

# Traumatic Brain Injury and Public Services in Michigan

# **TBI Services and Prevention Council (SPC)**

With continued support of State and Federal funds in 2012 and 2013, the Michigan Traumatic Brain Injury Grant 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 grant. The Council is comprised of 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 14th year of the TBI Grant 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. This report highlights recent accomplishments and project activities of the SPC and its subcommittees.

# **Grant Overview and SPC Accomplishments in 2012-2013**

- Training service professionals and the public remains an important focus of the SPC. The *Michigan Traumatic Brain Injury Online Training* will soon feature a fourth online training titled *Traumatic Brain Injury and Substance Use.* Professionals are still able to earn continuing education credits toward their respective licenses for successfully completing the training.
- Updated TBI incidence rates from 1999 through 2010 indicated an increase in the number of nonfatal hospitalized cases in Michigan.
- MDCH submitted the Medicaid Waiver Application and is in the process of making revisions.
- Prevention materials, including lesson plans, regarding student safety during seasonal activities were distributed to Michigan educators.

# **Accomplishments during the Past Five Years**

- **2011-2012:** Launched two new online trainings: *Pediatric Traumatic Brain Injury* and *Cognitive and Behavioral Consequences of Traumatic Brain Injury in Adults*; expanded the list of professionals who can earn continuing education credits for successfully completing the training to 12; updated findings from the analysis of Michigan inpatient and mortality data from 1999 to 2010; and MDCH submitted the Medicaid Waiver Application.
- 2009-2010: Governor Granholm declared September 23, 2010 Fall Prevention Awareness Day; the Brain Injury Association of Michigan (BIAMI) filled a critical TBI Ombudsman position; and BIAMI President Michael Dabbs and Veterans 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 veterans returning from Iraq and Afghanistan to conduct regular trainings with troops on brain injury and available resources.

# Michigan Traumatic Brain Injury Online Training Updates

• The Michigan Traumatic Brain Injury Online Training provides education about TBI to professionals as well as individuals with TBI and their family members. The free web-based training, located at <a href="https://www.mitbitraining.org">www.mitbitraining.org</a>, consists of three self-study trainings on the following topics: 1) Traumatic Brian Injury and Public Services in Michigan, 2) Pediatric Traumatic Brain Injury, and 3) Cognitive and Behavioral Consequences of Traumatic Brain Injury in Adults. In 2012, 993 people registered with the training website. Since tracking of training registrants began, over 5,400 trainees have registered.



- The following professionals have the opportunity to earn continuing education credits for participating in the online trainings: Nurses, Educators, Case Managers, Social Workers, Nursing Home Administrators, Certified Disability Management Specialists, Certified Rehabilitation Counselors, Adult Foster Care Workers, Certified Health Education Specialists, Professional Guardians, Certified Brain Injury Specialists, and Certified Brain Injury Specialist Trainers. Two hundred and fifteen professionals earned continuing education credits in 2012, and 1,000 have earned continuing education credits over the lifetime of the three trainings.
- Coming Soon: The training website will host a fourth training titled Traumatic Brain Injury and Substance Use prepared by Dr. Carolyn Lemsky, neuropsychologist, Clinical Director at Community Head Injury Resource Services of Toronto, and Director of the Substance Use and Brain Injury Bridging Project. This exciting new training will be available on the Michigan Traumatic Brain Injury Online Training website located at <a href="https://www.mitbitraining.org">www.mitbitraining.org</a>.

# **SPC Policy Recommendations on Traumatic Brain Injury**

- 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 establish an advisory council to the MDCH Director with specific reports and tasks to include:
  - developing a comprehensive statewide information and referral network for individuals with brain injury (BI);
  - collecting data on the incidence of BI in the state; and
  - making recommendations to address the needs of individuals with BI, including the use of public private partnerships.
- Michigan's Sports Concussion Law was enacted on June 30, 2013. Michigan was the 39<sup>th</sup> state to enact a law that regulates sports concussions and return to athletic activity. More information is available online at www.michigan.gov/sportsconcussion.
- Other issues that are monitored by the SPC Policy Committee include **Michigan's Auto No**-Fault Insurance and supporting the Michigan TBI Medicaid Waiver Program.

# **Highlights of the MDCH TBI Grant**

# Traumatic Brain Injury Characteristics in Michigan

The SPC Data Committee presents findings on the incidence of TBI and risk factors for TBI from the analysis of Michigan inpatient and mortality data from 1999 to 2010. The following information describes the incidence of TBI in Michigan.

