
In accordance to P.L. 2001, c 332 (N.J.S.A. 30.6F-B, 7. The Department of Human Services shall report annually on the status of the NJ Traumatic Brain Injury Fund to the Governor and to the Senate and General Assembly committees with responsibility for issues affecting health or human services.

The Fund currently has over 2,200 active recipients. The total number of applicants in the database is over 8,500. The current annual cap is $10,000, with a lifetime cap of $100,000. To date, no applicant has reached their lifetime cap. Average awards for the year are over $2,000. Activities in 2014 included updating the database with current information. In July 2014, the Fund raised the annual cap to $10,000 from $6,000, as the financial stability of the program improved dramatically.

In addition to providing supports to survivors of traumatic brain injury, the Fund also contracts with the Brain Injury Alliance (BIA) of New Jersey to provide outreach and education on brain injuries. The Alliance provides many services in conjunction with the Fund’s objectives for New Jersey residents who have survived a traumatic brain injury (See section XVIII).
I. Authority

Statutory Citation: P.L. 2001, c 332 (N.J.S.A. 30:6F-6B)
Regulatory Citation: N.J.A.C. 10:141

II. Purpose of the Traumatic Brain Injury Fund

The purpose of the Traumatic Brain Injury (TBI) Fund is to support New Jersey residents who have survived a Traumatic Brain Injury to obtain post-acute and rehabilitative services and supports they need. The Fund sponsors services and supports that foster independence and maximize quality of life. Also, in accordance with its legislation, the Fund provides support for education and outreach for prevention of brain injuries through a contract with the Brain Injury Alliance of New Jersey (BIANJ).

III. Eligibility for the TBI Fund

- The Fund is the payer of last resort and must be utilized after other benefits and funding sources have been exhausted, or do not exist.
- Individuals are eligible for up to $15,000 per Funding year with a lifetime cap of $100,000.

IV. Eligibility Requirements of the TBI Fund

Fund applicants must meet the following three criteria:

1. Provide medical documentation of a traumatic brain injury, as defined by the Centers for Disease Control (CDC)
2. Must be a NJ resident for at least 90 days prior date of application
3. Have liquid assets of less than $100,000 (primary residence, and one vehicle not included)

V. Application Process for the TBI Fund

When an application request is made, Fund staff send out an application (to be completed by the applicant, a family member or guardian) and medical document forms, which are completed and signed by a physician who can verify the clinical information about the client. If the applicant requires assistance completing the application, Fund staff may assist over the phone, or a case manager may come to the home of the applicant and assist with completing the application.

Once all documents are received by the Fund, eligibility is determined by a clinical specialist or the Fund Manager, and if deemed eligible, the application is forwarded to a contracted case management agency. Case managers are assigned based upon the county in which an applicant lives.

A case manager is assigned, to contact the applicant, family member or guardian to make an appointment for an assessment. When the case manager meets with the applicant, family member and/or guardian, socioeconomic information as well as benefits they may be receiving (Medicare, Medicaid, etc.), dates of when the injury occurred and how the injury was sustained is gathered.
VI. Role of the TBI Fund Case Manager
Based upon that interview, the case manager writes a support plan detailing the services the client has requested.

Plans submitted by case managers are screened by Fund staff to ensure adherence to Fund regulations, and then abstracted for consideration by the Review Committee.

Upon determination of the committee, letters are mailed to clients informing them of the committee’s decision. The Committee may decide to approve, modify or deny a plan.

Approval letters, signed by the Fund Manager, are mailed to clients, along with letters of guarantee of payments to the approved provider(s), with copies of both to the assigned case manager, and hard copies are filed in hard copy and electronic format in clients folders.

Upon receipt of the approval letters the case manager informs the client and the provider(s) that services may begin. A schedule and/or appointment is arranged with the client and provider.

The guarantee of payment (GOP) letter includes the services approved, the total amount of funding approved, and the beginning and ending dates services must be performed.

Included in each GOP letter is the following statement, “It is the responsibility of the provider to ensure that the amount billed does not exceed the award amount or valid date. The TBI Fund is not responsible for the cost of any supports, items or services beyond the above award or date. Any additional treatments other than those listed above require Fund approval prior to rendering service. The TBI Fund is the payer of last resort.”

