



Traumatic Brain Injury Summary Report: Emerging Public Health Module Variables

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Traumatic Brain Injury Summary Report

Emerging Public Health Module Variables

Background

In October 2006, a summary report describing Oklahoma's traumatic brain injury (TBI) data collection methodology and issues related to extended TBI surveillance in Oklahoma was prepared. The 2006 summary report included background information on TBI in the United States and Oklahoma and information on TBI data collection in Oklahoma, including the authority to collect and maintain the data, the history of TBI data collection, surveillance methodology, usefulness of the data, strengths and limitations of the data, and lessons learned. The summary report is available on the Injury Prevention Service (IPS) website at <http://www.health.ok.gov/program/injury/Toolbox/TBI/Surveillance.htm>. This TBI summary report, prepared in October 2007, focuses on the new variables that were collected for the first time for 2005 TBI surveillance. The usefulness and completeness of each variable is discussed, and future recommendations are given.

The original Part B grant proposal guidelines stated that the Centers for Disease Control and Prevention (CDC) and grantees would identify a topic of emerging public health importance and states would collect information on 10-15 additional TBI data elements. Numerous conference calls were held with TBI funded states and CDC during 2006 to decide on these additional data elements. In January 2007, the Introduction to the

Emerging Public Health Module Variable Dictionary was finalized. A total of 44 new variables were added. Seven new variables were created to be collected on all persons with a TBI. These variables were added to the IPS's existing TBI Report Form (Appendix 1) and required minimal extra effort to collect. Thirty-seven new variables were created to be collected on persons 65 years and older who sustained a TBI during a fall. IPS personnel created a new form, Supplemental TBI Report Form, Falls Among Persons 65 Years and Older (Appendix 2) for use in collecting these data.

A total of 4,395 Oklahomans were hospitalized or died from a TBI in 2005. Of these, a stratified random sample of 1,051 TBI cases were selected for medical record abstraction, including the records for 290 persons (28% of the sample) that were 65 years or older who sustained a TBI from a fall. Appendix 3 shows the frequency of each response for each new variable for sampled cases. It is estimated that collection of the 37 new TBI variables pertaining to elderly falls took approximately eight extra minutes per medical record. Smaller medical records took less time, whereas larger medical records that were not well organized, especially those on slow computer systems, required additional time. An estimated total of almost 40 extra hours at hospitals was required to collect the supplemental data on elderly falls. In order to collect the best possible

information for the special study, only the two epidemiologists (Pam and Tracy) who participated on the TBI conference calls abstracted data from the medical records on elderly falls. This policy

allowed more standardized data collection, but required either Tracy or Pam to visit/call virtually every hospital in the state.

Variables for All TBI Patients

Amnesia

Information on this variable was a bit difficult to collect, but the information was useful since amnesia is one of the TBI clinical case definition criteria. There was some debate among our abstractors on “no” amnesia versus “not applicable.” Some staff thought this variable should be coded based on the patient’s condition in the emergency department, so persons who were unresponsive in the emergency department would be coded as “not applicable.” Other staff thought that all progress notes in the medical record should be read to see if the patient became responsive later in the hospital stay and if amnesia was mentioned. In addition, this variable was difficult to code for persons with mild dementia and for persons who asked repetitive questions regarding the injury (amnesia vs. confusion). Overall, 23% of TBI patients had amnesia documented in their medical record.

AVPU (Optional)

Information on this optional variable was rarely available and not useful for Oklahoma. It was not consistently recorded in medical records; in fact, AVPU was not specifically documented in the notes of any hospital emergency department. AVPU was also not a variable on the standardized emergency medical services form used by most ambulance services across the state. It was sometimes documented on non-standardized emergency medical services forms and air ambulance forms. Overall, the AVPU was missing for 83% of cases.

Clinical Case Definition

Information on this variable was not difficult to collect and was very useful. Information in the medical records was sufficient to obtain useful information for 93% of TBI cases. For 3% of cases, we were not able to determine if deficits were due to TBI or other factors, such as intoxication or dementia, and for 5%, available information was insufficient to code the variable. In order to make this variable consistent across all states, very specific inclusion and exclusion guidelines should be developed for skull fractures, intracranial lesions, and neuroabnormalities so that all states are using the same criteria. The specific criteria that are developed should also be placed in the guidelines on their respective individual variable pages. Setting a level of intoxication (e.g., 0.2 mg/dl) to code “unable to determine” would also be helpful. Information on this variable should definitely continue to be collected. Inclusion of the clinical case definition variable ensures that all states submit data for all TBI sampled cases, whether they fit the clinical case definition or not. Each state and CDC can conduct analyses on all TBI coded cases or only on those cases that fit the clinical case definition. In addition, the predictive value positive of TBI coding can be determined.

Drug Use

Information on this variable was not particularly difficult to collect in most instances; however, the results should be interpreted cautiously. Some patients are treated with medications (by ground or air ambulance personnel) prior to arrival at the hospital, and these medications

may cause the patient's drug screen to be positive, particularly for amphetamines, barbiturates, benzodiazepines, methadone, methamphetamines, or opiates. Many times it is not documented if the positive toxicology results are due to prior medications or non-medical drug use. In addition, some drugs may continue to show positive results on drug screens for an extended period of time following use. Overall, 22% of injured persons had a positive drug screen or evidence of drug use.

Federal Hospital

Information on this variable was simple to include in the TBI dataset and was useful. In Oklahoma, this variable was auto set to "no" since none of the hospitals in the hospital discharge database that had a TBI case were federal facilities. However, it is helpful to have this variable in all state databases to verify that all state data analyzed as a group are consistent with regard to types of hospitals included. An additional suggestion to maintain consistency between states is to specify in the TBI

guidelines the types of hospitals in the hospital discharge database to include and exclude for the TBI database (e.g., heart, spine, other specialty hospitals).

Other Motor Vehicle Type

Information on this variable was simple to collect, but for the most part, this information could be incorporated into the sports and recreation variable. For this variable, Oklahoma had 26 ATVs, 2 jet skis, and 1 golf cart. For Oklahoma, the ATV and jet ski categories could be added to the sports and recreation variable and this would allow virtually all of the other motor vehicle types to be picked up.

