



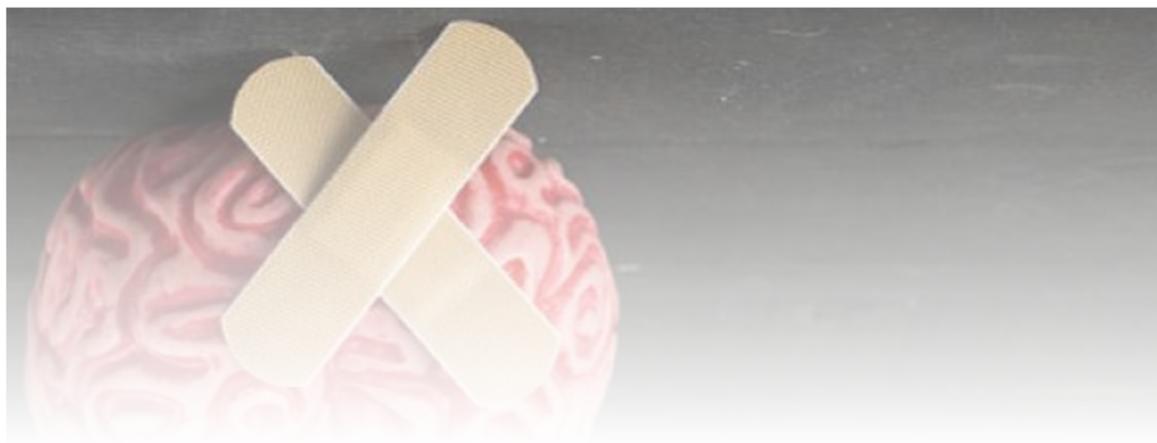
Mountain Plains (HHS Region 8)

MHTTC

Mental Health Technology Transfer Center Network

Funded by Substance Abuse and Mental Health Services Administration

The Intersection between Traumatic Brain Injury and Mental Health: An Introduction



SAMHSA
Substance Abuse and Mental Health
Services Administration



NATIONAL ASSOCIATION
OF STATE HEAD INJURY
ADMINISTRATORS

Housekeeping Items

- We have made every attempt to make today's presentation secure. If we need to end today's presentation unexpectedly, we will follow-up with you using your registration information.
- All attendees are muted, and attendees cannot share video during this session.
- Remember to ask questions using the Q&A feature. Only the answers will be seen by all attendees.
- The chat feature is public, and comments can be seen by all attendees.
- Follow us on social media:



@MPMHTTC



@MountainPlainsMHTTC

Who We Are

The Mountain Plains Mental Health Technology Transfer Center provides training and technical assistance on evidence-based practices to the mental health providers of Region 8 (Colorado, Montana, North Dakota, South Dakota, and Utah).

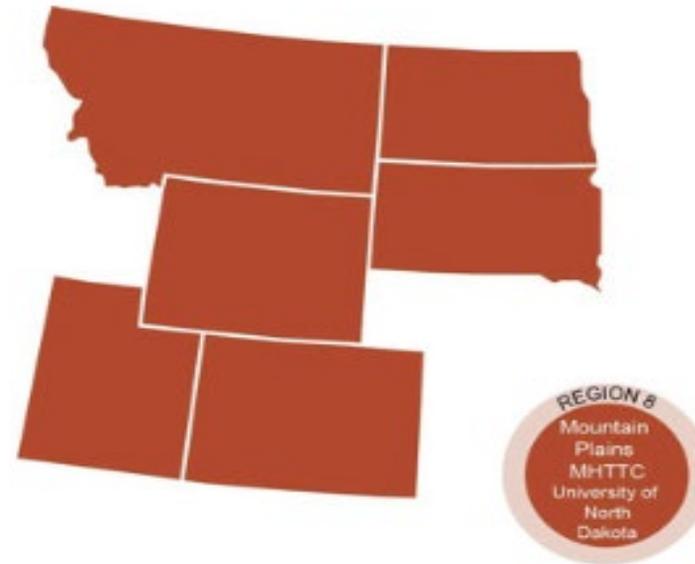
We belong to the Technology Transfer Center (TTC) Network, a national network of training and technical assistance centers serving the needs of mental health, substance use and prevention providers. The work of the TTC Network is under a cooperative agreement by the Substance Abuse and Mental Health Service Administration (SAMHSA).

Co-hosted by:

The University of North
Dakota

and

The Western Interstate
Commission for Higher
Education (WICHE)



Evaluation Information

The Mountain Plains MHTTC is funded through SAMHSA to provide this training. As part of receiving this funding we are required to submit data related to the quality of this event.

At the end of today's training please take a moment to complete a **brief** survey about today's training. Here is the link for the survey:

<https://ttc-gpra.org/P?s=317313>



Disclaimer

This presentation was prepared for the Mountain Plains Mental Health Technology Transfer Center (Mountain Plains MHTTC) under a cooperative agreement from the Substance Abuse and Mental Health Services Administration (SAMHSA). All material appearing in this presentation, except that taken directly from copyrighted sources, is in the public domain and may be reproduced or copied without permission from SAMHSA or the authors. Citation of the source is appreciated. Do not reproduce or distribute this presentation for a fee without specific, written authorization from the Mountain Plains MHTTC. For more information on obtaining copies of this presentation please email gberry@wiche.edu.

At the time of this presentation, Elinore F. McCance-Katz served as SAMHSA Assistant Secretary. The opinions expressed herein are the views of Rebeccah Wolfkiel, Judy Dettmer, and Charles Smith and do not reflect the official position of the Department of Health and Human Services (DHHS), or SAMHSA. No official support or endorsement of DHHS, SAMHSA, for the opinions described in this presentation is intended or should be inferred.