In the event a plan is denied by the Committee, the client has the right to reconsideration. A written request for reconsideration must be received within 30 calendar days of the date of the denial letter, and must state the reason(s) why the client disagrees with the decision. The client may provide additional information and/or supporting documentation with their request for an appeal.

VII. Definition of Traumatic Brain Injury
The Fund recently adopted amendments to its regulations at N.J.A.C. 10:141. These amendments include a change in the definition of Traumatic Brain Injury that is used to determine eligibility for benefits from the Fund. The Fund now uses the Federal CDC definition for traumatic brain injury, which states, in part, “A TBI is caused by a bump, blow or jolt to the head or a penetrating head injury that disrupts the normal function of the brain.”
VIII. Common Causes for Traumatic Brain Injury
According to the Centers for Disease and Control Injury Prevention Center, the leading causes of traumatic brain injury nationally are:

- Falls: 40.5%
- Unknown/Other: 19.0%
- Motor Vehicle: 14.3%
- Struck by/Against: 15.5%
- Assault: 10.7%

More than half of all traumatic brain injuries to people under the age of 65 years are a result of motor vehicle crashes. Falls are the leading cause of head injuries in people over 65 years of age or under the age of 14.

Alone or in combination with other injuries about 2.5 million emergency department visits (ED), hospitalizations, or deaths were associated with TBI in 2010 in the United States.

IX. Symptoms of Traumatic Brain Injury
People who sustain a head injury may experience many different symptoms, including but not limited to:

- loss of consciousness
- concussion - caused by sudden impact, blood vessels may stretch causing damage to cranial nerves
- memory loss (long and/ or short term)
- headache
- confusion
- difficulty speaking/hearing/vision loss
- depression, a change in personality

Open head injuries may cause bleeding, swelling and bruises on the head.

X. Common Causes for Acquired Brain Injury
An acquired brain injury is an injury to the brain, which is not hereditary, congenital, degenerative, or induced by birth trauma. An acquired brain injury is an injury to the brain that has occurred after birth.

Types of acquired brain injury include, but are not limited to:

- Hypoxia - Deficiency in the amount of oxygen reaching body tissues
- Encephalitis- Swelling of the brain caused by virus
- Menengitis & Septicemia
- Tumor
- Stroke (CVA)- suspension of blood supply to an area of the brain
- Anoxia – loss of oxygen to the brain
- Diffuse Anoxal Injury
- Aneurysm
- Brain bleed
- Toxicity- overuse of substances
XI. History of the TBI Fund

In 2002, through a surcharge on New Jersey motor vehicle registrations, the State of New Jersey established the TBI Fund (PL 2001, Chapter 332, Section 5.). The Department of Human Services, through the Division of Disability Services administers the program. It took two years to start the Fund operations because regulations had to be created and published in the NJ Register, forms for application were developed, procedures were created and staff was hired.

The Fund began operations in 2004. The first application request was received on May 3, 2004.

XII. New Jersey Advisory Council on Traumatic Brain Injury

Legal Authority: Executive Order # 84 of 05/28/98

The TBI Advisory Council is charged with the following: (a) advise and make recommendations to the Department of Human Services and the other related State agencies on ways to improve services regarding traumatic brain injury, including the coordination of such services between public and private entities; (b) encourage citizen participation through the establishment of public hearings and other types of community outreach and prevention activities; (c) encourage and stimulate research and prevention activities; and oversee any programs created under federal Public Law 104-166 known as the Traumatic Brain Injury Act and any successive amendments to said Act, and report to the federal government regarding such programs. The advisory council oversees the program and makes recommendations at quarterly meetings.

The statute governing the Advisory Council states the following:


3. a. There is established in the Department of Human Services the New Jersey Advisory Council on Traumatic Brain Injury.

   b. The council shall be composed of 26 members as follows: the Commissioners of Human Services, Education, Health and Senior Services, Community Affairs, Labor and Banking and Insurance, the Attorney General and the State Treasurer, or their designees, who shall serve ex officio and 18 public members, who shall be appointed by the Governor, with the advice and consent of the Senate. Of the public members, eight shall be survivors of traumatic brain injury or the family members of these persons and at least five shall be representatives of the following groups: public or private health-related organizations, disability advisory or planning groups within the State, the Brain Injury Alliance of New Jersey, injury control programs at the State or local level, and the Center for Health Statistics in the Department of Health and Senior Services for data research purposes.