Other Motor Vehicle Type—Specify

Information on this variable was simple to collect, but not especially useful. Only six cases had an entry in this field, including airplane (2), electric wheelchair (1), forklift (1), go-cart (1), and tractor (1). Because the number of entries in this field was so small, this variable is probably not worthwhile to collect in the future.

Variables for TBI Patients 65 Years and Older Injured During a Fall

Body Position/Mechanics

The body position/mechanics at the time of the fall was known for 58% of injured persons and unknown for 42%.

Generally, if details about the fall were documented in the medical record, the question was straightforward to answer. One exception we noted was if a person tripped over a step—were they walking or climbing? Our analysis revealed that two-thirds of injured persons with known information were walking or standing at the time of their injury.

Body Position/Mechanics—Specify

There were no responses on this variable for Oklahoma.

Comorbid Conditions—Overall Comment

The value of many of the comorbid conditions was questionable. Some were very low incidence conditions. Other conditions that had a high incidence among injured persons may also have a high incidence among uninjured persons 65 years and older. Many additional comorbid conditions that were not included in the TBI database were documented in a large number of medical records, including cancer, congestive heart failure, and hypotension. The contribution of each comorbid condition to the TBI is not known in most cases.

Comorbid Condition: Alzheimer's/Dementia

Twenty-nine percent of injured persons had documentation of Alzheimer's disease or another form of dementia.

Comorbid Condition: Arthritis

Thirty-four percent of injured persons had documentation of a history of arthritis.

Comorbid Condition: Atrial Fibrillation

Twenty-seven percent of injured persons had documentation of a history of atrial fibrillation or having a pacemaker implanted.

Comorbid Condition: CVA/Stroke

Thirty-one percent of injured persons had documentation of a history of stroke or cerebrovascular accident. This variable was more difficult to collect than other comorbid conditions because it sometimes could not be determined if the patient had deficits.

Comorbid Condition: Depression

Twenty-three percent of injured persons had documentation of a history of depression.

Comorbid Condition: Diabetes

Twenty-seven percent of injured persons had documentation of a history of diabetes.

Comorbid Condition: Frailty (Optional)

This optional variable was collected, but found not to be useful in Oklahoma. This variable was coded as "yes" only if the words "frail" or "frailty" were mentioned in the medical record. These words were not mentioned in 97% of medical records reviewed. However, other words with similar meaning (e.g., weak, debilitated) were found in many medical records.

Comorbid Condition: Hypertension

Seventy percent of injured persons had documentation of a history of hypertension.

Comorbid Condition: Incontinence (Optional)

Twelve percent of injured persons had a history of urinary frequency or bowel or bladder incontinence.

Comorbid Condition: Multiple Sclerosis (Optional)

None of the injured persons had a history of multiple sclerosis.

Comorbid Condition: Osteoporosis

Eleven percent of injured persons had documentation of a history of osteoporosis.

Comorbid Condition: Parkinson's

Six percent of injured persons had documentation of a history of Parkinson's disease.

Comorbid Condition: Peripheral Neuropathy (Optional)

Three percent of injured persons had documentation of a history of peripheral neuropathy.

Comorbid Condition: Recent Illness

Eighteen percent of injured persons had documentation of a recent acute illness such as pneumonia, urinary tract infection, upper respiratory infection, flu, or gastrointestinal illness.

Comorbid Condition: Seizures/Epilepsy

Nine percent of injured persons had documentation of a history of epilepsy or seizures.

Comorbid Condition: Syncope

Seven percent of injured persons had a past history of syncope (not syncope as a factor related to the most recent fall).

Comorbid Condition: Vision Problems

Twenty-eight percent of injured persons had a past history of vision problems, including cataracts, glaucoma, diabetic retinopathy, macular degeneration, or failure to wear their corrective eyewear. Some persons with a history of cataracts may have had the cataracts removed and may not have had vision problems at the time of the injury incident.

Factors Involved with Fall

Information on this variable was fairly straightforward to collect when the information was available. However, a specific answer from the list of available choices was recorded for only about one-third of cases. Syncope was most commonly mentioned, followed by tripped and slipped. There was not a choice for "unknown" factor. Cases with unknown factors went into "no mention of factor involvement." The only choice that was not ever documented in a medical record in Oklahoma was "mechanical fall."

Factors Involved with Fall—Specify

Because this variable allowed free text, numerous (46) items were recorded, many of which had similar meanings. When categories were collapsed, the most common ones mentioned were dizziness, lost balance/balance problems, and using alcohol.

Hip Fracture

Information on this variable was fairly simple to collect, but was not very useful. Only 2% of persons suffered a hip fracture. If this variable is still of interest, the ICD-9-CM discharge codes could be used to identify hip fractures.

Location at the Time of Fall

Information on this variable was straightforward to collect and was generally available, although detailed information was frequently lacking. Only 10% of TBI cases had “unknown/not documented” recorded as a response; however, for 49% of all known locations, the responses were unspecified inside/outside home, unspecified nursing home, and other public location. This level of detail could be identified by the E code, particularly since each state revises E codes, if needed, to ensure accuracy. If the current detailed choices continue to be used, an additional choice that should be added to the list is “unspecified home.” This choice could be selected for cases that document the injury occurred “at home” (unknown if inside or outside).

Location at the Time of Fall—Specify

Because this variable allowed free text, numerous (24) items were recorded. The most common locations recorded were hospital, street, doctor/dentist office, sidewalk, and garden.

Medications: Anticoagulant Use

Information on this variable was available for 98% of cases. Fifty-seven percent of injured persons were taking aspirin and/or a prescription anticoagulant/antiplatelet. The list of the most common prescription anticoagulants/antiplatelets was very

helpful and was included in alphabetic order on the supplemental TBI report form. It did take time to compare the medications each patient was on to the anticoagulant/antiplatelet list, particularly if the patient was on multiple medications. For some patients, the only documentation available was “on anticoagulant therapy.” It would be helpful to add a variable choice for “yes, but unknown if aspirin or prescription anticoagulant/antiplatelet” to code these patients. If information on this variable continues to be collected, the list of anticoagulants/antiplatelets will need to be updated as new medications are used for this purpose. In addition, it may be helpful to collect the specific name of the prescription drug used.

