

Kentucky Traumatic Brain & Spinal Cord Injury Surveillance Project

Fiscal Year 2008 Final Report

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This project is located at the Kentucky Injury Prevention and Research Center,
University of Kentucky, and funded by the Kentucky Traumatic Brain Injury Trust Fund

FOR MORE INFORMATION

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FIGURES AND TABLES

Figures	Page
1. Number of TBI cases by county	18
2. Age-adjusted incidence rate of TBI by county	19
3. Number of cases listed in Tennessee TBI registry for Kentucky residents, by county	20
4. Number of ABI cases by county	21
5. Age-adjusted incidence rate of ABI by county	22
6. Mechanism of injury for self-pay TBI	23
7. Mechanism of injury for TBI having 'Commercial Insurance' as primary payer	23
8. Mechanism of injury for TBI having 'Government' as primary payer	24
9. Mechanism of injury for TBI having 'Worker's Compensation' as primary payer	24
10. Mechanism of injury for TBI having 'HMO' as primary payer	25

Tables	Page
1. TBI by age	26
2. TBI by gender	26
3. Leading causes of TBI, all ages	26
4. Leading causes of TBI for ages 0-4	27
5. Leading causes of TBI for ages 5-14	27
6. Leading causes of TBI for ages 15-24	27
7. Leading causes of TBI for ages 25-44	28
8. Leading causes of TBI for ages 45-64	28
9. Leading causes of TBI for ages 65+	28
10. Incidence of TBI by county, sorted by county name	29
11. Incidence of TBI by county, sorted by frequency	30
12. Incidence of TBI by county, sorted by age-adjusted rate	31
13. Hospital discharges by disposition for non-fatal TBI	32
14. Length of stay for hospitalized TBI	32
15. Barrell Matrix Type I/II/III TBI by mechanism for non-fatal TBI	32
16. Primary payers for hospitalized TBI	33
17. Work related TBI	33
18. ABI by age	34
19. ABI by gender	34
20. Incidence of ABI by county, sorted by county name	35
21. Incidence of ABI by county, sorted by frequency	36
22. Incidence of ABI by county, sorted by age-adjusted rate	37
23. Causes of ABI	38
24. Anoxia/hypoxia by age group	38
25. Exposure to toxic substances by age group	38
26. Injury-related causes of ABI	39
27. Length of stay for hospitalized ABI	39
28. Hospital discharge disposition for non-fatal ABI	39
29. Primary payers for hospitalized ABI	40
30. Work related ABI	40
31. SCI by age	40
32. SCI by gender	40
33. Leading causes of SCI, all ages	41
34. Length of stay for hospitalized SCI	41
35. Hospital discharge disposition for non-fatal SCI	41
36. Primary payers for hospitalized SCI	42
37. Work related SCI	42

APPENDIX: Six-year trend tables, 2000-2005	Page
A. Rates and cases of TBI by year, 2000-2005	43
B. Rates and case of TBI by age group, 2000-2005	43
C. Rates and cases of TBI by gender, 2000-2005	44
D. Mechanism of Injury for TBI, 2000-2005	44
E. Discharge disposition of TBI hospitalizations, 2000-2005	45
F. Primary payers for TBI hospitalizations, 2000-2005	45
G. County TBI frequency and age adjusted rates by year, 2000-05	46-48
H. Rates and cases of ABI by year, 2000-2005	49
I. Rates and cases of ABI by age group, 2000-2005	49
J. Rates and cases of ABI by gender, 2000-2005	50
K. ABI by type, 2000-2005	50
L. Discharge disposition of ABI hospitalizations, 2000-2005	51
M. Primary payers for ABI hospitalizations, 2000-2005	51
N. County ABI frequency and age adjusted rates by year, 2000-2005	52-54
O. Rates and cases of SCI by year, 2000-2005	55
P. Rates and cases of SCI by age group, 2000-2005	55
Q. Rates and cases of SCI by gender, 2000-2005	56

Introduction

In 2005, traumatic brain injury (TBI) was a factor in the deaths of 1,097 Kentuckians, as well as the live discharges of 3,270 Kentuckians from licensed, acute-care hospitals across the state. TBI played a role in the death or hospitalization of 12 state residents per day. Acquired brain injury (ABI) was diagnosed in 1,353 deaths and 2,443 live discharges (more than 10 ABI per day), and spinal cord injury (SCI) was reported in 60 deaths and 183 live discharges, or over 4 SCI per week. See Tables 1, 18, and 31 for details.

The results of this year's report, combined with the two previous year's reports, clearly suggest that further exploration of the following causes of TBI, ABI, and SCI are needed, in order to pinpoint the risk factors involved and develop prevention strategies:

- *Motor vehicle traffic crashes (TBI and SCI), especially among ages 15-24*
- *Falls (TBI and SCI), especially among ages 0-4 and 65 and older*
- *Anoxia/hypoxia (ABI), especially among ages 45 and older*
- *Exposure to toxic substances (ABI), especially among ages 25-44*

Motor vehicle traffic crashes in persons aged 15-24, and falls in persons aged 65 and older, again emerged as the leading causes of TBI. Anoxia/hypoxia was most common among persons aged 65 and older, whereas exposure to toxic substances was greatest among those aged 25-44. Overall, these two were the cause of 99% of fatal ABI and 92% of nonfatal, hospitalized ABI.

Geographically, rates of TBI and ABI were both highest in eastern Kentucky. The west-central part of the state is also high for TBI, and the western part is high for ABI.

*Furthermore, the following counties have been identified as top priorities for prevention activities and programs. These counties have ranked in the top quarter of Kentucky counties in terms of both the number of cases reported **and** the age-adjusted rate per 100,000 residents in at least four out of the last five years and can be considered excellent candidates for an in-depth pilot study leading to interventions to prevent and control TBI and ABI:*

- *TBI: Letcher, Nelson, and Perry*
- *ABI: Bell, Hopkins, Knox, Perry and Whitley*
- *SCI: There were not enough total reported cases of SCI statewide to support a reliable geographic analysis.*

Jefferson county would also be a good choice for an in-depth pilot study as it represented 19% of all TBI in 2005 and had an age-adjusted rate that was higher than the statewide rate, and 50% higher than the rate for Fayette county, which had the second highest number of TBI.

Methods

Data collection

Data used for surveillance were all received electronically. Hospital Discharge Data files from the Kentucky Department for Public Health (KDPH) are routinely received by the Kentucky Injury Prevention and Research Center (KIPRC) for surveillance purposes. The National Center for Health Statistics' Multiple Cause of Death File (NCHS Death) was required, as this data set contains information on up to 20 supplemental causes of death, whereas the Kentucky computerized death certificate data file generally includes only the external cause of injury (E-code) for trauma cases. In addition to these data sets, we were able to obtain data on Kentucky residents treated in Tennessee from that state's TBI registry. We have reported the number of TBI identified on that dataset. However, those cases were not included in the data linkage or in the final count or rates.

Trauma registry data are no longer included in this surveillance system, because nearly all of the hospital inpatients with TBI, ABI or SCI are picked up by the state hospital inpatient database. *Due to this change in methodology, results from previous reports should not be compared with results from this or subsequent reports. Data for 2000 to 2004 have been recalculated using the updated methodology, and are presented in the Appendix. This report should be considered the baseline going forward.*

Traumatic brain injury case definition

The Centers for Disease Control and Prevention (CDC) have established standards for TBI case identification (CDC, 1995). Hospitals commonly use ICD-9 codes for injury coding. For death certificates, state and federal authorities use ICD-10 codes. The following ICD-9 diagnosis codes (n-codes) were used for identifying TBI in HDD:

- Fracture of vault or base of skull: 800.0-801.9
- Other, unqualified, and multiple fractures of skull: 803.0-804.9
- Intracranial injury, including concussion, cerebral laceration, subdural hemorrhage, unspecified intracranial injury, etc: 850.0-854.1
- Head injury, unspecified: 959.01

ICD-10 codes were used to identify TBI in NCHS Death records:

- Open wound of head: S01.0-S01.9
- Fracture of skull and facial bones: S02.0-S02.1, S02.3, S02.7-S02.9
- Intracranial injury: S06.0, S06.2-S06.9
- Crushing injury of head: S07.0-S07.1, S07.8-S07.9
- Other unspecified injuries of head: S09.7-S09.9
- Open wounds involving head with neck: T01.0
- Fractures involving head with neck: T02.0
- Crushing injuries involving head with neck: T04.0
- Injuries of brain and cranial nerve with injuries of nerves and spinal cord at neck level: T06.0
- Sequelae of injuries of head: T90.1-T90.2, T90.4-T90.5, T90.8-T90.9

If one or more of these codes was found in any of the diagnosis code fields in HDD or NCHS Death, the record was determined to be a TBI.

Acquired brain injury case definition

In addition to CDC-defined TBI, there are many brain injuries that have non-traumatic etiologies. These we have classified as ABI. Because these diagnoses are not included in the CDC definition of TBI, they have been linked and analyzed separately. These conditions were also identified by ICD-9 diagnosis codes, as follows:

- Anoxia/Hypoxia: 348.1, 668.2, 669.4, 768.1, 768.5, 768.6, 768.9, 799.0, 994.1, 994.7, 997.0
- Allergy/Anaphylaxis: 995.0, 999.4, 999.5
- Acute Medical Clinical Incidents: 320.0-320.9, 321.0-321.8
- Toxic Substances: 964.2, 967.0-967.9, 968.0-968.9, 980.0-980.9, 985, 986, 988.0-988.2, 989.0, 995.4, 995.5, 998.0

The following ICD-10 codes were used to identify ABI in NCHS Death records:

- Anoxia/Hypoxia: G93.1, O29.2, O74.3, O75.4, O89.2, P20.1, P21.0, P21.1, P21.9, R09.0, T71, T75.1
- Allergy/Anaphylaxis: T78.0, T78.2, T80.5, T80.6, T88.1, T88.6
- Acute Medical Clinical Incidents: G00.0, G00.1, G00.2, G00.3, G00.8, G01, G07, G02.0, G02.1, G02.8, G04.2, G04.8, G05.0, G05.1, G06.2
- Toxic Substances: G03.8, G03.9, G97.1, G97.2, G97.8, G97.9, N14.3, R29.1, T40.5, T41.0, T41.1, T41.2, T41.3, T41.4, T42.3, T42.4, T42.6, T42.7, T45.5, T49.0, T51.0, T51.1, T51.2, T51.3, T51.8, T51.9, T56.1, T56.2, T56.3, T56.4, T56.5, T56.6, T56.7, T56.8, T57.0, T57.2, T57.3, T57.8, T58, T60.4, T61.9, T62.0, T62.1, T62.2, T62.8, T62.8, T64, T65.0, T65.8, T65.9, T81.1, T88.2, T88.5

If one or more of these codes was found in any of the diagnosis code fields in HDD or NCHS Death, the record was classified as an ABI.

Spinal cord injury case definition

The CDC defines SCI by the following ICD-9 diagnosis codes (CDC, 1995):

- Fracture of vertebral column with spinal cord injury: 806.0-806.9
- Spinal cord injury without evidence of spinal bone injury: 952.0-952.9

The following ICD-10 codes were used to identify SCI in NCHS Death records:

- Fracture of neck: S12.0-S12.2, S12.7, S12.9
- Fracture of thoracic vertebra and thoracic spine: S22.0-S22.1
- Fracture of lumbar spine: S32.0, S32.7
- Injury of nerves and spinal cord at neck level: S14.0-S14.1
- Injury of nerves and spinal cord at thorax level: S24.0-S24.1
- Injury of nerves and lumbar spinal cord at abdomen, lower back, and pelvis level: S34.0-S34.1, S34.3
- Fracture of spine, level unspecified: T08
- Injury of nerves and spinal cord involving other multiple body regions: T06.1
- Injury of spinal cord, level unspecified: T09.3
- Sequelae of injury of spinal cord: T91.3

For this report, SCI records had to contain one of these codes in one of the first three diagnosis code fields in HDD or NCHS Death data.

Eliminating duplicate records

Probabilistic data linkage (PDL) has been described in scholarly depth by Jaro (1995, 1989). Briefly, PDL is a statistical method for matching records in unrelated databases. By comparing the frequencies of all individuals' characteristics, such as age, birth date, and zip code, the data linkage software decides which records in the different databases probably pertain to the same person. Thus, we avoid counting these cases more than once when calculating incidence.

Standardized variables were created from variables necessary for linkage. These included dates (of injury, admission, discharge, death, birth), geographic variables (resident county, resident state, zip codes), and demographic characteristics (age, gender, race, marital status) and others (hospital ID, TBI indicator, cause of injury).

Self match: As a first step, we matched each file against itself to determine the extent of duplication of cases within the datasets. We found that less than 0.5%

of the HDD records, and almost none of the NCHS death records, appeared to be a duplicate. In other words, duplication of cases within the datasets appeared to be minimal.

File linkages and master dataset: Next we linked the HDD and NCHS death datasets. We then created a master dataset containing two sections: one for the HDD portion of the record and one for the NCHS death portion. For example, if a case was identified by data linkage in both the HDD and NCHS Death files, the master file would contain a single record with an HDD and a NCHS Death portion. If it was found in the HDD only, the master file would contain a single record with only the HDD portion populated, and so on.

Create analytical file: From the master dataset we created a simplified dataset from which the tables and figures in this report were derived. In doing so we made several choices which we outline briefly here. First, we defined a master record to represent a TBI, ABI, or SCI case if there was a TBI, ABI, or SCI diagnosis on any of the three files. Second, we declared a master record to represent a fatality if there was an NCHS death record present, or if there was a HDD record with a patient disposition indicating death. Third, we established rules of precedence for the data source. For fatalities, if a NCHS death record was found its values were used to populate the analytical file. If a death was indicated on the HDD but no death record was found, then the HDD files were used to populate the analytical file.

Using these rules we reduced the master file to an analytical file with a single value for each data element (age, gender, diagnosis codes, etc.).

Incidence rates

Crude incidence rates were calculated for each injury type by dividing the number of injuries by 4,173,405, the estimated 2005 population of Kentucky according to the Kentucky State Data Center, and then multiplying by 100,000. This figure represents the number of TBI, ABI, or SCI that occurred per 100,000 residents of Kentucky. Age-adjusted rates were calculated using the Year 2000 Standard Population.

Data analysis

All data analysis, including mapping, was performed using SAS Version 9.1.

Results

Traumatic brain injury

There were 4,367 Kentucky-resident TBI cases identified for 2005 (Table 1). The crude incidence rate was 104.6 per 100,000 population. (Residents who were treated out-of-state are not included in any of any of the estimates in this report.)

The demographics of TBI in 2005 were consistent with those for 2004. Table 1 shows that the highest rates of TBI were again found among those aged 65 and over and 15-24. From Table 2 we find that 61% of non-fatal and 71% of fatal TBI occurred in males. The leading mechanisms of injury were also consistent with last year's report. Motor vehicle traffic crashes (MVTC) were the cause of 35% of all TBI, and falls caused 26% (Table 3). The top three mechanisms varied by age group (Tables 4 to 9). For those aged 65 and over, falls were the leading cause (54%). MVTC's contributed to just under two thirds (63%) of TBI in those aged 15-24, and were the leading cause from ages 5 to 64. Falls led among young children (ages 0-4).

As one would expect, the incidence of TBI was highest in the larger counties (Figure 1). Four of the most populous counties in 2005 (Jefferson, Fayette, Kenton, Hardin) were among the top five in TBI incidence. A notable exception was Owsley, which was 73rd in TBI incidence but 119th in population. Unsurprisingly, Owsley County had the highest age-adjusted rate in the state. Owsley was also first in age-adjusted rate in 2004 as well as being either the first or second highest rate since 2001. Another notable exception was Christian county, which was 10th in population but 28th in frequency (and 116th in age-adjusted rate) of TBI. Because it borders Tennessee, we can reasonable infer that a substantial number of TBI cases in Christian county residents are not treated in Kentucky. This conclusion is supported by Figure 3, which shows that 38 Christian county residents appeared in the 2005 Tennessee TBI registry. In general, Figure 3 shows that several southern border counties have significant numbers of residents treated in Tennessee hospitals. Prominent examples, in addition to Christian, include Whitley, Warren, Todd, Harlan, Graves, and McCracken. This illustrates an important point: if this report shows a county to have a high rate of TBI, we can be confident that this is a county in need. Conversely, however, if a county is shown to have a low rate we cannot conclude that there is not a significant problem in that county, particularly if it is located on or near the state border.