How many people in Michigan have a Traumatic Brain Injury?

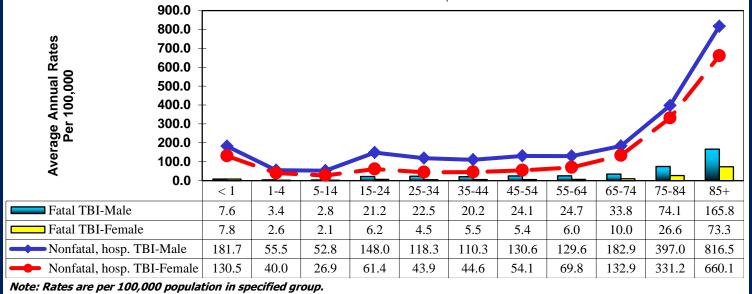
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Year	No. of Fatal Cases	Fatal TBI Rates Per 100,000	No. of Nonfatal Hosp. Cases	Hosp. Rates Per 100,000
1999	1,585	16.1	8,612	87.3
2000	1,591	16.0	8,703	87.4
2001	1,563	15.6	9,275	92.7
2002	1,523	15.2	9,669	96.3
2003	1,538	15.3	9,064	90.0
2004	1,502	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
2010	1,520	15.4	12,565	127.1

- On an annual basis, about 58,500 individuals sustain a TBI in Michigan. Out of those approximately:
  - ▶1,520 die;
  - ▶10,980 are hospitalized; and
  - ▶46,000 are treated and released from an emergency department.
- From 1999 to 2010, rates of nonfatal hospitalizations of Michigan residents related to TBI have increased; over the same time period the rate of TBIrelated deaths have remained relatively steady.

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 TBI?

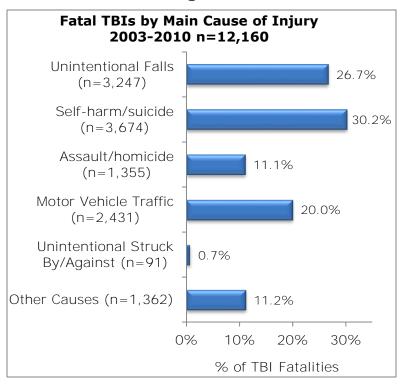
- Males are almost three times as likely as females to die from a TBI and are twice as likely as females to require TBI-related hospitalization.
- Adults age 65 years or older have the highest rates of TBI-related hospitalization and death. Annually, 3,800 adults in Michigan ages 65 years and older are hospitalized and 520 die from TBI.



# **Traumatic Brain Injury Characteristics in Michigan Continued**

Additional key findings to date from the analysis of Michigan inpatient and mortality data from 2003 to 2010 describe the leading causes of TBI in the State.

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



### **Accidental Falls:**

- Falls account for nearly half of TBI hospitalizations and over a quarter of TBI deaths.
- 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.

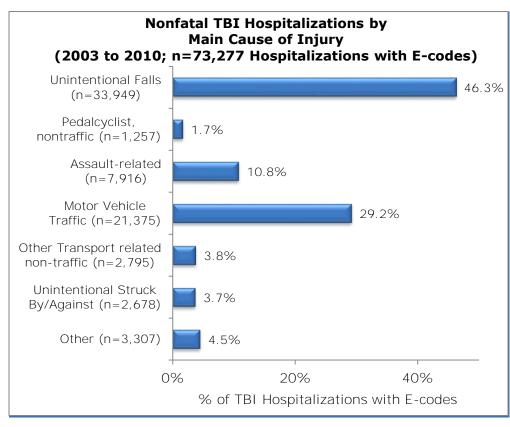


### **Assaults and Suicides:**

- From 2003 to 2010, assaults have resulted in approximately 1,355 fatal TBIs and 7,916 TBI hospitalizations.
- Self-harm or suicide is the leading cause of death for individuals sustaining a TBI in Michigan.

# Motor Vehicle Traffic Crashes:

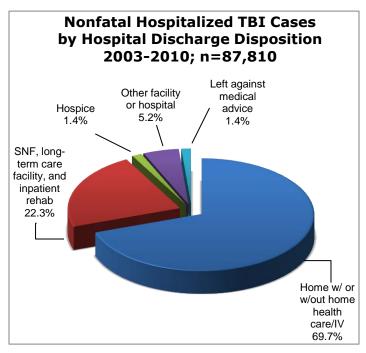
 Motor vehicle traffic crashes resulted in over 21,000 TBI-related hospitalizations and nearly 2,500 TBI-related deaths from 2003-2010.