Medications: Antihypertensive Use (Optional)

Data on this optional variable were not collected in Oklahoma. There was a long list of antihypertensive medications that would need to be compared to the list of all medications the patient was taking. In addition, there is a separate question on whether or not the patient had a history of hypertension. The effort to conduct the medication comparisons for each patient did not seem to be worth the value of the information obtained, particularly since many older persons (with and without a TBI) are on antihypertensive medications.

Medications: Four or More Medications

Information on this variable was generally straightforward to collect and was available for 99% of cases. Seventy-nine percent of injured persons were on four or more medications. Generally, patients were on many medications or virtually no medications. In a few cases

where the patient was on a small number of medications, distinguishing between prescription drugs and over the counter drugs was important (but not always simple).

Objects Involved with Fall

Information on this variable was not particularly helpful. There was no mention of object involvement or object involvement was unknown for 50% of cases. The most common items involved in falls were only involved in a small percentage of the falls: bed (8%), wheelchair (5%), chair (4%), walker (4%), and shower/tub (2%). For assistive devices, it is unclear whether the device contributed to the injury or not. In addition, it was sometimes unclear if the patient was using the assistive device at the time of injury (e.g., documentation that the patient usually uses a cane or walker).

Objects Involved with Fall—Specify

Analysis of this variable generated a long list of items (42) involved with the fall. No object on the list was involved with more than four falls, so this variable was not very useful. In some cases, information was recorded on objects that persons hit their head on (e.g.,

nightstand, table), although that was likely not the intent of the question.

Previous Falls

Information on this variable was valuable. Analysis revealed that 40% of injured persons had a history of previous falls. There was no previous fall or no mention of a previous fall for 56% of persons. Although some of these persons may have had previous falls, a history was not documented. Information was insufficient for 4% of cases.

Time of Day of Fall

Data on this variable were available for 70% of cases. Collapsing the hours of injury into the general categories of morning, afternoon, evening, and night allowed more complete data collection. If only the specific time of day had been collected, more cases would have been coded as unknown time. In addition, known times would likely have been collapsed into these categories.

Wrist Fracture

This variable was fairly simple to collect, but was not very useful. Only 1% of persons suffered a wrist fracture. If this variable is still of interest, the ICD-9-CM discharge codes could be used to identify wrist fractures.

Recommendations

The seven new variables created to be collected on all persons with a TBI required minimal extra effort to collect. The clinical case definition variable seemed to be especially valuable. Inclusion of this variable ensures that all states submit data for all TBI sampled cases, whether they fit the clinical case definition or not. Analyses can be conducted by each state and CDC on all TBI coded cases or only on those cases that fit the clinical case definition. In addition, the predictive value positive of TBI coding can be determined. Other new variables that should likely continue to be collected include amnesia and federal hospital. It may also be helpful to collect information on neuroabnormalities in the future. Variables that rarely had information available or were not useful in Oklahoma were AVPU, drug use, other motor vehicle type, and other motor vehicle type—specify.

Collecting data on the 37 new variables for older persons who sustained a TBI

during a fall required significant extra effort. A three-page supplemental form was created to collect the information on a total of 290 persons in Oklahoma. By combining the supplemental data from all TBI states, a detailed descriptive analysis on elderly falls can be completed. It is recommended that the TBI states and CDC have a conference call to determine how the data will be used (e.g., who will analyze it, if a multi-state publication will be prepared). In addition, there needs to be discussion on continued supplemental TBI surveillance for 2006. All TBI states and CDC need to decide very soon which supplemental variables will continue to be collected for 2006 and which will not. Based on Oklahoma's experience, it is not feasible or valuable to continue to collect data on all 37 new variables for elderly falls. The number of variables collected would need to be pared down significantly. An alternative approach is that supplemental data for 2006 could be collected on a different etiology or age group.

- Sampled Case (1)
- Out of State (6)
- No TBI/prevalent case (False positive case – complete form) (3)
- Record not found (4)
- Other (7) _____

TRAUMATIC BRAIN INJURY REPORT FORM*
Oklahoma State Department of Health

OSDH Record # _____

Date of Review: _____

Reviewer: _____

Hospital: _____ Hospital Record #: _____

Patient Name (*last, first, middle initial*): _____

Sex: Male (1) Female (2) Unknown (9) Date of Birth: _____ Age: _____

Race (*check all that apply*): White African American Native American/Alaska Native
 Unknown Asian Hawaii/Pac Islander Other: _____

SS# (*last 4 digits*): _____ Hispanic/Latino: Yes (1) No (2) Unknown (9)

Address: _____ City: _____
 (*If patient's address is unknown, record contact information for a relative/friend.*)

County of Residence: _____ Zip: _____ Phone: (_____) _____

Employer/Occupation _____ Unemployed Child/Student Retired

Patient's Residence at Admission:

Private home (1) Group home (2) Assisted living (3) Correctional institution (4)

Nursing home/long-term care (5) Foster home (6) Psych hospital (7) Homeless/shelter (8)

Military/college dorm (9) Unknown (99) Other (*hotel, etc.*) (10) _____

City and County (*or name of other state*) where injury occurred:

Date of Admission: _____ Date of Discharge: _____

Date of Injury: _____ Outcome: Survived Died (date): _____

Insurance (*check all that apply*):

Private/commercial (1) Self pay (6) Workers' comp (4) VA/TRICARE/CHAMPVA (5a)

Medicare (2) Medicaid (3) Other gov't program (*CHIP, IHS, etc.*) (5b)

Automobile insurance (8) Unknown (9) Other (*no charge, charity, etc.*) (7) _____

Was the injury work-related? Yes (1) No (2) Unknown (9)

Was the injury: Unintentional Intentional (*self-inflicted*) Intentional (*by another person*) Unknown

Where did the injury occur?

