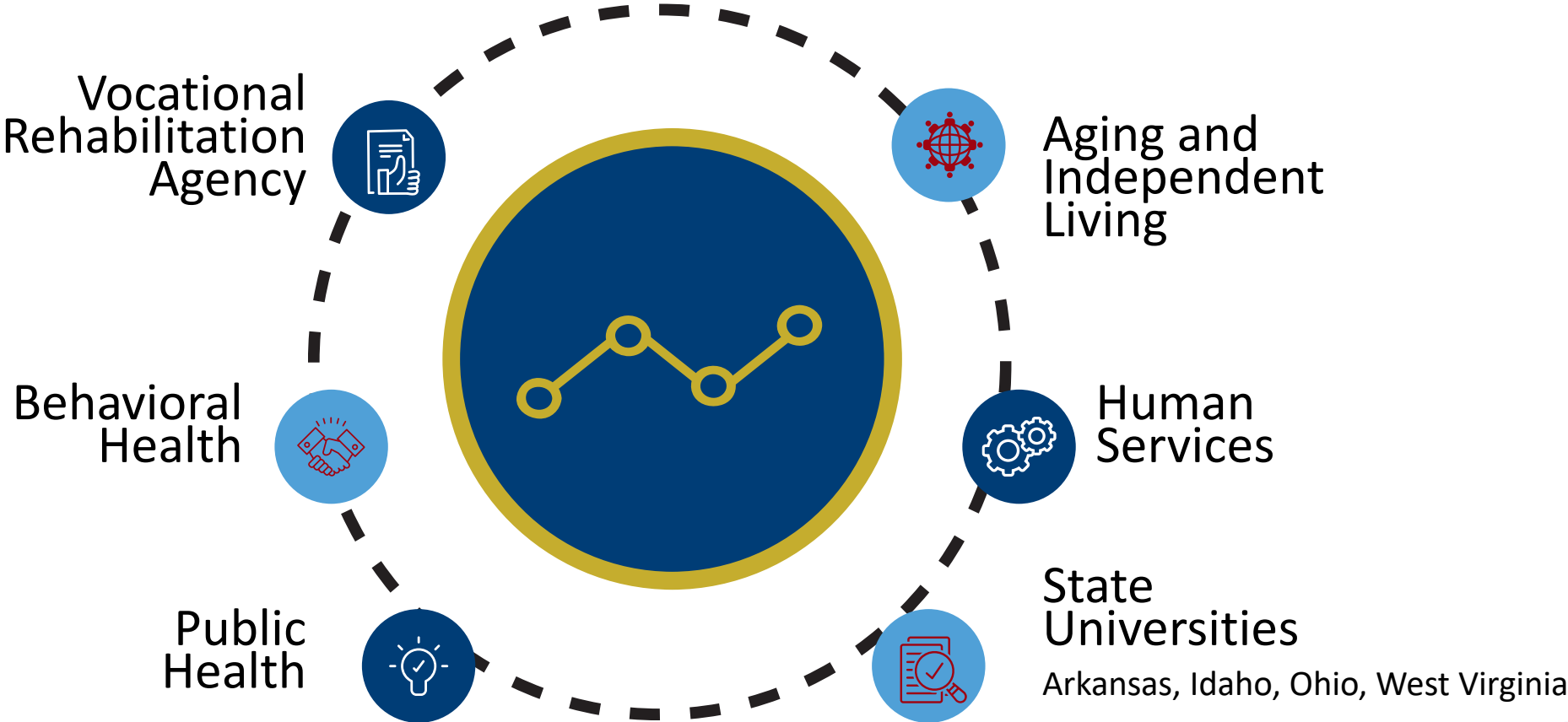
Federal  
Advocacy



**NASHIA**

# State Government

# Brain Injury Programs



# Funding Sources

# For State Brain Injury Programs

## Federal Grants

ACL TBI State Grants  
CDC Core SVIPP  
DOJ  
HRSA  
SAMHSA

## State Funding

## Brain Injury Trustfund



# Training and Professional Development

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# NASHIA Training U

## Training Opportunities

Jul 6, 2023

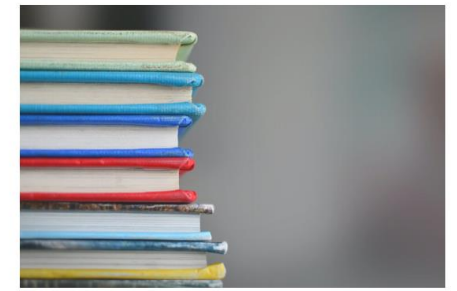
### Applying Diversity, Equity, and Inclusion Practices in the Brain Injury Community, Session 1

You are working to impact your brain injury community. You are trying to create inclusive spaces in your work. You have committed to implementing ideas from diversity, equity and inclusion learnings. Now you'd like to hear and see how theory can meet application in your programs, practices, and partners. There have been many education opportunities to learn about diversity, equity and inclusion. The importance of these practices can not be overstated. However, if you have attended these workshops and have become excited about making changes to be truly inclusive but now find that you are asking yourself how, this workshop is right for you. In this workshop theory will be translated to application for your programs, practices, and partnerships.

## Leading Practices Academy

State provider systems looking to initiate and enhance partnerships with other state systems might be interested in our **Leading Practices Academies**. These LPAs are centered on building topic-focused intensives over a series of courses so that states can reach their goals of infrastructure development and capacity building surrounding a particular area of need, such as criminal justice or employment.

[More Here](#)



## Customized State Tools

There are **customized state tools** as well, that combine online training with in-person or virtual consultation to maximize guidance geared towards a particular topic.

[View Here](#)

## Skill Building Workshops

For those who want a more in-depth approach, our **workshops** provide focused training with smaller groups of attendees, allowing a more interactive training with specific skill building. Don't see a topic you're interested in? Let us design one for your organization!