Viewing the state in terms of age-adjusted rates (Figure 2), again there were clusters of high-incidence counties in the eastern and west-central regions. The eastern cluster for 2005 was slightly less inclusive than the 2004 cluster. A west-central cluster was again evident, though with some variation in counties involved. One useful way of determining priority counties is to find those that

ranked among the top thirty in both frequency **and** age-adjusted rate of TBI. For 2005 there were six such counties: Breathitt, Knox, Letcher, Perry, Pulaski, and Talor. Tables 10 through 12 show the frequency and rates of TBI by county, ranked in order by county, frequency, and age-adjusted rate respectively.

The length of stay (LOS) for hospitalized TBI (n=3,504) ranged from 1 day to 86 days. The mean LOS was 6.3 days with a median LOS of 4 days (Table 14). Table 13 indicates that 1,100 non-fatal TBI discharges had a disposition other than “routine”. The three most frequent non-routine discharges were “skilled nursing facility”, “home health”, and “inpatient – other short term hospital”. A total of 696 discharges had one of these three dispositions.

Table 15 presents an analysis of TBI in terms defined by the Barell Injury Diagnosis Matrix (Barell et al 2002). The definitions are as follows:

- A Type 1 TBI is one in which there is “recorded evidence of an intracranial injury or a moderate or a prolonged loss of consciousness (LOC), Shaken Infant Syndrome, or injuries to the optic nerve pathways.”
- A Type 2 TBI is one in which there is “no recorded evidence of intracranial injury, and LOC of less than one hour, or LOC of unknown duration, or unspecified level of consciousness.”
- A Type 3 TBI is one in which there is “no evidence of intracranial injury and no LOC.”

From this Table we see that 1,549 (69%) non-fatal TBI discharges had a principal diagnosis indicating a “Type 1” TBI. Falls were the highest contributor to these types of injuries (Type 1 TBI).

Table 17 shows that 40 fatal TBI’s were work related and 152 non-fatal TBI’s involved work related incidents. The length of stay for work related, non-fatal TBI’s varied from 1 to 50 days and had a mean of 6.4 days.

Government (39%) or commercial (28%) sources were the primary payers billed for acute care charges in 68% of nonfatal TBI, based on discharges identified from the HDD (Table 16). Commercial payers were billed just over \$41 million in 2005, and government payers over \$31 million. These charges were very similar to charges in 2004 though seem to be continuing to show increasing charges in the Self Pay and HMO categories. Please note that the amount billed by the hospital will generally be larger than the amount actually paid after adjudication of the claim.

Figures 6 through 10 demonstrate that the leading mechanism of TBI varies according to the primary insurance source billed. For example, MVTC was the mechanism of injury in 65% of TBI for which ‘Commercial Insurance’ was the primary payer billed. Falls were the leading mechanism of TBI when

“Government” was the primary payer, at 51%. These insurers should be viewed as stakeholders in programs to prevent those injuries that result in a substantial portion of their claims.

Acquired brain injury

There were 3,796 ABI cases for Kentucky residents identified in 2005 (Table 18). The crude incidence rate for 2005 was 91.0 per 100,000 population.

ABI was skewed toward the middle and older age groups, with 88% occurring in persons aged 25 and older, compared to 76% of TBI (Table 18). Also in contrast to TBI, of which 64% occurred in males, ABI affected the genders in closer to equal proportions (Table 19). Just under two thirds (64%) of ABI were nonfatal, compared to 75% of TBI.

As shown in Table 23, nearly all ABI (99% of fatal and 92% of nonfatal, hospitalized) were a result of either anoxia/hypoxia or exposure to toxic substances (ETS). Anoxia/hypoxia tends to affect older people (ages 45 and over) considerably more often than younger people, whereas ETS affects persons 15 and older, and is most common among persons aged 25-44 (Tables 24 and 25). Asphyxia was the leading cause in both fatal and non-fatal anoxia/hypoxia. Complications related to medical care was the second leading cause in nonfatal anoxia/hypoxia. These complications were much less common in fatal cases. Alcohol and drugs were involved in most of the nonfatal ETS. They were common in fatal ETS as well, as were carbon monoxide poisoning and postoperative shock.

Among those ABI discharges that were reported to have some relationship with an injury (i.e., included an E-code), 50% of the non-fatal cases were poisonings. Poisoning, suffocation or drowning were indicated in over 7 out of 10 of the fatal, injury-related ABI (Table 26). (Note that we are making a distinction here between “injury-related” and traumatic, with trauma being considered one of several forms of injury. ABI is, by the statutory definition, non-traumatic).

In general, as with TBI, the more populous counties had high numbers of ABI (Figure 4). Four of the most populous counties in 2005 (Jefferson, Fayette, Kenton, and Hardin) were the top four counties in ABI incidence. However, with the exception of Hardin (31st), the ten most populous counties did not appear in the top forty counties when ranked by age-adjusted rate.

The counties with the highest rates were strongly concentrated in eastern Kentucky (Figure 5). As with TBI, we located the counties that ranked among the top thirty in both frequency and age-adjusted rate of ABI. There were nine counties that met both criteria in 2005: Adair, Hopkins, Knox, Marshall, McCracken, Perry, Pike, and Russell. These can be considered leading

candidates for further study and intervention. Tables 20 through 22 show the frequency and rates of ABI cases by county, ranked in order by county, frequency, and age-adjusted rate respectively.

The length of stay (LOS) for hospitalized ABI patients varied from 1 day to 413 days. The mean LOS was 8.3 days with a mean of 4 days (Table 27). Table 28 indicates that 45% of ABI discharges were other than “routine” – i.e., to destinations other than the home. The three most frequent non-routine discharges were “skilled nursing facility”, “home health”, and “inpatient – other type of facility”.

Government (55%) or commercial (16%) sources were the primary payer billed for hospital charges in 7 out of 10 non-fatal ABI, based on discharges identified from the HDD (Table 29). Government payers were billed almost \$48 million in 2005, and commercial payers over \$14 million.

Spinal cord injury

SCI patients often are readmitted for problems stemming from the original injury. In an effort to avoid double counting in such cases, for SCI we looked only at the first three listed diagnosis codes. There were 243 SCI cases for Kentucky residents identified in 2005 (Table 31). The crude incidence rate was 5.8 per 100,000 population.

Age groups 65 and over had the highest age-specific rates (13.5 per 100,000) of SCI (Table 32). Persons aged 15-64 had lower rates but were similar across the groups. Males had nearly double the SCI rate of females, and had just over two thirds of the non-fatal SCI (Table 32).

Among SCI's for which an E-code was reported, MVTC and falls were the leading mechanisms of injury (Table 33). Unfortunately, over one out of four of the non-fatal SCI discharges had no E-code reported.

Hospitalized SCI patients had a length of stay (LOS) varying from 1 day to 81 days. The mean LOS was 11.6 days with a median of 7 days (Table 34). Almost half (57%) of the non-fatal SCI discharges had dispositions other than “routine”, compared to one-third for TBI (Table 35).

Government (36%) or commercial (21%) sources were the primary payer billed for acute care charges in 57% of nonfatal SCI, based on discharges identified from the HDD (Table 36). Commercial payers were billed over \$3 million in 2005, and government payers just over \$4 million.

Limitations

We have tried to minimize the double counting of cases, however double counting is possible for several reasons. These include multiple representation of cases within individual data sets (e.g., transfers between hospitals), or across linked data sets (due to failure of data linkage to identify duplicate records).

“Non-fatal” in this report refers to Kentucky-resident inpatients discharged alive from a licensed, acute-care hospital *in Kentucky*. It does not include those treated and released at emergency departments, those treated by emergency medical services who refused transport to a hospital, or those hospitalized outside of Kentucky. **The incidence of non-fatal TBI in Kentucky residents, in that larger sense, is certainly several times larger than the results reported here.**

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Figure 6. Mechanism of injury for self-pay TBI, 2005

Injury Causes by Payment Sources for Hospitalized TBI

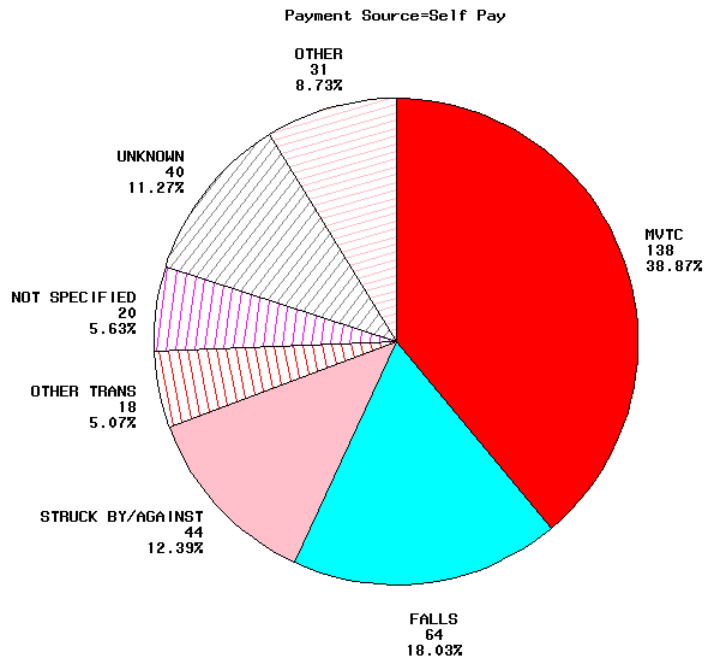


Figure 7. Mechanism of injury for TBI having 'Commercial Insurance' as primary payer, 2005

Injury Causes by Payment Sources for Hospitalized TBI

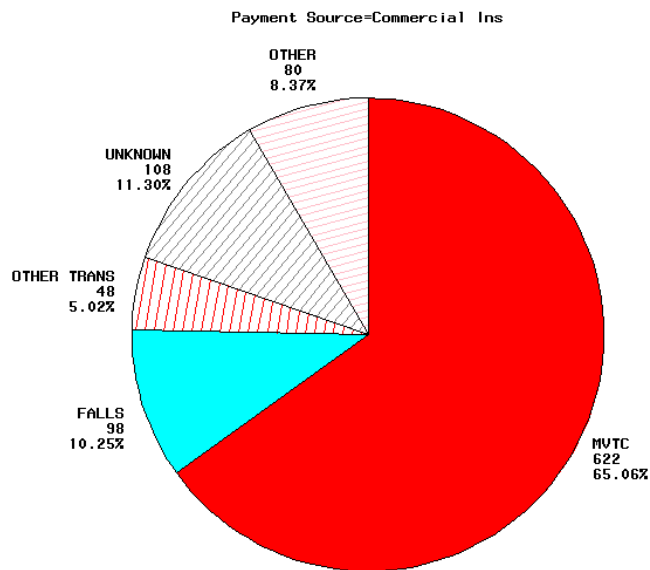


Figure 8. Mechanism of injury for TBI having 'Government' as primary payer, 2005

Injury Causes by Payment Sources for Hospitalized TBI

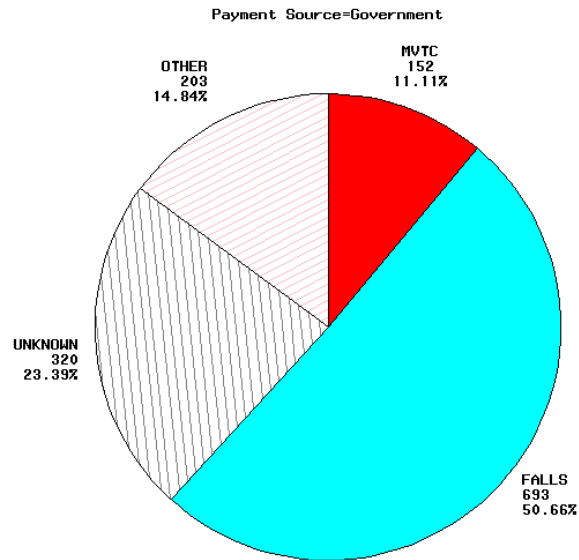


Figure 9. Mechanism of injury for TBI having 'Worker's Compensation' as primary payer, 2005

Injury Causes by Payment Sources for Hospitalized TBI

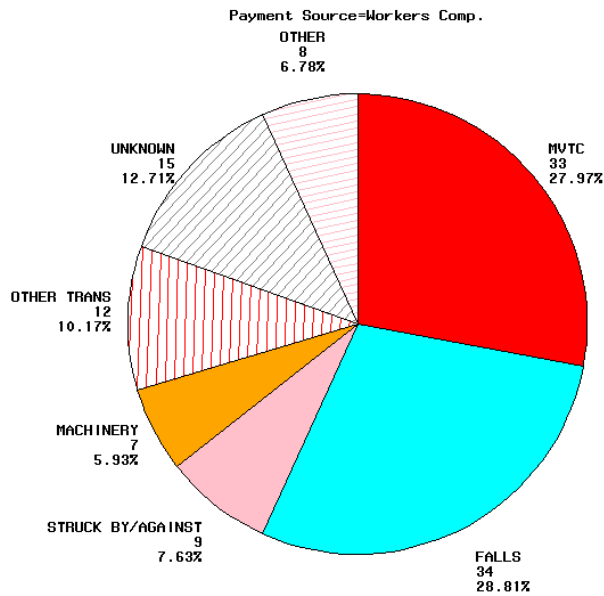
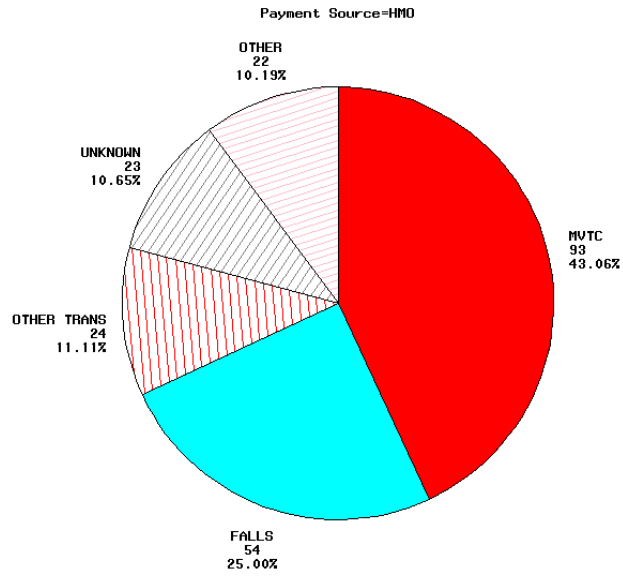


Figure 10. Mechanism of injury for TBI having 'HMO' as primary payer, 2005

Injury Causes by Payment Sources for Hospitalized TBI



TABLES

Table 1. TBI by age, 2005

Age	Fatal			Non-fatal			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
0-4	21	13.6	7.8	133	86.4	49.3	154	100.0	57.1
5-14	21	11.5	3.9	162	88.5	30.0	183	100.0	33.8
15-24	174	25.1	30.1	518	74.9	89.7	692	100.0	119.8
25-44	315	29.9	26.5	737	70.1	62.0	1,052	100.0	88.5
45-64	271	27.5	25.3	715	72.5	66.7	986	100.0	92.0
65+	295	22.7	56.1	1005	77.3	191.2	1,300	100.0	247.3
Total	1,097	25.1	26.3	3,270	74.9	78.4	4,367	100.0	104.6

Table 2. TBI by gender, 2005

Gender	Fatal			Non-fatal			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Male	773	27.8	37.7	2,004	72.2	97.8	2,777	100.0	135.5
Female	324	20.4	15.3	1,266	79.6	59.6	1,590	100.0	74.9
Total	1,097	25.1	26.3	3,270	74.9	78.4	4,367	100.0	104.6

