

Brain Injury and Adverse Childhood Experiences

Adverse childhood experiences (ACEs) are stressful or traumatic events, including abuse, neglect, witnessing domestic violence or having a family member who is incarcerated. Unaddressed ACEs are strongly linked to a wide range of health problems throughout a person's lifespan, including those associated with substance misuse.

61%

61% of adults have experienced at least 1 ACE. 16% of adults have experienced 4 or more ACEs. ACEs occur across all demographic groups.

ACEs & BI

Toxic stress from ACEs exposure can alter brain development and look like impulsivity, poor judgment, and quick to anger.

Later Life

Brain changes from toxic stress/ACEs can lead to risk-taking behaviors, increasing the risk of TBI as an adult. ACEs can also lead to neurological decline later in life.

BEST PRACTICE

Providers across systems should:

- SCREEN for prior history of Brain Injury
- ASSESS Cognitive & Functional Impairment
- EDUCATE staff on Brain Injury
- EDUCATE the person about their Brain Injury
- PROVIDE and TEACH Accommodations
- CONNECT person served with Community Resources

COMMON PROBLEMS

After Brain Injury, we often see problems with:

Attention, memory and new learning
Slowed speed of processing
Organization, problem solving & impulsivity
Irritability, frustration & agitation
Balance, dizziness & headaches
Poor awareness of deficits & difficulties
Difficulty being flexible, poor self-monitoring

Some changes in the brain caused by toxic stress from ACE exposure can look like brain injury changes, like impulsivity, poor judgment and quick to anger

What to Look For

What providers might see:

Looking uninterested because they cannot pay attention
Appearance of defiance because they cannot remember the rules
Slow to follow directions because they cannot process quickly
Getting into fights because of irritability, anger and impulsivity
Falling into things, often getting hurt
Difficulty re-entering community because of cognitive changes
Gets stuck on an idea or a way of doing something, does not recognize mistakes

ACEs are preventable. To prevent ACEs, we must understand and address the factors that put people at risk for ACEs. Creating and sustaining safe, stable, nurturing relationships and environments for all children and families can prevent ACEs and help all children reach their full potential.

Common Accommodations for Brain Injury Challenges

Here are some common and simple accommodations:

For the person:

Working for shorter periods of time
Getting rid of distractions around you, like noise or movement
Taking notes (on paper, in a notebook, on a phone or computer)
Using a phone to set timers to remember appointments

For the care provider:

- Repeating information to the person
- Slowing down when talking; giving them more time to respond
- Giving students extra time on tests
- Giving the person a list of house rules, written directions, or pictures to help them understand and remember
- Coaching the person with the injury to “Stop, think and plan” then act
- Coaching the person to take deep breaths when feeling angry or anxious

Tools for Best Practice

Brain Injury Screening Resources:

NASHIA’s OBISSS: <https://www.nashia.org/obisssprogram> - The OBISSS is highly recommended. It is made up of the OSU screening tool, a Symptoms Questionnaire and Strategies. It can be used electronically, on a computer, phone or ipad. It can be self-administered.

OSU TBI Identification Method: <https://wexnermedical.osu.edu/neurological-institute/neuroscience-research-institute/research-centers/ohio-valley-center-for-brain-injury-prevention-and-rehabilitation/osu-tbi-id>

Brain Links’ Strategies & Accommodations Tool: <https://www.tndisability.org/rehabilitation>

Symptom Questionnaire and Cognitive Strategies:

Adult: bit.ly/3FLkz0V

Juvenile: bit.ly/4iS2bSC

Tennessee Resources

Brain Links’ Website with many resources: <https://www.tndisability.org/brain>

Brain Links’ Toolkits (for Service Professionals and Survivors):

<https://www.tndisability.org/brain-toolkits>

TN Department of Health TBI Program:

<https://tinyurl.com/3v5jrdt3>

Tennessee Brighter Futures’ Resource Pages & Training for Brain Injury:

<https://www.tndisability.org/tbf-brain-injury>

Resource Pages & Training for Child Abuse:
<https://www.tndisability.org/tbf-child-abuse>

Tennessee Brighter Futures is organized and facilitated by Brain Links through a contract from the Tennessee Department of Health TBI Program.

References:

- Adverse Childhood Experiences (ACEs): Preventing early trauma to improve adult health. Vital Signs, Nov. 2019. Centers for Disease Control and Prevention.
<https://www.cdc.gov/vitalsigns/aces/index.html>
- Guinn AS, Ports KA, Ford DC, Breiding M, Merrick MT. Associations between adverse childhood experiences and acquired brain injury, including traumatic brain injuries, among adults: 2014 BRFSS North Carolina. Inj Prev. 2019 Dec;25(6):514-520. [doi: 10.1136/injuryprev-2018-042927](https://doi.org/10.1136/injuryprev-2018-042927). Epub 2018 Oct 13. PMID: 30317219; PMCID: PMC6462254.

Brain Links is supported by the Administration for Community Living (ACL) of the U.S. Department of Health and Human Services under Grant No. 90TBSG0051-01-00 and in part by the TN Department of Health, Traumatic Brain Injury Program.

4/2025