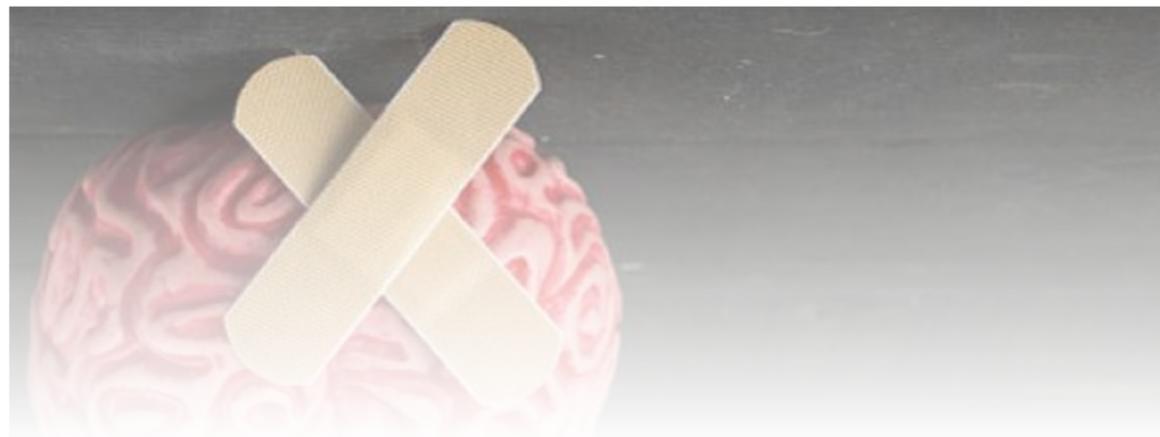
Mountain Plains (HHS Region 8)

MHTTC

Mental Health Technology Transfer Center Network

Funded by Substance Abuse and Mental Health Services Administration

The Intersection between Traumatic Brain Injury and Mental Health: An Introduction



SAMHSA
Substance Abuse and Mental Health
Services Administration



NATIONAL ASSOCIATION
OF STATE HEAD INJURY
ADMINISTRATORS

Introduction



Charles H. Smith, PhD
Regional Administrator

Substance Abuse and Mental Health Services Administration
(SAMHSA)

U.S. Department of Health and Human Services –
Region VIII

(Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming)

Charles.Smith@samhsa.hhs.gov

Today's Presenters



Rebecca Wolfkiel

Executive Director

National Association of State Head Injury
Administrators (NASHIA)

rwolfkiel@nashia.org



Judy Dettmer

Director for Strategic Partnerships

National Association of State Head Injury
Administrators (NASHIA)

Technical Assistance Lead for the Traumatic Brain
Injury Technical Assistance and Resource Center

jdettmer@nashia.org

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.



NATIONAL ASSOCIATION
OF STATE HEAD INJURY
ADMINISTRATORS

NASHIA Provides



Objectives

- 1. Gain an understanding of brain injury**
- 2. Learn about the prevalence of brain injury in the context of behavioral health**
- 3. Gain an understanding of a basic framework for supporting individuals with brain injury and co-occurring behavioral health**



Mountain Plains (HHS Region 8)

MHTTC

Mental Health Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration



**NATIONAL ASSOCIATION
OF STATE HEAD INJURY
ADMINISTRATORS**

Why Knowing about Brain Injury Matters

- A history of TBI is often hidden among individuals with cognitive/intellectual disabilities, spinal cord injury, and behavioral health challenges (mental health and addiction).
- If provider knows/suspects history of TBI, they can engage from the start of the relationship and make the right referrals.



Mountain Plains (HHS Region 8)

MHTTC

Mental Health Technology Transfer Center Network

Funded by Substance Abuse and Mental Health Services Administration



NATIONAL ASSOCIATION
OF STATE HEAD INJURY
ADMINISTRATORS

Why Knowing about Brain Injury Matters

- Provider can make simple accommodations to better support the individual's deficits
- Provide psychoeducation for the individual so that they may be better equipped to advocate for themselves



Mountain Plains (HHS Region 8)

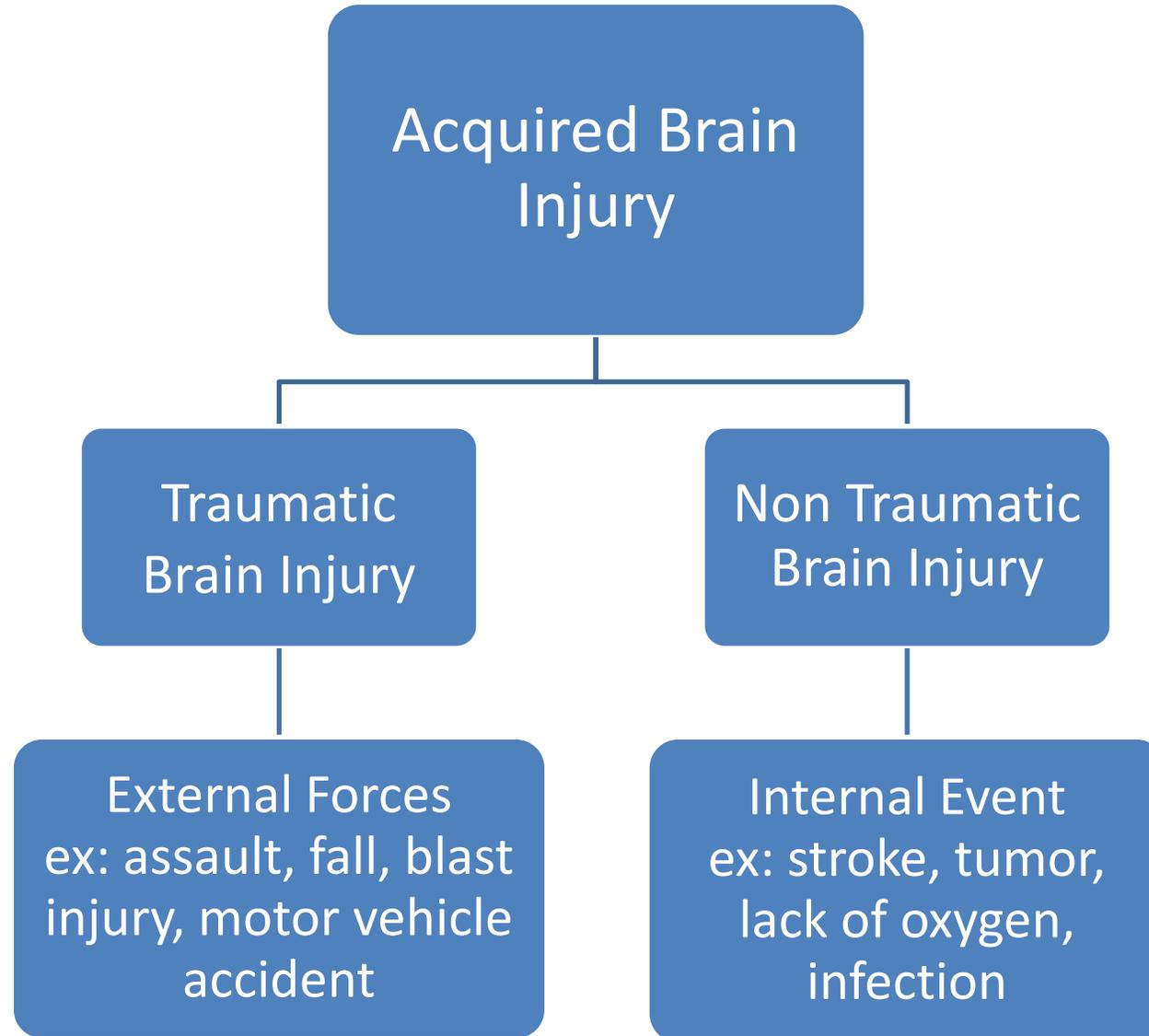
MHTTC

Mental Health Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration



**NATIONAL ASSOCIATION
OF STATE HEAD INJURY
ADMINISTRATORS**

Brain Injury Defined



Classification of Severity

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



Mountain Plains (HHS Region 8)

