

South Carolina Traumatic Brain Injury Surveillance

Data Abstraction Manual

SECTION 1: RANDOM SAMPLE INFORMATION (Verbatim from Random Sample)

1a. Date of Abstraction (DATEABS)

Description: Date on which record was abstracted.
Field Length: 8
Values: Date record actually abstracted -- mm/dd/yyyy

1b. Abstracter Initials (INITIALS)

Description: Initials of data abstractor.
Field Length: 2
Values: First and last name initials

1c. Hospital ID Number (HID)

Description: Number identifying the hospital in which the injured patient was treated.
Field Length: 3
Values: A combination of numbers, which make up the hospital ID number

1d. Medical Record ID Number (MEDRECID)

Description: A required, unique identification code.
Field length: 20
Values: The actual number found on the abstraction list

Note: Please enter medical record number from the random sample list we send you. Include dashes, letters, etc., and type exactly as the number appears on the abstraction list. This is only the number to link the data you send to the original file.

1e. Admittance Date (ADMIT)

Description: Date when individual was admitted to the hospital.
Field length: 8
Values: Date in 2000 or 2001 -- mm/dd/yyyy

Note: Enter 11/11/1111 if not found on the abstraction list. If admittance date differs on the medical record, make a note of the different date in the comments section.

1f. Discharge Date (DISD)

Description: Date when individual was discharged from the hospital.
Field length: 8
Values: Date in 2000 or 2001 -- mm/dd/yyyy

Note: Enter 11/11/1111 if not found on the abstraction list. If discharge date differs on the medical record, make a note of the different date in the comments section.

1g. Case ID Number (CASEID)

Description: A required, unique identification code.

Field length: 8

Values: The actual number found on the abstraction list.

Note: Please enter the Case ID Number from the random sample list we send you. Please type exactly as provided.

1h. Is Medical Record Available (RECAVAIL)

Description: Determines whether the chart was available to be abstracted.

Field length: 1

Values: 1 = Yes

2 = No, clerk states (verbal or written) that record is being microfilmed/
microfiched or off-site storage

3 = No, clerk states (verbal or written) unable to locate B no reason given

4 = No, clerk states (verbal or written) other reason

5 = No identifiable reason

Note: If answers 2 through 5, program skips to Missing Record Comments at end of program. If Yes, program continues to next question.

SECTION 2: PERSONAL INFORMATION (From Here Forward from Medical Chart)

2a. Chart Number (CHARTNO)

Description: A required, unique identification code.

Field length: 20

Values: The actual number found on the chart

Note: Please enter the actual number found on the chart. It may or may not be the same as the Medical Record ID Number from the list that was provided to you.

2b. Individual's Last Name (LNAME)

Description: The last name of the individual.

Field length: 40

Values: Any valid name

Note: Enter 9 in first column if not STATED in medical record.

Note: If the name on the medical record is different than the name on the random sample, enter the name from the medical record, including incorrect spelling. Document in the comment section and flag the record.

2c. Individual's First Name (FNAME)

Description: The last name of the individual.

Field length: 20

Values: Any valid name

Note: Enter 9 in first column if not STATED in medical record.

2d. Individual's Middle Initial (MI)

Description: The last name of the individual.

Field length: 1

Values: Any valid initial

Note: Enter 9 in first column if not STATED in medical record.

2e. Date of Birth (DOB)

Description: Individual's date of birth.

Field Length: 8

Values: Relevant date before 1984-- mm/dd/yyyy

Note: Enter 11/11/1111 if not found in medical record.

Note: If individual is 14 or younger, continue but comment and flag record.

2f. Sex (SEX)

Description: The gender of the individual.

Field Length: 1

Values: M= Male

F= Female

U= Unknown/Not STATED in medical record

2g. Race (RACE)

Description: The race or ethnicity of the individual.

Field Length: 1

Values: 1 = White

2 = Black

3 = Oriental / Asian

4 = American Indian

5 = Hispanic

8 = Other

9 = Unknown/Not STATED in medical record

2h. Marital Status (MARISTAT)

Description: Current marital status of the individual.

Field length: 1

Values: 1 = Married

2 = Widowed

3 = Single

9 = Unknown/Not STATED in medical record

2i. Individual's Street Address (INDADDR)

Description: The street address of residence of the individual.

Field length: 40

Values: Any street address

Note: Be sure to get apartment and route numbers if applicable.

Note: Enter 9 in first column if not STATED in medical record.

2j. Individual's City (INDCITY)

Description: The city of residence of the individual.

Field length: 20

Values: Any city name

Note: Enter 9 in first column if not STATED in medical record.

2k. Individual's State (INDSTATE)

Description: The state of residence of the individual.

Field length: 2

Values: SC = South Carolina
NC = North Carolina
GA = Georgia
OT = Other
UK = Unknown/Not STATED in medical record

2l. Individual's Zip Code (INDZIP)

Description: The zip code of residence of the individual.

Field length: 5

Values: Five-digit number

Note: Enter 9 in first column if not STATED in medical record.

2m. Telephone Number (PHONE)

Description: Telephone number of the individual.

Field length: 13

Values: A telephone number with area code as stated in the medical record.

