Unmasking Brain Injury

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"Statements, opinions, and study results presented may not reflect the policy or science position of the American Heart Association, unless otherwise noted"

Brain Injury Defined

Acquired Brain Injury (ABI)

Traumatic
Brain Injury (TBI)

External Events: assault, fall, blast injury, motor vehicle crash

Non-Traumatic Brain Injury

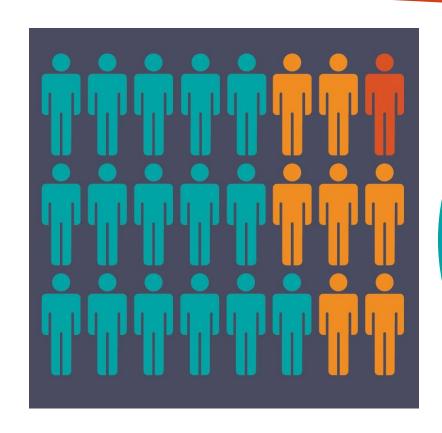
Internal Events: stroke, tumor, anoxia, aneurysm, infection

North Dakota's Definition

"Brain injury means damage to the brain or the coverings of the brain which produces an altered mental state and results in a decrease in cognitive, behavioral, emotional, or physical functioning. The term does not include an insult of a degenerative or congenital nature."-

NDCC 50-06.4

2.8 Million TBIs a year



2.5 million Treated and released from ED

282,000 Hospitalized

56,000 Die



Leading Causes of TBI

Severity Continuum

Mild

75-90%

LOC less 30min

15% have long term impairments

Moderate

10-30%

LOC between 30min-24hrs

30-50% have long term impairments

Severe

5-10%

LOC greater 24hrs

80% have long term impairments

Brain injuries are like earthquakes.

- In a major quake, a severe brain injury involving fractures, hemorrhages or penetrating wounds bridges go down and buildings collapse. The city is devastated.
- ▶ But mild brain injuries are smaller quakes: Books fall off shelves; vases are broken. It's harder to survey the damage and easy to miss what's broken, but something is clearly wrong.



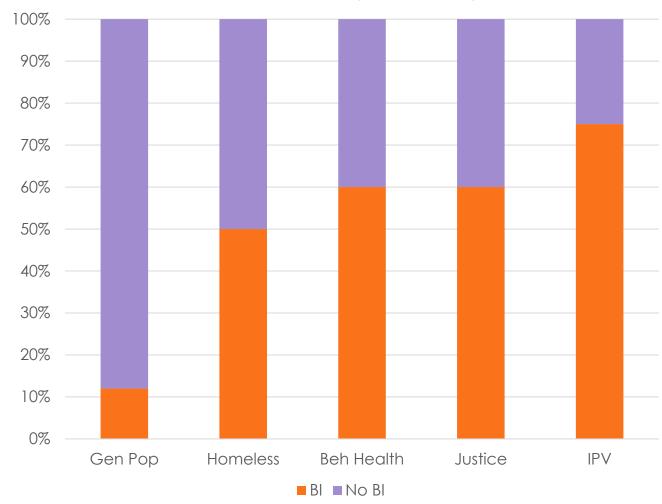


Health Disparities

Screening programs have shown that brain injuries hide in plain sight

Particularly in high-risk populations

BI Prevalence within Special Populations



Recovery After Brain Injury

There is no cure for brain injury......

- Recovery is usually most rapid in the first six months.
- ▶ More like a **chronic condition** that has changing needs.