MHTTC

Mental Health Technology Transfer Center Network

Funded by Substance Abuse and Mental Health Services Administration



**NATIONAL ASSOCIATION
OF STATE HEAD INJURY
ADMINISTRATORS**

Mild TBI – Complications

>**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

Possible Physical Changes

Injury-related problem	How it may affect a person functionally
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

Injury-related problem	How it may affect a person functionally
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 Behavioral Changes

Injury-related problem	How it may affect a person functionally
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

Special Populations





Behavioral Health and Brain Injury

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)

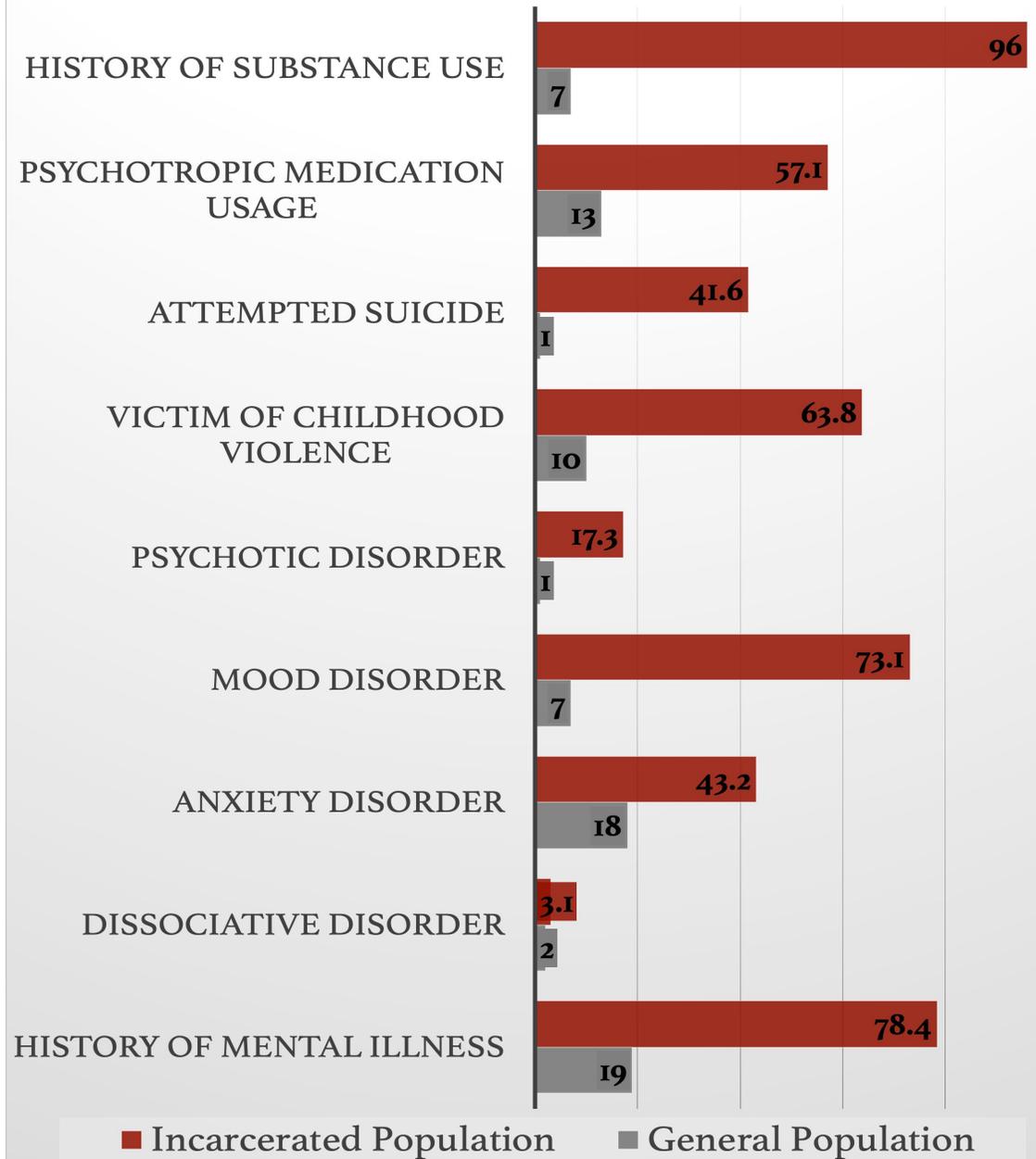
Mental Health

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

Justice Involved

- Meta-analytic review found the prevalence of TBI in the offender population to be 60.25% (Shiroma, Ferguson, & Pickelsimer, 2010)
- A meta-analysis found that approximately 30% of juvenile offenders have sustained a previous brain injury (Vaughn, Salas-Wright, Delisi, & Perron, 2014)
- TBI is associated with higher impulsivity, aggressive behavior and negative emotion ratings (Farrer, Frost, & Hedges, 2013)