Note: Enter (000) 000-0000 if the number is not STATED in medical record. If the area is missing, enter (000) for area code and then the 7-digit number.

2n. Employment Status (EMPSTAT)

Description: Employment status of the individual.

Field length: 1

Values: 1 = Student
2 = Currently employed
3 = Retired
4 = Disabled
5 = Unemployed
6 = Minor Child under age 5
9 = Unknown/Not STATED in medical record

2o. Availability of Employer Information (EMPINFO)

Description: Is employer information available?

Field length: 1

Values: 1 = Yes
2 = No (*If No, program skips to primary contact section.*)

2p. Employer Name (EMPNAME)

Description: The name of the employer of the individual.

Field length: 40

Values: Any name

Note: Enter 9 in first column if not STATED in medical record.

2q. Employer's Street Address (EMPADDR)

Description: The street address of the employer of the individual.

Field length: 40

Values: Any street address

Note: Be sure to get apartment and route numbers if applicable.

Note: Enter 9 in first column if not STATED in medical record.

2r. Employer's City (EMPCITY)

Description: The city of the employer of the individual.

Field length: 20

Values: Any city name

Note: Enter 9 in first column if not STATED in medical record.

2s. Employer's State (EMPSTATE)

Description: The state of residence of the employer of the individual.

Field length: 2

Values: SC = South Carolina

NC = North Carolina

GA = Georgia

OT = Other

UK = Unknown/Not STATED in medical record

2t. Employer's Zip Code (EMPZIP)

Description: The zip code of the employer of the individual.

Field length: 5

Values: Five-digit number

Note: Enter 9 in first column if not STATED in medical record.

2u. Employer Telephone Number (EMPPHONE)

Description: Telephone number of the employer of the individual.

Field length: 13

Values: A telephone number with area code

Note: Enter (000) 000-0000 if not STATED in medical record. If the area is missing, enter (000) for area code and then the 7-digit number.

SECTION 3: CONTACT 1

3a. Availability of Contact 1 (C1CONT)

Description: Is a contact other than the individual available? (Ex. Next of kin, emergency contact)

Field length: 1

Values: 1 = Yes

2 = No *(If No, program skips to secondary contact.)*

3b. Contact 1 Last Name (C1LNAME)

Description: The last name of the primary contact.

Field Length: 40

Values: Any name

Note: Enter 9 in first column if not STATED in medical record.

3c. Contact 1 First Name (C1FNAME)

Description: The first name of the primary contact.

Field Length: 20

Values: Any name

Note: Enter 9 in first column if not STATED in medical record.

3d. Contact 1 Relationship to Patient (C1RELAT)

Description: The relationship of primary contact to patient.

Field Length: 1

Values: 1 = Spouse
2 = Brother
3 = Sister
4 = Parent
5 = Child
8 = Other
9 = Not STATED in medical record

Note: If other relationship, note relationship in Contact 1 Comments.

3e. Contact 1 Street Address (C1ADDR)

Description: The street address of residence of the primary contact.

Field length: 40

Values: Any street address

Note: Be sure to get apartment and route numbers if applicable.

Note: Enter 9 in first column if not STATED in medical record.

3f. Contact 1 City (C1CITY)

Description: The city of residence of the primary contact.

Field length: 20

Values: Any city name

Note: Enter 9 in first column if not STATED in medical record.

3g. Contact 1 State (C1STATE)

Description: The state of residence of the primary contact.

Field length: 2

Values: SC = South Carolina
NC = North Carolina
GA = Georgia
OT = Other
UK = Unknown/Not STATED in medical record

3h. Contact 1 Zip Code (C1ZIP)

Description: The zip code of residence of the primary contact.

Field length: 5

Values: Five-digit number

Note: Enter 9 in first column if not STATED in medical record.

3i. Contact 1 Telephone Number (C1PHONE)

Description: The telephone or other telecommunications number of the primary contact.

Field Length: 13

Values: A telephone number with area code

Note: Enter (000) 000-0000 if not STATED in medical record. If the area is missing, enter (000) for area code and then the 7-digit number.

3j. Contact 1 Employer (C1EMPLOY)

Description: The employer of the primary contact.

Field Length: 40

Values: Employer name

Note: Enter 9 in first column if not STATED in medical record.

3k. Contact 1 Employer Telephone Number (C1EMPLPH)

Description: The telephone number of the employer of the primary contact.

Field Length: 13

Values: A telephone number with area code

Note: Enter (000) 000-0000 if not STATED in medical record. If the area is missing, enter (000) for area code and then the 7-digit number.

3l. Contact 1 Comments (C1COMNT)

Description: Any other applicable information about primary contact.

Field Length: 40

Values: Any comments

Note: Enter 9 in first column if no comments.

SECTION 4: CONTACT 2

4a. Availability of Secondary Contact (C2CONT)

Description: Is a secondary contact other than the individual or primary contact available?

Field length: 1

Values: 1 = Yes

2 = No (If No, program skips to Narrative of Injury.)

4b. Contact 2 Last Name (C2LNAME)

Description: The last name of the secondary contact.

