

Traumatic Brain Injury and Public Services in Michigan



Partner



TBI Services and Prevention Council (SPC)

With continued support of State and Federal funds in Fiscal Year 2011, the Michigan Traumatic Brain Injury Project continued to improve state and local capacity to enhance access to comprehensive, coordinated, person/family directed, and culturally competent services for individuals with traumatic brain injury (TBI) and their family members; to reach out to the most at-risk communities; and to evaluate and improve TBI services. Established in April of 2005, the Michigan TBI Services and Prevention Council (SPC) continues to meet quarterly and provide oversight and guidance to the project. The Council is currently comprised of twenty active members who contribute to one of four subcommittees that focus on specific topic areas. The subcommittees are: 1) Training, 2) Prevention/Outreach, 3) Data, and 4) Policy. The diverse expertise of the SPC provides a well-rounded approach to the prioritization and programming of the grant activities. This reporting period marks the 13th year of the TBI Project in Michigan. Through the combined expertise and coordinated efforts of its members, the SPC provides timely, accurate, and relevant information and resources about TBI on a state and national level. Describing the accomplishments of the SPC and its workgroups, this report highlights recent accomplishments and project activities.

Project Overview and SPC Accomplishments in 2011

- Training public service professionals and the public remains an important focus of the SPC. *The Traumatic Brain Injury and Public Services in Michigan* online training added two new training modules this year, *Pediatric Traumatic Brain Injury* and *Cognitive and Behavioral Consequences of Traumatic Brain Injury in Adults*. Additionally, the training committee expanded the list of professionals who can receive continuing education credits to 13.
- Updated TBI incidence rates from 1999 through 2009 indicated an increase in the number of nonfatal hospital cases in Michigan.
- MDCH submitted the Medicaid Waiver Application and is now awaiting approval.
- Revised the recommendations for the future of the Services and Prevention Council.

Accomplishments Over the Past Five Years

- **2009-2010:** Governor Granholm declared September 23, 2010, Fall Prevention Awareness Day, the Brain Injury Association of Michigan filled a critical TBI Ombudsman position and BIAMI President, Michael Dabbs, and Veteran's program Manager Rick Briggs presented to the U.S. Senate Veterans Affairs Committee and MI House Committee on Health policy.
- **2007-2008:** MDCH and BIAMI collaborated to reach out to returning veterans from Iraq and Afghanistan to conduct regular trainings with troops on brain injury and resources to seeking help.
- **2006:** MDCH and its partners created a new web-based training for providers who serve clients with TBI. Targeted to human service professionals in public agencies and non-profit organizations, the online course is an innovative means to reach and educate more individuals than traditional courses for professional development. Further outreach in 2006, included the "Traumatic Brain Injury Impacts Education and Learning".

Traumatic Brain Injury Training for Public Service Professionals

- The *Traumatic Brain Injury and Public Services in Michigan* online training educates professionals and individuals with TBI and their family members about TBI. This free training, found at www.mitbitraining.org, consists of three self-study trainings including: 1) *Traumatic Brian Injury and Public Services in Michigan*, 2) *Pediatric Traumatic Brain Injury*, 3) *Cognitive and Behavioral Consequences of Traumatic Brain Injury in Adults*. In 2011, 659 people registered for the training. Since tracking of training registrants began in July of 2008, 3,701 trainees have registered.
- The training currently offers the opportunity to earn continuing education credits for the following professionals: Nurses, Educators, Case Managers, Social Workers, Nursing Home Administrators, Licensed Professional Counselors, Certified Disability Management Specialists, Certified Rehabilitation Counselors, Adult Foster Care Workers, and Certified Health Education Specialists, Professional Guardians, Certified Brain Injury Specialists, and Certified Brain Injury Specialist Trainers. One hundred and nineteen professionals have earned continuing education credits in 2011, and 516 over the lifetime of the training.
- The two new additional training modules focus on TBI in pediatric and adult populations. The content of both modules explains the behavioral and cognitive impact of brain injury. These exciting new modules will be posted on the *Traumatic Brain Injury and Public Services in Michigan* online training website located at www.mitbitraining.org, as well as on the Virtual Center of Excellence website located at <http://vceonline.org/VCE-Online-Courses.id.571.htm>



