

# Kentucky Traumatic Brain Injury Trust Fund Board of Directors



## Annual Report

July 1, 2014 through June 30, 2015

Cabinet for Health and Family Services  
Department for Aging and Independent Living



December 2015

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**Board of Directors  
Kentucky Traumatic Brain Injury Trust Fund  
Fiscal Year 2015**

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Brain Injury Alliance of Kentucky  
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## **Kentucky Brain Injury Trust Fund**

### **A Message from the Board of Directors' Chairperson, Mary Hass**



The Kentucky Traumatic Brain Injury Trust Fund is a substantial mechanism of funds needed to service the large numbers of persons affected by brain injury across the Commonwealth. Since its inception in 1998, the TBI Trust Fund has provided over \$30 million dollars of services to brain injury individuals over the course of 17 years.

The Fund has been able to fill in the gaps of needs of individuals so they can remain in their homes and communities. It has done so under the charge of KRS 211.470 to 211.478 and the mandate of being the payor of last resort. Unfortunately, over the course of these 17 years, the TBI Trust Fund has been the only funding source for many individuals severely affected by brain injury since the Medicaid brain injury waivers continue to be at capacity and have long waiting lists. Other funding streams outside of Medicaid do not provide the necessary services to assist and meet the specialized needs of our brain injury population.

The TBI Trust Fund has made great strides in meeting those needs; however, the gaps are growing for those affected by brain injury. The Commonwealth has few providers with the needed brain injury expertise throughout the state and is under resourced to address the growing number of incidents of brain injury in Kentucky. As of 2014, Kentucky recorded more than 93,000 incidents of brain injury. The number would likely be higher if better information was shared between our border states. With the growing number of incidents and the existing gaps in service provision, the TBI Trust Fund is stretched to its limit in addressing the ever growing needs of our fellow brain injury citizens.

The TBI Trust Fund has taken steps to continue to be responsible stewards of its funding by lowering the administrative costs with the Department for Aging and Independent Living which serves as the Benefit Management entity. Bringing the management of benefits in house has allowed the Trust Fund to increase the allocation of funds paid to brain injury clients by over a million dollars, but this may not be sustainable long term. TBI Trust Fund receipts are down by over 25% this year alone. However, the Trust Fund was designated this year to receive a small percentage of county attorney traffic school program fees that will be given annually each year which may help offset the decline in the primary funding sources.

Thank you,  
Mary Hass

# Kentucky Traumatic Brain Injury Trust Fund Board of Directors Annual Report FY 2015

## History and Statutory Authority



The Kentucky Traumatic Brain Injury (TBI) Trust Fund was created by the Kentucky General Assembly in 1998 to provide services to children and adults with acquired and traumatic brain injuries across the Commonwealth. Traumatic brain injury, as defined in KRS 211.470 to 211.478, is a “partial or total disability caused by an injury to the central nervous system from physical trauma, damage to the central nervous system from anoxia, hypoxic episodes, allergic conditions, toxic substances, or other acute medical clinical incidents resulting in impaired cognitive abilities or impaired physical functioning.” The statutory definition also encompasses the definition of acquired brain injury (ABI). Within this report, ABI and TBI may be used interchangeably unless noted. TBI does not include: strokes treatable in nursing facilities; spinal cord injuries; depression and psychiatric disorders; progressive dementias and other mentally impaired conditions; mental retardation and birth defect-space related disorders of a long standing nature; or neurological degenerative, metabolic, and other medical conditions of a chronic, degenerative nature.

The statute provides for a nine-member governing Board of Directors charged with fulfilling the following mandates:

- Administering the TBI Trust Fund;
- Promulgating administrative regulations;
- Establishing a confidential registry for traumatic brain and spinal cord injuries;
- Investigating the needs of people with brain injuries and identifying gaps in services;
- Assisting in the development of services for people with brain injuries; and
- Monitoring and evaluating services provided by the TBI Trust Fund.

For administrative purposes, the TBI Trust Fund Board of Directors is attached to the Cabinet for Health and Family Services (CHFS), Department for Aging and Independent Living (DAIL), which provides direct staff support to the board. Since Fiscal Year 2013, the TBI Trust Fund Board of Directors has collaborated with DAIL to administer the program’s case management and benefit management components. Through this partnership, DAIL has been able to decrease the costs of administration and increase the distribution of funds to individuals affected by brain injury.

The Kentucky Injury Prevention and Research Center (KIPRC) at the University of Kentucky has been contracted to analyze hospital data and emergency department data for dissemination. This information is used to estimate the incidence and causation of brain injuries in Kentucky, as well as the demographic characteristics of injured persons. However, the data, which illustrates the impact of brain injury on the citizens of Kentucky, lacks specific identifying information that would eliminate duplication.

With the growing number of incidents of brain injury occurring annually (93,000 incidents as identified by KIPRC's 2015 report), the TBI Trust Fund cannot fully address the needs of the individuals diagnosed with brain injury. The gaps in the service delivery system along with the current funding levels create many obstacles for the TBI Trust Fund program to assist those affected by brain injury across the Commonwealth. The rising numbers of Trust Fund referrals received each month compounded by the funding declines escalate the concern for the welfare of the individuals unable to secure services. It is imperative for the future support of individuals with brain injuries and their families that the gaps in services are addressed and the funding increased to meet the needs of this unique population.