Field Length: 40

Values: Any name

Note: Enter 9 in first column if not STATED in medical record.

4c. Contact 2 First Name (C2FNAME)

Description: The first name of the secondary contact.

Field Length: 20

Values: Any name

Note: Enter 9 in first column if not STATED in medical record.

4d. Contact 2 Relationship to Patient (C2RELAT)

Description: The relationship of secondary contact to patient.

Field Length: 1

Values: 1 = Spouse
2 = Brother
3 = Sister
4 = Parent
5 = Child
8 = Other
9 = Not STATED in medical record

Note: If other relationship, note relationship in Contact 2 Comments.

4e. Contact 2 Street Address (C2ADDR)

Description: The street address of residence of the secondary contact.

Field length: 40

Values: Any street address

Note: Be sure to get apartment and route numbers if applicable.

Note: Enter 9 in first column if not STATED in medical record.

4f. Contact 2 City (C2CITY)

Description: The city of residence of the secondary contact.

Field length: 20

Values: Any city name

Note: Enter 9 in first column if not STATED in medical record.

4g. Contact 2 State (C2STATE)

Description: The state of residence of the secondary contact.

Field length: 2

Values: SC = South Carolina
NC = North Carolina
GA = Georgia
OT = Other
UK = Unknown/Not STATED in medical record

4h. Contact 2 Zip Code (C2ZIP)

Description: The zip code of residence of the secondary contact.

Field length: 5

Values: Five-digit number

Note: Enter 9 in first column if not STATED in medical record.

4i. Contact 2 Telephone Number (C2PHONE)

Description: The telephone or other telecommunications number of the secondary contact.

Field Length: 13

Values: A telephone number with area code

Note: Enter (000) 000-0000 if not STATED in medical record. If the area is missing, enter (000) for area code and then the 7-digit number.

4j. Contact 2 Comments (C2COMNT)

Description: Any other applicable information about secondary contact.

Field Length: 40

Values: Any comments

Note: Enter 9 in first column if no comments.

SECTION 5: DIAGNOSIS

5a-c. Narrative of Injury (NATINJ)

Description: Clinical narrative of the injuries sustained.

Field Length: 40 for each of three lines

Values: Any description of the diagnosis

Note: Enter 9 in first column if not STATED in medical record.

Note: Be as descriptive as possible

5d. Primary Diagnosis Code/N-Code (DIAG1)

Description: An ICD-9 CM code and rubric assigned to the diagnosis.

Field Length: 5

Values: Code that the hospital listed first.

Note: Decimal points are not entered. Enter 5 nine's (99999) if no code is found.

Note: Add Zeros to any three digit N-Code found in the record.

5e-m. Secondary N-Codes (DIAG2-DIAG10)

Description: An ICD-9 CM code and rubric assigned to the diagnoses.

Field Length: 5 for each, for up to 9 codes

Values: Any code listed in the medical record.

Note: Decimal points are not entered. Enter 5 nine's (99999) if no code is found.

Note: Add Zeros to any three digit N-Code found in the record.

SECTION 6: CAUSE OF INJURY

6a-c. Narrative of Cause of Injury (CAUSE)

Description: Brief description of patients' activity at time of injury and how did the injury occur during that activity (i.e. "playing football fell down", "gardening cut foot with shovel").

Field Length: 40 characters for each of three lines

Values: Any narrative that describes the cause of injury

Note: Enter 9 in first column if not STATED in medical record.

Note: Be as specific as possible.

6d. Primary External Cause Code/E-code (ECODE1 - ECODE1A)

Description: The primary external cause of the injury value is coded according to the "Supplementary Classification of External Cause of Injury and Poisoning" from the ICD-9 for deaths and from the ICD-9-CM for hospitalized persons.

Field Length: 5 for each up to 2 codes - prioritize cause(s) of injury

Values: Codes 800.00 through 999.99 - should be cause of injury.

Note: Decimal points are not entered. Enter 5 nine's (99999) if code is not found.

Note: Add Zeros to any three digit E-Code found in the record.

6e. Secondary E-code (ECODE2)

Description: The place of occurrence of the injury value is coded according to the "Supplementary Classification of External Cause of Injury and Poisoning" from the ICD-9 for deaths and from the ICD-9-CM for hospitalized persons.

Field Length: 5

Values: Codes 849.00 through 849.99 - should be where injury occurred.

Note: Decimal points are not entered. Enter 5 nine's (99999) if code is not found.

Note: Add Zeros to any three digit E-Code found in the record.

6f. Etiology/Circumstances of Injury (ETIOLOGY)

Description: Identifies the external cause of the traumatic brain or spinal cord injury.