Table 3. Leading causes of TBI, all ages, 2005

Mechanism of Injury	Fatal			Non-fatal			Total		
	Number	Pct.	Rate	Number	Pct.	Rate	Number	Pct.	Rate
Motor vehicle traffic crash	396	25.9	9.5	1,131	74.1	27.1	1,527	100.0	36.6
Fall	174	15.1	4.2	976	84.9	23.4	1,150	100.0	27.6
Firearm	316	95.5	7.6	15	4.5	0.4	331	100.0	7.9
Non-traffic land transport	30	14.4	0.7	179	85.6	4.3	209	100.0	5.0
Struck by object or person	18	9.9	0.4	163	90.1	3.9	181	100.0	4.3
Non-traffic pedal cycle	0	0.0	0.0	29	100.0	0.7	29	100.0	0.7
Machinery	5	26.3	0.1	14	73.7	0.3	19	100.0	0.5
Other	104	36.9	2.5	178	63.1	4.3	282	100.0	6.8
Unknown (missing E-code)	54	8.5	1.3	585	91.5	14.0	639	100.0	15.3
Total	1,097	25.1	26.3	3,270	74.9	78.4	4,367	100.0	104.7

Table 4. Leading causes of TBI for ages 0-4, 2005

Mechanism of Injury	Fatal		Non-fatal		Total	
	Number	Percent	Number	Percent	Number	Percent
Fall	1	4.8	50	37.6	51	33.1
Motor vehicle traffic crash	8	38.1	23	17.3	31	20.1
Struck by or against object or person	1	4.8	8	6.0	9	5.8
Non-traffic land transportation	1	4.8	6	4.5	7	4.5
Other (including non-specific codes)	9	42.9	33	24.8	42	27.3
Unknown (missing E-code)	1	4.8	13	9.8	14	9.1
Total	21	100.0	133	100.0	154	100.0

Table 5. Leading causes of TBI for ages 5-14, 2005

Mechanism of Injury	Fatal		Non-fatal		Total	
	Number	Percent	Number	Percent	Number	Percent
Motor vehicle traffic crash	16	76.2	56	34.6	72	39.3
Fall	0	0.0	28	17.3	28	15.3
Non-traffic land transportation	1	4.8	28	17.3	29	15.8
Other pedal cycle	0	0.0	10	6.2	10	5.5
Struck by or against object or person	2	9.5	13	8.0	15	8.2
Firearm	1	4.8	0	0.0	1	0.5
Other (including non-specific codes)	1	4.8	5	3.1	6	3.3
Unknown (missing E-code)	0	0.0	22	13.6	22	12.0
Total	21	100.0	162	100.0	183	100.0

Table 6. Leading causes of TBI for ages 15-24, 2005

Mechanism of Injury	Fatal		Non-fatal		Total	
	Number	Percent	Number	Percent	Number	Percent
Motor vehicle traffic crash	113	64.9	325	62.7	438	63.3
Firearm	42	24.1	5	1.0	47	6.8
Non-traffic land transportation	4	2.3	48	9.3	52	7.5
Fall	2	1.1	33	6.4	35	5.1
Struck by or against object or person	1	0.6	34	6.6	35	5.1
Other (including non-specific codes)	10	5.7	19	3.7	29	4.2
Unknown (missing E-code)	2	1.1	54	10.4	56	8.1
Total	174	100.0	518	100.0	692	100.0

Table 7. Leading causes of TBI for ages 25-44, 2005

Mechanism of Injury	Fatal		Non-fatal		Total	
	Number	Percent	Number	Percent	Number	Percent
Motor vehicle traffic crash	118	37.5	373	50.6	491	46.7
Firearm	129	41.0	6	0.8	135	12.8
Fall	11	3.5	85	11.5	96	9.1
Struck by or against object or person	6	1.9	57	7.7	63	6.0
Non-traffic land transportation	15	4.8	60	8.1	75	7.1
Machinery	1	0.3	7	0.9	8	0.8
Other (including non-specific codes)	28	8.9	56	7.6	84	8.0
Unknown (missing E-code)	7	2.2	93	12.6	100	9.5
Total	315	100.0	737	100.0	1,052	100.0

Table 8. Leading causes of TBI for ages 45-64, 2005

Mechanism of Injury	Fatal		Non-fatal		Total	
	Number	Percent	Number	Percent	Number	Percent
Motor vehicle traffic crash	81	29.9	262	36.6	343	34.8
Fall	40	14.8	195	27.3	235	23.8
Firearm	105	38.7	3	0.4	108	11.0
Struck by or against object or person	6	2.2	37	5.2	43	4.4
Non-traffic land transportation	8	3.0	27	3.8	35	3.5
Other (including non-specific codes)	20	7.4	52	7.3	72	7.3
Unknown (missing E-code)	11	4.1	139	19.4	150	15.2
Total	271	100.0	715	100.0	986	100.0

Table 9. Leading causes of TBI for ages 65+, 2005

Mechanism of Injury	Fatal		Non-fatal		Total	
	Number	Percent	Number	Percent	Number	Percent
Fall	120	40.7	585	58.2	705	54.2
Motor vehicle traffic crash	60	20.3	92	9.2	152	11.7
Firearm	38	12.9	1	0.1	39	3.0
Struck by or against object or person	2	0.7	14	1.4	16	1.2
Non-traffic land transportation	1	0.3	10	1.0	11	0.8
Other (including non-specific codes)	41	13.9	39	3.9	80	6.2
Unknown (missing E-code)	33	11.2	264	26.3	297	22.8
Total	295	100.0	1,005	100.0	1,300	100.0

Table 10. Incidence of TBI by county, sorted by county name, 2005

County	Freq	Percent	Age-Adjusted Rate	Crude Rate	County	Freq	Percent	Age-Adjusted Rate	Crude Rate	County	Freq	Percent	Age-Adjusted Rate	Crude Rate
Adair	30	0.7	162.0	170.7	Grant	15	0.3	66.2	61.0	McLean	17	0.4	161.3	171.3
Allen	15	0.3	81.2	80.2	Graves	45	1.0	105.7	119.6	Meade	31	0.7	110.3	109.0
Anderson	14	0.3	69.8	68.6	Grayson	32	0.7	129.6	127.0	Menifee	6	0.1	81.3	88.1
Ballard	12	0.3	133.0	145.0	Green	20	0.5	167.1	172.6	Mercer	17	0.4	73.6	78.7
Barren	33	0.8	82.3	82.4	Greenup	35	0.8	87.7	94.1	Metcalfe	16	0.4	162.9	156.9
Bath	17	0.4	144.9	146.2	Hancock	13	0.3	166.5	150.9	Monroe	18	0.4	136.2	154.4
Bell	20	0.5	67.7	67.4	Hardin	101	2.3	107.7	104.2	Montgomery	28	0.6	115.8	115.4
Boone	62	1.4	76.7	58.3	Harlan	28	0.6	87.1	88.6	Morgan	15	0.3	113.2	104.6
Bourbon	20	0.5	97.4	100.8	Harrison	16	0.4	87.6	86.4	Muhlenberg	30	0.7	89.9	95.1
Boyd	47	1.1	86.8	94.8	Hart	19	0.4	106.6	103.7	Nelson	49	1.1	131.3	119.3
Boyle	23	0.5	76.5	81.1	Henderson	29	0.7	60.4	63.6	Nicholas	10	0.2	142.5	142.3
Bracken	7	0.2	85.0	80.7	Henry	23	0.5	151.3	144.6	Ohio	32	0.7	134.0	135.2
Breathitt	38	0.9	247.4	238.1	Hickman	13	0.3	240.8	256.2	Oldham	34	0.8	67.3	63.5
Breckinridge	27	0.6	130.3	139.9	Hopkins	47	1.1	100.4	100.6	Owen	13	0.3	119.8	114.3
Bullitt	76	1.7	119.6	111.0	Jackson	24	0.5	177.6	176.2	Owsley	17	0.4	365.5	358.2
Butler	15	0.3	109.2	111.8	Jefferson	849	19.4	118.6	121.3	Pendleton	12	0.3	87.6	79.3
Caldwell	7	0.2	51.7	54.0	Jessamine	42	1.0	101.1	96.6	Perry	73	1.7	254.3	247.9
Calloway	21	0.5	66.7	59.8	Johnson	32	0.7	139.4	133.3	Pike	70	1.6	108.5	104.6
Campbell	61	1.4	68.1	69.9	Kenton	104	2.4	71.9	67.7	Powell	25	0.6	184.4	182.7
Carlisle	9	0.2	161.4	168.9	Knott	20	0.5	113.6	113.9	Pulaski	87	2.0	147.5	147.0
Carroll	14	0.3	132.0	133.9	Knox	51	1.2	158.0	159.0	Robertson	*	-	-	-
Carter	19	0.4	71.2	69.6	Larue	15	0.3	108.5	109.5	Rockcastle	21	0.5	127.8	125.7
Casey	28	0.6	179.5	171.9	Laurel	60	1.4	108.1	106.5	Rowan	12	0.3	45.8	54.0
Christian	36	0.8	54.4	51.3	Lawrence	14	0.3	88.4	86.6	Russell	19	0.4	111.5	111.6
Clark	29	0.7	85.6	83.1	Lee	14	0.3	180.0	181.6	Scott	12	0.3	29.2	30.5
Clay	36	0.8	141.9	149.1	Leslie	21	0.5	170.2	175.1	Shelby	31	0.7	81.0	81.1
Clinton	17	0.4	174.3	177.8	Letcher	45	1.0	187.2	184.2	Simpson	12	0.3	68.4	70.5
Crittenden	11	0.3	115.4	122.4	Lewis	9	0.2	65.4	64.9	Spencer	30	0.7	201.7	191.7
Cumberland	10	0.2	137.1	139.9	Lincoln	31	0.7	122.2	123.4	Taylor	48	1.1	190.2	202.1
Daviess	111	2.5	112.5	119.3	Livingston	8	0.2	70.5	82.0	Todd	10	0.2	85.6	83.7
Edmonson	11	0.3	83.6	91.4	Logan	19	0.4	70.3	69.9	Trigg	10	0.2	70.3	74.9
Elliott	7	0.2	99.1	101.4	Lyon	*	-	-	-	Trimble	9	0.2	116.0	99.7
Estill	23	0.5	145.9	152.4	Madison	64	1.5	84.5	82.3	Union	10	0.2	58.9	64.1
Fayette	202	4.6	77.2	75.4	Magoffin	18	0.4	134.9	133.6	Warren	85	1.9	88.0	85.9
Fleming	28	0.6	180.9	191.7	Marion	33	0.8	174.6	174.2	Washington	10	0.2	84.1	87.7
Floyd	48	1.1	114.0	113.7	Marshall	43	1.0	121.2	138.9	Wayne	20	0.5	95.9	98.3
Franklin	30	0.7	64.4	62.2	Martin	8	0.2	68.5	65.5	Webster	9	0.2	66.9	63.6
Fulton	18	0.4	232.3	249.4	Mason	16	0.4	96.8	93.3	Whitley	40	0.9	104.7	105.2
Gallatin	6	0.1	93.4	73.8	McCracken	77	1.8	108.8	119.0	Wolfe	16	0.4	230.5	226.3
Garrard	20	0.5	120.9	120.6	McCreary	15	0.3	88.5	87.0	Woodford	30	0.7	136.6	123.7

* At least one but fewer than five

- Percentage or rate suppressed to prevent disclosure of the value on which it was based

Table 11. Incidence of TBI by county, sorted by frequency, 2005

County	Freq	Percent	Age-Adjusted Rate	Crude Rate	County	Freq	Percent	Age-Adjusted Rate	Crude Rate	County	Freq	Percent	Age-Adjusted Rate	Crude Rate
Jefferson	849	19.4	118.6	121.3	Franklin	30	0.7	64.4	62.2	Wolfe	16	0.4	230.5	226.3
Fayette	202	4.6	77.2	75.4	Muhlenberg	30	0.7	89.9	95.1	Allen	15	0.3	81.2	80.2
Daviess	111	2.5	112.5	119.3	Spencer	30	0.7	201.7	191.7	Butler	15	0.3	109.2	111.8
Kenton	104	2.4	71.9	67.7	Woodford	30	0.7	136.6	123.7	Grant	15	0.3	66.2	61.0
Hardin	101	2.3	107.7	104.2	Clark	29	0.7	85.6	83.1	Larue	15	0.3	108.5	109.5
Pulaski	87	2.0	147.5	147.0	Henderson	29	0.7	60.4	63.6	McCreary	15	0.3	88.5	87.0
Warren	85	1.9	88.0	85.9	Casey	28	0.6	179.5	171.9	Morgan	15	0.3	113.2	104.6
McCracken	77	1.8	108.8	119.0	Fleming	28	0.6	180.9	191.7	Anderson	14	0.3	69.8	68.6
Bullitt	76	1.7	119.6	111.0	Harlan	28	0.6	87.1	88.6	Carroll	14	0.3	132.0	133.9
Perry	73	1.7	254.3	247.9	Montgomery	28	0.6	115.8	115.4	Lawrence	14	0.3	88.4	86.6
Pike	70	1.6	108.5	104.6	Breckinridge	27	0.6	130.3	139.9	Lee	14	0.3	180.0	181.6
Madison	64	1.5	84.5	82.3	Powell	25	0.6	184.4	182.7	Hancock	13	0.3	166.5	150.9
Boone	62	1.4	76.7	58.3	Jackson	24	0.5	177.6	176.2	Hickman	13	0.3	240.8	256.2
Campbell	61	1.4	68.1	69.9	Boyle	23	0.5	76.5	81.1	Owen	13	0.3	119.8	114.3
Laurel	60	1.4	108.1	106.5	Estill	23	0.5	145.9	152.4	Ballard	12	0.3	133.0	145.0
Knox	51	1.2	158.0	159.0	Henry	23	0.5	151.3	144.6	Pendleton	12	0.3	87.6	79.3
Nelson	49	1.1	131.3	119.3	Calloway	21	0.5	66.7	59.8	Rowan	12	0.3	45.8	54.0
Floyd	48	1.1	114.0	113.7	Leslie	21	0.5	170.2	175.1	Scott	12	0.3	29.2	30.5
Taylor	48	1.1	190.2	202.1	Rockcastle	21	0.5	127.8	125.7	Simpson	12	0.3	68.4	70.5
Boyd	47	1.1	86.8	94.8	Bell	20	0.5	67.7	67.4	Crittenden	11	0.3	115.4	122.4
Hopkins	47	1.1	100.4	100.6	Bourbon	20	0.5	97.4	100.8	Edmonson	11	0.3	83.6	91.4
Graves	45	1.0	105.7	119.6	Garrard	20	0.5	120.9	120.6	Cumberland	10	0.2	137.1	139.9
Letcher	45	1.0	187.2	184.2	Green	20	0.5	167.1	172.6	Nicholas	10	0.2	142.5	142.3
Marshall	43	1.0	121.2	138.9	Knott	20	0.5	113.6	113.9	Todd	10	0.2	85.6	83.7
Jessamine	42	1.0	101.1	96.6	Wayne	20	0.5	95.9	98.3	Trigg	10	0.2	70.3	74.9
Whitley	40	0.9	104.7	105.2	Carter	19	0.4	71.2	69.6	Union	10	0.2	58.9	64.1
Breathitt	38	0.9	247.4	238.1	Hart	19	0.4	106.6	103.7	Washington	10	0.2	84.1	87.7
Christian	36	0.8	54.4	51.3	Logan	19	0.4	70.3	69.9	Carlisle	9	0.2	161.4	168.9
Clay	36	0.8	141.9	149.1	Russell	19	0.4	111.5	111.6	Lewis	9	0.2	65.4	64.9
Greenup	35	0.8	87.7	94.1	Fulton	18	0.4	232.3	249.4	Trimble	9	0.2	116.0	99.7
Oldham	34	0.8	67.3	63.5	Magoffin	18	0.4	134.9	133.6	Webster	9	0.2	66.9	63.6
Barren	33	0.8	82.3	82.4	Monroe	18	0.4	136.2	154.4	Livingston	8	0.2	70.5	82.0
Marion	33	0.8	174.6	174.2	Bath	17	0.4	144.9	146.2	Martin	8	0.2	68.5	65.5
Grayson	32	0.7	129.6	127.0	Clinton	17	0.4	174.3	177.8	Bracken	7	0.2	85.0	80.7
Johnson	32	0.7	139.4	133.3	McLean	17	0.4	161.3	171.3	Caldwell	7	0.2	51.7	54.0
Ohio	32	0.7	134.0	135.2	Mercer	17	0.4	73.6	78.7	Elliott	7	0.2	99.1	101.4
Lincoln	31	0.7	122.2	123.4	Owsley	17	0.4	365.5	358.2	Gallatin	6	0.1	93.4	73.8
Meade	31	0.7	110.3	109.0	Harrison	16	0.4	87.6	86.4	Menifee	6	0.1	81.3	88.1
Shelby	31	0.7	81.0	81.1	Mason	16	0.4	96.8	93.3	Robertson	*	-	-	-
Adair	30	0.7	162.0	170.7	Metcalfe	16	0.4	162.9	156.9	Lyon	*	-	-	-