### Funding Mechanism



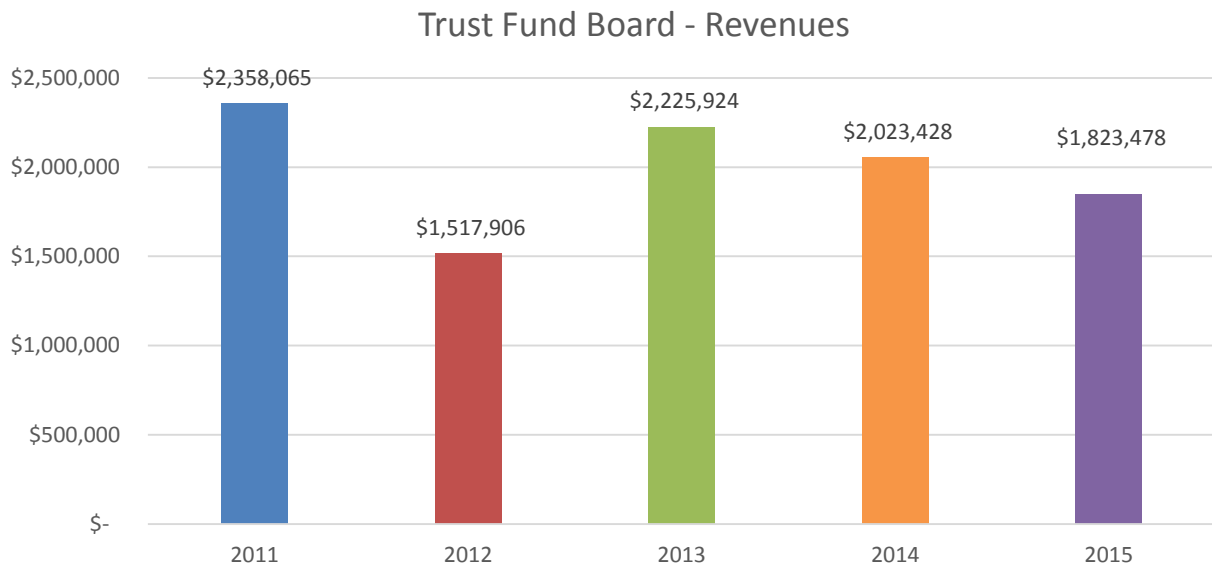
**F**iscally, it is the goal of the TBI Trust Fund Board and DAIL to be efficient stewards of the monies received by the TBI Trust Fund. KRS 42.320 (2)(d) designates that the TBI Trust Fund receive 5.5 percent of all court costs collected by circuit clerks, up to \$2,750,000 annually, to be used to serve individuals with brain injury. KRS 189A.050 (3)(d) 1 specifies that eight percent of the driving under the influence (DUI) service fees after the first fifty dollars shall be credited to the TBI Trust Fund and deposited in an interest bearing account. The graphs below indicate the Trust Fund revenues and allocations for the last five years. As illustrated, the deposits into the Trust Fund have varied in 2015, and expenditures for allocations to clients exceeded revenues for the first time in the history of the program. A concern for the board is how to continue to be the primary funding source for the brain injury population when funding to the Trust Fund is unstable.

In March of 2015 the TBI Trust Fund was afforded another source of revenue Senate Bill 17, which designated 9.1% of funds collected by the County Attorneys for traffic violations for the Trust Fund. The Trust Fund hopes this will assist with closing the gap in services; however since a deposit on this mandate has not yet been received, the Trust Fund is unsure of how substantial the funding will be for the program.

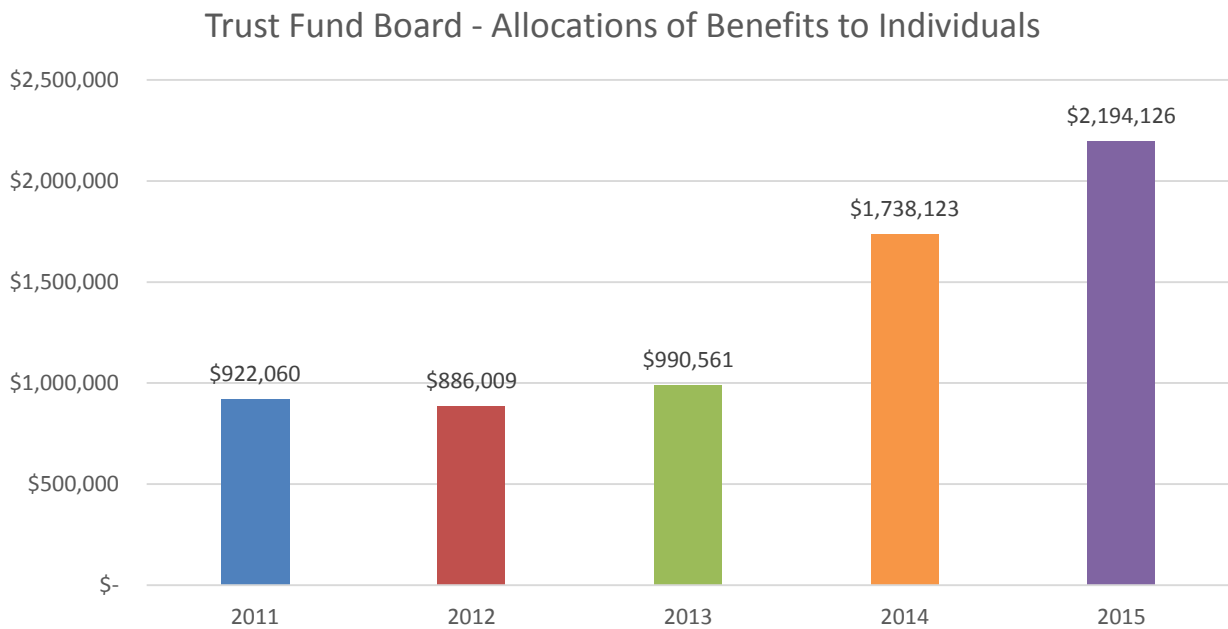
As noted in the allocation and revenue graph, DAIL has increased the distribution of funds to individuals despite the decrease of funds earned. This truly reflects the determination of the board and DAIL to maximize benefits to those affected by brain injury and minimizes administrative costs. The allocations depicted within the graph demonstrate that the need for assistance is high, and individuals will continue to seek resources from the TBI Trust Fund to meet their needs, both short term and long term, until the gaps in supports and services are filled across the continuum of care for those affected by brain injury. DAIL has been attentive to the steady decreasing revenues and has attempted to reserve dollars in order to ensure allocations can be made to meet all the requests. In reviewing the graphs provided, DAIL dispersed more benefits than funds deposited.