Traumatic Brain Injury Policy Recommendations of the SPC

- Current programs and services for individuals with traumatic brain injury (TBI) and their families are not available to all persons who sustain a brain injury. To address the disparity of available services, the SPC and BIAMI developed a comprehensive statewide plan to address the needs of ALL individuals with brain injuries called the Michigan Brain Injury Act. This act would require the Council, in collaboration with the MDCH, to add definitions of brain injury terms to State law; develop a comprehensive statewide information and referral network for individuals with brain injuries; collect data on the incidence of brain injuries in the State; and make recommendations to address the needs of individuals with brain injuries, including the use of public-private partnerships.
- The SPC and BIAMI are currently drafting legislation requiring private sports and recreation leagues using public facilities to abide by and enforce sports concussion guidelines when applying for or renewing licensing requirements.
- Other issues that are monitored by the Policy committee include maintaining Auto No-Fault insurance, the existing helmet laws, and supporting the Michigan TBI Medicaid Waiver Program.

Traumatic Brain Injury Characteristics in Michigan

The SPC data workgroup presents findings on the incidence of TBI and risk factors for TBI from the analysis of Michigan inpatient and mortality data from 1999 to 2009. The following information describes the incidence of TBI in the state.

How many people in Michigan have a Traumatic Brain Injury?

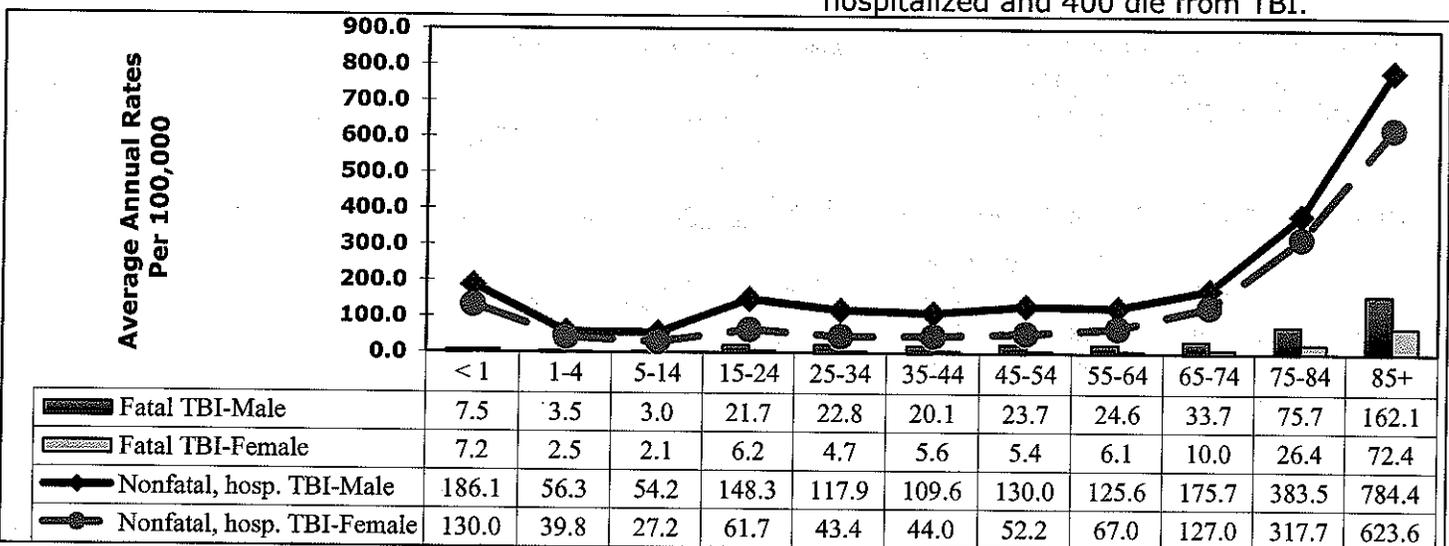
Year	No. of Fatal Cases	Fatal TBI Rates Per 100,000	No. of Nonfatal Hosp Cases	Hosp Rates Per 100,000
1999	1,585	16.1	8,612	87.3
2000	1,591	16.0	8,703	87.4
2001	1,563	15.6	9,275	92.7
2002	1,523	15.2	9,669	96.3
2003	1,538	15.3	9,064	90.0
2004	1,502	14.9	9,547	94.6
2005	1,557	15.4	10,211	101.1
2006	1,550	15.4	10,358	102.6
2007	1,497	14.9	11,373	113.2
2008	1,549	15.5	11,920	119.2
2009	1,447	14.5	12,811	128.5

- On an annual basis, about 58,000 individuals sustain a TBI in Michigan. Out of those approximately:
 - > 1,520 die;
 - > 10,700 are hospitalized; and
 - > 46,000 are treated and released from an emergency department.
- From 1999 to 2009, rates of nonfatal hospitalizations of Michigan residents related to TBI have increased; over the same time period the rate of TBI-related deaths has decreased.