* At least one but fewer than five

- Percentage or rate suppressed to prevent disclosure of the value on which it was based

Table 12. Incidence of TBI by county, sorted by age-adjusted rate, 2005

County	Freq	Percent	Age-Adjusted Rate	Crude Rate	County	Freq	Percent	Age-Adjusted Rate	Crude Rate	County	Freq	Percent	Age-Adjusted Rate	Crude Rate
Owsley	17	0.4	365.5	358.2	Breckinridge	27	0.6	130.3	139.9	Pendleton	12	0.3	87.6	79.3
Perry	73	1.7	254.3	247.9	Grayson	32	0.7	129.6	127.0	Harlan	28	0.6	87.1	88.6
Breathitt	38	0.9	247.4	238.1	Rockcastle	21	0.5	127.8	125.7	Boyd	47	1.1	86.8	94.8
Hickman	13	0.3	240.8	256.2	Lincoln	31	0.7	122.2	123.4	Clark	29	0.7	85.6	83.1
Fulton	18	0.4	232.3	249.4	Marshall	43	1.0	121.2	138.9	Todd	10	0.2	85.6	83.7
Wolfe	16	0.4	230.5	226.3	Garrard	20	0.5	120.9	120.6	Bracken	7	0.2	85.0	80.7
Spencer	30	0.7	201.7	191.7	Owen	13	0.3	119.8	114.3	Madison	64	1.5	84.5	82.3
Taylor	48	1.1	190.2	202.1	Bullitt	76	1.7	119.6	111.0	Washington	10	0.2	84.1	87.7
Letcher	45	1.0	187.2	184.2	Jefferson	849	19.4	118.6	121.3	Edmonson	11	0.3	83.6	91.4
Powell	25	0.6	184.4	182.7	Trimble	9	0.2	116.0	99.7	Barren	33	0.8	82.3	82.4
Fleming	28	0.6	180.9	191.7	Montgomery	28	0.6	115.8	115.4	Menifee	6	0.1	81.3	88.1
Lee	14	0.3	180.0	181.6	Crittenden	11	0.3	115.4	122.4	Allen	15	0.3	81.2	80.2
Robertson	*	-	-	-	Floyd	48	1.1	114.0	113.7	Shelby	31	0.7	81.0	81.1
Casey	28	0.6	179.5	171.9	Knott	20	0.5	113.6	113.9	Fayette	202	4.6	77.2	75.4
Jackson	24	0.5	177.6	176.2	Morgan	15	0.3	113.2	104.6	Boone	62	1.4	76.7	58.3
Marion	33	0.8	174.6	174.2	Daviess	111	2.5	112.5	119.3	Boyle	23	0.5	76.5	81.1
Clinton	17	0.4	174.3	177.8	Russell	19	0.4	111.5	111.6	Mercer	17	0.4	73.6	78.7
Leslie	21	0.5	170.2	175.1	Meade	31	0.7	110.3	109.0	Kenton	104	2.4	71.9	67.7
Green	20	0.5	167.1	172.6	Butler	15	0.3	109.2	111.8	Carter	19	0.4	71.2	69.6
Hancock	13	0.3	166.5	150.9	McCracken	77	1.8	108.8	119.0	Livingston	8	0.2	70.5	82.0
Metcalfe	16	0.4	162.9	156.9	Pike	70	1.6	108.5	104.6	Logan	19	0.4	70.3	69.9
Adair	30	0.7	162.0	170.7	Larue	15	0.3	108.5	109.5	Trigg	10	0.2	70.3	74.9
Carlisle	9	0.2	161.4	168.9	Laurel	60	1.4	108.1	106.5	Anderson	14	0.3	69.8	68.6
McLean	17	0.4	161.3	171.3	Hardin	101	2.3	107.7	104.2	Martin	8	0.2	68.5	65.5
Knox	51	1.2	158.0	159.0	Hart	19	0.4	106.6	103.7	Simpson	12	0.3	68.4	70.5
Henry	23	0.5	151.3	144.6	Graves	45	1.0	105.7	119.6	Campbell	61	1.4	68.1	69.9
Pulaski	87	2.0	147.5	147.0	Whitley	40	0.9	104.7	105.2	Bell	20	0.5	67.7	67.4
Estill	23	0.5	145.9	152.4	Jessamine	42	1.0	101.1	96.6	Oldham	34	0.8	67.3	63.5
Bath	17	0.4	144.9	146.2	Hopkins	47	1.1	100.4	100.6	Webster	9	0.2	66.9	63.6
Nicholas	10	0.2	142.5	142.3	Elliott	7	0.2	99.1	101.4	Calloway	21	0.5	66.7	59.8
Clay	36	0.8	141.9	149.1	Bourbon	20	0.5	97.4	100.8	Grant	15	0.3	66.2	61.0
Johnson	32	0.7	139.4	133.3	Mason	16	0.4	96.8	93.3	Lewis	9	0.2	65.4	64.9
Cumberland	10	0.2	137.1	139.9	Wayne	20	0.5	95.9	98.3	Franklin	30	0.7	64.4	62.2
Woodford	30	0.7	136.6	123.7	Gallatin	6	0.1	93.4	73.8	Henderson	29	0.7	60.4	63.6
Monroe	18	0.4	136.2	154.4	Muhlenberg	30	0.7	89.9	95.1	Union	10	0.2	58.9	64.1
Magoffin	18	0.4	134.9	133.6	McCreary	15	0.3	88.5	87.0	Christian	36	0.8	54.4	51.3
Ohio	32	0.7	134.0	135.2	Lawrence	14	0.3	88.4	86.6	Caldwell	7	0.2	51.7	54.0
Ballard	12	0.3	133.0	145.0	Warren	85	1.9	88.0	85.9	Rowan	12	0.3	45.8	54.0
Carroll	14	0.3	132.0	133.9	Greenup	35	0.8	87.7	94.1	Scott	12	0.3	29.2	30.5
Nelson	49	1.1	131.3	119.3	Harrison	16	0.4	87.6	86.4	Lyon	*	-	-	-

* At least one but fewer than five

- Percentage or rate suppressed to prevent disclosure of the value on which it was based

Table 13. Hospital discharges by disposition for non-fatal TBI, 2005

Discharge Disposition	Number	Percent
Routine discharge (home/self care)	2,170	66.4
Skilled nursing facility (SNF)	354	10.8
Home health	268	8.2
Inpatient-other short-term hospital	74	2.3
Intermediate care facility (ICF)	25	0.8
Inpatient-other type facility	70	2.1
Other	309	9.4
Total	3,270	100.0

Table 14. Length of stay for non-fatal TBI, 2005

Length of Stay	Number	Percent*
1 day	536	16.4
More than one day but less than 1 week	1773	54.2
1 week to less than 2 weeks	577	17.6
2 weeks to less than 3 weeks	200	6.1
3 weeks to less than 4 weeks	105	3.2
4 weeks or more	79	2.4
Total	3270	100

*Percent of Non-Fatal TBI

Table 15. Barrell Matrix Type I/II/III TBI by mechanism for non-fatal TBI, 2005

Injury Mechanism	Type of TBI								Total
	Type I		Type II		Type III		Other		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Motor vehicle traffic crash	417	26.9	202	41.5	10	11.0	33	26.4	662
Falls	574	37.1	113	23.2	29	31.9	46	36.8	762
Non-traffic land transportation	76	4.9	40	8.2	10	11.0	5	4.0	131
Struck by or against object or person	67	4.3	29	6.0	9	9.9	12	9.6	117
Non-traffic pedal cycle	10	0.6	6	1.2	2	2.2	1	0.8	19
Firearm	35	2.3	1	0.2	2	2.2	0	0.0	38
Other	101	6.5	28	5.7	4	4.4	2	1.6	135
Unknown	269	17.4	68	14.0	10	11.0	28	22.4	375
Total	1,549	100.0	487	100.0	76	83.5	127	101.6	2,239

Table 16. Primary payers for hospitalized TBI, 2005
(Hospital Discharge Dataset only)

Payer	Number of Discharges	Percent of Discharges	Total Hospital Charges
Government	1,269	38.8	\$ 31,478,441
Commercial Ins	898	27.5	\$ 41,046,890
Self Pay	330	10.1	\$ 15,500,788
Workers Compensation	113	3.5	\$ 4,328,964
HMO	205	6.3	\$ 8,784,003
Other	455	13.9	\$ 16,710,668
Total	3,270	100.0	\$ 117,849,754

Table 17. Work related TBI, 2005

Work Related	Number
Fatalities	40
Non-Fatal	152
Total Work Related	192

Table 18. ABI by age, 2005

Age	Fatal			Non-fatal			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
0-4	52	40.9	19.3	75	59.1	27.8	127	100.0	47.1
5-14	16	19.0	3.0	68	81.0	12.6	84	100.0	15.5
15-24	65	27.4	11.3	172	72.6	29.8	237	100.0	41.0
25-44	290	33.0	24.4	589	67.0	49.6	879	100.0	74.0
45-64	380	33.6	35.5	752	66.4	70.2	1,132	100.0	105.7
65+	550	41.1	104.6	787	58.9	149.7	1,337	100.0	254.3
Total	1,353	35.6	32.4	2,443	64.4	58.5	3,796	100.0	91.0

Table 19. ABI by gender, 2005

Gender	Fatal			Non-fatal			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Male	810	40.4	39.5	1,195	59.6	58.3	2,005	100.0	97.8
Female	543	30.3	25.6	1,248	69.7	58.8	1,791	100.0	84.4
Total	1,353	35.6	32.4	2,443	64.4	58.5	3,796	100.0	91.0

Table 20. Incidence of ABI by county, sorted by county name, 2005

County	Freq	Percent	Age-Adjusted Rate	Crude Rate	County	Freq	Percent	Age-Adjusted Rate	Crude Rate	County	Freq	Percent	Age-Adjusted Rate	Crude Rate
Adair	41	1.1	215.7	233.3	Grant	22	0.6	90.1	89.4	McLean	8	0.2	75.4	80.6
Allen	16	0.4	84.5	85.5	Graves	34	0.9	84.8	90.4	Meade	23	0.6	94.8	80.9
Anderson	15	0.4	81.5	73.6	Grayson	24	0.6	97.9	95.3	Menifee	6	0.2	77.5	88.1
Ballard	6	0.2	68.1	72.5	Green	6	0.2	48.4	51.8	Mercer	28	0.7	119.4	129.6
Barren	43	1.1	96.3	107.3	Greenup	33	0.9	81.3	88.7	Metcalfe	10	0.3	100.5	98.1
Bath	9	0.2	66.6	77.4	Hancock	8	0.2	95.9	92.9	Monroe	9	0.2	71.5	77.2
Bell	28	0.7	90.5	94.4	Hardin	100	2.6	107.8	103.1	Montgomery	18	0.5	70.4	74.2
Boone	67	1.8	68.4	63.0	Harlan	45	1.2	141.8	142.3	Morgan	12	0.3	86.6	83.7
Bourbon	18	0.5	84.5	90.8	Harrison	16	0.4	81.9	86.4	Muhlenberg	36	0.9	100.4	114.1
Boyd	51	1.3	93.6	102.8	Hart	16	0.4	80.3	87.3	Nelson	25	0.7	61.3	60.8
Boyle	20	0.5	67.9	70.5	Henderson	18	0.5	37.2	39.5	Nicholas	12	0.3	151.1	170.8
Bracken	11	0.3	116.4	126.9	Henry	28	0.7	166.4	176.1	Ohio	19	0.5	72.7	80.3
Breathitt	21	0.6	133.8	131.6	Hickman	7	0.2	107.3	137.9	Oldham	32	0.8	89.0	59.8
Breckinridge	13	0.3	61.8	67.4	Hopkins	67	1.8	128.6	143.5	Owen	11	0.3	103.0	96.7
Bullitt	36	0.9	59.5	52.6	Jackson	16	0.4	117.4	117.5	Owsley	8	0.2	171.3	168.6
Butler	7	0.2	49.7	52.2	Jefferson	637	16.8	87.2	91.0	Pendleton	6	0.2	38.2	39.7
Caldwell	13	0.3	85.6	100.2	Jessamine	39	1.0	91.7	89.7	Perry	60	1.6	201.9	203.7
Calloway	18	0.5	49.9	51.3	Johnson	32	0.8	131.4	133.3	Pike	93	2.4	138.2	139.0
Campbell	67	1.8	75.0	76.8	Kenton	132	3.5	88.1	85.9	Powell	15	0.4	104.7	109.6
Carlisle	6	0.2	91.4	112.6	Knott	25	0.7	139.8	142.4	Pulaski	67	1.8	106.2	113.2
Carroll	9	0.2	83.3	86.1	Knox	42	1.1	134.2	131.0	Robertson	0	0.0	0.0	0.0
Carter	23	0.6	82.4	84.2	Larue	16	0.4	103.1	116.8	Rockcastle	19	0.5	108.3	113.7
Casey	33	0.9	179.5	202.6	Laurel	32	0.8	56.8	56.8	Rowan	22	0.6	112.0	99.0
Christian	34	0.9	55.0	48.5	Lawrence	16	0.4	99.0	99.0	Russell	50	1.3	255.1	293.8
Clark	29	0.8	81.5	83.1	Lee	12	0.3	143.8	155.7	Scott	24	0.6	71.4	60.9
Clay	20	0.5	84.6	82.8	Leslie	13	0.3	92.5	108.4	Shelby	25	0.7	67.3	65.4
Clinton	11	0.3	116.5	115.1	Letcher	25	0.7	102.3	102.3	Simpson	14	0.4	79.6	82.3
Crittenden	5	0.1	41.6	55.7	Lewis	10	0.3	63.9	72.1	Spencer	6	0.2	37.0	38.3
Cumberland	19	0.5	249.3	265.8	Lincoln	17	0.4	65.3	67.7	Taylor	23	0.6	95.2	96.8
Daviess	62	1.6	62.6	66.6	Livingston	14	0.4	123.1	143.4	Todd	8	0.2	61.7	67.0
Edmonson	*	-	-	-	Logan	21	0.6	75.0	77.3	Trigg	*	-	-	-
Elliott	6	0.2	94.7	86.9	Lyon	7	0.2	79.8	85.8	Trimble	*	-	-	-
Estill	19	0.5	112.4	125.9	Madison	66	1.7	87.3	84.9	Union	10	0.3	63.9	64.1
Fayette	203	5.3	78.2	75.7	Magoffin	16	0.4	123.8	118.8	Warren	65	1.7	71.3	65.7
Fleming	8	0.2	53.9	54.8	Marion	13	0.3	65.7	68.6	Washington	9	0.2	73.8	79.0
Floyd	46	1.2	103.6	109.0	Marshall	37	1.0	108.9	119.5	Wayne	18	0.5	86.0	88.4
Franklin	48	1.3	93.6	99.6	Martin	24	0.6	207.5	196.5	Webster	9	0.2	59.6	63.6
Fulton	10	0.3	105.6	138.6	Mason	16	0.4	84.7	93.3	Whitley	37	1.0	95.2	97.3
Gallatin	7	0.2	96.3	86.1	McCracken	90	2.4	126.8	139.1	Wolfe	11	0.3	156.4	155.6
Garrard	8	0.2	50.0	48.3	McCreary	19	0.5	117.6	110.3	Woodford	20	0.5	87.2	82.5