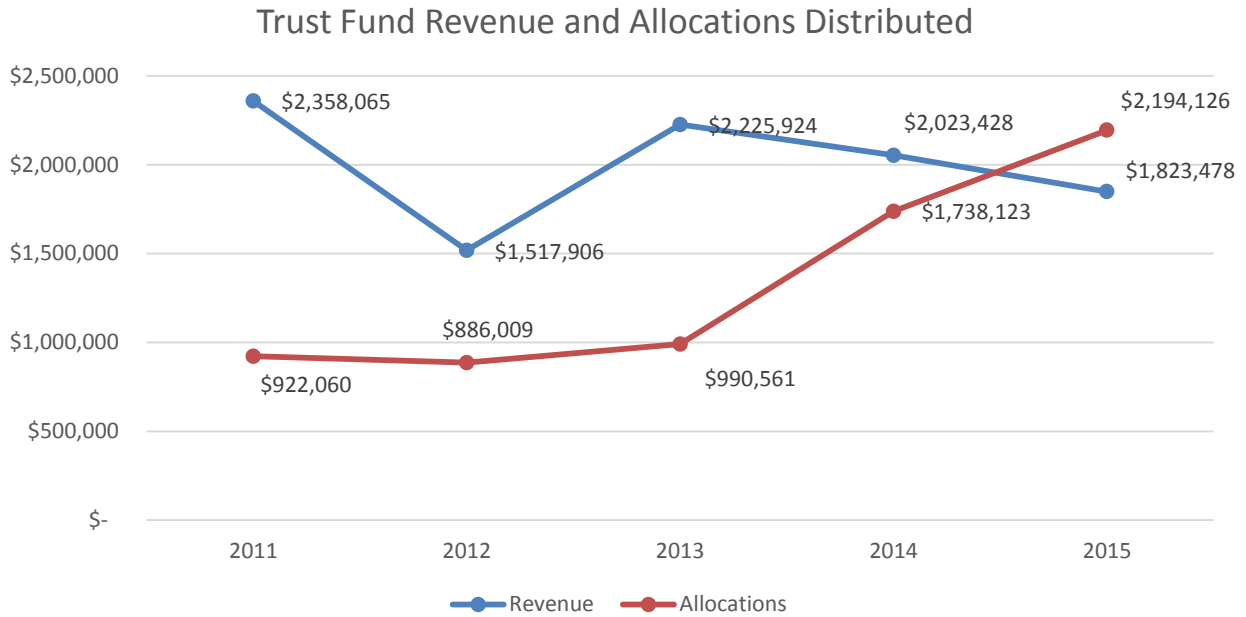
The expenditures of the TBI Trust Fund program reflect that DAIL is being mindful of administrative costs. The costs are primarily for case management staff that work directly with the Trust Fund clients. As noted, administrative costs are significantly

decreased compared to the benefits paid for direct client services so they may continue to remain in their homes and communities.



Source: Kentucky Injury Prevention and Research Center (KIPRC) and Kentucky Traumatic Brain Injury






In addition, the TBI Trust Fund Board tracks administrative expenditures for each fiscal year. The following chart illustrates the TBI Trust Fund expenditures for fiscal year 2015 per line item. The expenditures for benefit management/case management shown below are significantly less than in years' past due to the continued administration of the Trust Fund under DAIL and its case management staffing pattern. As illustrated above allocations reached over 2 million however the below graph illustrates the actual claims paid for those client allocations.