In Michigan, more people than ever are surviving serious TBI and are likely to need life-long services.

Which groups of people are at the highest risk of sustaining a Traumatic Brain Injury?

- Males are almost three times as likely as females to die from a TBI. Males are also twice as likely as females to require a TBI related hospitalization, especially from ages fifteen to twenty-four.
- Adults age 65 years or older have the highest rates of TBI-related hospitalization and death. Annually, 2,500 adults in Michigan ages 65 years and older are hospitalized and 400 die from TBI.



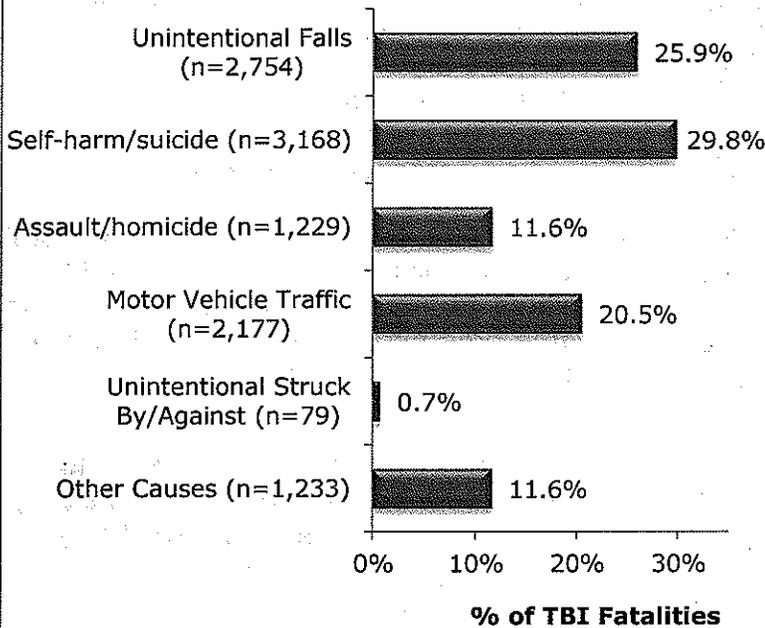
Note: Rates are per 100,000 populations in specified group.

Traumatic Brain Injury Characteristics in Michigan Continued

Additional key findings to date from the analysis of Michigan inpatient and mortality data from 2003 to 2009 describe the leading causes in TBI in the state.

What are the leading causes of Traumatic Brain Injury in Michigan?

**Fatal TBIs by Main Cause of Injury
2003-2009 n=10,640**



Accidental Falls:

- Accidental falls are the leading cause of fatal TBIs among the elderly.
- Accidental falls are also the leading cause of TBI hospitalization for adults aged 65 years and older.
- In all age groups, falls account for nearly half of TBI hospitalizations and over a quarter of TBI deaths.



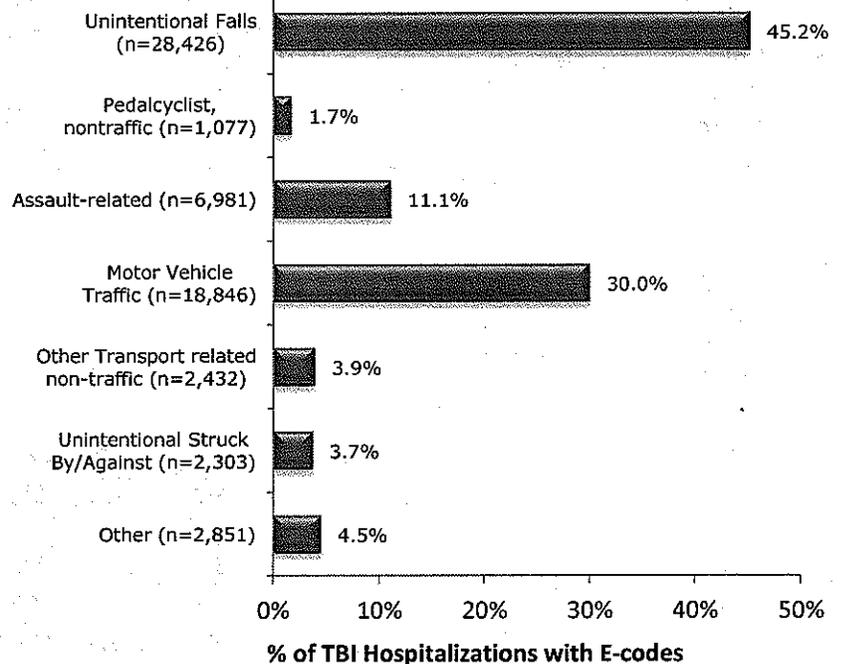
Assaults and Suicides:

- From 2003-2009, assaults have resulted in approximately 1,250 fatal TBIs and 7,000 TBI hospitalizations.
- Self-harm or suicide is the leading cause of death for individuals sustaining a TBI in Michigan.

Motor Vehicle Traffic Crashes:

- Motor vehicle traffic crashes resulted in nearly 20,000 TBI-related hospitalizations and over 2,000 TBI deaths from 2003-2009.

**Nonfatal TBI Hospitalizations by Main Cause of Injury
(2003 to 2009; n=62,916 Hospitalizations with E-codes)**

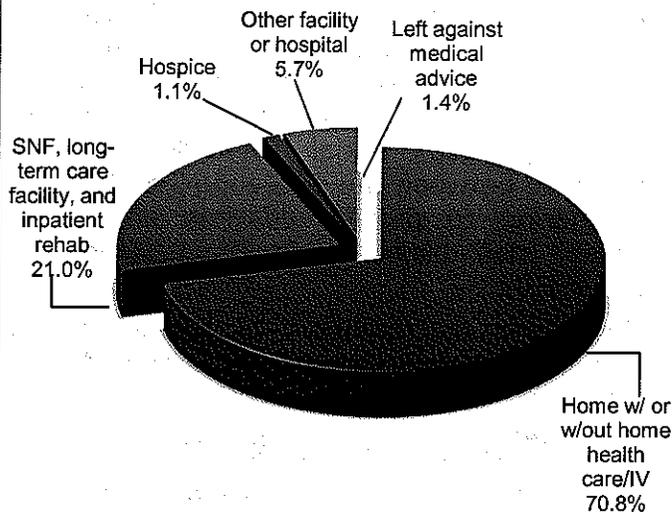


Traumatic Brain Injury Characteristics in Michigan Continued

Further findings from inpatient and mortality data from 2003 to 2009 illustrate the impact of TBI across the State. Using Michigan Medicaid data, members of the data workgroup estimated the costs of traumatic brain injuries in Michigan from 2002 to 2006.

What are the outcomes and the consequences of TBI in Michigan?

Nonfatal Hospitalized TBI Cases by Hospital Discharge Disposition 2003-2009; n=75,284



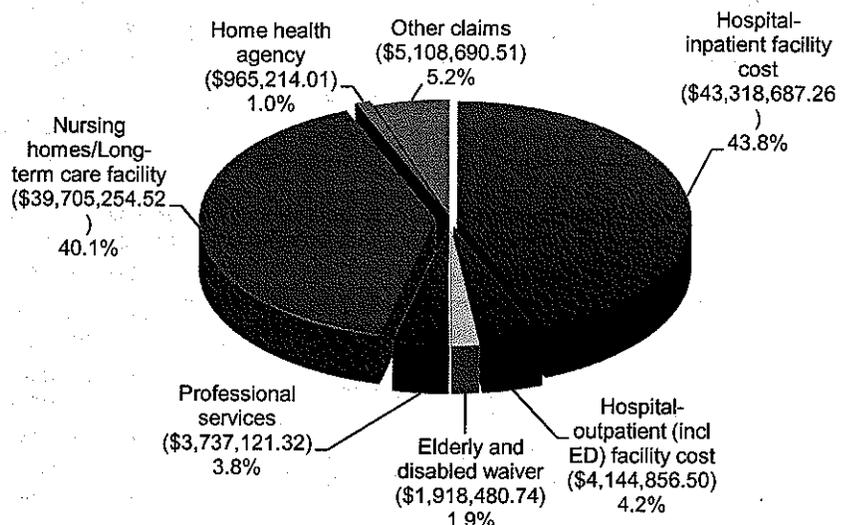
- The majority of identified TBI in Michigan are mild TBI cases that are treated and released from hospital emergency departments.
- About 2,300 Michigan TBI hospitalized cases annually are discharged from hospitals with TBI-related disability requiring rehabilitative and other long-term care stay.
- Analysis of the Long Term Care Minimum Data Set for 2008 collected by all the nursing facilities in Michigan showed that 266 Medicaid nursing home residents have a TBI; 60% of these cases are 64 years of age or younger.