Home/assisted living Street/highway

Farm Public building

Mine/quarry Residential institution (*includes hospital, dormitory, jail, nursing home, etc.*)

Industrial place/premises Other (*specify*) _____

Place for recreation/sport Unknown

<p>Discharge Disposition (if transferred, specify name of facility):</p> <p><input type="checkbox"/> Home (1)—includes foster care/DHS</p> <p><input type="checkbox"/> Acute care hospital (0) _____</p> <p><input type="checkbox"/> Skilled nursing facility (3a) _____</p> <p><input type="checkbox"/> Intermediate care facility (3b) _____</p> <p><input type="checkbox"/> Inpatient rehab facility (4) _____</p> <p><input type="checkbox"/> Home health care/home hospice/outpatient rehab (2)</p> <p><input type="checkbox"/> Left AMA (5)</p> <p><input type="checkbox"/> Expired (7)</p> <p><input type="checkbox"/> Correctional facility (prison, jail, detention center, police) (6)</p> <p><input type="checkbox"/> Other (psych, drug/etoh rehab, inpatient hospice) (8) (specify) _____</p> <p><input type="checkbox"/> Unknown (9)</p>	<p>List All Primary & Associated ICD-9-CM Codes (in order):</p> <p>#1 _____ #10 _____ #19 _____</p> <p>#2 _____ #11 _____ #20 _____</p> <p>#3 _____ #12 _____ #21 _____</p> <p>#4 _____ #13 _____ #22 _____</p> <p>#5 _____ #14 _____ #23 _____</p> <p>#6 _____ #15 _____ #24 _____</p> <p>#7 _____ #16 _____ #25 _____</p> <p>#8 _____ #17 _____ #26 _____</p> <p>#9 _____ #18 _____ #27 _____</p>
<p>Hospital E codes: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>#1 E _____ #4 E _____</p> <p>#2 E _____ (Place code E849) #5 E _____</p> <p>#3 E _____</p>	<p>For Surveillance Coordinator:</p> <p>E code #1 Revised _____</p> <p>E code #2 Revised _____</p> <p>E code #3 Revised _____</p>

How did the injury occur?

- Motor vehicle (car, van, pickup, SUV)
 - Motorcycle
 - ATV (circle: 3-wheeler or 4-wheeler)
 - Bicycle
 - Other recreational vehicle (jet ski, etc.)—(specify vehicle) _____
 - Fall/jump (circle: fall or jump)
 - Sports activity (diving, football, etc.)
 - Pedestrian
 - Hit by falling/flying object (specify object) _____
 - Gunshot
 - Assault -- Blunt instrument Cut/pierce instrument Fist/kick Shaken baby Other weapon Unknown
 - Was the assault IPV? Yes No Unknown
 - Airplane/helicopter
 - Other (specify) _____
- How #2 _____ How Specified _____

Description of circumstances (e.g., fell down icy stairs) _____

Was personal protective equipment used? Yes No (0) Not applicable (8) Unknown (9)

If YES, select all types of PPE used:

Seat belt/car seat (1) Airbag (2) Helmet (3) Hard hat (4) Other (6) (specify) _____

Length of Unconsciousness: ≤5 min (1) 6-30 min (2) 31-60 min (3) 61 min-24 hrs (4) >24 hrs (5)
 No LOC (6) Possible/questionable LOC (11) Unknown length LOC ("+LOC") (10)
 Unknown (99) Not applicable (e.g., use of sedative/paralytic drugs) (7)

Level of Responsiveness (AVPU) (record lowest score found in EMS, ED, or immediately after admission):

- Alert: patient is awake and alert (0)
- Verbal: patient is responsive to verbal stimuli; not awake, but easy to arouse; can obey some simple commands and speak comprehensively, although some disorientation may be present (1)
- Pain: patient is responsive to painful stimuli; difficult to arouse (e.g., requires noxious stimuli); cannot obey simple commands; speech inappropriate or incomprehensible (2)
- Unresponsive: patient does not open eyes, obey commands, or utter words (3)
- Not applicable: no score reported before patient sedated, paralyzed, and/or intubated (8)
- Unknown (9)

Level of Consciousness: Coma (1) Moderate impairment (2) Minimal impairment (4)
 No impairment (5) GCS (8) Unknown (9)

Was a CT scan or MRI of the head done? Yes No Unknown

If YES: Normal Abnormal (likely due to TBI) Unknown (Specify results, if abnormal) _____

Skull fracture diagnosed: Yes with imaging/surgery (1) Yes but not by imaging (2) No (3) Unknown (9)

Intracranial lesion: Found by imaging/surgery (1) None found by imaging (0) No CT/MRI/surgery (8) Unknown (9)

Did the patient have amnesia? Yes (1) No/no mention (0) N/A (infant, unresponsive, BAC ≥ .2, etc.) (8) Unknown (9)

Did the patient meet the clinical case definition (decreased LOC, amnesia, skull fracture, neuro abnormality, or intracranial lesion)?

- Yes (circle above) (1)
- No (0)
- Unsure if deficits due to other factors (dementia, intoxication, etc.) (2)
- Unknown (9)

AIS Score (head region): _____ Glasgow Coma Score (03-15): _____
 Not applicable (8) Unknown (9) N/A (GCS-T, sedated, intoxicated, intubated) (88) Unknown (99)

Glasgow Outcome Scale (functional outcome of TBI at discharge)

- Death: all in-hospital deaths, regardless of cause (1)
- Persistent vegetative state: coma (2)
- Severe disability: conscious and at least somewhat responsive, but disabled and dependent for daily support (3)
- Moderate disability: disabled, but independent with respect to daily life; able to participate in activities indicating self-sufficiency beyond dressing and minimal self-care (4)
- Good recovery: independent, may have minor deficits that do not prevent resumption of "normal" life; actual return to work at pre-injury levels or return to work at all is not a requirement (5)
- Unknown (9)

Was the patient definitely/likely drinking ALCOHOL prior to being injured? Yes No Unknown

_____ BAC test result in mg/dL (*legal limit is 80 mg/dL; if lab result is in g/dL, move decimal point 3 places to the right*)

- (777) BAC not tested, but alcohol use suspected (*alcohol smell on breath, self or witness report, positive breath test, etc.*)
 (888) BAC not tested, no evidence or mention of alcohol use
 (999) Unknown (*stated in the record that they did not know if the patient was using alcohol or not*)

Was the patient definitely/likely using illicit DRUGS prior to being injured? Yes No Unknown

- (0) Drug screen negative
 (1) Drug screen positive _____
 (4) Drug screen not done, but drug use suspected
 (3) Drug screen not done, no evidence or mention of drug use
 (9) Unknown (*stated in the record that they did not know if the patient was using drugs or not*)
(*includes amphetamines, barbiturates, benzos, cocaine, marijuana/THC, methadone, methamphetamines, opiates, phencyclidine/PCP*)