   c. Public members shall serve for a term of three years from the date of their appointment and until their successors are appointed and qualified; except that of the members first appointed, six shall serve for a term of one year, six shall serve for a term of two years and six shall serve for a term of three years. Vacancies shall be filled for the balance of the unexpired term in the same manner as the original appointments were made. A member of the council shall be eligible for reappointment.
d. The public members who are serving on the New Jersey Advisory Council on Traumatic Brain Injury established by Executive Order No. 84 of 1998, on the effective date of this act may complete the duration of their term as members of the council established pursuant to this act and are eligible for appointment to the council established pursuant to this act.

e. The members of the Council shall meet quarterly and the Commissioner of Human Services, or his designee, shall serve as chair of the Council.

f. The members of the Council shall serve without compensation, but shall be reimbursed for necessary and reasonable expenses actually incurred in the performance of their duties, within the limits of funds appropriated or otherwise made available to the council for this purpose.

C.30:6F-4 Duties of the Council.

4. The council shall:

a. Advise and make recommendations to the Department of Human Services and other related State agencies on ways to improve and develop services regarding traumatic brain injury, including the coordination of these services between public and private entities;

b. Encourage citizen participation through the establishment of public hearings and other types of community outreach and prevention activities;

c. Encourage and stimulate research, public awareness, education and prevention activities;

d. Oversee any programs created under the federal law, Pub. L.104-166, known as the Traumatic Brain Injury Act, and any successive amendments to that act, and report to the federal government regarding these programs; and

e. Advise the Commissioner of Human Services on the administration of the Traumatic Brain Injury Fund established pursuant to section 5 of this act.

XIII. TBI Fund Review Committee

The review committee hears abstracts of support requests (care plans) written by case managers to determine the outcome of those requests based upon the guidelines and regulations of the Fund. The committee consists of the Director of the Division of Disability Services, a member of the Brain Injury Alliance of NJ, a family member of a brain injury survivor, a brain injury survivor, a professional in brain injury, and two members of the advisory council. The committee meets approximately six times a year.

Among the criteria the Committee reviews are the following:

- Ensures the request has a clear link to traumatic brain injury
- There is an attainable outcome and need or necessity
- Clear longevity of service when sponsorship is over
- The plan contains a good use of Fund resources
- The request made is for more than just financial relief, and has a rehabilitative goal
- The committee approves over 95% of plans presented
XIV. Services and Supports

Among the eligible services covered by the Fund (but not limited to):

• Cognitive Therapy – to improve memory, organization, management of life skills, etc.
• Assistive technology – computers for cognitive rehabilitation, GPS, adaptive software
• Home / Vehicle Modifications – ramps, accessibility, lifts, etc.
• Pharmaceuticals – to treat conditions such as: pain, anxiety, memory loss, etc.
• Neuro - ophthalmology, vision care, prisms, glasses
• Household and Financial Management – formulate strategies for living independently
• Companion Care – to perform household tasks, errands, meal preparation, etc.

*All services covered must be brain injury related, and not covered by any insurance or funding source, by regulation.

XV. National Statistics on TBI

• 5.3 million people have a brain injury in the U.S., equivalent to 2% of the population
• A brain injury occurs every 23 seconds and 1.4 million people are hospitalized each year
• 235,000 will survive after hospitalization
• Approximately 80,000 - 90,000 will have permanent injuries
• 50,000 will not survive
• Males sustain almost 3 times the number of brain injuries than females
• Motor vehicle collisions are the leading cause of brain injuries
• Leading cause of brain injury in children under 18 are falls and sports related injuries.
• The economic consequences of the resulting physical disabilities are enormous.
• Medical and long term care costs to the nation’s economy are estimated to be $48 billion dollars annually

*Statistics courtesy of Center for Disease Control and Prevention 2015

XVI. Traumatic Brain Injury in New Jersey

• There are approximately 13,000 to 16,000 TBIs in New Jersey each year, with an estimated 1,000 being fatal. In fact, many TBI’s go unreported.
• Approximately 175,000 New Jersey residents suffer from traumatic injuries that damage the brain.
• Since 2000, falls have been the leading cause of TBI in New Jersey, responsible for more than 20% more TBIs than vehicle crashes.
• Self-inflicted TBI, mostly gunshot wounds, are by far the most lethal, with nearly 97% resulting in death. Males are 13 times more likely to sustain a TBI due to self-injury than women.
• Traumatic Brain Injuries rates rise greatly after age 65, mostly due to slip and falls; however, a majority of TBI’s occur in people under 35 years of age. These statistics are similar across all racial and ethnic groups.
• The personal and emotional toll on individuals and families with brain injuries is incalculable.