Individuals who have survived a TBI tend to be too young to be placed in a nursing home for the rest of their lives.

What are the costs of TBI to the State of Michigan?

- Currently, the Medicaid TBI Memorandum of Understanding (MOU) Program is the only public service program specifically targeted to the rehabilitation of individuals with TBI.
- Medicaid reimbursed TBI-related services are received by about 29,000 beneficiaries per year (an under-estimate since services related to long-term needs after a TBI might not be identified)
- Michigan Medicaid covers TBI-related hospitalizations of over 3,000 beneficiaries annually.
- The Medicaid Fee for Service (FFS) component pays about \$20 million dollars a year for TBI-related services. A clear underestimate since only one-third of all individuals receiving Medicaid TBI services are enrolled in FFS.
- Nursing home expenses account for 33% while inpatient facility costs account for 44% of the fee for service costs.

TBI Cost Information by Provider Category Medicaid FFS FY2002-2006



Total amount paid for TBI-related FFS claims from FY2002-06 = **\$98,898,304.86.**

Services to Veteran's

- Shock wave blasts from improvised explosive devices, rocket propelled grenades, and land mines are the leading cause of TBIs for active duty military personnel in combat zones. Reports indicate that up to 20% of returning veterans exhibit symptoms consistent with having sustained a TBI during deployment.
- Estimates suggest that as many as 320,000 veterans of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) have sustained a traumatic brain injury.
- The Brain Injury Association of Michigan's Veterans Program hosted its first annual Veterans TBI Summit. The purpose of the summit to provide state-of-the-art information about combat brain injury programs, treatment and research, which will provide optimum outcomes for quality of life and military service reintegration opportunities.
- Conducted awareness trainings to over 600 police officers regarding the issues faced by returning Iraq and Afghanistan combatants with Post Traumatic Stress Disorder (PTSD) and TBI.
- Operation Never Forgotten (ONF) Invisible Wounds Campaign: This is a joint media awareness campaign sponsored by the Brain Injury Association of America (BIAA) and ONF that provides electronic "Invisible Wounds" message billboards along major highways, at major airports, and at VA hospitals. For more information on the campaign, please go to <http://operationneverforgotten.org/>

TBI Prevention & Outreach Activities

- The Representative Council of the Michigan High School Athletic Association (MHSAA) finalized a five-step protocol to follow when an athlete sustains a concussion during a sporting event or game. A player with a possible brain injury, including a concussion, may not return to play that day and will only be allowed to play with written clearance from a Medical Doctor or Doctor of Osteopathic Medicine. For a copy of the form and additional resources, please go to <http://www.mhsaa.com/Schools/HealthSafetyResources.aspx> Initial conversations have occurred between the SPC and MHSAA about partnering to provide coaches and other school staff trainings on concussions and other TBIs.
- Governor's proclamation for the 2011 Fall Prevention Awareness was signed by Governor Rick Snyder.

Ombudsman Activities

- Began a working relationship with *Arab Community Center for Economic and Social Services (ACCESS)*.
- Serve on the *Michigan Developmental Disability Council's* Education Work Group.
- Serve on the *Family2Family Health Information and Education Center* work group.
- Became an active partner (BIAMI) with the *Aging Disability Resource Center* of Hillsdale, Jackson and Lenawee Counties Region 2AAA.

A series of educational materials about TBI and services for eligible individuals is available for free by download at www.Michigan.gov/tbi. Products may also be ordered by emailing info@mitbitraining.org.

For the General Public and Consumers

- *Michigan Resource Guide for Persons with Traumatic Brain Injury and their Families* (Download available in English, Spanish, and Arabic)
- "Resources for Persons with Brain Injury and their Families" (Brochure available in English, Spanish, and Arabic)
- "Resources for Veterans with Brain Injury and their Families". (Brochure available in English, Spanish, and Arabic)

For Service Providers

- Traumatic Brain Injury Online Training for Public Service Providers: www.mitbitraining.org
- *Access Guidelines to State Services for Persons with Traumatic Brain Injury* (online only)
- *Traumatic Brain Injury Provider Training Manual* (online only)
- "Important Information about Working with Persons with Brain Injury and their Families" (Brochure)

For more information about public services for people with TBI, please contact:
Michael Daeschlein, State Administrative Manager of Home and Community-Based Services at
(517) 335-5322 or at daeschleinm@michigan.gov