If injury was a motor vehicle-related event, please mark the patient's position:

- | | |
|---|---|
| <input type="checkbox"/> Motorcyclist or motorcycle passenger (5) | <input type="checkbox"/> Back of pickup or outside vehicle (<i>car surfing</i>) (4) |
| <input type="checkbox"/> Driver of motor vehicle (1) | <input type="checkbox"/> Bicyclist or passenger (6) |
| <input type="checkbox"/> Passenger in motor vehicle (2) | <input type="checkbox"/> Pedestrian (7) |
| <input type="checkbox"/> Occupant of motor vehicle – driver/passenger not specified (3) | <input type="checkbox"/> Not applicable (not MV-related or cause unknown) (8) |
| | <input type="checkbox"/> Unknown position (9) |

If injury involved something other than a traditional motor vehicle ("other" motor vehicles), please mark the type:

- | | |
|--|--|
| <input type="checkbox"/> ATV (1) | <input type="checkbox"/> Segway (7) |
| <input type="checkbox"/> Boat (motorized) (2) | <input type="checkbox"/> Snowmobile (8) |
| <input type="checkbox"/> Golf cart (3) | <input type="checkbox"/> Not applicable (not an "other" motor vehicle) (77) |
| <input type="checkbox"/> Jet ski/personal watercraft (4) | <input type="checkbox"/> Other (88) (<i>specify</i>) _____ |
| <input type="checkbox"/> Pocket rocket/bike (5) | (<i>includes motorized wheelchairs and mobility scooters</i>) |
| <input type="checkbox"/> Scooter (motorized) (6) | <input type="checkbox"/> Unknown "other" motor vehicle (99) |

For injuries related to sports and recreation, please mark the activity:

- | | |
|---|---|
| <input type="checkbox"/> 1 = Baseball or softball | <input type="checkbox"/> 15 = Toboggan (<i>sled, tube</i>) |
| <input type="checkbox"/> 2 = Basketball | <input type="checkbox"/> 16 = Water sports (<i>swimming, water ski, water tube, surf</i>) |
| <input type="checkbox"/> 3 = Biking | <input type="checkbox"/> 18 = Snow ski |
| <input type="checkbox"/> 4 = Combative exercise (<i>e.g., boxing, wrestling, Tae Kwan Do</i>) | <input type="checkbox"/> 19 = Snowboard |
| <input type="checkbox"/> 5 = Football | <input type="checkbox"/> 20 = Golf |
| <input type="checkbox"/> 6 = Gymnastics or cheerleading | <input type="checkbox"/> 21 = Horseplay (<i>e.g., play wrestling, tag, chase</i>) |
| <input type="checkbox"/> 7 = Ice hockey | <input type="checkbox"/> 66 = Sports and recreation motor vehicle-related |
| <input type="checkbox"/> 8 = Horseback riding | (complete "other" motor vehicle above) |
| <input type="checkbox"/> 9 = Playground equipment | <input type="checkbox"/> 77 = Other (<i>e.g., billiards, bowling, fishing, non-powder gun, track & field, trampoline, "spectator: <sport>"</i>) |
| <input type="checkbox"/> 10 = Skateboard or scooter | _____ |
| <input type="checkbox"/> 11 = Skate-ice (not ice hockey) | <input type="checkbox"/> 88 = Not applicable – not sports-related |
| <input type="checkbox"/> 12 = Skate-in-line, other specified | <input type="checkbox"/> 99 = Unknown |
| <input type="checkbox"/> 13 = Soccer | |

**SUPPLEMENTAL TBI REPORT FORM
FALLS AMONG PERSONS 65 YEARS AND OLDER**

Name: _____

Hospital: _____

What was the patient's body position/mechanics at the time of the fall?

- Lying down (1)
 Sitting (2)
 Standing (3)
 Walking (4)
 Running (5)
 Climbing (6)
 Transition from lying down/sitting to standing (7)
 Transition from standing to sitting/lying down (8)
 Other (88) (specify) _____
 Unknown (99)

What factors were associated with the fall?

(Check all that apply)

- Slipped (1)
 Tripped (2)
 Carrying something (3)
 Reaching for something (4)
 Bending over (5)
 Being moved/carried/supported by another person (includes assisted transfers) (6)
 Unspecified "mechanical" fall (i.e., "mechanical fall" is the only description in the chart) (7)
 Syncope (8)
 Ice/snow (9)
 Low/poor/no lighting (10)
 Other (88) (specify) _____
 No mention of factor involvement (99)

Where did the fall occur (i.e., the patient's location at the initiation of the fall)?

Home – inside

- Attic (10)
 Basement (11)
 Bathroom (12)
 Bedroom (13)
 Garage/workshop/laundry (14)
 Kitchen (15)
 Living room/family room/den/dining room (16)
 Staircase (17)
 Other (18) (specify) _____
 Unspecified inside home (19)

Home – outside

- Outdoor steps/stairs (20)
 Porch/deck (21)
 Roof (22)
 Yard (23)
 Driveway (24)
 Other (28) (specify) _____
 Unspecified outside home (29)

Nursing home

- Patient room (30)
 Patient bathroom (31)
 Public area (e.g., hallways, dining area) (32)
 Other (38) (specify) _____
 Unspecified nursing home (39)

Assisted living facility

- Patient room (40)
 Patient bathroom (41)
 Public area (42)
 Other (48) (specify) _____
 Unspecified assisted living facility (49)

Public locations

- Parking lot (50)
 Store (51)
 Restaurant (52)
 Church (53)
 Other (58) (specify) _____

Other

- Other (88) (specify) _____
 Unknown/not documented (99)

What objects were involved with the fall? (Check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Wheelchair (1) | <input type="checkbox"/> Stoop/steps (consists of several steps; e.g., three steps from a sidewalk to a porch) (13) |
| <input type="checkbox"/> Walker (2) | <input type="checkbox"/> Threshold (i.e., raised area underneath a door) (14) |
| <input type="checkbox"/> Cane (3) | <input type="checkbox"/> Sidewalk (15) |
| <input type="checkbox"/> Scooter (4) | <input type="checkbox"/> Curb (16) |
| <input type="checkbox"/> Bed (5) | <input type="checkbox"/> Roof (17) |
| <input type="checkbox"/> Chair (6) | <input type="checkbox"/> Ladder (18) |
| <input type="checkbox"/> Shower/bathtub (7) | <input type="checkbox"/> Step stool/stool (19) |
| <input type="checkbox"/> Toilet (8) | <input type="checkbox"/> Car (e.g., person falls while getting out of car) (20) |
| <input type="checkbox"/> Rug (9) | <input type="checkbox"/> Other assistive device (77) (specify) _____ |
| <input type="checkbox"/> Pet (10) | <input type="checkbox"/> Other (88) (specify) _____ |
| <input type="checkbox"/> Electrical cord (11) | <input type="checkbox"/> No mention of object involvement (99) |
| <input type="checkbox"/> Staircase/stairs (e.g., flight of stairs) (12) | |

When did the fall occur?