Statistics Courtesy: New Jersey Department of Health
Rates are age-adjusted to the US 2000 Standard population.
Source: 2010 CNS Injury Surveillance data, OISP, CHS, NJDHSS
New Jersey Commission on Brain Injury Research, 2015
### Hospitalizations for TBI by cause of injury, New Jersey, 2000-2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Falls #</th>
<th>Falls %</th>
<th>Motor vehicle crashes #</th>
<th>Motor vehicle crashes %</th>
<th>Assault #</th>
<th>Assault %</th>
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<td>2000</td>
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<td>1,717</td>
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<td>616</td>
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*Hospitalization data are from the New Jersey Central Nervous System Injury Surveillance, 2015.

### Percentage Rankings of Active TBI Fund Applicants by County

1. Ocean County 10.0% 229 # of -TBI Fund Clients
2. Camden County 9.0% 213
3. Middlesex County 9.0% 198
4. Burlington County 8.0% 182
5. Monmouth County 8.0% 169
6. Bergen County 6.0% 140
7. Essex County 6.0% 127
8. Mercer County 6.0% 117
9. Gloucester County 5.0% 116
10. Morris County 4.0% 95
11. Union County 4.0% 86
12. Atlantic County 4.0% 83
13. Somerset County 4.0% 83
14. Hunterdon County 3.0% 68
15. Passaic County 3.0% 65
16. Hudson County 3.0% 62
17. Sussex County 3.0% 59
18. Cumberland County 3.0% 54
19. Warren County 2.0% 50
20. Cape May County 1.0% 31
21. Salem County 1.0% 26
Major Causes for TBI
Brain injuries affect thousands of New Jersey residents every year. Traumatic brain injuries (TBI) are most often caused by a blow or jolt to the head, and can severely disrupt normal brain functions.

The top 3 causes of TBI with Fund clients are as a result of:
1. Slip & Falls
2. Motor Vehicle/Motorcycle / Pedestrian Accidents
3. Assaults/Gunshot Wounds

(These incidents are on par with the overall ratios exhibited within the state)

XVII. Thirteen Year Fiscal Review of the TBI Fund – (2003-2015)

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues</th>
<th>Expenditures</th>
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<td>2008</td>
<td>$4,293,410</td>
<td>$5,889,069</td>
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<tr>
<td>2009*</td>
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<tr>
<td>2010</td>
<td>$3,456,402</td>
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<tr>
<td>2012</td>
<td>$3,585,572</td>
<td>$1,694,556</td>
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<tr>
<td>2013</td>
<td>$3,594,404</td>
<td>$4,982,707**</td>
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<tr>
<td>2014</td>
<td>$3,651,705</td>
<td>$4,190,084***</td>
</tr>
<tr>
<td>2015</td>
<td>$3,722,995</td>
<td>$3,103,699.81****</td>
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*Note- $2,179,000.00 was taken from the Fund’s surplus in 2009. The money was returned, and then paid back in 2010. The Fund was operating with a surplus until 2007, when expenditures increased due to the number of applicants increasing.

**Note: In 2013, $4,145,000 was re-allocated to the TBI Waiver due to a Fund surplus, and waiver deficit, to allow brain injury funding to remain within programs that serve the BI community. (Fund Regulations (N.J.A.C. 10:141)

***Note: In 2014, there was a $582,487.41 carry over from FY13, for a total of $4,234,192.

****Note: In 2015, there was a $135,244.44 carry over from FY14, for a total of $3,103,699.81.
XVIII. Education and Outreach

The Fund is also to provide education and outreach to raise public awareness and prevention of brain injury. Through legislation, the Brain Injury Alliance of New Jersey (BIANJ) is contracted with this responsibility.