Field Length: 2

Values: Select one ***Vehicular Transportation: Operator or Passenger***

- 01 = Automobile: injured while riding or driving in a passenger car
- 02 = Truck, light: injured while riding or driving in a pickup truck, utility vehicle, light truck or van
- 03 = Truck, heavy: injured while riding or driving in a heavy truck or tractor-trailer
- 04 = Truck, unspecified; injured while riding or driving in an unspecified truck
- 05 = Bus: injured while riding or driving in a bus
- 06 = Motorcycle: injured while riding or driving a motorcycle, motorized dirt bike, or moped
- 07 = All-terrain vehicle (ATV) or snowmobile: injured while riding or driving an ATV or snowmobile
- 08 = Bicycle and motor-vehicle collision: injured while riding a pedal bicycle that collided with a motor vehicle, including automobiles, trucks, buses, and motorcycles
- 09 = Bicycle, other: injured while riding a pedal bicycle, but did not collide with a motor vehicle; includes non-collision events and collisions with fixed objects, animals, and trains
- 10 = Vehicle, unspecified: injured while riding in or driving an unspecified type of motor vehicle
- 11 = Other transport: injured while riding in a vehicle or transport craft other than those listed in 01-10; includes trains, water craft, and aircraft

Pedestrian-Vehicular

- 21 = Pedestrian, motor-vehicle-related: pedestrian injured in a collision with an auto-mobile, truck, bus or motorcycle
- 22 = Pedestrian, bicycle-related: pedestrian struck by bicycle
- 23 = Pedestrian, other conveyance: pedestrian injured by some other, specified conveyance (e.g., train, streetcar)
- 29 = Pedestrian, conveyance not specified: pedestrian injured in a collision with an unknown type of vehicle

Choices continued on next

Firearms and Other Objects Used as Weapons (used for fighting or defending)

- 31 = Firearm, handgun: injury caused by a handgun
- 32 = Firearm, other: injury caused by firearm other than handgun
- 33 = Firearm, unspecified: injury caused by unspecified or unknown type of firearm
- 34 = Cutting or piercing instrument: injury caused by instrument designed for cutting or piercing (i.e. knife, axe)
- 35 = Blunt instrument: injury caused by a blunt instrument or object
- 38 = Other weapon, type specified
- 39 = Weapon, type unknown

Note: *Firearms, cutting and piercing instruments, and blunt instruments not used as a weapon (i.e. instruments not used for fighting or defending) are not coded as choices 31 through 39.*

Examples: 1) Gun fell off rack, striking patient in the head

2) Cleaning scales off fish, cut hand with knife

3) Patient gardening, dropped rock on foot

Not coded as weapons

Note: *Injuries caused by firearms, piercing and blunt instruments, or objects used as weapons should be coded as such, even if another listed activity (e.g., transportation or sports) was also involved. These injuries may be intentional or unintentional. Intent should be described in the “Intentionality” variable.*

Violence Without Use of Firearms or Other Weapons

- 41 = Altercation or assault not involving firearm, cutting or piercing instrument, blunt instrument, or other weapon (e.g., person struck with fist or kicked)
- 42 = Assault by pushing from high place

Sports and Recreation (coded as per CDC guideline)

- 51 = Football
- 52 = Diving
- 53 = Snow Skiing
- 54 = Other snow sports or recreation (i.e. sledding)
- 55 = Boxing, prize-fighting
- 58 = Sports, other specified recreation
- 59 = Sports, unspecified recreation

Etiological Supplement on Sports Injuries (Coded as per NCAA guideline)

- | | |
|--|--|
| 87 = Aerobics (<i>stretching, Calathenic, Machine</i>) | 64 = Rugby |
| 44 = Basketball | 65 = Running: Competition (e.g., 5K or 10K) |
| 63 = Rafting (Canoeing) | 66 = Running: Leisure (e.g., jogging or walking) |
| 45 = Bowling | 67 = Scuba Diving, Snorkling |
| 46 = Boxing | 84 = Skateboarding |
| 47 = Cheerleading | 68 = Skating: Ice |
| 48 = Cycling (Bicycle, Tricycle) | 69 = Skating: Rollerblade |
| 49 = Diving (off a surface into water) | 70 = Ski: Snow |
| 50 = Equestrian | 71 = Ski: Water |
| 51 = Fishing | 72 = Sky Diving |
| 52 = Football | 73 = Soccer |

Etiological Supplement on Sports Injuries (continued)

- | | |
|------------------------------------|---------------------------------|
| 53 = Golf | 85 = Softball |
| 54 = Gymnastics | 74 = Swimming |
| 55 = Hang Gliding | 75 = Tennis |
| 56 = Hockey: Ice | 76 = Track & Field (Team Event) |
| 57 = Hockey: Rollerblade | 77 = Volleyball |
| 58 = Hunting | 78 = Weight Lifting |
| 59 = Kayaking (whitewater rafting) | 79 = Wrestling |
| 60 = LaCrosse | 80 = Sports, Other _____ |
| 61 = Martial Arts | |
| 86 = <i>Play with Ball, Other</i> | |
| 62 = Racquetball | |

*Note: When an injury is associated with a sport or recreation **and** a vehicle, the injury should be coded as vehicular. When an injury is associated with a sport or recreation **and** a fall, the injury should be coded as a sport or recreation.*

Falls

- 71 = Fall from one level to another
- 72 = Fall on same level
- 73 = Jump from high place
- 78 = Fall, other specified
- 79 = Fall, not specified

Note: These injuries may be intentional or unintentional. Intent should be described in the "Intentionality" variable.