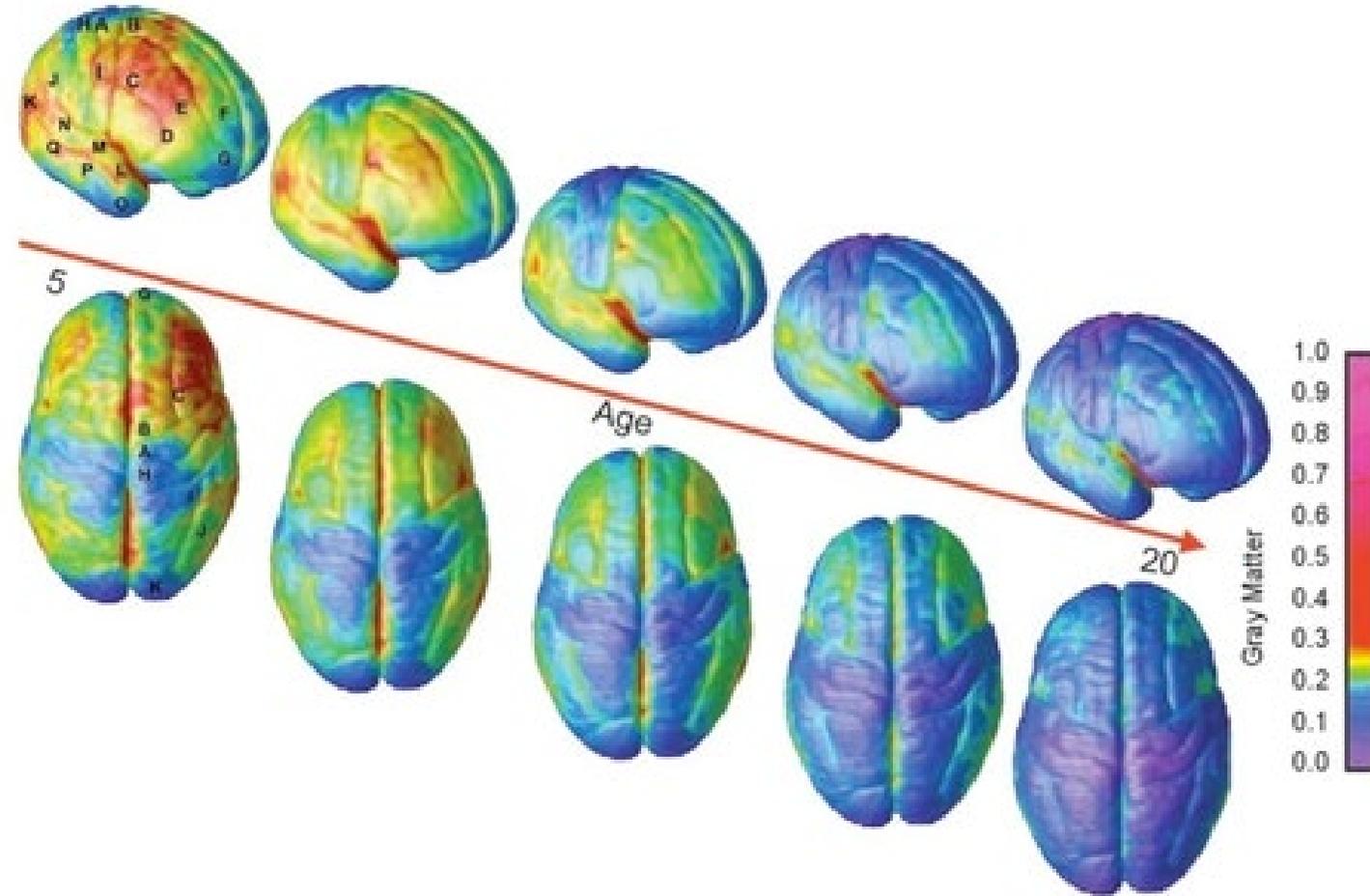
Justice Involved with Traumatic Brain Injury



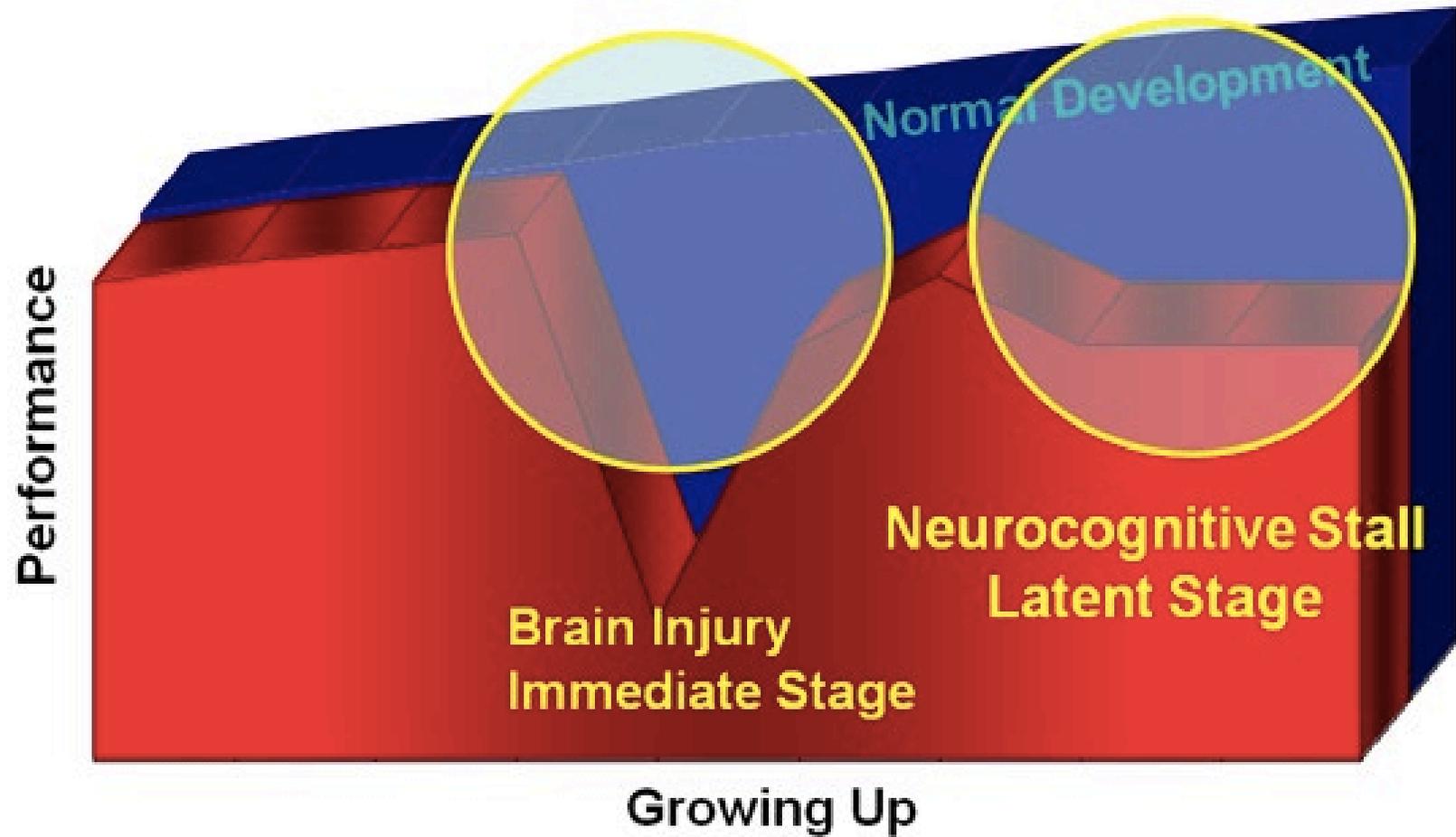
Individuals Experiencing Homelessness

- **43% (n over 2,000)** of respondents reported a history of TBI with the mean age of first injury being 15
- Individuals with TBI become homeless at a **younger age** and are **more likely to report mental health diagnoses, substance use, suicidality, victimization, and difficulties with activities of daily living**
- **51% reported** sustaining their first injury prior to becoming homeless or at the same age as their first homelessness episode. (Mackelprang, Harpin, Grubenhoff, & Rivara, 2014)