### Trust Fund Expenditures for Fiscal Year 2015

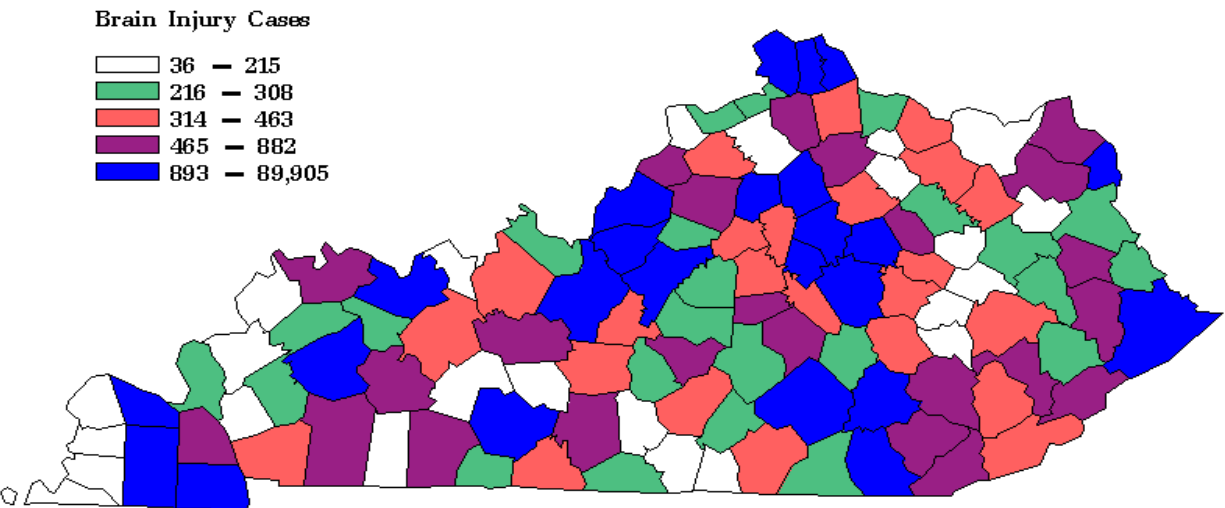
ITEM	AMOUNT
Benefit Management Administration – Case Management	<b>\$679,507</b>
University of Kentucky Kentucky Injury Prevention and Research Center (KIPRC) Surveillance/Registry	<b>\$75,000</b>
Actual Claims Paid for TBI TF Client Allocations	<b>\$1,207,074</b>
<b>Grand Total Expenditures for FY 2015</b>	<b>\$1,961,581</b>

### Data Analysis

 The following data shows the most current available information regarding incidences of brain injury across Kentucky caused by Traumatic Brain Injury (TBI), Acquired Brain Injury (ABI), or stroke.



**Kentucky Inpatient and Emergency Department Brain Injury Cases\* by County, 2014**  
 \*Includes TBI, ABI, and Stroke.



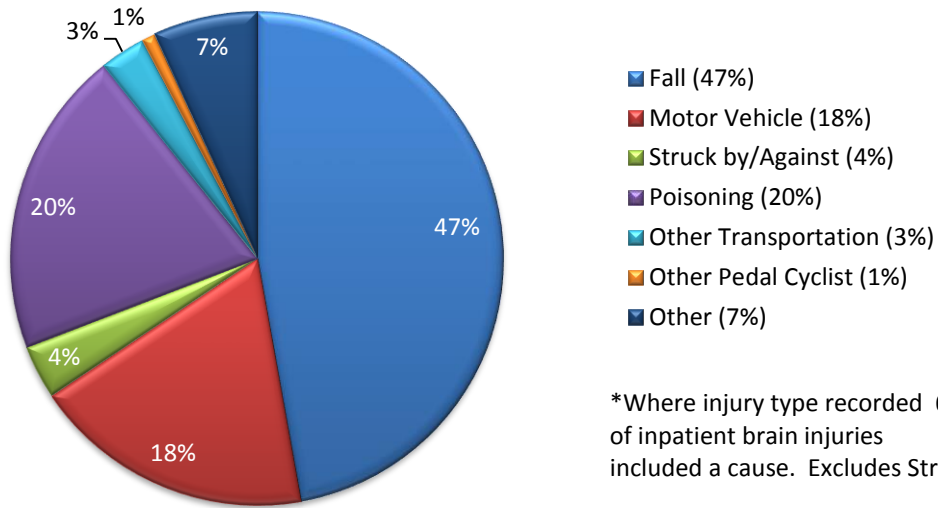
Source: Kentucky TBI Surveillance Project, Kentucky Injury Prevention and Research Center (KIPRC).

Kentucky’s hospital data is reported per calendar year, while the TBI Trust Fund data is reported per fiscal year. The above map shows the distribution of reported TBI, ABI, and strokes in calendar year 2014. The largest numbers of brain injuries occur in the more populated areas of the state. Jefferson County had the highest number of brain injuries occurring from TBI, ABI, and stroke (16,008), accounting for approximately 18% of all brain injury occurring in Kentucky for 2014. Fayette County (4,629) and Kenton County (3,596) complete the top three counties for brain injuries with approximately 5% and 4% respectively. However, when considered per capita (rates per 100,000 residents) prevalence, brain injury was highest in eastern Kentucky followed by the south central and western parts of the state. The counties listed below have ranked in the top percentage of Kentucky counties with the most occurrences of TBI and ABI cases based on population over the last four years:

- TBI: Boyd, Clay, Perry, Grant, Jackson, Greenup, and Hopkins
- ABI: Clay, Henry, Magoffin, Nicholas, Rowan, and Whitley

When considering cases of reported brain injury, it is important to look at the causation of brain injury across the state. Entitled “Cause of Injury\*, Inpatient Brain Injury,” the following graph depicts the percentage of brain injuries resulting in inpatient admission per cause of injury. Falls (47%) continue to be the most common reason that a brain injury results in hospitalizations when cause is recorded. It is important to note that stroke is not coded or charted as “injury” in hospital data but rather as a medical condition.