Other

- 91 = Struck by falling object
- 92 = Equestrian
- 98 = Other specified or known cause of injury
- 99 = Unknown/Not STATED in medical record

6g. Injury Intentionality (INTENT)

Description: Specifies whether the injury was unintentional or the result of interpersonal violence or suicidal behavior.

Field Length: 1

- Values:
- 1 = Self-inflicted / suggestive of suicidal intent
 - 2 = Self-inflicted / unintentional or not suggestive of suicidal intent
 - 3 = Self-inflicted / suicidal intent undetermined
 - 4 = Inflicted by other / suggestive of interpersonal violence
 - 5 = Inflicted by other / unintentional or not suggestive of harmful intent
 - 6 = Inflicted by other / harmful intent undetermined
 - 8 = Not applicable, unintentional injury, determination of infliction by self or other not relevant
 - 9 = Unknown/Not STATED in medical record

Note: Injuries from interpersonal violence include injuries from rape, domestic violence, child abuse, elder abuse, robberies, or assaults. Injuries resulting from actions intended to frighten or coerce are included.

*Examples: 1 = self-inflicted gunshot wound with apparent suicidal intent
4 = assaulted with a blunt instrument
5 = a small child playing with a gun shoots a playmate*

SECTION 7: MEDICAL HISTORY

**Note: Enter “YES” if the record states previous history for the following.
Enter “NO” if the record states NO previous history for the following.
Enter “9” if no previous history information is documented in the medical record.**

7a. Previous TBI (PREVTBI)

Description: Does the patient’s medical history include a previous TBI?
Field Length: 1
Values: 1 = Yes
2 = No
9 = Not STATED in medical record

7b. Previous Alcohol Use (PREVALC)

Description: Does the patient’s medical history include alcohol use?
Field Length: 1
Values: 1 = Yes
2 = No
9 = Not STATED in medical record

7c. Previous Drug Use (PREVDRUG)

Description: Does the patient’s medical history include drug use?
Field Length: 1
Values: 1 = Yes
2 = No
9 = Not STATED in medical record

7d. Pre-Morbid Neurological Disorder (PRENEURO)

Description: Does the patient’s medical history include a neurological disorder? Examples of neurological disorders include dementia, Alzheimer’s disease, Parkinson’s disease or epilepsy.

Field Length: 1
Values: 1 = Yes
2 = No
9 = Not STATED in medical record

7e. Pre-Morbid Psychological Disorder (PREPSYCH)

Description: Does the patient’s medical history include a psychological disorder?
Field Length: 1
Values: 1 = Yes
2 = No
9 = Not STATED in medical record

SECTION 8: INJURY SPECIFICS

8a. Date of Injury (INJDATE)

Description: Date when individual was injured.

Field Length: 8

Values: Any month, day, and year -- mm/dd/yyyy

Note: Put 11/11/1111, if not STATED in medical record.

8b. Time of Injury Onset (INJTIME)

Description: Time when individual was injured.

Field Length: 4

Values: Any time of day – hh mm in a 24-hour cycle (0001 to 2400) - Military Time

Note: Put 9999, if not STATED in medical record.

8c. Estimation of Time of Injury (TIMEESTM)

Description: Was the time of injury estimated by the abstractor from the information given in the chart?

Field Length: 1

Values: 1 = Yes

2 = No

8d. City of Injury (CITY)

Description: City in which the injury occurred.

Field length: 20

Values: Any city name

Note: Enter the number 9 in the first column, if not STATED in medical record.

8e. Zip Code of Injury (INJZIP)

Description: Zip code of city where injury occurred

Field length: 5 digits (4 digit extension is not necessary)

Values: Any zip code

Note: Enter the number 9 in the first column, if not STATED in medical record.

8f. County of Injury (COUNTY)

Description: County in which the injury occurred.

Field length: 2

Values: 47...Injury in SC, county not known

48...Injury in Georgia

49...Injury in North Carolina

50...Injury not in SC, NC or GA— ex. Florida

99...County Unknown/Not STATED in medical record

South Carolina Counties

1...Abbeville	13...Chesterfield	25...Hampton	37...Oconee
2...Aiken	14...Clarendon	26...Horry	38...Orangeburg
3...Allendale	15...Colleton	27...Jasper	39...Pickens
4...Anderson	16...Darlington	28...Kershaw	40...Richland
5...Bamberg	17...Dillon	29...Lancaster	41...Saluda
6...Barnwell	18...Dorchester	30...Laurens	42...Spartanburg
7...Beaufort	19...Edgefield	31...Lee	43...Sumter
8...Berkeley	20...Fairfield	32...Lexington	44...Union
9...Calhoun	21...Florence	33...Marion	45...Williamsburg
10...Charleston	22...Georgetown	34...Marlboro	46...York
11...Cherokee	23...Greenville	35...McCormick	
12...Chester	24...Greenwood	36...Newberry	

8g. Injury Incident Location Type (INJLOC)

- Description: Describes the type of place of occurrence of the injury.
- Field Length: 2
- Values:
- 01 = Home
 - 02 = Residential Institution
 - 03 = School, other Institution and Public Administrative Area
 - 04 = Sports or Recreation area
 - 05 = Street or Highway
 - 06 = Trade or Service Area
 - 07 = Industrial or Construction Area
 - 08 = Farm
 - 88 = Other Specified Place
 - 99 = Unspecified Place or not STATED in medical record

