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*Each year in the United States, an estimated 1.4 million people sustain a TBI.<sup>1</sup>*

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*Each year in the United States, an estimated 80,000 - 90,000 people experience the onset of long-term disability associated with a TBI.<sup>1</sup>*

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*Direct medical costs and indirect costs (such as lost productivity) of TBI are estimated at \$60 billion annually. This number does not take into account returning military service personnel with TBI.<sup>2</sup>*

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*10% to 20% of Marines and Soldiers returning from Afghanistan and Iraq may have experienced brain injuries.<sup>3</sup>*

# TBI: The Invisible Injury

## U.S. Department of Education

A traumatic brain injury (TBI) is a blow or jolt to the head or a penetrating head injury. The injury is caused by falls, motor vehicle crashes, assaults and other incidents. Blasts are a leading cause of TBI for active duty military personnel in war zones.

Any TBI—whether diagnosed as mild, moderate or severe—can temporarily or permanently impair a person's cognitive skills, interfere with emotional well-being and diminish physical abilities.

Individuals with TBI may experience memory loss; concentration or attention problems; slowed learning; and difficulty with planning, reasoning, or judgment. Emotional and behavioral consequences include depression, anxiety, impulsivity, aggression, and thoughts of suicide.

Physical challenges of TBI may include fatigue, headaches, problems with balance or motor skills, sensory losses, seizures, and endocrine dysfunction. TBI often leads to respiratory, circulatory, digestive, and neurological diseases, including epilepsy, Alzheimer's disease, and Parkinson's disease.

Poor outcomes after TBI result from shortened length of stays in both inpatient and outpatient medical settings; insurance coverage denials for rehabilitative treatment; and inadequate funding for public services. Too often individuals with TBI are prematurely discharged to untrained, unsupported family caregivers or inappropriately placed in nursing homes, psychiatric institutions or correctional facilities.

Maximal recovery and long-term health maintenance for people with brain injury can only be achieved through a comprehensive, coordinated neurotrauma disease management system providing for immediate treatment, medically-necessary rehabilitation, and supportive services delivered by appropriately trained TBI specialists in the public and private sectors.

**The Brain Injury Association of America and its nationwide network of advocates call on Congress to enact and fully fund balanced, coordinated and responsible public policy that provides for basic and applied research; acute inpatient and outpatient treatment and rehabilitation; long-term disease management, and appropriate, accessible social services and supports following neurotrauma.**

## **Traumatic Brain Injury Needs U.S. Department Education**

### **National Institute on Disability and Rehabilitation Research Funding**

Private sector payers point to the lack of evidence-based research as a primary reason for coverage denial of medically-necessary inpatient and outpatient rehabilitative treatment for individuals with TBI, particularly for those who need behavioral health services and cognitive re-training. The first step to eradicating this health care disparity requires substantially increased appropriations for applied research conducted by the National Institute on Disability and Rehabilitation Research (NIDRR), which is housed within the Department of Education.

NIDRR is the nation's lead federal agency on rehabilitation and disability research, including critical research related to TBI. The needs and expectations of NIDRR's TBI-related research programs are extraordinary and include development and testing of practice parameters, innovative treatment interventions, and novel diagnostic procedures as well as identification of adverse outcomes and associated risk factors plus maintenance of the only nonproprietary longitudinal database on the course of recovery following TBI.

In addition to their applied research responsibilities, NIDRR grantees serve as informal resource points/technical assistance providers for research and clinical issues in brain injury, increasingly so among VA Centers and military bases caring for blast injury survivors. In fact, the FY2008 Defense Authorization bill, which was recently signed into law, includes specific language directing new TBI research efforts within the Department of Veterans Affairs to collaborate with NIDRR TBI research programs, including the TBI Model Systems of Care.

Last year, Congress provided \$900,000 in additional stopgap funding for the TBI Model Systems of Care program in order to maintain 16 TBI research centers around the country, and to prevent the nation's valuable TBI research capacity from being diminished. It is essential that Congress provide sufficient funding in FY2009 to enable NIDRR to sustain and increase its medical rehabilitation research portfolio and to include its annual allocation of at least \$8.3 million to fund 16 TBI Model Systems research centers.



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*59% of those exposed to a blast and seen at Walter Reed Army Medical Center between Jan 03 and Feb 05 sustained a TBI.<sup>4</sup>*

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*U.S. citizens are five times more likely to sustain a TBI than multiple sclerosis, spinal cord injury, HIV/AIDS and breast cancer combined.<sup>5</sup>*

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*Annually, the Federal government spends less than \$3 per brain injury survivor on TBI research and services.<sup>6</sup>*

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*Each year, 475,000 children in the U.S. sustain a TBI.<sup>1</sup>*

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*TBI is a leading cause of death and disability among youngsters.<sup>5</sup>*

1. CDC, National Center for Injury Prevention and Control, 2006.

2. Finkelstein E, Corso P, Miller T and Associates. *The Incidence and Economic Burden of Injuries in the United States*. New York: Oxford University Press, 2006.

3. *Report to The [Army] Surgeon General Traumatic Brain Injury Task Force*, May 15, 2007.

4. Okie, *N Eng J Med* 2005; 352:2043-47.

5. Brain Injury Association of America, 2006.

6. Denkeler, K. *The Traumatic Brain Injury Act*, *Premier Outlook* 5(1), 35-45.