[View Here](#)



## Trainings On Demand

Each year, our **webinar series** is designed to expand knowledge for brain injury providers on a variety of cutting-edge topics, keeping you and your staff current in numerous key areas of research and service trends.

[View Trainings](#)

# Leading Practices Academies

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- Direct state TA & consultation
- Six Academy meetings per year
- Peer-to-peer support
- Online HUB with resources & community forum
- Annual Summit

[Leading Practices Academy on Criminal and Juvenile Justice](#)

[Leading Practices Academy on Behavioral Health](#)

**What topic will be next????**



# Technical Assistance and Consultation

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1. Screening for brain injury: work with your court to develop and implement screening protocol – both for screening for lifetime exposure of brain injury and current challenges
2. Provide consultation to the team about strategies and accommodations that can court staff and community providers can implement
3. Developing referral protocol to community providers



# BI and Screening

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Brief tools that assist with uncovering undiagnosed brain injury

- Uncovers lifetime history of brain injury
- **Individuals may be eligible for community-based services**
- Helps provider understand how to work with individuals with TBI
- Helps individual understand background of injuries and impact to current function



# NASHIA OBISSS

**NASHIA Online Brain  
Injury Screening and  
Support System  
OBISSS**

The OBISSS is an online screening system to determine the likelihood of brain injury and to identify associated challenges that may be present for youth and adults.

Benefit to the client:

- identify TBI and non-TBI history
- determine program eligibility
- identify impairment and share strategies regarding the associated symptoms
- provide strategies for professionals for how to support their client with a brain injury



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# Symptoms Questionnaire-BI

## SYMPTOMS QUESTIONNAIRE

Name: \_\_\_\_\_ Date: \_\_\_\_\_

In recent weeks, how much have you been bothered by the following problems?  
Please mark only one circle per item.