8h. Injury Activity (INJACT)

- Description: Describes the type of activity of the patient at the time of injury.
- Field Length: 2
- Values:
- 01= Sports: Comprises exercise with functional purpose, e.g. golf, jogging, riding, school sports and athletics, skiing, swimming, water-skiing. Includes activities described as a ball game, but excludes those described as play with ball.
 - 02= Leisure: Comprises activity with purpose of entertainment or recreation, e.g., hobby activities, going to the cinema, a dance or to a party. Includes activities described as play with ball, but excludes activities described as ball game.
 - 03= Paid work: Comprised of manual or professional work for salary, bonus, or other types of income.
 - 04= Unpaid work: Comprised of duties for which one would not normally gain an income. Includes volunteer work and domestic duties such as caring for children and relatives, cleaning, cooking, gardening, and household maintenance. Excludes learning activities, e.g., attending school session or lesson, undergoing education.
 - 05= Educational activity: Comprises learning activities, e.g., attending school or university. Excludes apprenticeship.
 - 06= Vital activity: Comprises resting, sleeping, eating, bathing, using

- bathroom or engaging in other vital activities.
- 88= Other specified activity.
- 99= Unknown activity or not STATED in medical record.

8i. Occupation, if Work Related (OCCUPAT)

Description: Occupation of individual, if individual was injured on the job.
 Field length: 25
 Values: Any occupation name

Note: Enter the number 9 in the first column, if not STATED in medical record.

8j. Transferred from Other Facility (TRANSINF)

Description: Determines if the individual was transferred into the hospital from another facility.
 Field length: 1
 Values: 1 = Yes
 2 = No (*If No, program skips to section 9.*)
 9 = Not STATED in medical record

8j. Facility Name (FACNAME)

Description: The name of the facility the individual was transferred from.
 Field length: 20
 Values: Any facility name

Note: Enter the number 9 in the first column, if not STATED in medical record.

SECTION 9: INJURY CIRCUMSTANCES AND RISK FACTORS

9a. Injury Motor Vehicle Related? (INJMVREL)

Description: Was injury motor vehicle related?
 Field length: 1
 Values: 1 = Yes
 2 = No (*If No, program skips to Personal Protective Equipment.*)
 9 = Not STATED in medical record

9b. Position of Injured Person in Vehicle (POSMVREL)

Description: Identifies whether a person injured in a motor vehicle was the driver, a passenger, or a pedestrian.
 Field length: 1
 Values: 1 = Driver/Operator
 2 = Passenger
 3 = Occupant: driver or passenger status not specified
 4 = Pedestrian
 8 = Not applicable
 9 = Not STATED in medical record

9c. Personal Protective Equipment (PERPROTE)

Description: Use by the individual of specified traffic safety equipment designed to prevent injury.
 Field length: 1
 Values: 0 = No safety belt, child restraint, airbag, helmet or other personal protective equipment

- 1 = Safety belt, or child restraint, or helmet in use
- 2 = (Safety belt or child restraint) and airbag in use
- 3 = Airbag only in use
- 4 = Other personal protective equipment
- 8 = Not applicable. Person not injured under circumstances where use of protective equipment was warranted
- 9 = Unknown/Not STATED in medical record

9d. Blood Alcohol Level (BAL)

Description: Evidence of alcohol use by the injured person before injury; includes the injured patient's laboratory-determined blood alcohol concentration (BAC), if available.

Field Length: 3

Values: 000-699 = actual BAC in mg/dl
 700 = BAC exceeds 699 mg/dl
 777 = BAC not tested, but clinical or other evidence of alcohol use present
 888 = BAC not tested, clinical records indicate alcohol is not used
 999= Not STATED in medical record: information insufficient to code variable

9e. Evidence of Drug Use (DRUG)

Description: Evidence of drug use by the injured patient before injury.

Field Length: 1

Values: 1 = Yes / test conducted and "evidence" of drug use stated
 2 = No / test conducted and "no evidence" of drug use stated
 3 = Drug use not tested / clinical or other evidence of drug use is present
 4 = Drug use not tested / clinical or other evidence of drugs not used
 9 = Not STATED in medical record: information insufficient to code variable

SECTION 10: DIAGNOSTIC TESTS

10a. X-Ray Information (XRAY)

Description: Was a x-ray taken of the head?

Field length: 1

Values: 1 = Yes (*If Yes, goes to next question.*)
 2 = No (*If No, program skips to CT Information.*)
 9 = Not STATED in medical record

10b. X-Ray Normal / Abnormal (XRAYNA)

Description: Were the findings from the x-ray documented as normal or abnormal?

Field length: 1

Values: 1 = Normal (*If Normal, program skips to CT Information.*)
 2 = Abnormal
 9 = Not STATED in medical record

10c-e Abnormal X-Ray description (XRAYDES)

Description: Description from chart of abnormal x-ray.

Field length: 40 characters for each of 3 lines

Values: Any description

Note: Enter the number 9 in the first column, if not STATED in medical record.