Using the Fund’s purposes as objectives, the BIANJ focuses on four primary program goals.

The first is the promotion of the TBI Fund, as well as other brain injury resources.

Another important aspect is publicizing the government’s commitment to devoting a portion of the Fund’s resources to assist people better understand the significance of brain injury on the lives of New Jersey citizens, and ways to prevent brain injury.

The second goal is to provide information about traumatic brain injury to those directly affected by injury. This includes consumers and professionals.

Training sessions are scheduled by the BIANJ throughout the year titled, “Brain Injury Basics” and “Brain Injury 101”, to educate brain injury survivors and their families about brain injury. The BIANJ also has an Information and Referral Department, as well as a library of resources available to survivors, families and professionals.

Family Support Specialists meet with families to assist them with information and resources that may be available to them.

The third goal is to raise awareness of traumatic brain injury, its high incidences and its prevention. The general public is the target for these activities.

The fourth goal is targeted public campaigns for brain injury prevention. Other aspects of brain injury, such as falls by elders, sports concussions, and automobile crashes, have been subjects of these campaigns.

In addition to the above services, the BIANJ also provides: summer respite programs, county based support groups; mentor programs; family support and care coordination; injury prevention services, and systems advocacy.

XIV. The Traumatic Brain Injury Fund Today and Beyond

In 2015, the Fund produced a new updated tri-fold brochure to use for outreach to promote the Fund. They were distributed at all events and presentations and meetings.

The Fund manager presented at several events, including those hosted by the BIANJ, such as, their annual and regional seminars. Meetings and presentations were also held at several trauma units and rehab facilities throughout the state to increase awareness of the Fund to their patients. New case managers were also trained throughout the year.

2015 also saw the Fund end the year with a surplus. The Fund currently is serving over 2,000 clients with traumatic brain injuries. Service requests submitted by case management agencies are being processed and reviewed by the committee and services are being rendered on a timely basis, usually within two to four months from date of application.

Approximately 20 new application requests per month are being received by the Fund, with approximately 90% becoming new referrals to case management agencies.
The most frequently requested services include:

- Cognitive therapy
- Assistive technology items and training
- Household and Financial Management Services
- Home & Vehicle Modifications

In 2016, the Fund will continue to promote services and attend events and give presentations for outreach and education to facilities, agencies, TBI support groups and audiences during the year. Case worker trainings will continue throughout the year to enhance their current knowledge, and train new employees of case management agencies.

The Fund database will be revised and updated, and entries will be updated and revised, as needed.

**XV. Case Histories from the TBI Fund**

**GC** is a 44 year-old divorced male from Essex County who was injured while working on the roof of his mother’s house. He was cleaning the gutters, slipped and fell 25 feet, causing extensive injuries to his back, left leg and head. He was unconscious when the ambulance arrived, and taken to a local trauma center. He then spent several weeks in the hospital recovering from surgeries that had to be performed. The hospital neurologist determined **GC** had a Traumatic Brain Injury in addition to the several orthopedic injuries he sustained with his fall. Once he was discharged from the hospital, **GC** spent several months in rehab. In order to be sent home, he needed modifications to his house so he could enter and exit safely.

The TBI Fund paid for grab bars throughout his home. It also replaced his stairs with low-rise, long tread stairs to allow him to walk up the front steps easier and unassisted.

**PB** is a 59 year-old male from Union County who sustained a Traumatic Brain Injury as a result of a slip and fall accident when there was ice on his driveway. As a result of his TBI, **PB** could not return to work, due to memory loss and physical pain. He became very easily agitated due to his brain injury. His health insurance provided medical coverage, however the Fund was asked to pay for life skills training, so he would be able to re-acclimate himself into the community. As a result of this assistance, he was able to move back into his apartment and live independently once again.

**MP** is a 37 year-old single female from Sussex County, who sustained a TBI while a passenger in a friend’s car when another vehicle ran a stop sign.

**MP** requested funding for assistive technology equipment to assist her with her memory loss. The Fund paid for an Assistive Technology Evaluation, which recommended a GPS for directions while driving, an iPad for her to use to pay her monthly bills, and use the calendar feature for reminding her of medical and personal appointments. This technology has allowed **MP** to remain current on her bills, and to drive herself to and from appointments safely, without getting lost.