MEMORY CONCERNS	I do not experience this problem at all	I experience this problem but it does not bother me	I am mildly bothered by this problem	I am moderately bothered by this problem	I am extremely bothered by this problem
Losing or misplacing important items (e.g., keys, wallet, papers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forgetting what people tell me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forgetting what I've read	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Losing track of time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forgetting what I did yesterday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forgetting things I've just learned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forgetting meetings/appointments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forgetting to turn off appliances (e.g., iron, stove)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

DELAYED PROCESSING	I do not experience this problem at all	I experience this problem but it does not bother me	I am mildly bothered by this problem	I am moderately bothered by this problem	I am extremely bothered by this problem
Trouble following conversations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remembering only one or two steps when someone is giving me instructions or directions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking too long to figure out what someone is trying to tell me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Modified from Columbia-Baird Research, March 2019

SYMPTOMS QUESTIONNAIRE 1



Memory Problems



Delayed Processing



Attention Problems



Inhibition Problems/Impulsivity



Physical and Sensorimotor Problems



Language Problems



Organization Problems



Mental Inflexibility



Emotional Dysregulation



Appendix - Sleep



Appendix - Sleep

### Checklist For Better Sleep



Good sleep is influenced by many factors. Record how many of these things you have done in the last week and consider making changes to your routine.

#### Things that are known to make sleep worse

- Napping during the day
- Watching television in bed
- Using a device with a bright screen in the hour before bedtime (e.g. a smartphone, a laptop)
- Consuming drinks containing caffeine (includes tea, coffee, cola, energy drinks, hot chocolate)
  - How many each day?
  - What time of the day was your last caffeinated drink? (try to avoid caffeine after 6pm)
- Drinking alcohol (alcohol typically leads to interrupted sleep)
- Eating a heavy meal less than 3 hours before bedtime
- Staying in bed even if you can't fall asleep (it's better to get up and do something relaxing, then try again later)

#### Things that are known to improve sleep

- Regular exercise
  - How many times a week? (it is recommended to do at least 3 x 30 minutes per week)
  - What time of the day? (it is best not to exercise in the 3-4 hours before bedtime)
- Setting aside some 'worry time' each day to write down any issues that are bothering or concerning you, then deciding to leave those worries behind until tomorrow (make sure to do this at least one hour before bedtime)
- Relaxation exercises (e.g. relaxed breathing exercises, progressive muscle relaxation)
- Having a relaxing bedtime routine (e.g. taking a bath or a shower, reading a comforting book)
- Setting the conditions for sleep
  - Make sure the bedroom is completely dark (blackout curtains are cheap and effective)
  - Make sure the mattress and pillows are comfortable (make bed an attractive place to be!)
  - Make sure the bedroom is the right temperature (think like Goldilocks: not too hot, not too cold)

# Neuropsychological Screening Course: [Learn more here](#)

Neuropsychological  
Screening:  
Using Brain Injury  
and Cognitive  
Screening to Inform  
Treatment Planning  
Across Settings

with

Dr. Kim Gorgens



NATIONAL ASSOCIATION  
OF STATE HEAD INJURY  
ADMINISTRATORS

**MODULE 1 - 3: FOR MASTERS-LEVEL  
CLINICIANS (\$150)**

**MODULE 4: FOR SUPERVISORS (\$150)**

**CONSULTATION HOURS AVAILABLE**

**SIGN UP TODAY**

**HCUSHEN@NASHIA.ORG**



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# Support in Connecting to Local Resources

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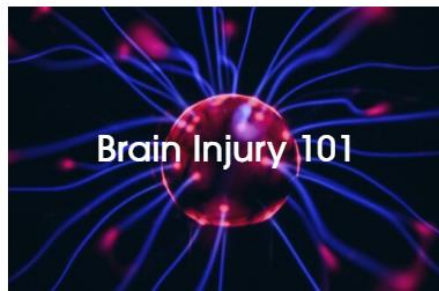
State Agency on Brain  
Injury:  
<https://www.nashia.org/state-program-directory>

State Advocacy/Service  
Agencies:  
<https://www.biausa.org/find-bia>  
<https://www.biausa.org/find-bia>



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# Resource Library



## Latest Resources

### Brain Injury – Enhancing Self-Directed Choice and Control

NASHIA, in partnership with Disability Technical Assistance Center (DEIAC), has released Brain Injury – Enhancing Self-Directed Choice and Control, a resource on brain injury and employment targeted for Centers for Independent Living (CILs).