* At least one but fewer than five

- Percentage or rate suppressed to prevent disclosure of the value on which it was based

Table 21. Incidence of ABI by county, sorted by frequency, 2005

County	Freq	Percent	Age-Adjusted Rate	Crude Rate	County	Freq	Percent	Age-Adjusted Rate	Crude Rate	County	Freq	Percent	Age-Adjusted Rate	Crude Rate
Jefferson	637	16.8	87.2	91.0	Nelson	25	0.7	61.3	60.8	Leslie	13	0.3	92.5	108.4
Fayette	203	5.3	78.2	75.7	Shelby	25	0.7	67.3	65.4	Marion	13	0.3	65.7	68.6
Kenton	132	3.5	88.1	85.9	Grayson	24	0.6	97.9	95.3	Lee	12	0.3	143.8	155.7
Hardin	100	2.6	107.8	103.1	Martin	24	0.6	207.5	196.5	Morgan	12	0.3	86.6	83.7
Pike	93	2.4	138.2	139.0	Scott	24	0.6	71.4	60.9	Nicholas	12	0.3	151.1	170.8
McCracken	90	2.4	126.8	139.1	Carter	23	0.6	82.4	84.2	Bracken	11	0.3	116.4	126.9
Boone	67	1.8	68.4	63.0	Meade	23	0.6	94.8	80.9	Clinton	11	0.3	116.5	115.1
Campbell	67	1.8	75.0	76.8	Taylor	23	0.6	95.2	96.8	Owen	11	0.3	103.0	96.7
Hopkins	67	1.8	128.6	143.5	Grant	22	0.6	90.1	89.4	Wolfe	11	0.3	156.4	155.6
Pulaski	67	1.8	106.2	113.2	Rowan	22	0.6	112.0	99.0	Fulton	10	0.3	105.6	138.6
Madison	66	1.7	87.3	84.9	Breathitt	21	0.6	133.8	131.6	Lewis	10	0.3	63.9	72.1
Warren	65	1.7	71.3	65.7	Logan	21	0.6	75.0	77.3	Metcalfe	10	0.3	100.5	98.1
Daviess	62	1.6	62.6	66.6	Boyle	20	0.5	67.9	70.5	Union	10	0.3	63.9	64.1
Perry	60	1.6	201.9	203.7	Clay	20	0.5	84.6	82.8	Bath	9	0.2	66.6	77.4
Boyd	51	1.3	93.6	102.8	Woodford	20	0.5	87.2	82.5	Carroll	9	0.2	83.3	86.1
Russell	50	1.3	255.1	293.8	Cumberland	19	0.5	249.3	265.8	Monroe	9	0.2	71.5	77.2
Franklin	48	1.3	93.6	99.6	Estill	19	0.5	112.4	125.9	Washington	9	0.2	73.8	79.0
Floyd	46	1.2	103.6	109.0	McCreary	19	0.5	117.6	110.3	Webster	9	0.2	59.6	63.6
Harlan	45	1.2	141.8	142.3	Ohio	19	0.5	72.7	80.3	Fleming	8	0.2	53.9	54.8
Barren	43	1.1	96.3	107.3	Rockcastle	19	0.5	108.3	113.7	Garrard	8	0.2	50.0	48.3
Knox	42	1.1	134.2	131.0	Bourbon	18	0.5	84.5	90.8	Hancock	8	0.2	95.9	92.9
Adair	41	1.1	215.7	233.3	Calloway	18	0.5	49.9	51.3	McLean	8	0.2	75.4	80.6
Jessamine	39	1.0	91.7	89.7	Henderson	18	0.5	37.2	39.5	Owsley	8	0.2	171.3	168.6
Marshall	37	1.0	108.9	119.5	Montgomery	18	0.5	70.4	74.2	Todd	8	0.2	61.7	67.0
Whitley	37	1.0	95.2	97.3	Wayne	18	0.5	86.0	88.4	Butler	7	0.2	49.7	52.2
Bullitt	36	0.9	59.5	52.6	Lincoln	17	0.4	65.3	67.7	Gallatin	7	0.2	96.3	86.1
Muhlenberg	36	0.9	100.4	114.1	Allen	16	0.4	84.5	85.5	Hickman	7	0.2	107.3	137.9
Christian	34	0.9	55.0	48.5	Harrison	16	0.4	81.9	86.4	Lyon	7	0.2	79.8	85.8
Graves	34	0.9	84.8	90.4	Hart	16	0.4	80.3	87.3	Ballard	6	0.2	68.1	72.5
Casey	33	0.9	179.5	202.6	Jackson	16	0.4	117.4	117.5	Carlisle	6	0.2	91.4	112.6
Greenup	33	0.9	81.3	88.7	Larue	16	0.4	103.1	116.8	Elliott	6	0.2	94.7	86.9
Johnson	32	0.8	131.4	133.3	Lawrence	16	0.4	99.0	99.0	Green	6	0.2	48.4	51.8
Laurel	32	0.8	56.8	56.8	Magoffin	16	0.4	123.8	118.8	Menifee	6	0.2	77.5	88.1
Oldham	32	0.8	89.0	59.8	Mason	16	0.4	84.7	93.3	Pendleton	6	0.2	38.2	39.7
Clark	29	0.8	81.5	83.1	Anderson	15	0.4	81.5	73.6	Spencer	6	0.2	37.0	38.3
Bell	28	0.7	90.5	94.4	Powell	15	0.4	104.7	109.6	Crittenden	5	0.1	41.6	55.7
Henry	28	0.7	166.4	176.1	Livingston	14	0.4	123.1	143.4	Edmonson	*	-	-	-
Mercer	28	0.7	119.4	129.6	Simpson	14	0.4	79.6	82.3	Trimble	*	-	-	-
Knott	25	0.7	139.8	142.4	Breckinridge	13	0.3	61.8	67.4	Trigg	*	-	-	-
Letcher	25	0.7	102.3	102.3	Caldwell	13	0.3	85.6	100.2	Robertson	0	0.0	0.0	0.0

* At least one but fewer than five

- Percentage or rate suppressed to prevent disclosure of the value on which it was based

Table 22. Incidence of ABI by county, sorted by age-adjusted rate, 2005

County	Freq	Percent	Age-Adjusted		County	Freq	Percent	Age-Adjusted		County	Freq	Percent	Age-Adjusted	
			Rate	Crude Rate				Rate	Crude Rate				Rate	Crude Rate
Russell	50	1.3	255.1	293.8	Muhlenberg	36	0.9	100.4	114.1	Menifee	6	0.2	77.5	88.1
Cumberland	19	0.5	249.3	265.8	Lawrence	16	0.4	99.0	99.0	McLean	8	0.2	75.4	80.6
Adair	41	1.1	215.7	233.3	Grayson	24	0.6	97.9	95.3	Campbell	67	1.8	75.0	76.8
Martin	24	0.6	207.5	196.5	Gallatin	7	0.2	96.3	86.1	Logan	21	0.6	75.0	77.3
Perry	60	1.6	201.9	203.7	Barren	43	1.1	96.3	107.3	Washington	9	0.2	73.8	79.0
Casey	33	0.9	179.5	202.6	Hancock	8	0.2	95.9	92.9	Ohio	19	0.5	72.7	80.3
Owsley	8	0.2	171.3	168.6	Taylor	23	0.6	95.2	96.8	Monroe	9	0.2	71.5	77.2
Henry	28	0.7	166.4	176.1	Whitley	37	1.0	95.2	97.3	Scott	24	0.6	71.4	60.9
Wolfe	11	0.3	156.4	155.6	Meade	23	0.6	94.8	80.9	Warren	65	1.7	71.3	65.7
Nicholas	12	0.3	151.1	170.8	Elliott	6	0.2	94.7	86.9	Montgomery	18	0.5	70.4	74.2
Lee	12	0.3	143.8	155.7	Franklin	48	1.3	93.6	99.6	Boone	67	1.8	68.4	63.0
Harlan	45	1.2	141.8	142.3	Boyd	51	1.3	93.6	102.8	Ballard	6	0.2	68.1	72.5
Knott	25	0.7	139.8	142.4	Leslie	13	0.3	92.5	108.4	Boyle	20	0.5	67.9	70.5
Pike	93	2.4	138.2	139.0	Jessamine	39	1.0	91.7	89.7	Shelby	25	0.7	67.3	65.4
Knox	42	1.1	134.2	131.0	Carlisle	6	0.2	91.4	112.6	Bath	9	0.2	66.6	77.4
Breathitt	21	0.6	133.8	131.6	Bell	28	0.7	90.5	94.4	Marion	13	0.3	65.7	68.6
Johnson	32	0.8	131.4	133.3	Grant	22	0.6	90.1	89.4	Lincoln	17	0.4	65.3	67.7
Hopkins	67	1.8	128.6	143.5	Oldham	32	0.8	89.0	59.8	Lewis	10	0.3	63.9	72.1
McCracken	90	2.4	126.8	139.1	Kenton	132	3.5	88.1	85.9	Union	10	0.3	63.9	64.1
Magoffin	16	0.4	123.8	118.8	Madison	66	1.7	87.3	84.9	Daviess	62	1.6	62.6	66.6
Livingston	14	0.4	123.1	143.4	Woodford	20	0.5	87.2	82.5	Breckinridge	13	0.3	61.8	67.4
Mercer	28	0.7	119.4	129.6	Jefferson	637	16.8	87.2	91.0	Todd	8	0.2	61.7	67.0
McCreary	19	0.5	117.6	110.3	Morgan	12	0.3	86.6	83.7	Nelson	25	0.7	61.3	60.8
Jackson	16	0.4	117.4	117.5	Wayne	18	0.5	86.0	88.4	Webster	9	0.2	59.6	63.6
Clinton	11	0.3	116.5	115.1	Caldwell	13	0.3	85.6	100.2	Bullitt	36	0.9	59.5	52.6
Bracken	11	0.3	116.4	126.9	Graves	34	0.9	84.8	90.4	Trimble	*	-	-	-
Estill	19	0.5	112.4	125.9	Mason	16	0.4	84.7	93.3	Laurel	32	0.8	56.8	56.8
Rowan	22	0.6	112.0	99.0	Clay	20	0.5	84.6	82.8	Christian	34	0.9	55.0	48.5
Marshall	37	1.0	108.9	119.5	Bourbon	18	0.5	84.5	90.8	Fleming	8	0.2	53.9	54.8
Rockcastle	19	0.5	108.3	113.7	Allen	16	0.4	84.5	85.5	Garrard	8	0.2	50.0	48.3
Hardin	100	2.6	107.8	103.1	Carroll	9	0.2	83.3	86.1	Calloway	18	0.5	49.9	51.3
Hickman	7	0.2	107.3	137.9	Carter	23	0.6	82.4	84.2	Butler	7	0.2	49.7	52.2
Pulaski	67	1.8	106.2	113.2	Harrison	16	0.4	81.9	86.4	Green	6	0.2	48.4	51.8
Fulton	10	0.3	105.6	138.6	Anderson	15	0.4	81.5	73.6	Crittenden	5	0.1	41.6	55.7
Powell	15	0.4	104.7	109.6	Clark	29	0.8	81.5	83.1	Pendleton	6	0.2	38.2	39.7
Floyd	46	1.2	103.6	109.0	Greenup	33	0.9	81.3	88.7	Henderson	18	0.5	37.2	39.5
Larue	16	0.4	103.1	116.8	Hart	16	0.4	80.3	87.3	Spencer	6	0.2	37.0	38.3
Owen	11	0.3	103.0	96.7	Lyon	7	0.2	79.8	85.8	Edmonson	*	-	-	-
Letcher	25	0.7	102.3	102.3	Simpson	14	0.4	79.6	82.3	Trigg	*	-	-	-
Metcalfe	10	0.3	100.5	98.1	Fayette	203	5.3	78.2	75.7	Robertson	0	0.0	0.0	0.0

* At least one but fewer than five

- Percentage or rate suppressed to prevent disclosure of the value on which it was based

Table 23. Causes of ABI (based on diagnosis code), 2005

ABI Category	Fatal		Non-fatal	
	Number	Percent	Number	Percent
Anoxia/hypoxia	1078	78.7	1267	51.4
Exposure to toxic substances	274	20.0	1002	40.6
Allergy/anaphylaxis	5	0.4	125	5.1
Acute medical clinical incidents	12	0.9	71	2.9

* Because there can be multiple diagnoses or causes of death listed on the hospital or death record for each individual, it is possible for the same case to fall into more than one ABI category. Therefore, the column sums in this table are slightly higher than the total number of ABI cases shown in Table 16.

Table 24. Anoxia/hypoxia by age group, 2005

Age	Fatal			Non-fatal			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
0-4	47	65.3	17.4	25	34.7	9.3	72	100.0	26.7
5-14	14	40.0	2.6	21	60.0	3.9	35	100.0	6.5
15-24	46	54.1	8.0	39	45.9	6.8	85	100.0	14.7
25-44	180	52.2	15.1	165	47.8	13.9	345	100.0	29.0
45-64	287	41.2	26.8	410	58.8	38.3	697	100.0	65.1
65+	504	45.4	95.9	607	54.6	115.5	1,111	100.0	211.3
Total	1,078	46.0	25.8	1,267	54.0	30.4	2,345	100.0	56.2

Table 25. Exposure to toxic substances by age group, 2005

Age	Fatal			Non-fatal			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
0-4	5	13.2	1.9	33	86.8	12.2	38	100.0	14.1
5-14	3	7.0	0.6	40	93.0	7.4	43	100.0	8.0
15-24	20	13.6	3.5	127	86.4	22.0	147	100.0	25.5
25-44	112	22.9	9.4	377	77.1	31.7	489	100.0	41.1
45-64	92	24.7	8.6	280	75.3	26.1	372	100.0	34.7
65+	42	22.5	8.0	145	77.5	27.6	187	100.0	35.6
Total	274	21.5	6.6	1,002	78.5	24.0	1,276	100.0	30.6

Table 26. Injury-related causes of ABI (based on E-code), 2005

Mechanism of Injury	Fatal			Non-fatal			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Poisoning	209	21.7	5.0	756	78.3	18.1	965	100.0	23.1
Suffocation	148	94.3	3.5	9	5.7	0.2	157	100.0	3.8
Drowning	75	91.5	1.8	7	8.5	0.2	82	100.0	2.0
Falls	24	19.2	0.6	101	80.8	2.4	125	100.0	3.0
Motor vehicle traffic crash	42	65.6	1.0	22	34.4	0.5	64	100.0	1.5
Fire/burn	21	72.4	0.5	8	27.6	0.2	29	100.0	0.7
Other	85	12.7	2.0	585	87.3	14.0	670	100.0	16.1
Total	604	28.9	14.5	1,488	71.1	35.7	2,092	100.0	50.1

Table 27. Length of stay for non-fatal ABI, 2005

Length of Stay	Number	Percent*
1 day	454	18.6
More than one day but less than 1 week	1150	47.1
1 week to less than 2 weeks	469	19.2
2 weeks to less than 3 weeks	184	7.5
3 weeks to less than 4 weeks	83	3.4
4 weeks or more	103	4.2
Total	2443	100.0

*Percent of hospitalized ABI

Table 28. Hospital discharge disposition for nonfatal ABI, 2005

Discharge Disposition	Number	Percent
Routine discharge (home/self care)	1,351	55.3
Skilled nursing facility (SNF)	257	10.5
Home health	237	9.7
Inpatient-other short-term hospital	80	3.3
Intermediate care facility (ICF)	9	0.4
Inpatient-other type facility	138	5.6
Other	371	15.2
Total	2,443	100.0