The Developing Brain



Pediatric TBI: Two Stages of Recovery



(Chapman, 2007)

Veterans and Brain Injury

- During **peacetime, over 7,000 annually** admitted to military and veterans' hospitals with diagnosis of TBI (IOM, 2009)
- 80 percent of TBIs since Sept. 11, 2001 have been **non-combat related**
- More common among non-combat military personnel than in the general population:
 - High concentration of service members in the highest incidence **age** groups (18 – 44)
 - **Greater risk** for injury associated with non-combat military duties
 - Greater **consumption of alcoholic beverages** by military personnel

Screening for Brain Injury



Importance of Screening for Brain Injury

**One study found that 42% of persons who indicated they had incurred a TBI as defined by the CDC did not seek medical attention
(Corrigan & Bogner, 2007)**

- Clients may be eligible for case management support/services
- Psychotherapies can be adapted for neurocognitive deficits. Examples:
 - Minimize environmental distractions
 - Educational therapies (e.g. CBT, DBT) should emphasize pacing, provide frequent opportunities for clients to respond, generate feedback, and provide reinforcement to maintain client engagement
 - Written material/handouts where possible
 - Repetition of key points

Components of Screening

- **Education / awareness**
 - Training regarding the sequelae of brain injury
 - Important to have a foundational knowledge of brain injury
 - Training should be provided to anyone conducting intake/screening
- **Medical documentation**
 - Best practice
 - Important to note that medical documentation only indicates an injury not impact
 - Documentation should be from a clinician trained in diagnosing TBI
- **Establishing credible history**
- **Assessing impact**
- **Modifying/generating novel interventions**

Screening Tools

1. Ohio State Traumatic Brain Injury Identification Method (OSU TBI-ID)

(Ages 13 plus)

<https://wexnermedical.osu.edu/neurological-institute/departments-and-centers/research-centers/ohio-valley-center-for-brain-injury-prevention-and-rehabilitation/for-professionals/screening-for-tbi>

2. Brain Check Survey

(School aged children/youth)

<https://www.chhs.colostate.edu/ot/research/life-outcomes-after-brain-injury-research-program/>

Framework for Support



Demystifies brain injury for non-brain injury professionals

Empowers individuals with brain injury and families to advocate for appropriate supports

Framework

Build capacity of the behavioral health system so providers can:

1. Ensure policies do not inadvertently exclude those with brain injury.
2. Screen for and recognize brain injury.
3. Screen for the affects of brain injury.
4. Provide basic accommodations and modifications to ensure treatment is more successful.
5. Provide referral to appropriate brain injury related resources.



Mountain Plains (HHS Region 8)

MHTTC

Mental Health Technology Transfer Center Network

Funded by Substance Abuse and Mental Health Services Administration



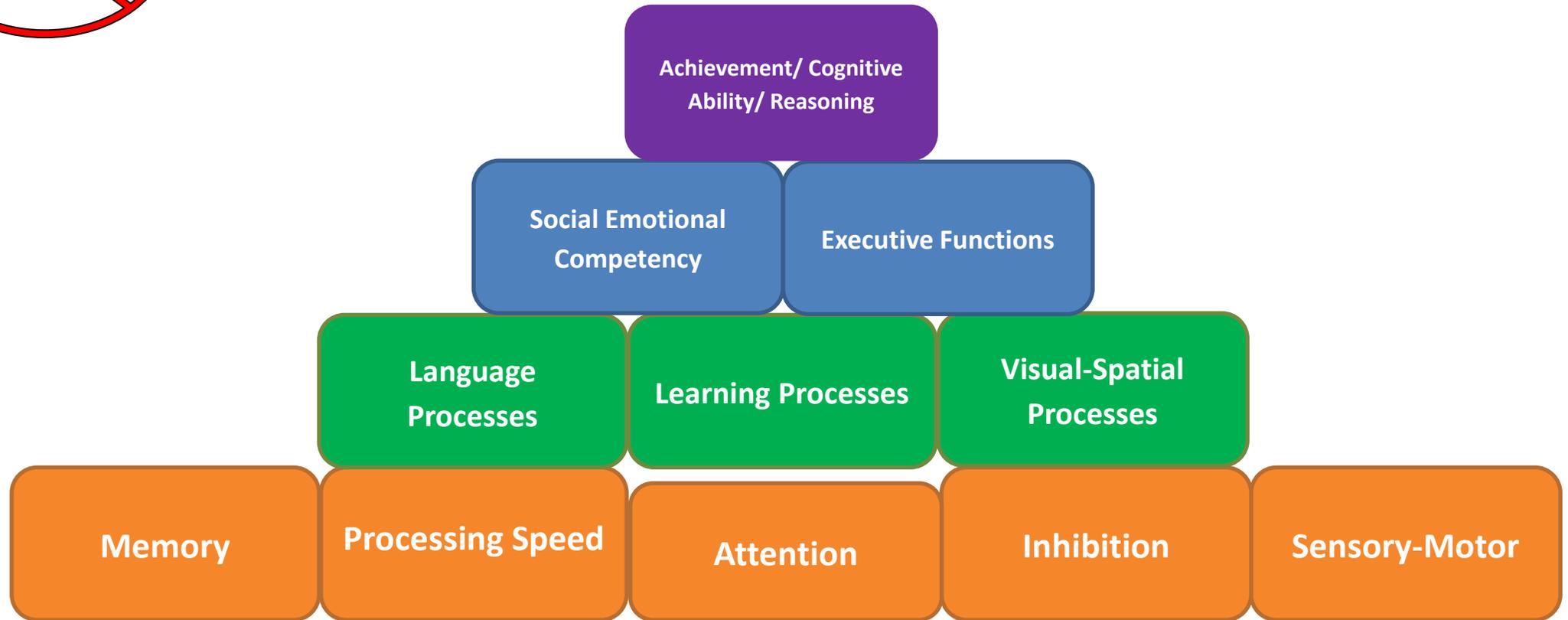
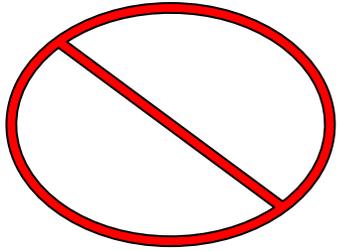
**NATIONAL ASSOCIATION
OF STATE HEAD INJURY
ADMINISTRATORS**

Building Blocks of Brain Development ©



The Hierarchy of Neurocognitive Functioning © - created by Peter Thompson, Ph.D. 2013, adapted from the works of Miller 2007; Reitan and Wolfson 2004; Hale and Fiorello 2004.