[Read Full Article +](#)

Apr 27, 2023

### A Family Caregiver Guide to Selecting Rehabilitation Programs

This factsheet from the Model Systems Knowledge Translation Center Traumatic Brain Injury Model System, A Family Caregiver Guide to Selecting Rehabilitation Programs for Persons With Disorders of Consciousness (DoC), explains the medical and rehabilitation care needs of persons with disorders of consciousness (DoC). It discusses the questions to ask when searching for the right program for your loved one with a DoC.

[View Resource +](#)

Apr 17, 2023

### DRNC TBI Justice Database

Disability Rights North Carolina (DRNC) has initiated the country's first national database centralizing information on criminal legal system-related brain injury screening and supportive service programs, including pilots, academic studies, and projects from the past 30 years. Users will be able to search for reports about prior and ongoing TBI screening projects across the nation and for all population categories: juvenile justice, adult corrections, specialty courts, probation, and parole.

[View Resource +](#)

Apr 15, 2023

## Targeted Populations



Children & Youth



Domestic Violence  
/ Intimate Partner  
Violence



Older Adults



Veterans



NASHIA

# TBI TARC BH Guide

- How to better partner with state mental health systems
- Training approaches
- Screening approaches
- [Modifying clinical interventions](#) \*\*
- [Modifying psychopharmacologic interventions](#) \*\*
  
- \*\**Chapter Briefs*

Administration for Community Living

**Behavioral Health Guide:  
Considerations for Best  
Practices for Children, Youth,  
and Adults with TBI**

May 2022



TBI TARC is supported by contract number HHSP2332015001191  
from the U.S. Administration for Community Living,  
Department of Health and Human Services, Washington, D.C. 20201

# Behavioral Health/Criminal & Juvenile Justice & Brain Injury Resources

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NASHIA:

- Website Resources

[Criminal & Juvenile Justice](#)

[Tip Card, Toolkit & Workbook, Advisory on Treating Brain Injury](#)

- Leading Practices Academy

- Direct state TA & consultation
- Six Academy meetings per year
- Peer-to-peer support
- Online HUB with resources & community forum
- Annual Summit

[Leading Practices Academy on Criminal and Juvenile Justice](#)

[Leading Practices Academy on Behavioral Health](#)