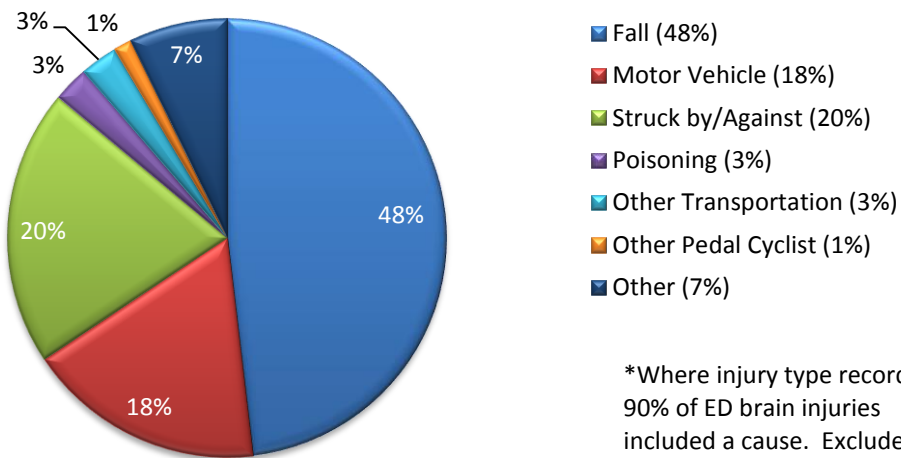
**Cause of Injury\*, Inpatient Brain Injury, Kentucky 2014**  
Includes Non-Fatal TBI and ABI



\*Where injury type recorded 67% of inpatient brain injuries included a cause. Excludes Strokes

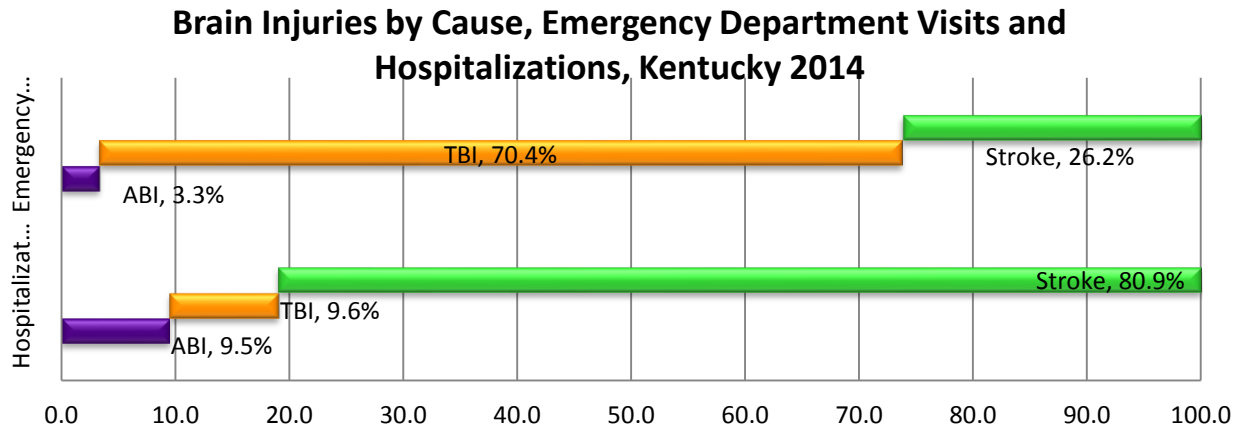
Similarly, of the incidents of non-fatal TBI and ABI treated in Kentucky emergency departments in 2014, falls (48%) accounted for the largest percentage of brain injuries that resulted in Emergency Department visits of those that has a cause recorded. Again, it is important to note strokes are not included in injury data from emergency departments.

**Cause of Injury\*, Emergency Department Brain Injury, Kentucky 2014**  
Includes Non-Fatal TBI and ABI

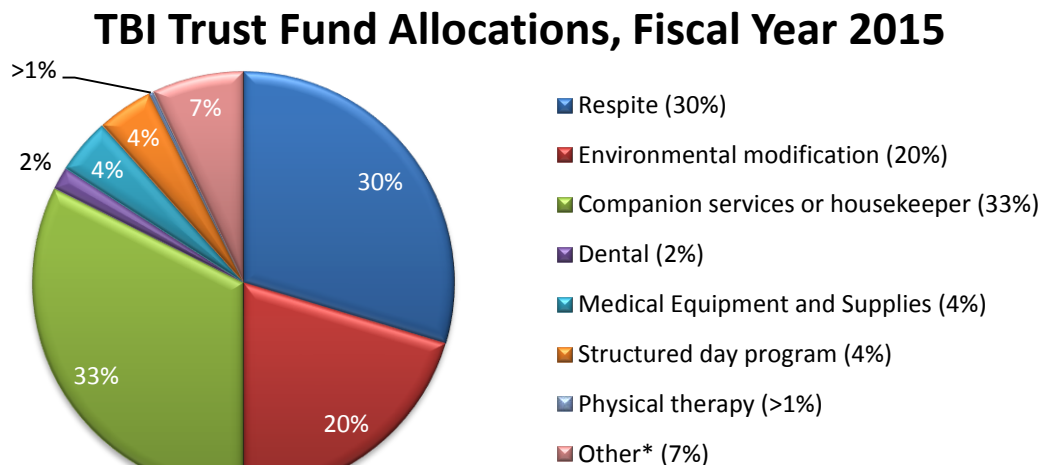


\*Where injury type recorded. 90% of ED brain injuries included a cause. Excludes Strokes.