Table 29. Primary payers for hospitalized ABI, 2005
(Hospital Discharge Dataset only)

Payer	Number of Discharges	Percent of Discharges	Total Hospital Charges
Government	1,348	55.2	\$ 47,687,133
Commercial Ins	385	15.8	\$ 14,194,631
Self Pay	219	9.0	\$ 4,085,638
Workers Compensation	27	1.1	\$ 776,903
HMO	155	6.3	\$ 4,720,425
Other	309	12.6	\$ 14,042,104
Total	2,443	100.0	\$ 85,506,834

Table 30. Work related ABI, 2005

Work Related	Number
Fatalities	13
Non-Fatal	34
Total Work Related	47

Table 31. SCI by age, 2005

Age	Fatal			Non-fatal			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
0-4	1	50.0	0.4	1	50.0	0.4	2	100.0	0.7
5-14	3	42.9	0.6	4	57.1	0.7	7	100.0	1.3
15-24	5	17.9	0.9	23	82.1	4.0	28	100.0	4.8
25-44	13	18.6	1.1	57	81.4	4.8	70	100.0	5.9
45-64	10	15.4	0.9	55	84.6	5.1	65	100.0	6.1
65+	28	39.4	5.3	43	60.6	8.2	71	100.0	13.5
Total	60	24.7	1.4	183	75.3	4.4	243	100.0	5.8

Table 32. SCI by gender, 2005

Gender	Fatal			Non-fatal			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Male	37	23.1	1.8	123	76.9	6.0	160	100.0	7.8
Female	23	27.7	1.1	60	72.3	2.8	83	100.0	3.9
Total	60	24.7	1.4	183	75.3	4.4	243	100.0	5.8

Table 33. Leading causes of SCI, all ages, 2005

Mechanism of Injury	Fatal			Non-fatal			Total		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Motor vehicle traffic crash	29	42.0	0.7	40	58.0	1.0	69	100.0	1.7
Fall	14	21.9	0.3	50	78.1	1.2	64	100.0	1.5
Non-traffic land transportation	1	5.9	0.0	16	94.1	0.4	17	100.0	0.4
Struck by or against object or person	0	0.0	0.0	4	100.0	0.1	4	100.0	0.1
Firearm	0	0.0	0.0	3	100.0	0.1	3	100.0	0.1
Other	11	36.7	0.3	19	63.3	0.5	30	100.0	0.7
Unknown (missing E-code)	5	8.9	0.1	51	91.1	1.2	56	100.0	1.3
Total	60	24.7	1.4	183	75.3	4.4	243	100.0	5.8

Table 34. Length of stay for non-fatal SCI, 2005

Length of Stay	Number	Percent*
1 day	8	4.4
More than one day but less than 1 week	70	38.3
1 week to less than 2 weeks	57	31.1
2 weeks to less than 3 weeks	21	11.5
3 weeks to less than 4 weeks	12	6.6
4 weeks or more	15	8.2
Total	183	100.0

*Percent of hospitalized ABI

Table 35. Hospital discharge disposition for non-fatal SCI, 2005

Discharge Disposition	Number	Percent
Routine discharge (home/self care)	97	53.0
Skilled nursing facility (SNF)	15	8.2
Home health	14	7.7
Inpatient-other short-term hospital	7	3.8
Intermediate care facility (ICF)	0	0.0
Inpatient-other type facility	15	8.2
Other	35	19.1
Total	183	100.0

Table 36. Primary payers for hospitalized SCI, 2005
(Hospital Discharge Dataset only)

Payer	Number of Discharges	Percent of Discharges	Total Hospital Charges
Government	66	36.1	\$ 4,077,542
Commercial Ins	39	21.3	\$ 3,239,028
Self Pay	22	12.0	\$ 2,384,970
Workers Compensation	13	7.1	\$ 731,451
HMO	9	4.9	\$ 484,076
Other	34	18.6	\$ 3,508,049
Total	183	100.0	\$ 14,425,116

Table 37. Work related SCI, 2005

Work Related	Number
Fatalities	3
Non-Fatal	14
Total Work Related	17

APPENDIX

Table A. Rates and cases of TBI by year, 2000-2005

	2000		2001		2002		2003		2004		2005	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Fatal	996	24.6	1,044	25.7	1,226	30	1,104	26.8	1,088	26.2	1,097	26.3
Non-Fatal	2,912	72	3,374	83	3,080	75.3	3,351	81.4	3,353	80.9	3,270	78.4
Total	3,908	96.7	4,418	108.7	4,306	105.2	4,455	108.2	4,441	107.1	4,367	104.6

Table B. Rates and cases of TBI by age group, 2000-2005

Fatal	2000		2001		2002		2003		2004		2005	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age												
0-4	20	7.5	18	6.8	28	10.4	20	7.5	19	7.1	21	7.7
5-14	27	4.8	21	3.8	20	3.6	24	4.3	24	4.4	21	3.8
15-24	183	32.0	170	29.4	198	33.9	162	27.9	187	32.3	174	30.6
25-44	308	25.4	320	26.8	325	27.4	308	25.9	314	26.4	315	26.5
45-64	200	21.5	209	21.7	272	27.6	272	26.8	266	25.5	271	25.4
65+	258	51.1	306	60.2	383	75.3	318	61.8	278	53.5	295	55.9
Total	996	24.6	1044	25.7	1226	30	1104	26.8	1,088	26.2	1,097	26.3
Non-Fatal												
Age												
0-4	61	22.9	146	55.3	118	43.6	133	49.9	123	46.1	133	48.5
5-14	168	30.1	194	34.7	193	34.6	182	33.0	182	33.3	162	29.5
15-24	555	97.0	652	112.7	566	96.8	579	99.8	544	93.9	518	91.2
25-44	835	69.0	912	76.4	765	64.5	797	67.0	812	68.3	737	62.1
45-64	518	55.7	564	58.6	558	56.6	621	61.1	649	62.1	715	67.1
65+	775	153.5	906	178.3	880	173.0	1039	202.0	1043	200.8	1005	190.4
Total	2912	72.0	3374	83.0	3080	75.3	3351	81.4	3,353	80.9	3,270	78.4

Table C. Rates and cases of TBI by gender, 2000-2005

	2000		2001		2002		2003		2004		2005	
Fatal												
Gender	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Male	750	38.0	737	37.1	864	43.1	805	39.9	804	39.5	773	37.8
Female	246	11.9	308	14.8	362	17.3	299	14.2	284	13.4	324	15.2
Total	996	24.6	1,045	25.7	1,226	30.0	1,104	26.8	1,088	26.2	1,097	26.3
Non-Fatal												
Gender	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Male	1,754	88.8	2,093	105.3	1,837	91.7	1,925	95.4	1,952	96.0	2,004	98.0
Female	1,157	56.0	1,281	61.7	1,243	59.5	1,426	67.9	1,400	66.3	1,266	59.5
Total	2,911	72.0	3,374	83.0	3,080	75.3	3,351	81.4	3,352	80.9	3,270	78.4

Table D. Mechanism of injury for TBI, 2000-2005

	2000		2001		2002		2003		2004		2005	
Fatal												
Mechanism of Injury	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Motor vehicle traffic crash	349	8.6	381	9.4	444	10.8	366	8.9	400	9.6	396	9.5
Fall	110	2.7	142	3.5	200	4.9	175	4.2	151	3.6	174	4.2
Firearm	351	8.7	333	8.2	342	8.4	356	8.6	354	8.5	316	7.6
Non-traffic land transport	29	0.7	12	0.3	32	0.8	39	0.9	21	0.5	30	0.7
Struck by object or person	20	0.5	13	0.3	17	0.4	15	0.4	12	0.3	18	0.4
Non-traffic pedal cycle	0	0.0	0	0.0	2	0.0	1	0.0	1	0.0	0	0.0
Machinery	4	0.1	5	0.1	9	0.2	7	0.2	3	0.1	5	0.1
Other	88	2.2	119	2.9	100	2.4	100	2.4	117	2.8	104	2.5
Unknown (missing E-code)	45	1.1	40	1.0	80	2.0	45	1.1	29	0.7	54	1.3
Total	996	24.6	1,045	25.7	1,226	30.0	1,104	26.8	1,088	26.2	1,097	26.3
Non-Fatal												
Mechanism of Injury	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Motor vehicle traffic crash	1,113	27.5	1,292	31.8	1,261	30.8	1,264	30.7	1,227	29.6	1,131	27.1
Fall	651	16.1	806	19.8	775	18.9	877	21.3	922	22.2	976	23.4
Firearm	20	0.5	20	0.5	22	0.5	25	0.6	29	0.7	15	0.4
Non-traffic land transport	135	3.3	143	3.5	159	3.9	159	3.9	168	4.1	179	4.3
Struck by object or person	143	3.5	190	4.7	157	3.8	173	4.2	196	4.7	163	3.9
Non-traffic pedal cycle	34	0.8	29	0.7	25	0.6	30	0.7	38	0.9	29	0.7
Machinery	10	0.2	15	0.4	16	0.4	12	0.3	13	0.3	14	0.3
Other	120	3.0	158	3.9	121	3.0	185	4.5	141	3.4	178	4.3
Unknown (missing E-code)	686	17.0	721	17.7	544	13.3	626	15.2	619	14.9	585	14.0
Total	2,912	72.0	3,374	83.0	3,080	75.3	3,351	81.4	3,353	80.9	3,270	78.4

Table E. Discharge disposition of TBI hospitalizations, 2000-2005

Discharge Disposition	2000		2001		2002		2003		2004		2005	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Routine discharge (home/self care)	1980	68.0	2233	66.2	2025	65.7	2183	65.1	2,234	66.6	2,170	66.4
Skilled nursing facility (SNF)	236	8.1	278	8.2	265	8.6	323	9.6	349	10.4	354	10.8
Home health	298	10.2	319	9.5	242	7.9	286	8.5	250	7.5	268	8.2
Inpatient-other short-term hospital	62	2.1	76	2.3	84	2.7	76	2.3	78	2.3	74	2.3
Intermediate care facility (ICF)	58	2.0	62	1.8	42	1.4	35	1.0	32	1.0	25	0.8
Inpatient-other type facility	237	8.1	363	10.8	260	8.4	198	5.9	52	1.6	70	2.1
Other	41	1.4	43	1.3	162	5.3	250	7.5	358	10.7	309	9.4
Total	2912	100.0	3374	100.0	3080	100.0	3351	100.0	3,353	100.0	3,270	100.0

Table F. Primary payers for TBI hospitalizations, 2000-2005

Payer	2000		2001		2002		2003		2004		2005	
	Number of Discharges	Total Hospital Charges	Number of Discharges	Total Hospital Charges	Number of Discharges	Total Hospital Charges	Number of Discharges	Total Hospital Charges	Number of Discharges	Total Hospital Charges	Number of Discharges	Total Hospital Charges
Government	1059	\$ 21,806,854	1164	\$ 21,878,424	1089	\$ 21,279,137	1,389	\$ 31,070,342	1,287	\$ 27,925,527	1,269	\$ 31,478,441
Commercial Ins	1289	\$ 39,030,992	1551	\$ 49,543,740	1376	\$ 50,220,376	1,356	\$ 57,458,064	1,000	\$ 41,383,636	898	\$ 41,046,890
Self Pay	114	\$ 890,088	154	\$ 1,506,506	169	\$ 2,012,921	141	\$ 1,494,069	323	\$ 13,855,222	330	\$ 15,500,788
Workers Compensation	111	\$ 3,296,527	138	\$ 2,890,370	90	\$ 2,420,791	86	\$ 2,498,097	108	\$ 4,651,458	113	\$ 4,328,964
HMO	114	\$ 1,769,658	113	\$ 1,561,099	113	\$ 2,382,090	115	\$ 2,058,066	231	\$ 7,268,867	205	\$ 8,784,003
Other	225	\$ 3,328,597	254	\$ 4,416,297	243	\$ 5,078,290	264	\$ 5,223,899	404	\$ 12,836,863	455	\$ 16,710,668
Total	2912	\$ 70,122,716	3374	\$ 81,796,436	3080	\$ 83,393,605	3,351	\$ 99,802,537	3,353	\$107,921,573	3,270	\$117,849,754

Table G. County TBI frequency and age adjusted rate by year, 2000-2005

County	2000		2001		2002		2003		2004		2005	
	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate
ADAIR	20	111.58	21	121.48	18	95.02	24	126.29	21	117.64	30	161.99
ALLEN	15	84.37	19	102.16	12	67.19	17	91.15	18	97.26	15	81.22
ANDERSON	16	90.44	14	76.20	12	65.57	9	48.39	18	93.09	14	69.76
BALLARD	15	180.84	11	120.54	8	101.89	10	123.34	11	136.76	12	133.04
BARREN	35	93.98	50	126.20	42	104.44	34	83.79	45	111.76	33	82.32
BATH	15	141.71	14	125.91	12	100.62	8	73.70	12	101.98	17	144.93
BELL	28	93.62	33	112.79	39	126.34	44	144.81	39	136.66	20	67.68
BOONE	52	78.08	45	70.09	49	69.83	52	73.94	54	68.36	62	76.66
BOURBON	13	68.71	20	104.29	17	83.98	16	78.07	20	100.79	20	97.38
BOYD	59	113.08	55	107.00	46	87.78	49	92.66	44	85.81	47	86.77
BOYLE	28	95.58	33	114.68	22	76.52	27	91.10	35	117.00	23	76.54
BRACKEN	12	143.94	8	93.83	9	113.70	8	92.18	5	57.24	7	84.96
BREATHITT	28	174.17	37	231.76	36	224.80	44	279.09	31	193.65	38	247.42
BRECKINRIDGE	26	144.57	28	151.92	12	63.85	23	116.08	23	112.22	27	130.28
BULLITT	56	108.43	61	110.89	56	120.20	62	105.90	51	76.96	76	119.60
BUTLER	8	60.86	12	90.74	25	190.44	11	80.22	10	71.01	15	109.15
CALDWELL	14	105.84	13	83.08	18	128.17	14	110.82	16	104.03	7	51.71
CALLOWAY	35	96.96	35	98.89	27	71.84	35	94.01	23	63.22	21	66.72
CAMPBELL	45	51.14	51	58.14	71	81.29	51	58.36	52	59.65	61	68.07
CARLISLE	7	131.01	5	84.51	9	174.45	7	119.37	17	291.87	9	161.40
CARROLL	11	110.87	16	160.96	20	206.76	19	189.63	13	126.57	14	132.04
CARTER	23	84.39	22	82.87	21	77.15	29	104.25	17	59.08	19	71.23
CASEY	26	170.84	35	213.63	27	172.76	18	111.37	17	104.57	28	179.46
CHRISTIAN	31	44.01	31	49.53	23	38.32	39	63.42	32	50.08	36	54.36
CLARK	19	58.35	33	103.71	29	82.33	30	91.88	28	82.17	29	85.63
CLAY	26	103.34	29	115.55	30	122.77	37	151.93	47	190.95	36	141.90
CLINTON	19	197.94	27	277.22	20	196.32	34	348.64	17	178.99	17	174.31
CRITTENDEN	13	130.06	19	174.15	14	142.06	11	112.25	11	114.40	11	115.38
CUMBERLAND	11	151.59	12	161.14	20	289.48	16	215.46	10	153.37	10	137.14
DAVIESS	95	102.98	108	116.36	92	96.77	93	97.35	115	119.12	111	112.53
EDMONSON	8	66.50	10	85.31	7	59.32	9	72.93	8	70.14	11	83.62
ELLIOTT	6	91.73	8	122.92	9	127.89	*	19.21	8	120.02	7	99.14
ESTILL	17	106.20	20	128.21	16	102.51	22	144.98	17	107.97	23	145.88
FAYETTE	171	68.84	202	80.92	189	74.55	185	73.75	205	79.88	202	77.23
FLEMING	18	127.35	19	132.23	16	118.55	11	75.86	20	139.94	28	180.92
FLOYD	56	130.27	57	133.65	51	120.03	53	125.61	47	110.85	48	113.97
FRANKLIN	43	91.95	50	103.67	54	112.46	39	84.57	33	70.67	30	64.41
FULTON	8	104.54	9	118.29	7	86.32	11	151.96	14	158.20	18	232.33
GALLATIN	*	19.21	8	115.85	8	116.55	7	93.40	6	86.45	6	93.43
GARRARD	17	117.24	10	65.51	10	62.54	9	57.60	16	98.18	20	120.85
GRANT	11	49.39	10	45.43	13	58.91	23	113.24	28	127.67	15	66.19