The Building Blocks of Brain Development © – further adapted by the CO Brain Injury Steering Committee, 2016.



~~Attention~~

Achievement/ Cognitive Ability/ Reasoning

Social Emotional Competency

Executive Functions

Language Processes

Learning Processes

Visual-Spatial Processes

Memory

Processing Speed

Inhibition

Sensory-Motor

Skill Vs. Will

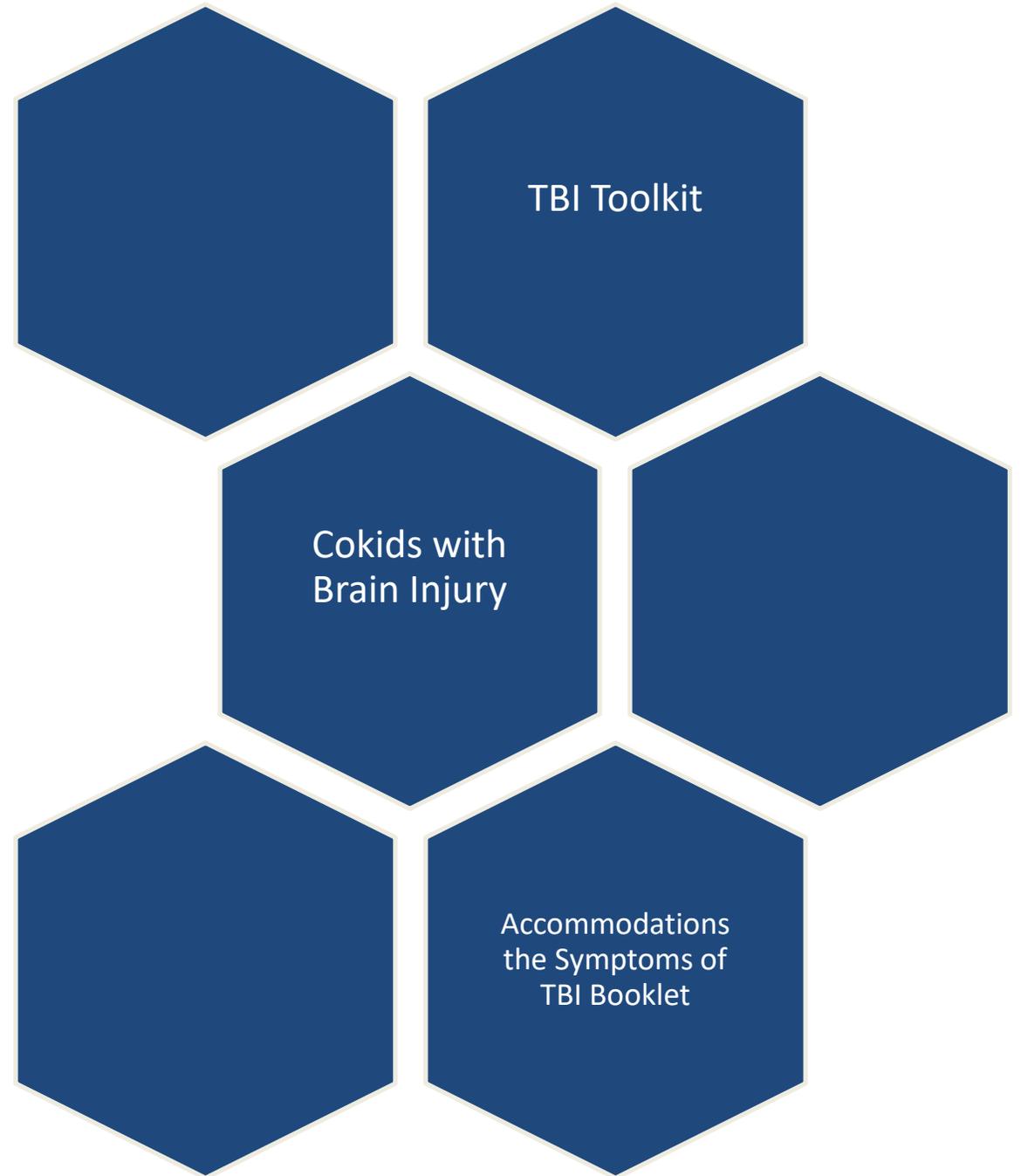


If think they have the skill but choose to not use it, likely to think punishment



If think they don't have the skill, less likely to think punishment, more likely to think of teaching the skill

Helpful Tools



TBI Toolkit

http://www.mirecc.va.gov/visn19/tbi_toolkit/

Free Online Toolkit



Developed by researchers at the Department of Veterans Affairs, this toolkit is designed to assist providers in identifying TBI and associated co-occurring problems and determining potential need for further evaluation and/or mental health treatment modification.

Click [here](#) to access the toolkit. Click [here](#) and open the “Training Resources” menu for valuable slides from the initial training on this toolkit.

The goal is to offer providers working with clients who have a history TBI and mental health symptoms the following:

- Background information/Education
- Screening and Assessment Tools
- Interventions and Treatment Modification Suggestions
- Additional resources

Cokids with Brain Injury

www.cokidswithbraininjury.com

Firefox | Traumatic Brain Injury Networking Tea... | +

cokidswithbraininjury.com | Google

Brain Injury Alliance of Colorado | Colorado Traumatic Brain Injury Trust Fund | cde COLORADO DEPARTMENT OF EDUCATION

Stay Connected! Join our Listserve

HOME | FOR EDUCATORS AND PROFESSIONALS | FOR PARENTS | UPCOMING EVENTS | KEY TERMS | CONTACT US

WELCOME TO THE TBI NETWORKING TEAM

The website was designed through funding from the Colorado TBI Trust Fund. This website should serve as a tool for educators, school administrators, school psychologists, related services professionals, and families. Feel free to join in the discussion and learn more about how to support our kids in Colorado with brain injuries.