Strokes account for a significant number of brain injuries. Though, as shown on the graph below, only 26.2% of Emergency Department visits due to brain injury were diagnosed as strokes, over 80% of the brain injuries resulting in inpatient hospitalization in 2014 were due to strokes. Therefore, stroke accounts for significantly more brain injuries requiring inpatient admission than TBIs and ABIs combined.



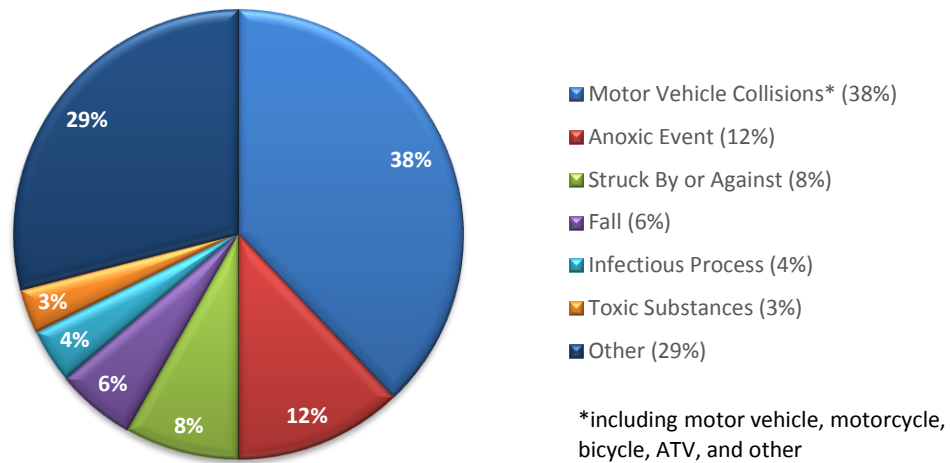
The TBI Trust Fund can provide a variety of assistive devices, home modifications, and services related to an individual’s injury, thus improving overall quality of life. 910 KAR 3:030 permits the TBI Trust Fund, as documented payer of last resort, to provide funding for case management; community residential services; companion services; occupational therapy; speech/language therapies; prevocational and psychological services; respite; structured day programs; supported employment services; and other wrap-around services, including assistive devices. The following graph depicts the percentage of TBI Trust Fund allocations per the type of service or assistive device requested by TBI Trust Fund clients.



\*Other includes Hearing Aids/Batteries, Hippo Therapy, Transportation, Assistive Technology, Wrap Around - General, Vehicle Modification, Case Management Only, TMJ Therapy, Health Insurance, Psychological and Mental Health Services,

The Kentucky Traumatic Brain Injury Trust Fund program serves individuals across the state living with brain injuries resulting from a variety of causes. The following graph illustrates the percentage of individuals the Trust Fund served in fiscal year 2015 by the cause of injury. Motor vehicle collisions, including motorcycles, were the leading cause of injury among individuals seeking services through the Trust Fund at 38%.

**Clients Served by Cause of Brain Injury,  
Fiscal Year 2015**



### Pediatric Brain Injury



**P**ediatric brain injury is a growing concern in Kentucky. To better understand the prevalence and frequency of pediatric brain injury in Kentucky, the TBI Trust Fund Board receives data regarding pediatric brain injuries by cause, by the number that are treated and released through emergency departments, and by the number that require inpatient admission. Kentucky has also taken measures to require that certain professional groups that may come into direct contact with children who have sustained brain injury, including licensed healthcare providers, have additional education needed to identify and treat pediatric brain injury. In accordance with the law, the following professionals must complete this new training requirement of continuing education covering the recognition and prevention of pediatric abusive head trauma as defined in KRS 620.020.

- Pediatricians;
- Radiologists;
- Family Practitioners;
- Urgent treatment or urgent care center physicians and personnel;
- Physician assistants;
- Emergency medicine physicians and medical technicians;

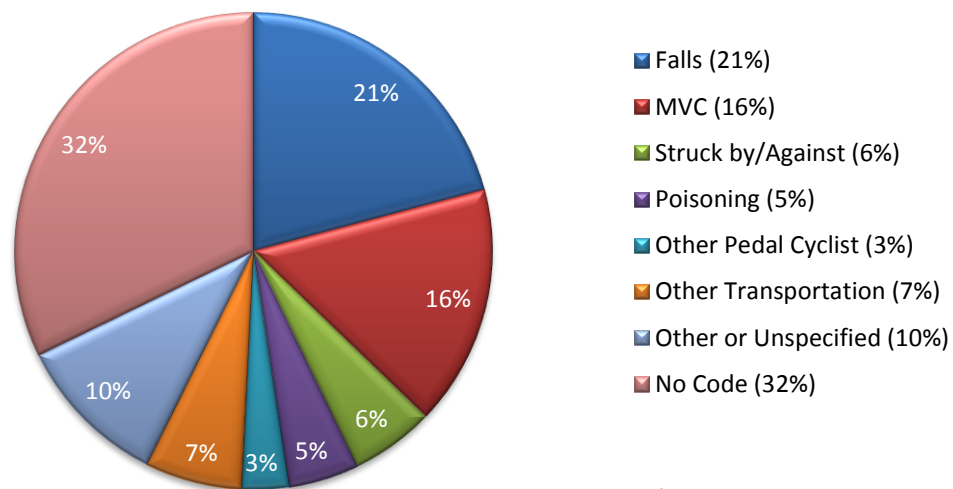
- Paramedics;
- Advanced registered nurse practitioners;
- Licensed and certified social workers; and
- Law enforcement personnel.