* At least one but fewer than five

- Percentage or rate suppressed to prevent disclosure of the value on which it was based

Table G (cont). County TBI frequency and age adjusted rate by year, 2000-2005

County	2000		2001		2002		2003		2004		2005	
	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate
GRAVES	47	126.04	43	113.72	43	115.30	62	157.08	56	136.40	45	105.72
GRAYSON	37	153.45	38	156.13	29	117.93	51	200.41	32	128.38	32	129.57
GREEN	12	89.80	15	115.79	24	187.99	9	63.23	14	116.12	20	167.07
GREENUP	30	78.08	32	85.64	17	42.61	30	79.34	33	85.42	35	87.72
HANCOCK	10	123.04	12	149.42	14	192.31	10	125.46	10	125.35	13	166.50
HARDIN	86	97.97	113	127.65	116	130.99	88	99.18	102	111.26	101	107.71
HARLAN	42	126.52	31	93.79	30	88.24	19	57.76	39	123.82	28	87.05
HARRISON	14	78.03	22	123.93	18	99.91	19	104.07	12	66.47	16	87.62
HART	19	110.82	37	211.67	22	122.59	23	124.02	22	119.78	19	106.59
HENDERSON	48	108.01	32	71.93	41	90.31	47	103.32	32	68.93	29	60.41
HENRY	15	105.15	20	137.12	16	112.20	16	105.03	20	131.10	23	151.32
HICKMAN	6	102.12	5	96.25	9	161.43	5	77.82	6	117.23	13	240.82
HOPKINS	35	71.30	48	100.19	54	118.43	56	112.73	48	99.64	47	100.36
JACKSON	16	119.05	19	140.96	15	107.79	21	150.43	26	195.79	24	177.56
JEFFERSON	774	109.81	874	124.72	834	117.93	866	122.01	854	119.54	849	118.56
JESSAMINE	45	111.92	38	97.47	29	77.16	33	81.40	30	69.94	42	101.09
JOHNSON	23	95.00	34	142.94	28	119.87	22	94.35	33	138.45	32	139.39
KENTON	66	44.69	108	75.82	102	71.44	112	78.80	125	88.95	104	71.86
KNOTT	17	92.14	38	213.75	32	183.38	34	191.49	34	191.87	20	113.56
KNOX	29	90.09	38	119.17	31	97.89	33	102.87	40	125.31	51	157.95
LARUE	13	94.05	15	109.70	13	93.71	13	96.62	22	164.09	15	108.47
LAUREL	69	133.39	56	105.26	50	94.56	64	120.37	87	164.73	60	108.14
LAWRENCE	12	75.91	12	74.50	18	116.33	16	104.38	11	70.60	14	88.40
LEE	15	181.46	10	126.40	16	193.73	19	234.16	15	177.39	14	179.98
LESLIE	23	192.87	19	153.43	26	212.69	33	279.52	30	257.10	21	170.22
LETCHER	36	145.93	58	233.60	47	192.25	42	171.05	39	163.40	45	187.18
LEWIS	11	78.20	8	58.08	8	54.94	9	65.85	12	85.91	9	65.39
LINCOLN	30	131.56	24	101.17	19	85.86	32	129.75	31	128.28	31	122.19
LIVINGSTON	15	141.64	22	216.76	20	200.02	19	188.04	12	129.98	8	70.49
LOGAN	17	62.51	12	44.49	13	50.93	24	85.97	13	47.67	19	70.33
LYON	6	71.00	10	117.42	9	104.75	*	19.21	8	97.93	*	26.82
MADISON	50	63.67	47	66.08	42	59.76	48	161.01	70	218.98	64	84.45
MAGOFFIN	19	147.58	18	132.99	24	181.35	27	223.93	26	217.81	18	134.87
MARION	15	83.00	17	91.09	24	128.83	22	125.92	29	176.61	33	174.61
MARSHALL	38	123.93	36	108.58	41	132.79	60	86.72	59	88.03	43	121.18
MARTIN	10	85.53	14	114.38	16	129.10	15	87.36	12	76.40	8	68.51
MASON	12	71.59	16	91.09	13	74.35	12	125.89	16	154.11	16	96.84
MCCRACKEN	102	148.10	74	104.18	108	157.00	106	164.35	103	151.52	77	108.85
MCCREARY	28	166.36	21	129.92	20	121.95	14	103.19	14	107.25	15	88.53
MCLEAN	15	154.32	14	138.05	15	134.29	26	137.21	14	73.11	17	161.34
MEADE	17	69.17	25	97.25	22	81.52	37	144.24	27	110.82	31	110.32

* At least one but fewer than five

- Percentage or rate suppressed to prevent disclosure of the value on which it was based

Table G (cont). County TBI frequency and age adjusted rate by year, 2000-2005

County	2000		2001		2002		2003		2004		2005	
	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate
MENIFEE	5	82.51	8	115.03	*	19.21	5	87.26	9	128.07	6	81.30
MERCER	23	112.55	21	102.89	31	149.83	25	110.16	18	81.76	17	73.61
METCALFE	14	144.04	17	170.41	11	104.71	13	129.90	17	168.88	16	162.95
MONROE	14	121.56	15	127.45	20	169.35	17	146.80	11	87.02	18	136.19
MONTGOMERY	22	95.59	21	90.06	26	111.36	33	142.70	28	122.11	28	115.85
MORGAN	13	89.56	8	53.69	14	93.46	15	106.48	9	65.52	15	113.18
MUHLENBERG	17	47.57	38	117.74	37	115.75	42	121.34	33	94.89	30	89.89
NELSON	42	118.34	71	190.85	67	189.03	55	148.32	60	153.00	49	131.27
NICHOLAS	10	143.90	9	120.12	10	144.53	7	93.22	8	103.86	10	142.53
OHIO	25	109.53	28	117.96	30	124.83	31	133.62	33	132.26	32	134.03
OLDHAM	27	73.90	31	76.57	36	104.20	40	97.57	33	75.46	34	67.32
OWEN	*	19.21	10	95.66	7	60.16	12	110.48	16	140.06	13	119.76
OWSLEY	7	153.09	14	277.99	21	453.06	15	324.67	16	342.04	17	365.46
PENDLETON	5	38.96	12	86.99	6	44.78	7	51.13	11	79.91	12	87.57
PERRY	53	178.45	82	280.53	93	317.80	91	311.17	65	220.74	73	254.31
PIKE	75	109.10	89	129.26	117	174.99	94	137.68	83	128.77	70	108.47
POWELL	15	112.49	12	88.04	13	99.60	19	145.43	13	94.97	25	184.39
PULASKI	59	103.87	70	122.98	74	131.83	68	113.93	68	113.37	87	147.54
ROBERTSON	*	19.21	*	19.21	*	19.21	*	19.21	*	19.21	*	179.94
ROCKCASTLE	10	61.57	14	82.49	16	93.02	22	126.57	23	140.41	21	127.78
ROWAN	18	90.56	12	47.42	21	92.98	20	76.02	19	82.13	12	45.82
RUSSELL	36	224.66	30	180.72	14	84.62	24	137.57	22	122.81	19	111.53
SCOTT	27	81.79	27	77.24	18	53.05	22	60.39	37	100.88	12	29.23
SHELBY	24	72.17	39	120.94	32	98.26	44	127.44	32	90.42	31	81.05
SIMPSON	5	31.86	11	66.35	14	84.17	9	52.69	9	50.45	12	68.40
SPENCER	10	103.50	26	219.29	16	138.66	13	97.40	16	104.78	30	201.68
TAYLOR	35	148.15	35	145.77	31	130.88	30	122.11	29	116.81	48	190.22
TODD	8	64.77	5	40.61	11	91.43	9	75.48	*	19.21	10	85.61
TRIGG	14	103.79	8	66.82	*	19.21	12	90.71	7	47.96	10	70.32
TRIMBLE	11	137.08	5	67.75	8	96.51	*	19.21	15	177.24	9	116.05
UNION	7	47.55	6	28.09	17	117.14	10	57.34	*	19.21	10	58.88
WARREN	56	59.84	85	93.77	81	84.35	80	86.01	90	95.16	85	87.97
WASHINGTON	6	52.94	12	104.16	13	116.05	11	92.51	15	127.57	10	84.12
WAYNE	21	106.59	28	140.50	19	93.82	27	129.10	30	150.42	20	95.95
WEBSTER	16	107.21	16	106.78	8	55.23	13	87.58	15	107.94	9	66.94
WHITLEY	51	138.94	50	136.99	45	123.93	49	135.66	34	88.05	40	104.72
WOLFE	15	211.01	13	182.13	15	202.01	15	208.22	22	329.33	16	230.46
WOODFORD	24	112.38	13	59.02	21	93.30	10	45.39	16	68.07	30	136.59

* At least one but fewer than five

- Percentage or rate suppressed to prevent disclosure of the value on which it was based

Table H. Rates and cases of ABI by year, 2000-2005

	2000		2001		2002		2003		2004		2005	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Fatal	1,162	28.7	1,178	29.0	1,338	32.7	1,227	29.8	1,242	30.0	1,353	32.4
Non-Fatal	1,857	45.9	2,046	50.3	2,127	52.0	2,217	53.8	2,194	52.9	2,443	58.5
Total	3,019	74.7	3,224	79.3	3,465	84.7	3,444	86.6	3,436	82.9	3,796	91.0

Table I. Rates and cases of ABI by age group, 2000-2005

	2000		2001		2002		2003		2004		2005	
Fatal												
Age	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0-4	60	22.6	55	20.8	63	23.3	59	22.1	67	25.1	52	19.0
5-14	15	2.7	20	3.6	20	3.6	18	3.3	15	2.7	16	2.9
15-24	68	11.9	58	10.0	89	15.2	98	16.9	85	14.7	65	11.4
25-44	219	18.1	227	19.0	243	20.5	216	18.2	264	22.2	290	24.4
45-64	279	30.0	313	32.5	323	32.8	320	31.5	329	31.5	380	35.6
65+	521	103.2	505	99.4	599	117.8	516	100.3	481	92.6	550	104.2
Total	1162	28.7	1178	29.0	1337	32.7	1227	29.8	1,241	29.9	1,353	32.4
Non-Fatal												
Age	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0-4	56	21.1	76	28.8	55	20.3	70	26.3	67	25.1	75	27.4
5-14	43	7.7	39	7.0	49	8.8	51	9.2	45	8.2	68	12.4
15-24	164	28.7	198	34.2	176	30.1	185	31.9	194	33.5	172	30.3
25-44	584	48.2	639	53.5	625	52.7	627	52.7	576	48.4	589	49.6
45-64	442	47.6	515	53.6	613	62.2	633	62.3	667	63.9	752	70.5
65+	568	112.5	579	113.9	611	120.1	651	126.6	645	124.2	787	149.1
Total	1857	45.9	2046	50.3	2129	52.0	2217	53.8	2,194	52.9	2,443	58.5

Table J. Rates and cases of ABI by gender, 2000-2005

	2000		2001		2002		2003		2004		2005	
Fatal												
Gender	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Male	664	33.6	695	35.0	787	39.3	717	35.5	757	37.2	810	39.6
Female	498	24.1	483	23.3	551	26.4	510	24.3	485	23.0	543	25.5
Total	1,162	28.7	1,178	29.0	1,338	32.7	1,227	29.8	1,242	30.0	1,353	32.4
Non-Fatal												
Gender	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Male	864	43.7	929	46.7	1,007	50.3	1,025	50.8	1,017	50.0	1,195	58.5
Female	993	48.1	1,116	53.7	1,120	53.6	1,192	56.8	1,177	55.7	1,248	58.6
Total	1,857	45.9	2,045	50.3	2,127	52.0	2,217	53.8	2,194	52.9	2,443	58.5

Table K. ABI by type, 2000-2005

	2000		2001		2002		2003		2004		2005	
Fatal	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Anoxia/hypoxia	929	78.3	929	78.3	1051	77.7	983	79.4	999	79.3	1078	78.7
Exposure to toxic substances	247	20.8	247	20.8	281	20.8	240	19.4	243	19.3	274	20.0
Allergy/anaphylaxis	3	0.3	3	0.3	8	0.6	3	0.2	2	0.2	5	0.4
Acute medical clinical incidents	8	0.7	8	0.7	12	0.9	12	1.0	15	1.2	12	0.9
Non-fatal	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Anoxia/hypoxia	920	44.6	920	44.6	1005	46.8	1026	45.8	1028	46.4	1267	51.4
Exposure to toxic substances	983	47.7	983	47.7	961	44.7	1025	45.7	996	45.0	1002	40.6
Allergy/anaphylaxis	113	5.5	113	5.5	128	6.0	134	6.0	132	6.0	125	5.1
Acute medical clinical incidents	45	2.2	45	2.2	55	2.6	56	2.5	58	2.6	71	2.9

Table L. Discharge disposition of ABI hospitalizations, 2000-2005

Discharge Disposition	2000		2001		2002		2003		2004		2005	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Routine discharge (home/self care)	1150	61.9	1289	63.0	1283	60.3	1384	62.4	1,283	58.5	1,351	55.3
Skilled nursing facility (SNF)	154	8.3	168	8.2	173	8.1	158	7.1	181	8.2	257	10.5
Home health	137	7.4	165	8.1	207	9.7	179	8.1	210	9.6	237	9.7
Inpatient-other short-term hospital	59	3.2	70	3.4	92	4.3	85	3.8	90	4.1	80	3.3
Intermediate care facility (ICF)	27	1.5	26	1.3	14	0.7	17	0.8	14	0.6	9	0.4
Inpatient-other type facility	225	12.1	235	11.5	176	8.3	142	6.4	150	6.8	138	5.6
Other	105	5.7	93	4.5	182	8.6	252	11.4	266	12.1	371	15.2
Total	1857	100.0	2046	100.0	2127	100.0	2217	100	2,194	100.0	2,443	100.0

Table M. Primary payers for ABI hospitalizations, 2000-2005

Payer	2000		2001		2002		2003		2004		2005	
	Number of Discharges	Total Hospital Charges	Number of Discharges	Total Hospital Charges	Number of Discharges	Total Hospital Charges	Number of Discharges	Total Hospital Charges	Number of Discharges	Total Hospital Charges	Number of Discharges	Total Hospital Charges
Government	1020	\$ 27,257,230	1126	\$ 27,997,686	1139	\$ 30,423,915	1,230	\$ 33,393,608	1,242	\$ 23,640,778	1,348	\$ 47,687,133
Commercial Ins	455	\$ 11,609,104	482	\$ 11,985,141	463	\$ 14,013,178	462	\$ 13,220,369	344	\$ 6,578,333	385	\$ 14,194,631
Self Pay	157	\$ 1,130,597	153	\$ 1,176,958	179	\$ 1,217,043	173	\$ 1,924,534	196	\$ 2,325,399	219	\$ 4,085,638
Workers Compensation	17	\$ 106,787	24	\$ 635,180	29	\$ 714,200	27	\$ 635,908	31	\$ 809,608	27	\$ 776,903
HMO	116	\$ 2,033,665	124	\$ 2,827,186	137	\$ 3,646,691	135	\$ 3,463,319	167	\$ 2,965,091	155	\$ 4,720,425
Other	92	\$ 1,039,123	137	\$ 2,316,786	180	\$ 4,027,160	190	\$ 4,858,953	211	\$ 3,017,309	309	\$ 14,042,104
Total	1857	\$ 43,176,506	2046	\$ 46,938,937	2127	\$ 54,042,187	2,217	\$ 57,496,691	2,191	\$ 39,336,518	2,443	\$ 85,506,834