Outcome Predictors

- Severity of injury
- Age of injury
- Access to appropriate acute care and rehabilitation
- Family life and support system

Possible Consequences after a Brain Injury

Physical Changes

Fatigue,
Lack of
Awareness, and
Inconsistency

Cognitive Changes

Emotional/ Behavioral Changes

"Silent Epidemic" "Invisible Disability"

- ► Injury forgotten once physically healed
- Person looks the same
- ► May have no conclusive measures
- ► Individuals often told they would be fine
- Unreported/non-accidental injuries
- Minor blows to the head or "concussions" are often not perceived as "brain injuries"

Unmasking Brain Injury

- ► Part of a national awareness effort
 - http://unmaskingbraininjury.org/
- NDBIN hosts events across ND
 - Over 150 total masks









Screening/Symptom Inventory

| e: | Current Age: | Interviewer Initials: | Date: |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lifetime History of Traumatio e this simple test to evaluate if you may have sustained a brain assessment with a trained professional. All information is kept Please think about injuries you have had during your entire lifetime, especially those that | injury. It is important to note that this test is no | t a diagnosis, not to be used for eligibility determinate | • |
| affected your head or neck. It might help to remember times you went to the hospital or Emergency Department. Think about injuries you may have received from a car or motorcycle wreck, bicycle crash, being hit by some | you experienced multiple, repeated impacts to your head (e.g. history of abuse, contact sports, military duty)? | drug overdose or being choked/strangled? | professional that you had any of the following? |
| a. Thinking about any injuries you have had in your lifetime, were you ever knocked out or did you lose consciousness? Yes No (IF NO, GO TO QUESTION 2) b. What was the longest time you were knocked out or unconscious? (Choose just one; if you are not sure please make your best guess.) knocked out or lost consciousness for less than 30 minutes knocked out or lost consciousness between 30 minutes and 24 hours knocked out or lost consciousness for 24 hours or longer | ☐ Yes ☐ No (IF NO, GO TO QUESTION 3) a. How old were you when these repeated injuries began? | □ Yes □ No (IF NO, GO TO QUESTION 4) a. How many times from a drug overdose? □ overdoses b. How many times from being choked/strangled? □ choked/strangled | epilepsy or seizures a stroke, cerebral vascular disease or a transient ischemic attack a tumor of the brain swelling of the brain (edema) toxic effects or poisoning by substances infection like meningitis or encephalitis a brain bleed or hemorrhage loss of oxygen to the brain - like from a time when you stopped breathing, had a near drowning or experienced a strangulation |
| c. How old were you the first time you were knocked out or lost consciousness?years old NORTH DAKOTA BRAIN INJURY NETWORK ndbin.org • 855.866.1884 | the likelihood that consequences have result A person may be more likely to have ongoing work of the second of the second of the second of the second of time when the second | ulted from one's lifetime exposure. ng problems if they have any of the following: BII so before age 15 tey experienced multiple blows to the head ted with another way their brain function has been im | istory of brain injury. Instead, it provides a means to estil paired The Ohio Valley Center for Brain Injury Prevention and Rehat |

| BDAINI INIII IDV | NIURY | | | | | | | |
|---------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------|----------------------------------------------|------------------------------------------|-----------------------------------------|--|--|--|
| ame: | | | _ Date: | | | | | |
| recent weeks, how much have you ease mark only one circle per item. | been bothere | d by the follo | wing problem | is? | | | | |
| SECTION 1 | N/A I don't have this problem at all | I have this problem but it never bothers me | I am slightly bothered by this problem | I am very bothered by this problem | I am extremely bothered by this problem | | | |
| I lose or misplace important items (keys, wallet, papers) | 0 | 0 | 0 | 0 | 0 | | | |
| I forget what people tell me | 0 | 0 | 0 | 0 | 0 | | | |
| I forget what I've read | 0 | 0 | 0 | 0 | 0 | | | |
| I lose track of time | 0 | 0 | 0 | 0 | 0 | | | |
| I forget what I did yesterday | 0 | 0 | 0 | 0 | 0 | | | |
| I forget things I've just learned | 0 | 0 | 0 | 0 | 0 | | | |
| I forget meetings/appointments | 0 | 0 | 0 | 0 | 0 | | | |
| I forget to turn off appliances (iron, stove) | 0 | 0 | 0 | 0 | 0 | | | |
| | | | | | | | | |
| SECTION 2 | N/A I don't have this problem at all | I have this problem but it never bothers me | l am slightly bothered by this problem | l am very bothered by this problem | I am extremely bothered by this problem | | | |
| I have a hard time following conversations | 0 | 0 | 0 | 0 | 0 | | | |
| I can remember only one or two steps of instructions or directions | 0 | 0 | 0 | 0 | 0 | | | |
| I take too long to figure out what someone is trying to tell me | 0 | 0 | 0 | 0 | 0 | | | |
| | | | | | NTORY 1 | | | |

