The North Dakota Traumatic Brain Injury (TBI) Partnership-current progress and future partnerships

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Connecting resources and knowledge to strengthen the health of people in rural communities.

Traumatic brain injury is the most misunderstood, misdiagnosed, underfunded public health problem our nation faces.”

Susan Connors, President
Brain Injury Association of America
Acquired Brain Injury (ABI)
Any injury to the brain occurring after birth.

Traumatic Brain Injury (TBI)
Injuries occurring from external force

Causes of TBI

- Falls, 28%
- Struck By/Against, 19%
- Motor Vehicle-Traffic, 20%
- Assault, 11%
- Pedal Cycle (non MV), 3%
- Other Transport, 2%
- Suicide, 1%
- Unknown, 9%
- Other, 7%
Scope of the TBI

- An estimated 1.5 million people will sustain a TBI each year in the United States.
- Of these:
  - 50,000 die;
  - 235,000 are hospitalized
  - 1.1 million are treated and released from an emergency department.
TBI is the **leading cause** of death and disability for children, adolescents, and young adults in the United States and in North Dakota.

Silent Epidemic

- Brain injuries are often unnoticed or misdiagnosed
- Often are no outward signs
- May have no conclusive measures
- Person looks the same
- Individuals often told they would be fine.
Severity Continuum

- **Severe 5-10%**
  - 80% have long term impairments

- **Moderate 10-30%**
  - 30-50% have long term impairments

- **Mild 75-90%**

**Mild can be a Misnomer**

- 90% of mild TBIs will recover within 6-8 weeks.
- Degree of physical injury does not always determine the degree of difficulty related to long-term functioning.
- **Post-Concussion Syndrome** is the term for individuals who have concussion symptoms more than six months after a concussion.
Changes Over the Years

30 years ago –
Only 50% of those with a TBI survived.

Today –
78% survive a TBI.

Who experiences TBI?

• Anyone can get a TBI!

• Yet some are more at risk than others.
  – Highest risk 0-4 years, 15-24, and 75 years and older.
  – Males are 1.5 times more likely than females to experience TBI.
  – Individuals who have already sustained one or more concussions.
Resulting Disabilities

- Estimates say 15-20% of TBIs will have long term disabilities.
- An estimated 5.3 million Americans have a long-term or lifelong need for help with activities of daily living as a result of TBI.

Estimate of TBI-Disabled Persons in ND: 12,844

Comparison of Disability Prevalence Rates

- 400,000 with Spinal Cord Injuries
- 500,000 with Cerebral Palsy
- 2 million Americans with Epilepsy
- 3 million with Stroke disabilities
- 4 million with Alzheimer’s Disease
- 5 million with persistent mental illness

5.3 MILLION WITH TBI DISABILITIES
- 7.3 million with Developmental Disabilities
A Whole New World!

• No one is prepared for a brain injury.

• Individuals and families are thrown into a whole new world.
  – Medical terms and diagnoses
  – Many different service delivery systems
  – Multitude of unknowns

No Two Brain Injuries Are Alike

As diverse as each human being is, this is how different brain injury can be for each person.

Factors influencing outcomes:
  – Personal
  – Medical
  – Social
Possible Cognitive Consequences:

- Memory, especially short-term memory
- Reduced flexibility of thinking
- Concentration difficulties
- Inability to plan or prioritize
- Multi-tasking

Possible Physical Consequences:

- Difficulty with walking, balance and movement
- Speech impairments such as slow or slurred speech
- Seizure disorders
- Headaches or migraines
- Fatigue and/or pain
Possible Emotional and Behavioral Consequences...

- Impulsivity
- Depression and mood swings
- Lack of self awareness and judgment
- Agitation and aggression
- Difficulty exercising good social judgment

Invisible Disability

- Often times co-morbidities such as depression, SA, PTSD mask the brain injury.
- Recovery does not fall into typical medical or human services model.
- Diagnosis is largely misunderstood within the community.
- Social disabilities often seen as personal choice
Prisons

- Minnesota Prison Study
- 82% of male population reported a TBI at admission
- 96 out of 100 females
  - 77% met the criteria for moderate to severe
  - 54% - highest cause due to domestic violence
- 49 of 50 juveniles
  - Of the 50 subjects, 267 incidents of head injury were reported
  - 66% met the criteria for moderate to severe
  - 90% had at least 4 or more injuries
  - 36% - highest cause due to assault

Homeless Population

- New York Study

- According to the 2006 Wilder Study, 34 percent of homeless adults in Fargo, and 30 percent of homeless adults in Moorhead, have a history that suggests likely traumatic brain injury.
Major Concern

- ND does not have a comprehensive program to serve individuals with TBI
  - No centralized source of TBI information
  - Shortage of TBI specific services
  - Shortage of Strong TBI advocates

Current Effort in ND

- Federal TBI Implementation Partnership Grant
  - 2007-2010
  - $118,000 a year, Local funds will provide $59,000 in match
  - Awarded to ND Department of Human Services
  - Contracted to The UND Center for Rural Health
  - Partners
    - Dakota Medical Foundation
    - Anne Carlsen Center for Children
    - North Dakota Head Injury Association
Current Effort in ND

• New Legislation
  – $$ goes to the Department of Human Services
    • for increase in Voc Rehab
    • for information and referral

• Head Injury Association of ND
  – Revitalized
  – Annual meeting Aug 6th
  – Will be providing information and educational outreach

National Resources

• Brain Injury Association of America
  703-236-6000, www.biausa.org

• National Association of State Head Injury Administrators, www.nashia.org

• TBI Technical Assistance Center, www.tbitac.org

• Center for Disease and Prevention, www.cdc.gov/injury
Resources


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