ANNOUNCEMENTS & UPDATES

New!! Lake Paddle Sports Day-Brain Injury Alliance of Colorado, Monday, June 30th. Family & friends are welcome. [Click here to view flyer.](#)

New!! Colorado Brain Injury Program is accepting applications for the education grant. [Visit the website by clicking here.](#)

New!! Grand Junction Conference "Applied Sports Medicine in Primary Care: Concussion- A Comprehensive Review"- Friday, July 18, 2014. [Click here to view flyer.](#)

5:30 PM 6/7/2014

Accommodating the Symptoms of TBI

<http://ohiovalley.org/informationeducation/accommodatingtbi/>

Presented by:

Ohio Valley Center for Brain Injury Prevention and Rehabilitation

With contributions from Minnesota Department of Human Services
State Operated Services

Additional Resources

Traumatic Brain Injury Model Systems Knowledge Translation Center:

<https://msktc.org/tbi>

[https://msktc.org/lib/docs/Factsheets/TBI Emotional Problems and TBI.pdf](https://msktc.org/lib/docs/Factsheets/TBI_Emotional_Problems_and_TBI.pdf)

[https://msktc.org/lib/docs/Factsheets/TBI Depression and TBI.pdf](https://msktc.org/lib/docs/Factsheets/TBI_Depression_and_TBI.pdf)

Additional Resources

Brandies, Heller School, Institute for Behavioral Health:

<https://heller.brandeis.edu/ibh/research/inroads/publications-products.html>

Brainline:

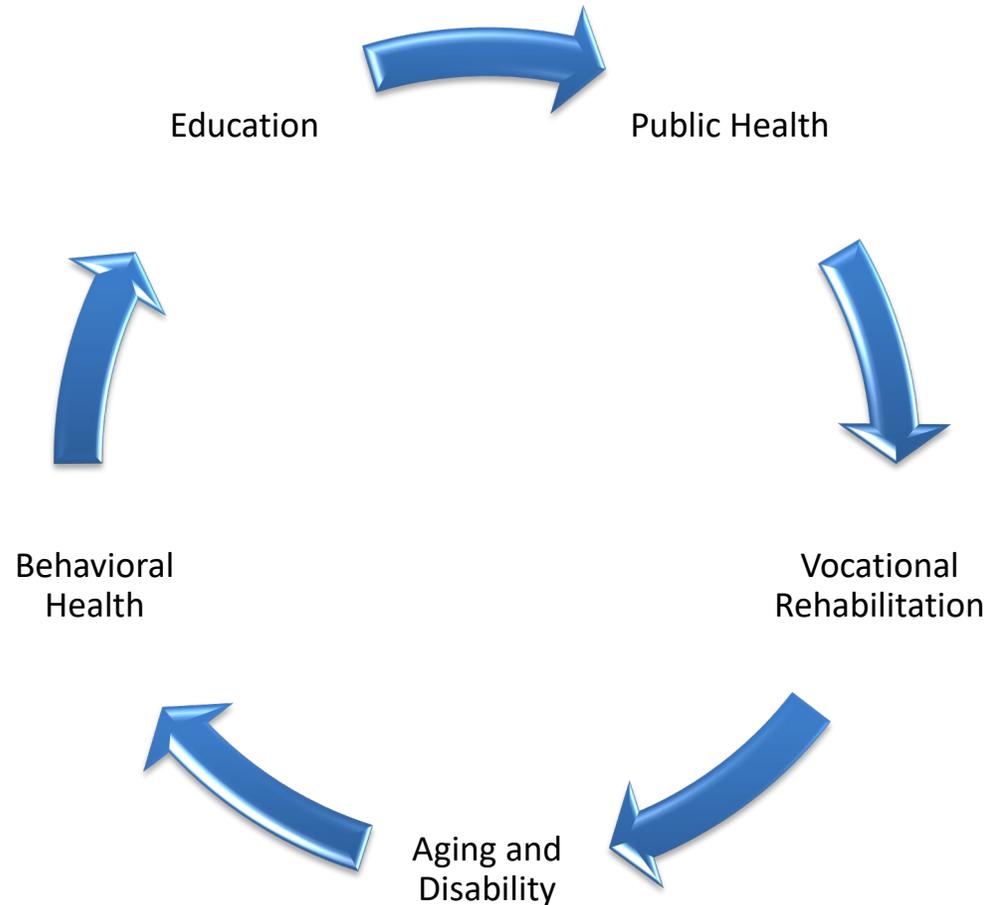
<https://www.brainline.org/>

Ohio Valley Center for Brain Injury Prevention and Rehabilitation:

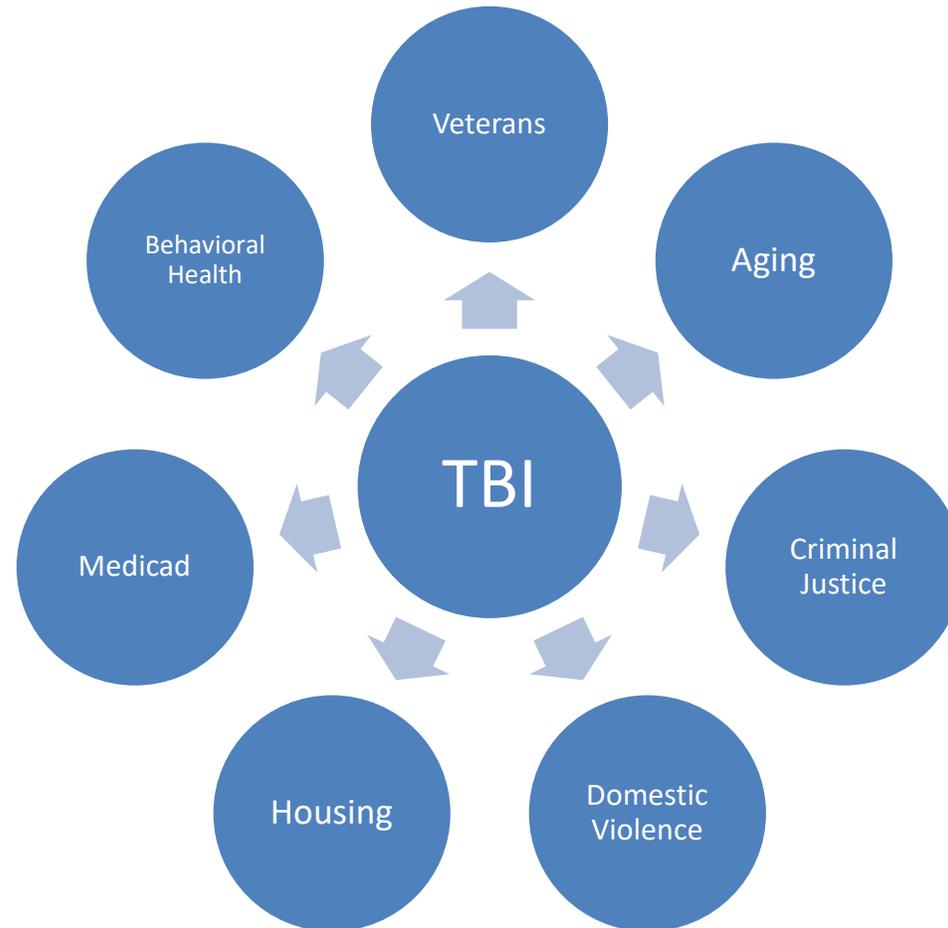
<https://wexnermedical.osu.edu/neurological-institute/departments-and-centers/research-centers/ohio-valley-center-for-brain-injury-prevention-and-rehabilitation>