- 1 = Morning (6am-11:59am)
 2 = Afternoon (12 pm-5:59pm)
 3 = Evening (6pm-11:59pm)
 4 = Night (12am-5:59am)
 9 = Unknown

Does the patient have a history of previous falls?

- Yes (regardless if injured/sought treatment) (1)
 No/no mention (0)
 Unknown (9)

Does the patient have any of the following conditions?

	Yes (1)	No/no mention (0)	Unknown (9)
Alzheimer's/dementia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arthritis/gout/lupus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atrial fibrillation/pacemaker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CVA/stroke	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Yes (1)	No/no mention (0)	Unknown (9)
Depression/bipolar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
"Frailty"/"frail"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypertension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Yes (1)	No/no mention (0)	Unknown (9)
Incontinence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multiple sclerosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Osteoporosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parkinson's	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Yes (1)	No/no mention (0)	Unknown (9)
Peripheral neuropathy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recent illness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seizures/epilepsy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Syncope	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vision problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Was the patient on four or more prescription medications at the time of the fall?

- Yes (1) No/no mention (0) Unknown (9)

Was the patient on anticoagulant medication at the time of the fall?

(see list below)

- No/no mention (0)
 Yes, patient on aspirin ONLY (1)
 Yes, patient on aspirin AND a prescription anticoagulant/antiplatelet (2)
 Yes, patient on prescription anticoagulant/antiplatelet ONLY (3)
 Unknown (9)

Common anticoagulants and antiplatelets include the following:

Abciximab	Clopidogrel/clopidogel	Enoxaprin	Persantine
Acetylsalicylic acid (aspirin)	bisulfate	Eptifibatide	Plavix
Aggrenox	Coumadin	Fragmin	Reopro
Anisindione	Dalteparin	Integrilin	Ticlid
	Dicumarol	Lovenox	Ticlopidine
	Dipyridamole	Miradon	Warfarin

Did the patient sustain a hip fracture as a result of the most recent fall?

(includes intertrochanteric, surgical neck, and acetabular fractures)

- Yes (1) No/no mention (0) Unknown (9)

Did the patient sustain a wrist fracture as a result of the most recent fall?

(includes Colles', navicular, hamate, scaphoid, distal radius, and distal ulna fractures)

- Yes (1) No/no mention (0) Unknown (9)

2005 TBI DATA NEW VARIABLE FREQUENCIES***The FREQ Procedure***

F_BODY	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	16	5.52	16	5.52
2	18	6.21	34	11.72
3	40	13.79	74	25.52
4	74	25.52	148	51.03
6	2	0.69	150	51.72
7	15	5.17	165	56.90
8	2	0.69	167	57.59
99	123	42.41	290	100.00

Frequency Missing = 759

F_BODY_SPEC				
F_BODY_SPEC	Frequency	Percent	Cumulative Frequency	Cumulative Percent

Frequency Missing = 1049

F_C_AFIB	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	211	72.76	211	72.76
1	79	27.24	290	100.00

Frequency Missing = 759

F_C_ALZ	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	205	70.69	205	70.69
1	83	28.62	288	99.31
9	2	0.69	290	100.00

Frequency Missing = 759

F_C_ARTH	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	191	65.86	191	65.86
1	99	34.14	290	100.00

Frequency Missing = 759

F_C_CVA	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	198	68.28	198	68.28
1	90	31.03	288	99.31
9	2	0.69	290	100.00

Frequency Missing = 759

F_C_DEPRESS	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	222	76.55	222	76.55
1	67	23.10	289	99.66
9	1	0.34	290	100.00

Frequency Missing = 759

F_C_DIAB	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	211	72.76	211	72.76
1	79	27.24	290	100.00

Frequency Missing = 759

F_C_FRAIL	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	281	96.90	281	96.90
1	9	3.10	290	100.00

Frequency Missing = 759

F_C_HTN	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	86	29.66	86	29.66
1	204	70.34	290	100.00

Frequency Missing = 759

F_C_ILL	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	237	81.72	237	81.72
1	52	17.93	289	99.66
9	1	0.34	290	100.00

Frequency Missing = 759

F_C_INCONT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	256	88.28	256	88.28
1	34	11.72	290	100.00

Frequency Missing = 759

F_C_MS	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	290	100.00	290	100.00

Frequency Missing = 759

F_C_OSTEO	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	258	88.97	258	88.97
1	32	11.03	290	100.00

Frequency Missing = 759

F_C_PARK	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	271	93.45	271	93.45
1	18	6.21	289	99.66
9	1	0.34	290	100.00

Frequency Missing = 759

F_C_PN	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	280	96.55	280	96.55
1	10	3.45	290	100.00

Frequency Missing = 759

F_C_SYNC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	268	92.41	268	92.41
1	20	6.90	288	99.31
9	2	0.69	290	100.00

Frequency Missing = 759

F_C_SZ	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	265	91.38	265	91.38
1	25	8.62	290	100.00

Frequency Missing = 759

F_C_VISION	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	209	72.07	209	72.07
1	81	27.93	290	100.00

Frequency Missing = 759

F_FACTOR1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	15	5.17	15	5.17
2	39	13.45	54	18.62
3	1	0.34	55	18.97
4	2	0.69	57	19.66
5	3	1.03	60	20.69
6	2	0.69	62	21.38
8	40	13.79	102	35.17
9	1	0.34	103	35.52
88	52	17.93	155	53.45
99	135	46.55	290	100.00