ATTENTION ACCOMMODATIONS

- · Reduce auditory and visual distractions
- Use visual aids to help with focus
- Work in quiet/non-distracting places or wear earphones to drown out noise
- Break larger tasks into smaller, written down steps
- Use highlighters or color coding when following along with handouts
- Take frequent "brain breaks"
- Use a recorder to help remember important details
- Try using doodling or fidget devices to stay focused
- Schedule appointments during most alert time



Aside from being awake and alert, one of the most important cognitive abilities is being able to pay attention or concentrate on important things happening around us.





ATTENTION



TYPES OF ATTENTION:

- 1. Sustained: the ability to focus on one thing over a period of time
- 2. Selective: the ability to focus on one thing despite distractions
- 3. Alternating: the ability to shift attention from one thing to another
- ۵. Divided: the ability to focus on multiple things at the same time

LOOK FOR:

- o Difficulty staying on task when working independently
- o Difficulty listening across the duration of a conversation/lesson/TV Show
- · Inability to complete tasks
- Selective
- o Difficulty following a conversation and ignoring background
- o Reduced concentration caused by auditory or visual distractors
- o Difficulty concentrating caused by fatigue, worry or sadness
- · Leaving tasks incomplete after interruption
- o Difficulty focusing on more than 1 thing at a time
- o Difficulty engaging in 2 tasks at once

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ATTENTION ACCOMMODA FOR PROFESSIONALS

· Attention Grabber

- · Check for eye contact and initial attention
- Begin an activity with something that demands attention or involves active participation(like an ice breaker, a challenge, or demonstration that includes their participation)
- Utilize visual aids

Reduce Distractions

o Allow for work in a quiet space/wear earphones to drown out

Break it Down

- Keep instructions brief, simple, and to the point
 Summarize critical points of discussion/conversation
- o Present information in short and concise segments, one at a
- Suggest using a calendar or reminders on phone/watch/computer

- $\circ~$ Use movement and tactile activities to enhance energy and
- Encourage note taking to record important information. (e.g., having them write down the date of the next meeting they are in
- Try to schedule appointments earlier in the day



Aside from being awake and alert, one of the most important cognitive abilities is being able to pay attention or concentrate on important things happening around us.

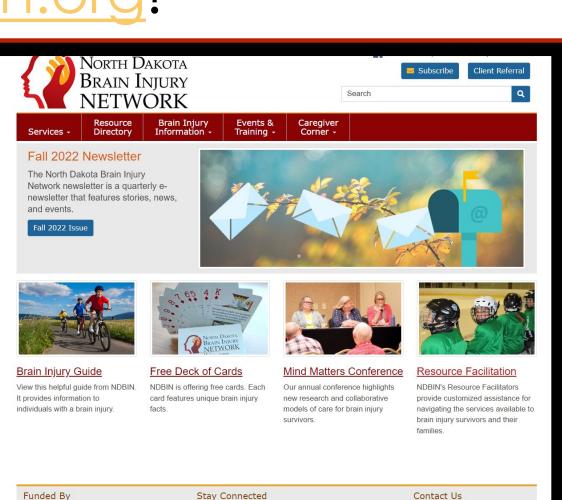


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Tip Sheets for Individuals & Professionals

www.ndbin.org!



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Dakota | Health & Human Services Be Legendary.

- · Receive Updates and Newsletter
- · Suggest an Event
- · Share your brain injury story with us
- . Share photos of you making a difference on Facebook or contact Rebecca Quinn

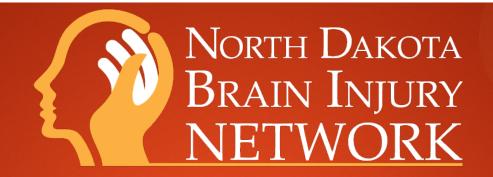
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For further contact information, refer to our contact us page

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