State Brain Injury Programs & Partnerships

<https://www.nashia.org/state-program-directory>



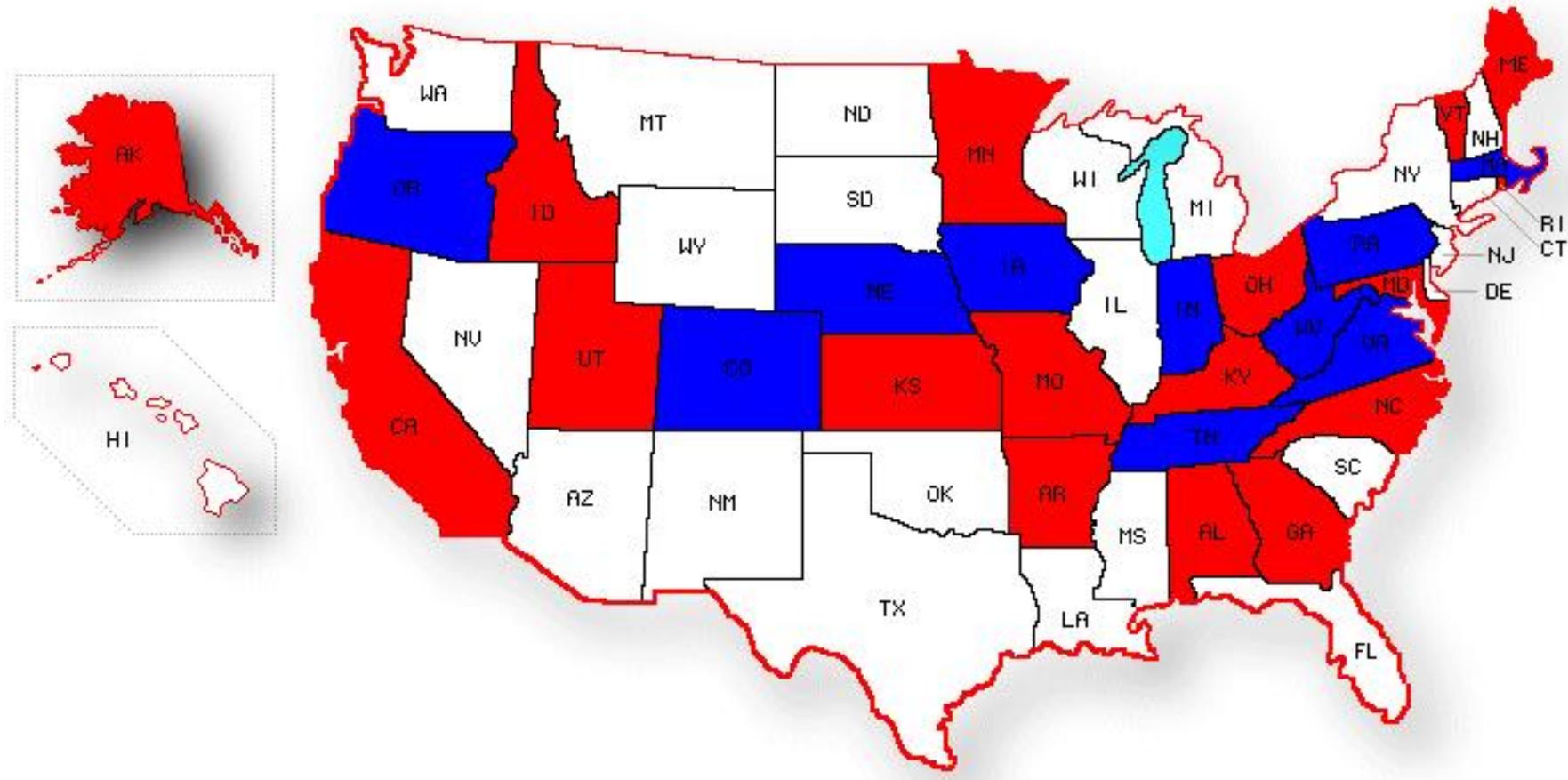
State Program Partnerships



ACL TBI State Partnership Program

ACL grantees

- Mentor States
- Partner States



Bridging Brain Injury & Behavioral Health Systems

Opioid & Brain Injury Webinar Series (www.nashia.org/webinars.asp)

Opioid & Brain Injury Fact Sheet

Partnership with NASMHPD

- 2018 Reciprocal Conference Participation
- 2019 SAMHSA funded paper “TBI and Behavioral Health Treatment”
- 2019 & 2020 Presentations Before State Mental Health Directors

Bridging Brain Injury & Behavioral Health Systems

“What If There’s a TBI?” Online Training Module w/ State Brain Injury Resources

2020 Annual Conference

Collaboration with Craig Hospital



Mountain Plains (HHS Region 8)

MHTTC

Mental Health Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration



**NATIONAL ASSOCIATION
OF STATE HEAD INJURY
ADMINISTRATORS**

THANK YOU!

Questions????

Rebecca Wolfkiel

rwolfkiel@nashia.org

Judy Dettmer

jdettmer@nashia.org



Mountain Plains (HHS Region 8)

MHTTC

Mental Health Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration



NATIONAL ASSOCIATION
OF STATE HEAD INJURY
ADMINISTRATORS