Frequency Missing = 759

F_FACTOR2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
2	2	16.67	2	16.67
4	1	8.33	3	25.00
5	1	8.33	4	33.33
8	2	16.67	6	50.00
9	1	8.33	7	58.33
10	1	8.33	8	66.67
88	4	33.33	12	100.00

Frequency Missing = 1037

F_FACTOR3	Frequency	Percent	Cumulative Frequency	Cumulative Percent

Frequency Missing = 1049

F_FACTOR_SPEC				
F_FACTOR_SPEC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
ALCOHOL USE	1	1.82	1	1.82
ASSAULTED	1	1.82	2	3.64
ATTEMPTING TO USE URINAL	1	1.82	3	5.45
BALANCE PROBLEMS	1	1.82	4	7.27
CHOKING	1	1.82	5	9.09
DIZZINESS	2	3.64	7	12.73
DIZZY	1	1.82	8	14.55
DIZZY/LIGHTHEADED	1	1.82	9	16.36
DRINKING ALCOHOL	1	1.82	10	18.18
EXTREMELY DROWSY	1	1.82	11	20.00
FELL ASLEEP	1	1.82	12	21.82
FELL THROUGH WEAKENED METAL	1	1.82	13	23.64
FOLDING CLOTHES	1	1.82	14	25.45
GETTING OUT OF CHAIR	1	1.82	15	27.27
GRAB BAR BROKE	1	1.82	16	29.09
HIT BY CAR	2	3.64	18	32.73
HIT BY FALLING TREE	1	1.82	19	34.55
INTOXICATED	2	3.64	21	38.18
KICKED BY HORSE	1	1.82	22	40.00
KNEE BUCKLED	1	1.82	23	41.82
KNEE GAVE OUT	1	1.82	24	43.64
KNEES GAVE OUT	1	1.82	25	45.45
KNOCKED DOWN	1	1.82	26	47.27
LEG GAVE OUT	2	3.64	28	50.91
LEG WEAKNESS	1	1.82	29	52.73
LEGS GAVE OUT	1	1.82	30	54.55
LEGS GAVE OUT/GENERALIZED WEAKNESS	1	1.82	31	56.36
LIGHTHEADED/LOST BALANCE	1	1.82	32	58.18
LOST BALANCE	6	10.91	38	69.09
LOST BALANCE/DIZZY	1	1.82	39	70.91
MOVING A CHAIR	1	1.82	40	72.73
NEAR SYNCOPE	1	1.82	41	74.55
ORTHOSTATIC HYPOTENSION	1	1.82	42	76.36
POOR VISION	1	1.82	43	78.18
RUNOVER BY FORKLIFT	1	1.82	44	80.00

F_FACTOR_SPEC				
F_FACTOR_SPEC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
SCOOTING CHAIR BACK	1	1.82	45	81.82
SEVERE CHEST PAIN	1	1.82	46	83.64
STEPPED IN HOLE	1	1.82	47	85.45
UNASSISTED TRANSFER	1	1.82	48	87.27
VOLUME DEPLETION	1	1.82	49	89.09
WALKING DOG/DOG JERKED HER	1	1.82	50	90.91
WEAK LEGS/NEAR SYNCOPE	1	1.82	51	92.73
WHEELCHAIR FELL OFF RAMP	1	1.82	52	94.55
WHEELCHAIR LIFT FAILURE	1	1.82	53	96.36
WHEELCHAIR TIPPED	1	1.82	54	98.18
WOBBLY BALANCE	1	1.82	55	100.00

Frequency Missing = 994

F_HIPFX	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	285	98.28	285	98.28
1	5	1.72	290	100.00

Frequency Missing = 759

F_LOCAT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
12	16	5.52	16	5.52
13	20	6.90	36	12.41
14	9	3.10	45	15.52
15	10	3.45	55	18.97
16	5	1.72	60	20.69
18	1	0.34	61	21.03
19	60	20.69	121	41.72
21	5	1.72	126	43.45
22	1	0.34	127	43.79
23	4	1.38	131	45.17
24	3	1.03	134	46.21
28	11	3.79	145	50.00
29	5	1.72	150	51.72
30	12	4.14	162	55.86
31	4	1.38	166	57.24
32	1	0.34	167	57.59
38	2	0.69	169	58.28
39	37	12.76	206	71.03
40	2	0.69	208	71.72
41	1	0.34	209	72.07
42	1	0.34	210	72.41
48	2	0.69	212	73.10
49	11	3.79	223	76.90
50	5	1.72	228	78.62
51	5	1.72	233	80.34
53	1	0.34	234	80.69
58	26	8.97	260	89.66
88	2	0.69	262	90.34
99	28	9.66	290	100.00

Frequency Missing = 759

F_LOCAT_SPEC				
F_LOCAT_SPEC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
BARN	1	2.27	1	2.27
CARPORT	1	2.27	2	4.55
DENTIST OFFICE	1	2.27	3	6.82
DOCTOR'S OFFICE	2	4.55	5	11.36
DRIVEWAY	1	2.27	6	13.64
FARM	1	2.27	7	15.91
GARDEN	3	6.82	10	22.73
GOING INTO HOUSE - IN DOORWAY	1	2.27	11	25.00
GOLF COURSE (CLUBHOUSE)	1	2.27	12	27.27
HALLWAY	1	2.27	13	29.55
HOME - NS INSIDE OR OUTSIDE	1	2.27	14	31.82
HOSPITAL	11	25.00	25	56.82
INDUSTRIAL PLACE	1	2.27	26	59.09
JR. HIGH SCHOOL	1	2.27	27	61.36
NS "WEDDING"	1	2.27	28	63.64
OUTSIDE	2	4.55	30	68.18
OUTSIDE WORKSHOP	1	2.27	31	70.45
POST OFFICE	2	4.55	33	75.00
RAMP	1	2.27	34	77.27
RAMP INTO HOME	1	2.27	35	79.55
RANCH	1	2.27	36	81.82
REALTOR'S OFFICE	1	2.27	37	84.09
SIDEWALK	3	6.82	40	90.91
STREET	4	9.09	44	100.00