Table N. County ABI frequency and age adjusted rate by year, 2000-2005

County	2000		2001		2002		2003		2004		2005	
	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate
ADAIR	8	45.13	6	32.85	13	69.42	18	92.30	17	88.50	41	215.69
ALLEN	15	84.18	7	39.13	8	42.37	10	52.90	16	82.77	16	84.54
ANDERSON	11	63.88	18	95.74	14	74.77	19	105.54	13	72.17	15	81.53
BALLARD	*	-	6	61.90	10	100.50	6	61.24	7	76.97	6	68.09
BARREN	26	64.88	39	91.78	38	94.67	36	85.32	39	96.17	43	96.30
BATH	10	78.49	15	123.50	8	64.84	18	147.64	14	114.71	9	66.61
BELL	36	117.00	38	127.16	43	143.68	41	133.35	38	127.44	28	90.51
BOONE	39	53.89	45	58.84	47	56.06	66	73.40	58	60.40	67	68.36
BOURBON	24	121.53	10	48.76	18	87.52	7	32.23	20	100.13	18	84.55
BOYD	55	107.18	58	115.13	52	101.23	44	85.03	37	69.52	51	93.56
BOYLE	21	70.83	28	98.20	18	63.79	21	71.06	19	62.74	20	67.86
BRACKEN	*	-	9	104.17	8	88.24	5	58.45	*	-	11	116.39
BREATHITT	15	93.85	19	118.46	36	229.40	30	191.91	25	154.80	21	133.76
BRECKINRIDGE	7	35.64	8	38.75	23	108.97	20	98.37	16	75.82	13	61.81
BULLITT	26	57.48	33	57.07	26	43.79	26	45.49	32	49.66	36	59.50
BUTLER	8	61.00	*	-	9	68.18	6	46.54	5	40.60	7	49.74
CALDWELL	12	83.20	6	42.37	14	99.12	11	68.18	13	92.23	13	85.62
CALLOWAY	8	24.74	18	46.25	12	33.60	17	45.56	10	25.82	18	49.88
CAMPBELL	44	49.74	78	88.37	74	82.77	62	70.47	73	82.70	67	75.04
CARLISLE	*	-	6	108.41	5	73.35	8	126.65	*	-	6	91.39
CARROLL	12	118.47	6	61.12	7	76.27	11	105.40	13	127.15	9	83.29
CARTER	17	62.94	24	87.14	17	63.88	28	102.85	29	101.00	23	82.41
CASEY	9	55.11	16	96.23	9	55.48	23	127.65	33	189.01	33	179.54
CHRISTIAN	34	53.54	36	60.73	46	74.57	39	64.32	31	50.73	34	55.04
CLARK	25	74.69	27	79.90	34	101.08	34	96.03	33	94.12	29	81.52
CLAY	27	106.63	28	117.49	25	112.00	16	71.35	30	126.29	20	84.58
CLINTON	8	76.01	9	93.38	14	124.21	12	116.90	15	142.64	11	116.46
CRITTENDEN	8	73.56	12	115.94	15	129.38	14	147.36	7	74.12	5	41.57
CUMBERLAND	5	72.91	5	73.36	*	-	6	58.61	9	118.89	19	249.35
DAVISS	74	78.78	57	60.73	58	61.62	71	74.24	54	56.03	62	62.61
EDMONSON	*	-	*	-	*	-	6	45.22	7	56.59	*	-
ELLIOTT	*	-	5	79.15	7	96.06	*	-	13	176.98	6	94.69
ESTILL	12	76.14	12	75.60	15	93.75	12	80.64	14	86.48	19	112.43
FAYETTE	217	87.80	205	85.38	213	85.24	212	84.72	219	86.05	203	78.21
FLEMING	15	107.76	9	64.32	12	83.24	12	83.14	15	98.30	8	53.89
FLOYD	44	104.41	47	110.43	44	103.48	47	106.88	53	119.57	46	103.61
FRANKLIN	42	89.51	25	50.40	49	100.38	37	75.87	41	82.94	48	93.64
FULTON	7	95.08	16	180.95	13	146.81	13	157.90	9	110.41	10	105.60
GALLATIN	7	91.61	*	-	8	118.05	*	-	5	61.64	7	96.30
GARRARD	10	64.74	8	49.12	17	102.29	14	87.26	12	77.36	8	49.97

* At least one but fewer than five

- Percentage or rate suppressed to prevent disclosure of the value on which it was based

Table N (cont). County ABI frequency and age adjusted rate by year, 2000-2005

County	2000		2001		2002		2003		2004		2005	
	Age-Adjusted		Age-Adjusted		Age-Adjusted		Age-Adjusted		Age-Adjusted		Age-Adjusted	
	Freq	Rate	Freq	Rate	Freq	Rate	Freq	Rate	Freq	Rate	Freq	Rate
GRANT	17	80.92	15	70.02	22	105.91	23	104.36	29	125.54	22	90.13
GRAVES	50	120.03	34	87.46	41	105.25	44	108.26	31	78.14	34	84.79
GRAYSON	14	60.03	20	80.66	19	73.35	15	58.38	29	116.56	24	97.86
GREEN	*	-	6	43.40	8	59.33	7	48.62	10	74.14	6	48.35
GREENUP	32	85.05	29	77.60	25	65.23	27	67.78	26	71.65	33	81.30
HANCOCK	*	-	5	58.75	6	81.14	*	73.38	*	73.38	8	95.91
HARDIN	57	66.10	68	76.53	72	84.68	71	81.63	96	104.82	100	107.75
HARLAN	34	99.93	41	120.76	26	75.17	43	128.38	31	96.91	45	141.84
HARRISON	10	54.61	8	43.65	10	54.47	10	52.47	11	62.20	16	81.89
HART	13	71.31	9	49.07	14	74.77	12	62.89	15	78.60	16	80.27
HENDERSON	35	76.89	30	66.59	32	69.07	20	43.51	22	46.27	18	37.19
HENRY	22	151.82	14	96.01	22	149.77	22	150.26	20	129.72	28	166.44
HICKMAN	*	-	11	166.05	5	91.17	11	155.30	6	85.61	7	107.26
HOPKINS	81	161.22	62	122.74	73	139.55	67	135.26	72	134.02	67	128.55
JACKSON	15	109.40	12	86.35	14	105.30	22	165.24	21	162.02	16	117.45
JEFFERSON	488	68.43	469	65.88	499	69.41	491	67.90	501	68.78	637	87.16
JESSAMINE	31	86.78	26	68.44	22	59.25	40	110.09	32	81.67	39	91.65
JOHNSON	30	128.43	42	178.20	39	166.55	26	105.36	30	125.82	32	131.44
KENTON	84	56.32	137	90.99	133	88.51	138	92.50	123	81.82	132	88.08
KNOTT	17	96.82	27	155.41	20	116.09	32	181.95	31	173.27	25	139.82
KNOX	28	86.98	29	88.73	51	158.67	48	148.97	43	135.90	42	134.25
LARUE	8	52.80	9	64.77	10	68.33	14	92.62	13	84.96	16	103.09
LAUREL	53	105.18	37	69.12	58	114.82	56	103.53	42	75.33	32	56.78
LAWRENCE	22	137.13	22	143.73	19	124.53	9	56.04	14	87.40	16	98.98
LEE	7	83.15	12	143.29	11	127.68	*	-	7	83.91	12	143.76
LESLIE	19	154.94	18	148.44	13	108.63	11	88.09	13	105.55	13	92.54
LETCHER	17	64.36	27	104.64	30	112.62	23	93.04	24	101.68	25	102.31
LEWIS	5	36.02	*	-	7	50.60	12	90.01	16	113.88	10	63.94
LINCOLN	20	86.47	19	74.51	25	102.89	17	70.07	26	107.87	17	65.25
LIVINGSTON	5	50.76	16	146.53	11	100.57	9	85.43	*	-	14	123.12
LOGAN	15	55.54	17	62.84	22	82.65	17	62.94	23	83.22	21	74.95
LYON	8	82.81	*	-	5	48.13	*	-	9	81.57	7	79.80
MADISON	32	47.54	30	46.84	35	54.61	49	147.97	51	159.65	66	87.34
MAGOFFIN	22	164.07	22	169.04	21	159.80	24	191.48	20	175.32	16	123.75
MARION	10	56.35	6	32.53	16	88.08	10	55.79	12	63.70	13	65.72
MARSHALL	26	70.48	38	107.08	38	100.46	32	43.83	21	29.82	37	108.94
MARTIN	15	127.22	19	150.56	29	240.68	15	90.46	15	90.52	24	207.55
MASON	9	51.01	6	31.13	14	75.19	7	68.99	15	143.87	16	84.71
MCCRACKEN	71	102.44	63	88.71	79	118.97	88	129.23	72	102.04	90	126.84
MCCREARY	12	70.29	10	58.93	18	106.11	15	115.40	27	206.98	19	117.57

* At least one but fewer than five

- Percentage or rate suppressed to prevent disclosure of the value on which it was based

Table N (cont). County ABI frequency and age adjusted rate by year, 2000-2005

County	2000		2001		2002		2003		2004		2005	
	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate	Freq	Age-Adjusted Rate
MCLEAN	9	80.05	9	88.54	6	58.99	*	-	12	65.16	8	75.43
MEADE	11	49.76	12	47.66	8	41.66	15	64.68	13	51.97	23	94.80
MENIFEE	8	139.22	5	87.70	*	-	5	83.58	8	108.08	6	77.49
MERCER	11	50.70	18	79.64	10	45.68	13	59.59	22	93.81	28	119.37
METCALFE	9	89.39	11	103.03	7	65.45	11	108.30	8	78.73	10	100.49
MONROE	13	108.66	*	-	18	142.37	10	73.67	9	66.26	9	71.53
MONTGOMERY	21	90.60	10	41.87	18	75.43	17	70.82	16	65.00	18	70.35
MORGAN	12	86.25	13	95.26	11	88.86	12	86.27	10	70.99	12	86.64
MUHLENBERG	26	74.82	25	71.98	28	80.69	39	113.16	30	85.98	36	100.39
NELSON	27	76.33	29	82.94	24	67.76	20	51.55	19	46.13	25	61.31
NICHOLAS	11	147.49	15	193.08	9	110.11	13	165.57	*	-	12	151.08
OHIO	9	36.82	15	59.74	8	32.43	16	67.41	9	35.48	19	72.69
OLDHAM	23	53.25	46	118.60	24	62.41	27	72.12	28	68.67	32	89.04
OWEN	5	45.10	5	45.63	5	45.02	11	95.03	13	111.19	11	102.98
OWSLEY	*	-	9	181.88	9	183.06	9	194.35	*	-	8	171.28
PENDLETON	6	46.71	12	81.97	8	58.02	7	52.25	11	75.36	6	38.25
PERRY	40	136.10	60	205.15	69	229.22	56	186.82	56	193.27	60	201.85
PIKE	64	93.20	80	115.80	73	105.81	89	128.94	52	78.05	93	138.24
POWELL	6	43.25	18	142.63	12	94.19	13	99.69	13	95.19	15	104.73
PULASKI	48	79.83	42	70.65	60	103.12	62	99.94	61	97.16	67	106.25
ROBERTSON	*	-	*	-	*	-	*	-	*	-	0	0.00
ROCKCASTLE	12	68.99	13	77.74	19	108.95	15	86.04	11	63.59	19	108.27
ROWAN	11	61.25	16	83.23	26	137.91	29	129.58	17	81.44	22	112.03
RUSSELL	15	85.90	19	103.69	31	164.20	26	143.37	34	178.47	50	255.12
SCOTT	24	84.51	24	79.44	20	65.85	14	41.07	13	39.04	24	71.36
SHELBY	11	32.34	17	54.22	17	51.25	16	46.69	11	30.73	25	67.28
SIMPSON	11	65.64	13	80.32	15	89.38	6	36.06	11	60.80	14	79.62
SPENCER	6	63.33	5	48.58	7	52.66	6	48.01	5	38.33	6	36.96
TAYLOR	26	106.56	21	86.42	22	88.15	13	47.66	28	109.53	23	95.24
TODD	6	47.66	*	-	9	67.71	6	47.64	15	121.67	8	61.67
TRIGG	*	-	8	48.56	7	55.12	10	72.40	11	68.31	*	-
TRIMBLE	8	101.39	7	86.89	5	60.64	10	120.93	10	111.57	*	-
UNION	*	-	11	68.99	18	111.88	7	39.75	8	61.21	10	63.86
WARREN	41	46.29	47	54.34	45	49.65	61	66.01	51	57.01	65	71.34
WASHINGTON	5	42.38	6	51.24	8	66.76	*	-	11	95.87	9	73.76
WAYNE	17	82.63	18	88.88	16	79.69	13	60.87	16	74.87	18	86.04
WEBSTER	12	80.30	19	131.39	13	82.78	11	70.62	11	73.70	9	59.56
WHITLEY	31	86.89	40	110.98	45	123.07	50	134.08	44	115.22	37	95.16
WOLFE	8	113.33	8	109.46	14	197.19	10	151.13	5	63.48	11	156.42
WOODFORD	11	48.33	14	62.08	15	68.25	21	93.93	19	86.16	20	87.23

* At least one but fewer than five

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Table O. Rates and cases of SCI by year, 2000-2005

	2000		2001		2002		2003		2004		2005	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Fatal	67	1.7	62	1.5	65	1.6	75	1.8	71	1.7	60	1.4
Non-Fatal	221	5.5	263	6.5	193	4.7	179	4.3	213	5.1	183	4.4
Total	288	7.1	325	8.0	258	6.3	254	6.2	284	6.9	243	5.8

Table P. Rates and cases of SCI by age group, 2000-2005

	2000		2001		2002		2003		2004		2005	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Fatal												
Age	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0-4	1	0.4	0	0.0	1	0.4	0	0.0	0	0.0	1	0.4
5-14	1	0.2	2	0.4	0	0.0	0	0.0	1	0.2	3	0.6
15-24	10	1.7	5	0.9	9	1.5	8	1.4	13	2.2	5	0.9
25-44	18	1.5	13	1.1	10	0.8	16	1.3	20	1.7	13	1.1
45-64	16	1.7	15	1.6	22	2.2	15	1.5	12	1.1	10	0.9
65+	21	4.2	27	5.3	23	4.5	36	7.0	25	4.8	28	5.3
Total	67	1.7	62	1.5	65	1.6	75	1.8	71	1.7	60	1.4
Non-Fatal												
Age	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0-4	1	0.4	1	0.4	3	1.1	2	0.8	2	0.8	1	0.4
5-14	4	0.7	4	0.7	6	1.1	3	0.5	5	0.9	4	0.7
15-24	53	9.3	53	9.2	30	5.1	28	4.8	43	7.4	23	4.0
25-44	74	6.1	94	7.9	69	5.8	54	4.5	61	5.1	57	4.8
45-64	54	5.8	65	6.8	46	4.7	59	5.8	51	4.9	55	5.1
65+	35	6.9	46	9.1	39	7.7	33	6.4	51	9.8	43	8.2
Total	221	5.5	263	6.5	193	4.7	179	4.3	213	5.1	183	4.4

Table Q. Rates and cases of SCI by gender, 2000-2005

	2000		2001		2002		2003		2004		2005	
Fatal												
Gender	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Male	46	2.3	43	2.2	48	2.4	46	2.3	44	2.2	37	1.8
Female	21	1.0	19	0.9	17	0.8	29	1.4	27	1.3	23	1.1
Total	67	1.7	62	1.5	65	1.6	75	1.8	71	1.7	60	1.4
Non-Fatal												
Gender	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Male	162	8.2	188	9.5	137	6.8	140	6.9	143	7.0	123	6.0
Female	59	2.9	75	3.6	56	2.7	39	1.9	70	3.3	60	2.8
Total	221	5.5	263	6.5	193	4.7	179	4.3	213	5.1	183	4.4