The TBI Trust Fund serves numerous children in need of services or care items related to brain injury who have no alternate payer source. When monitoring pediatric brain injury, not only are individual service and care needs important issues, but causation is also a crucial focus. The TBI Trust Fund Director, Tonia A. Wells, MSW, has participated in discussions and training sessions regarding sports related concussions with the Brain Injury Alliance of Kentucky (BIAK) and the Kentucky High School Athletic Association (KHSAA). TBI Trust Fund staff also participates in the Safe Kids of Fayette County coalition which focuses on preventable injuries to children, including brain injury.

The following graph shows the percentage of pediatric brain injuries requiring inpatient hospitalization by cause. In 2014, almost a third of pediatric brain injuries resulting in either traumatic brain injury or acquired brain injury requiring inpatient admission was unspecified or not coded (32%). The most frequent specified cause of brain injury in children resulting in inpatient admission was falls (21%). As with adult data, it is important to note that strokes are not coded as injuries and are not included in this data.

### Cause of Injury, Pediatric Inpatient Brain Injury\*, Kentucky, 2014

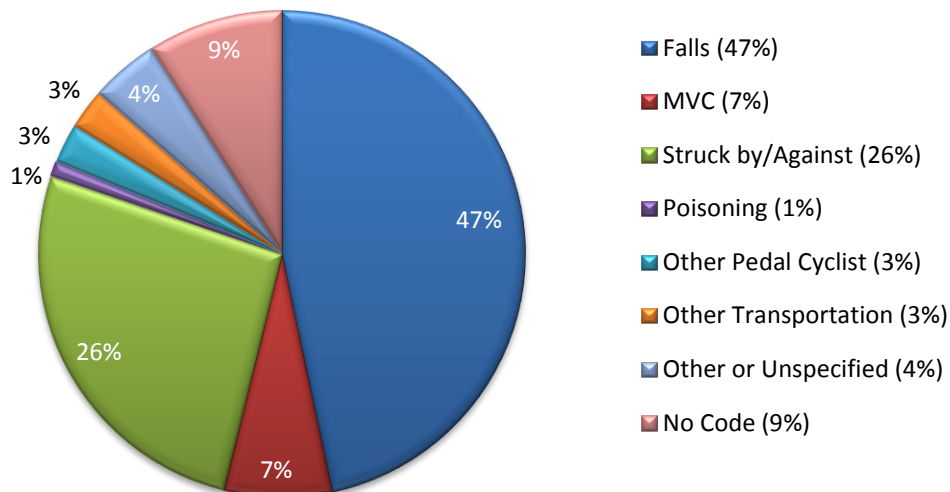
Includes Non-Fatal TBI and ABI



\*Excludes Stroke

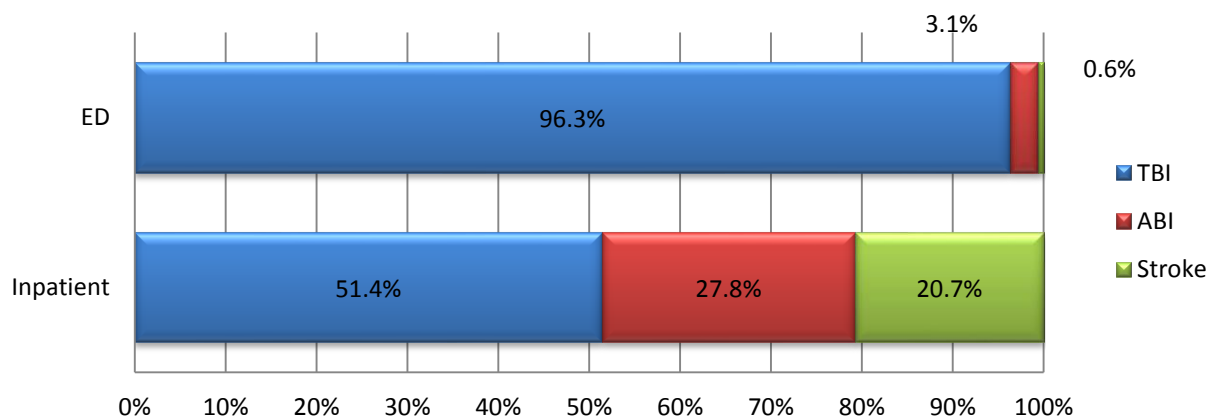
Falls (47%) were the most common cause of pediatric brain injuries treated and released from emergency departments across Kentucky in 2014 followed by injury from being struck by or against an object.