# **Traumatic Brain Injury Characteristics in Michigan Continued**

Further findings from inpatient and mortality data from 2003 to 2010, analysis of Michigan Medicaid data from 2002 to 2006, and analysis of the Long Term Care Minimum Data Set for 2008 illustrate the impact of TBI across the State.

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

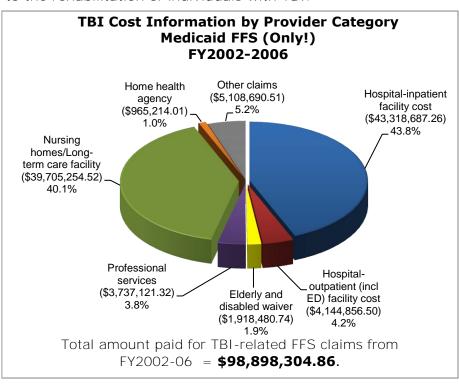


- The majority of identified TBI in Michigan are mild TBI cases that are treated and released from hospital emergency departments.
- About 2,400 Michigan TBI hospitalized cases annually are discharged from hospitals with TBI-related disability requiring rehabilitative and other long-term care stays.
- 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 TBIrelated 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 and other long term care facility expenses account for 40% while inpatient facility costs account for 44% of the Fee for Service costs.



### **Services to Veterans**

- For over 12 years, shock wave blasts from improvised explosive devices, rocket propelled grenades, and land mines have been the leading cause of TBIs for active duty military personnel in combat zones. Reports indicate that up to 18% 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 in the course of their service.
- The Brain Injury Association of Michigan's Veterans Program hosted its second annual Veterans TBI Summit. The purpose of the summit was to provide information about combat brain injury programs, treatment, and research, which will provide optimum outcomes for quality of life and military service reintegration opportunities.
- The BIAMI Veterans Program conducted 149 awareness interviews and presentations to an estimated audience in excess of 21,000 individuals.
- The BIAMI Veterans Program hosted 10 Veteran outdoor recreation events for more than 1,200 Veterans and guests for the 7<sup>th</sup> consecutive year.
- The telephone number for the BIAMI Veterans Program is 800-772-4323.

## **TBI Prevention & Outreach**

• The SPC Prevention Committee distributes prevention materials, including lesson plans, regarding student safety during seasonal activities to Michigan educators.

# **Ombudsman Activities**

- Assisted in the development of an "Adopt a Family" program for Christmas of 2012.
  Corporate members generously donated gift cards, gas cards and money to families with a loved one with a brain injury who were facing severe financial difficulties. Twenty families were helped.
- Developed surveys geared towards survivors and caregivers. Results of these surveys were used for BIAMI's Strategic Planning.
- Coordinated training in Grand Rapids on an "Introduction to Brain Injury" for special education staff, social workers, survivors and families with Michigan Family2Family Health Information Education Center.
- Developed relationships with two additional domestic violence shelters in hopes of presenting a one day conference on domestic violence and brain injury.
- Worked with Brett Williams, Mid-Regional Coordinator for the Michigan Consumers for Healthcare, to develop and schedule FREE community forums on the Affordable Care Act. Fifteen forums have been scheduled throughout the state of Michigan.

A series of educational materials about TBI and services for eligible individuals is available for free by download at <a href="www.michigan.gov/tbi">www.michigan.gov/tbi</a>. Products may also be ordered by emailing <a href="mailto:info@mitbitraining.org">info@mitbitraining.org</a>.

### **For the General Public and Consumers**

- Michigan Resource Guide for Persons with Traumatic Brain Injury and their Families
- "Resources for Persons with Brain Injury and their Families" (Brochure)
- "Resources for Veterans with Brain Injury and their Families" (Brochure)

### **For Service Providers**

- Michigan Traumatic Brain Injury Online Training: <a href="https://www.mitbitraining.org">www.mitbitraining.org</a>
- "Important Information about Working with and Caring for Persons with Brain Injury" (Brochure)

For more information please contact Michael Daeschlein, MDCH at (517) 335-5322 or at <a href="mailto:daeschleinm@michigan.gov">daeschleinm@michigan.gov</a>

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