10f. CT Information (CT)

Description: Was a CT taken of the head?
Field length: 1
Values: 1 = Yes
 2 = No
 9 = Not STATED in medical record

Note: If response is YES, program continues to 10g, otherwise program skips to 10k.

10g. CT Normal / Abnormal (CTNA)

Description: Were the findings from the CT documented as normal or abnormal?
Field length: 1
Values: 1 = Normal
 2 = Abnormal
 9 = Not STATED in medical record

Note: If No, program skips to MRI Information.

10h-j. Abnormal CT description (CTDES)

Description: Description from chart of abnormal CT.
Field length: 40 characters for each of 3 lines
Values: Any description

Note: Enter the number 9 in the first column, if not STATED in medical record.

10k. MRI Information (MRI)

Description: Was a MRI taken?
Field length: 1
Values: 1 = Yes
 2 = No (*If No, program skips to section 11.*)
 9 = Not STATED in medical record

10l. MRI Normal / Abnormal (MRINA)

Description: Were the findings from the MRI considered normal or abnormal?
Field length: 1
Values: 1 = Normal (*If Normal, program skips to section 11.*)
 2 = Abnormal
 9 = Not STATED in medical record

10m-o Abnormal MRI description (MRIDES)

Description: Description from chart of abnormal MRI.
Field length: 40 characters for each of 3 lines
Values: Any description

Note: Enter the number 9 in the first column, if not STATED in medical record.

SECTION 11: SEVERITY AND OUTCOME

11a. Availability of Glasgow Coma Score (AVLGCS)

Description: Is Glasgow Coma Score Available?

Field Length: 1

Values: 1 = YES, GCS found on Ambulance Run Report
2 = YES, GCS found elsewhere in the medical record (*program skips to 11f*).
3 = YES, GCS found on Ambulance Run Report and elsewhere in medical record.
9 = Not STATED in medical record

Note: If not stated in medical record, program skips to 11k Glasgow Outcome Score.

GCS TAKEN FROM THE AMBULANCE RUN REPORT:

11b. Glasgow Eye Opening Component (GEYE) - *from Ambulance Run Report*

Description: Eye opening component of the Glasgow coma scale.

Field Length: 1

Values: 1 = No response
2 = Opens eyes in response to painful stimulation
3 = Opens eyes in response to verbal stimulation
4 = Opens eyes spontaneously
8 = Not assessed
9 = Not STATED in medical record

11c. Glasgow Verbal Component (GVERBAL)- *from Ambulance Run Report*

Description: Eye opening component of the Glasgow coma scale.

Description: Verbal component of the Glasgow coma scale.

Field length: 1

Values: Best verbal response for adults:
1 = No response
2 = Non-specific sounds
3 = Inappropriate words
4 = Confused conversation or speech
5 = Oriented or appropriate speech
8 = Not assessed
9 = Not STATED in medical record

11d. Glasgow Motor Component (GMOTOR)- *from Ambulance Run Report*

Description: Eye opening component of the Glasgow coma scale.

Description: Motor component of the Glasgow coma scale.

Field length: 1

Values: 1 = No response
2 = Extensor posturing in response to painful stimulation
3 = Flexor posturing in response to painful stimulation
4 = General withdrawal in response to painful stimulation
5 = Localization of painful stimulation
6 = Obeys commands with appropriate motor response
8 = Not assessed
9 = Not STATED in medical record

- 11e. Glasgow Coma Score (GCS)- *from Ambulance Run Report***
 Description: Eye opening component of the Glasgow coma scale.
 Description: Total Glasgow Coma Score upon individual's arrival at the hospital.
 Field length: 2
 Values: Range of GCS is 03 to 15
 88 = Not applicable (death occurred before admission)
 99 = Not STATED in medical record

GCS TAKEN FROM ELSEWHERE IN THE MEDICAL RECORD:

- 11f. Availability of Glasgow Coma Score (AVLGCSO)**
 Description: Is Glasgow Coma Score available from elsewhere in the medical record?
 Field Length: 1
 Values: Y or N (*if N, skip to 11k*)

- 11g. Glasgow Eye Opening Component (GEYEO) - *from elsewhere in the medical record***
 Description: Eye opening component of the Glasgow coma scale.
 Field Length: 1
 Values: 1 = No response
 2 = Opens eyes in response to painful stimulation
 3 = Opens eyes in response to verbal stimulation
 4 = Opens eyes spontaneously
 8 = Not assessed
 9 = Not STATED in medical record

- 11h. Glasgow Verbal Component (GVERBALO)- *from elsewhere in the medical record***
 Description: Eye opening component of the Glasgow coma scale.
 Description: Verbal component of the Glasgow coma scale.
 Field length: 1
 Values: Best verbal response for adults:
 1 = No response
 2 = Non-specific sounds
 3 = Inappropriate words
 4 = Confused conversation or speech
 5 = Oriented or appropriate speech
 8 = Not assessed
 9 = Not STATED in medical record

- 11i. Glasgow Motor Component (GMOTORO)- *from elsewhere in the medical record***
 Description: Eye opening component of the Glasgow coma scale.
 Description: Motor component of the Glasgow coma scale.
 Field length: 1
 Values: 1 = No response
 2 = Extensor posturing in response to painful stimulation
 3 = Flexor posturing in response to painful stimulation
 4 = General withdrawal in response to painful stimulation
 5 = Localization of painful stimulation

6 = Obeys commands with appropriate motor response

8 = Not assessed

9 = Not STATED in medical record

11j. Glasgow Coma Score (GCSO)- from elsewhere in the medical record

Description: Eye opening component of the Glasgow coma scale.