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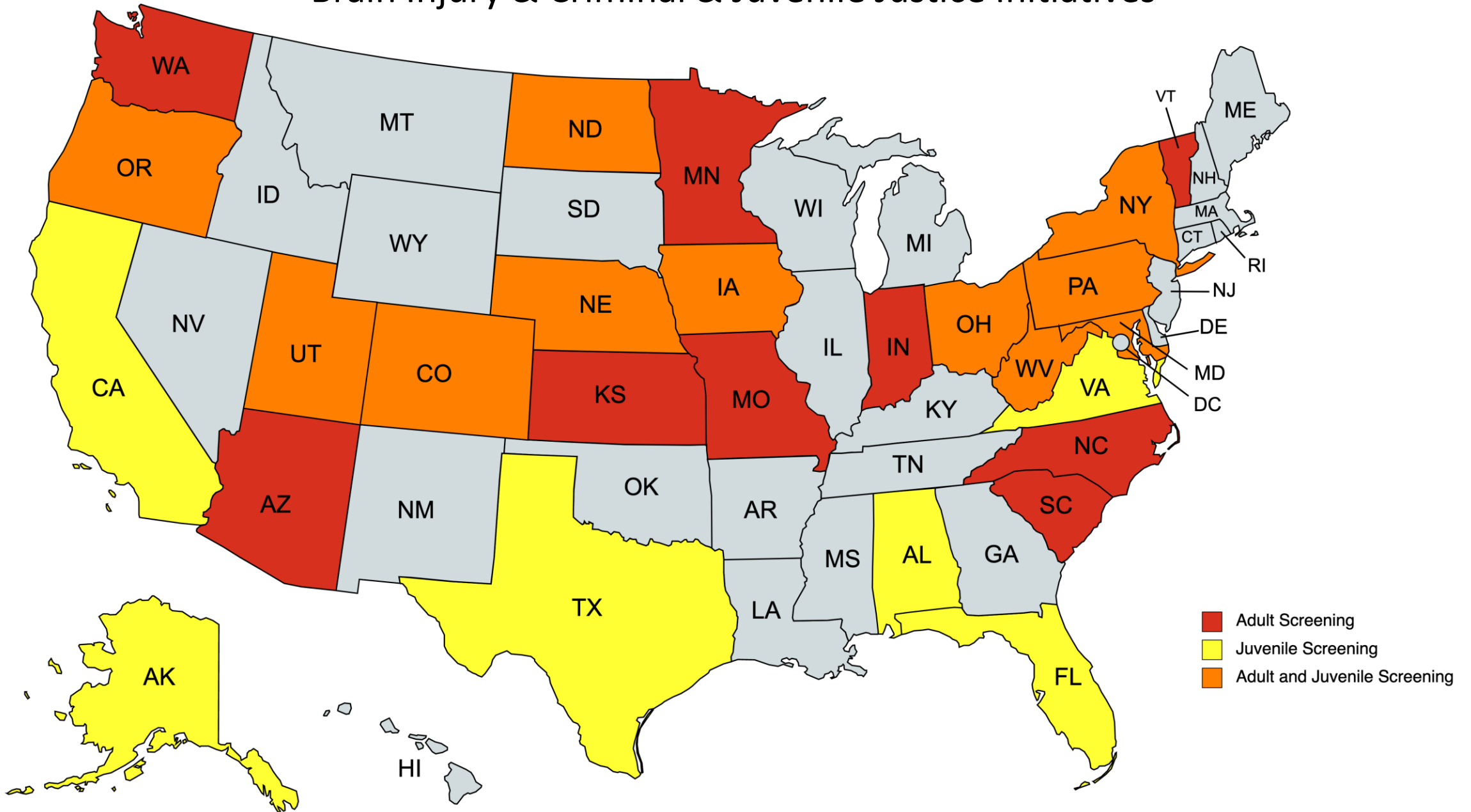


# NATIONAL TBI DATA BASE

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- Press release announcing the TBI database: <https://disabilityrightsnc.org/news/press-release/innovative-nc-program-launches-national-tbi-database/>
- Learn more about the TBI Justice Database: <https://disabilityrightsnc.org/tbi-justice-database/>
- Read Desireé Gorbea-Finalet's complete author's note here: <https://disabilityrightsnc.org/.../tbi-justice-database.../>
- Find out more about DRNC's TBI Justice Initiative here: <https://disabilityrightsnc.org/.../tbi-justice-initiative/>
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# Brain Injury & Criminal & Juvenile Justice Initiatives



# Sneak Preview

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## **Problem-Solving Courts Guide to Supporting Individuals with Acquired Brain Injury**

- I. Background on research into current practices related to brain injury
- II. Overview of Brain Injury and Why it is important in the Context of Problem-Solving Courts
- III. Screening for Lifetime history of Brain Injury and Brain Injury Related Challenges
- IV. Accommodating for Brain Injury
- V. Brain Injury Referral
- VI. National Resources



**Thank you.**

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