### Cause of Injury, Pediatric Emergency Department Brain Injury\*, Kentucky, 2014 Includes Non-Fatal TBI and ABI

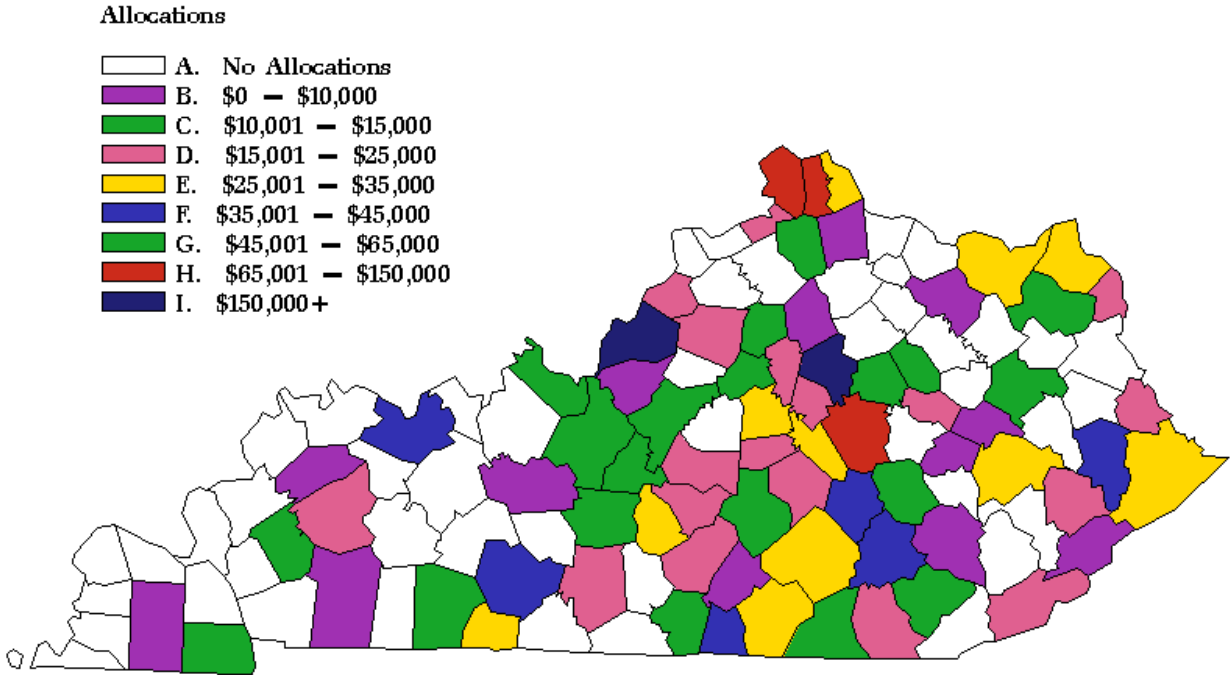


Differing substantially from adult data, the following chart illustrates that for pediatric incidents of brain injury only 0.6% of children treated and released from hospital emergency departments in 2014 are treated for stroke. Instead, the largest percentage of brain injury related to stroke occurring in children resulted in inpatient hospitalization (20.7%). Trauma-related brain injuries accounted for the percentage of emergency departments visits and inpatient hospitalizations among children ages 0 -17 years.

### Pediatric Non-Fatal Brain Injuries, Kentucky 2014



**Allocation of Benefits from the TBI Trust Fund, by County of Residence, Fiscal Year 2015**



Source: Kentucky TBI Surveillance Project, Kentucky Injury Prevention and Research Center (KIPRC).

The above graph illustrates the distribution of benefits across the Commonwealth for both children and adults. The Trust Fund waiting list for services has essentially been eliminated as more funding has been allocated for services to enhance individuals' quality of living and ability to remain in their home and community rather than historical utilization for administrative costs. This graph indicates that the TBI Trust Fund is allocating benefits in numerous counties across the Commonwealth; however, it also shows the gap in other counties that the Trust Fund has not been able to reach.

Case Managers continue to educate community stakeholders about the program and bring attention to supports that can aid individuals to remain in their home and community. The TBI Trust Fund continues to work diligently with hospital discharge planners and the Brain Injury Alliance of Kentucky to ensure awareness about the assistance the Trust Fund can provide while waiting for more permanent long term resources. Due to continued community outreach, the Trust Fund receives over 20 new referrals a month in addition to the over 500 active clients currently being served. This outreach has identified significant gaps in available providers and services across the Commonwealth for those affected by brain injury. As a result, the board is concerned that returning to a waiting list might be a necessary reality in the future. The board recognizes DAIL's efforts and supports the relationships being built with stakeholders. Stakeholders have taken notice of the gaps that are unable to be fully met by the Trust Fund and have assembled a vested group of entities. An interagency partnership which

includes the Department of Vocational Rehabilitation, DAIL's TBI Trust Fund, Frazier Institute and Rehabilitation, and the Brain Injury Alliance of Kentucky among others. The goal is to develop an initiative of employment in the Jefferson County Louisville Metro area for those individuals ready to explore employment opportunities following rehabilitation. This initiative, patterned after the Rehabilitation Hospital of Indiana Resource Facilitation Department's published research study, focused upon returning individuals to employment and finding employment for those seeking it. This group will begin this endeavor in 2016 with the hopes of assisting individuals in finding employment and increasing their independence.

### Conclusion



The Traumatic Brain Injury Trust Fund, established by the Kentucky General Assembly, has been able to serve over 3,000 citizens with brain injury since it's in 1998. However, in 2015 alone, over 93,000 incidents of brain injury were sustained by Kentuckians who required treatment in either an emergency department or by inpatient hospitalization. Working in conjunction with DAIL, the Trust Fund Board of Directors remains diligent in attempting to provide service provision, identification of community resources, and ongoing supports for individuals and families affected by brain injury who have no other options or who have no other payor sources.

The Board continually strives to ensure quality, effectiveness, and efficiency within every aspect of TBI Trust Fund operations. In light of the growing number of brain injuries sustained by Kentucky residents each year, the ability of the Kentucky TBI Trust Fund Board to fulfill its purpose as the mandated body in service identification and delivery for individuals and families affected by brain injury remains intact for the present but the ability to meet all the needs of individuals and address the gaps of service availability is of serious concern for the future. The need for services and resources for those living with a brain injury remains a challenge.