Frequency Missing = 1005

F_M_4MEDS	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	57	19.66	57	19.66
1	229	78.97	286	98.62
9	4	1.38	290	100.00

Frequency Missing = 759

F_M_ANTICOAG	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	118	40.69	118	40.69
1	73	25.17	191	65.86
2	36	12.41	227	78.28
3	57	19.66	284	97.93
9	6	2.07	290	100.00

Frequency Missing = 759

F_M_ANTIHTN	Frequency	Percent	Cumulative Frequency	Cumulative Percent

Frequency Missing = 1049

F_OBJECT1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	14	4.83	14	4.83
2	11	3.79	25	8.62
3	3	1.03	28	9.66
5	24	8.28	52	17.93
6	13	4.48	65	22.41
7	6	2.07	71	24.48
8	4	1.38	75	25.86
9	1	0.34	76	26.21
10	1	0.34	77	26.55
12	1	0.34	78	26.90
13	5	1.72	83	28.62
15	5	1.72	88	30.34
16	5	1.72	93	32.07
17	1	0.34	94	32.41
18	3	1.03	97	33.45
19	1	0.34	98	33.79
20	4	1.38	102	35.17
77	1	0.34	103	35.52
88	41	14.14	144	49.66
99	146	50.34	290	100.00

Frequency Missing = 759

F_OBJECT2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
5	1	5.26	1	5.26
6	1	5.26	2	10.53
8	1	5.26	3	15.79
10	1	5.26	4	21.05
14	1	5.26	5	26.32
15	1	5.26	6	31.58
16	1	5.26	7	36.84
19	1	5.26	8	42.11
20	1	5.26	9	47.37
88	10	52.63	19	100.00

Frequency Missing = 1030

F_OBJECT3	Frequency	Percent	Cumulative Frequency	Cumulative Percent

Frequency Missing = 1049

F_OBJECT1_SPEC				
F_OBJECT1_SPEC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
BARN/HAY LOFT	1	1.92	1	1.92
BUFFET	1	1.92	2	3.85
CALL LIGHT	1	1.92	3	5.77
CARPET	1	1.92	4	7.69
CARPORT	1	1.92	5	9.62
CEMENT BLOCKS	1	1.92	6	11.54
CLOTHES - FOLDING	1	1.92	7	13.46
COFFEE TABLE	1	1.92	8	15.38
COUCH	1	1.92	9	17.31
DESK	2	3.85	11	21.15
DOOR	3	5.77	14	26.92
DOOR FRAME	1	1.92	15	28.85
DOOR JAMB	1	1.92	16	30.77
DOOR OF THE HOME	1	1.92	17	32.69
DRESSER	1	1.92	18	34.62
DRIVEWAY	1	1.92	19	36.54
FEED BUCKETS	1	1.92	20	38.46
FORKLIFT	1	1.92	21	40.38
GARDEN HOSE	1	1.92	22	42.31
GRAB BAR	1	1.92	23	44.23
HOLE IN THE GROUND	1	1.92	24	46.15
HORSE	1	1.92	25	48.08
INTRAVENOUS (IV) CORD	1	1.92	26	50.00
MOP	1	1.92	27	51.92
NIGHTSTAND	4	7.69	31	59.62
NS INCLINE	1	1.92	32	61.54
ONE STEP	1	1.92	33	63.46
PLANTER	1	1.92	34	65.38
RAMP	2	3.85	36	69.23
REFRIGERATOR	1	1.92	37	71.15
ROCK	2	3.85	39	75.00
ROOT	1	1.92	40	76.92
SCAFFOLDING	1	1.92	41	78.85
SCALE	1	1.92	42	80.77
SOME "OBJECT"	1	1.92	43	82.69

F_OBJECT1_SPEC				
F_OBJECT1_SPEC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
STEP	1	1.92	44	84.62
TABLE	3	5.77	47	90.38
TRAILER PLATFORM	1	1.92	48	92.31
TRASH CAN	1	1.92	49	94.23
TREE	1	1.92	50	96.15
WET FLOOR	1	1.92	51	98.08
WHEELCHAIR LIFT	1	1.92	52	100.00

Frequency Missing = 997

F_OBJECT2_SPEC				
F_OBJECT2_SPEC	Frequency	Percent	Cumulative Frequency	Cumulative Percent

Frequency Missing = 1049

F_PREVFALL	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	161	55.52	161	55.52
1	116	40.00	277	95.52
9	13	4.48	290	100.00

Frequency Missing = 759

F_TIME	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	68	23.45	68	23.45
2	70	24.14	138	47.59
3	38	13.10	176	60.69
4	27	9.31	203	70.00
9	87	30.00	290	100.00

Frequency Missing = 759

F_WRISTFX	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	287	98.97	287	98.97
1	3	1.03	290	100.00

Frequency Missing = 759

M_AMNESIA	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	546	52.80	546	52.80
1	242	23.40	788	76.21
8	230	22.24	1018	98.45
9	16	1.55	1034	100.00

Frequency Missing = 15

M_AVPU	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	121	11.70	121	11.70
1	11	1.06	132	12.77
2	15	1.45	147	14.22
3	26	2.51	173	16.73
9	861	83.27	1034	100.00

Frequency Missing = 15

M_CASEDEF	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	37	3.58	37	3.58
1	920	88.97	957	92.55
2	28	2.71	985	95.26
9	49	4.74	1034	100.00

Frequency Missing = 15

M_DRUG	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	125	12.09	125	12.09
1	110	10.64	235	22.73
3	787	76.11	1022	98.84
4	5	0.48	1027	99.32
9	7	0.68	1034	100.00

Frequency Missing = 15

M_FEDHOSP	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	1049	100.00	1049	100.00

M_OTHMV	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	26	2.51	26	2.51
3	1	0.10	27	2.61
4	2	0.19	29	2.80
77	999	96.62	1028	99.42
88	6	0.58	1034	100.00

Frequency Missing = 15

M_OTHMV_SPEC				
M_OTHMV_SPEC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
AIRPLANE	2	33.33	2	33.33
ELECTRIC WHEELCHAIR	1	16.67	3	50.00
FORKLIFT	1	16.67	4	66.67
GO-CART	1	16.67	5	83.33
TRACTOR	1	16.67	6	100.00

Frequency Missing = 1043