Description: Total Glasgow Coma Score upon individual's arrival at the hospital.

Field length: 2

Values: Range of GCS is 03 to 15

88 = Not applicable (death occurred before admission)

99 = Not STATED in medical record

11k. Glasgow Outcome Scale (OUTCOME)

Description: Functional outcome of TBI as assessed by Glasgow Coma Scale at the time of discharge from acute care. **If not applicable or not stated in the record, do not attempt to score, enter "8" or "9" as appropriate.**

Field length: 1

Values: 1 = Death

2 = Persistent vegetative state

3 = Severe disability: conscious and at least somewhat responsive, but disabled and dependent for daily support

4 = Moderate disability: disabled, but independent with respect to daily life; able to participate in activities indicating self-sufficiency beyond dressing and minimal self-care.

5 = 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

8 = Not applicable (isolated spinal cord injury)

9 = Not STATED in medical record

Note: If Glasgow Outcome Score is found in the record, enter the correct number above.

11l. Availability of Glasgow Outcome Scale (AVLGOS)

Description: Was Glasgow Outcome Scale stated in the record or did you make an estimate?

Field length: 1

Values: 1 = Glasgow Outcome Scale was stated in the record.

2 = Glasgow Outcome Scale was estimated by the data abstractor.

11m. Level of Consciousness (LEVEL)

Description: Level of consciousness determined from chart. **Coded only if GCS is unknown/not STATED in medical record.**

Field length: 1

Values: 1 = Coma: patients who do not open their eyes, obey commands, or utter words.

2 = Moderate impairment of consciousness: patients who are difficult to arouse (require noxious stimuli), who cannot obey simple commands, and whose speech is inappropriate or incomprehensible.

3 = Minimal or no impairment of consciousness: patients who are awake or easily aroused by verbal stimuli, who can obey some simple commands, and who can speak comprehensibly, although some disorientation may or may not be present.

- 8 = Not coded; GCS available.
- 9 = Not STATED in medical record or documentation was inadequate.

11n. Responsiveness Assessment (RESPNAS)

Description: The first assessment of the patient's level of consciousness, gauged by the individual's alertness, self-awareness, and reaction to environmental cues or sensory stimuli. **Coded only if GCS is unknown/not STATED in medical record.**

Field length: 1

- Values:
- 1 = Alert: Patient is fully responsive, aware of the environment, and capable of responding appropriately to questions about orientation to person, place and time.
 - 2 = Verbal Response: Patient not fully alert, but responds to verbal stimuli.
 - 3 = Painful Response: Patient does not respond to verbal stimuli, but does respond to pain by withdrawing from the pain source, pushing in the direction of the pain source, flexing extremities, or extending extremities.
 - 4 = Unresponsive: Patient does not respond to any stimuli.
 - 9 = Not STATED in medical record.

11o. Date of Responsiveness Assessment (RESPNDT)

Description: The date of the patient's responsiveness assessment.

Field length: 8

Values: Any month, day, and year -- mm/dd/yyyy

Note: Put 11/11/1111, if not STATED in medical record.

11p. Time of Responsiveness Assessment (RESPNTM)

Description: The time of the patient's responsiveness assessment.

Field length: 4

Values: Any time of day -- hh mm in a 24-hour cycle (0001 to 2400) - Military Time

Note: Put 9999, if not STATED in medical record.

11q. Skull Fracture (FRACTURE)

Description: Specifies whether skull fracture was diagnosed.

Field length: 1

- Values:
- 0 = No skull fracture diagnosed
 - 1 = Skull fracture diagnosed
 - 9 = Not STATED in medical record

Note: All types of skull fractures are included under this variable. Types of skull fractures may sometimes be described as "depressed," "nondepressed," "open," "closed," or "basilar." Even if not directly visualized radiographically, skull fractures may be inferred by the presence of air inside the cranium, or by physical signs present on examination.

11r. Intracranial Lesion (INTRALES)

Description: Specifies whether a trauma-related intracranial lesion documented by radiologic imaging, neurosurgical procedure or autopsy?

Field length: 1

- Values:
- 0 = No intracranial lesion found with brain scan or autopsy

1 = Intracranial lesion documented by brain scan, neurosurgery, or autopsy

8 = No radiologic imaging, neurosurgery, or autopsy performed

9 = Not STATED in medical record

Note: Radiologic imaging procedures include computed tomography (CT) brain scans, magnetic resonance imaging (MRI) brain scans, and cerebral angiography. Intracranial lesions can also be inferred from skull x-ray studies showing penetrating bodies. Skull fractures alone should not be coded as intracranial lesions.

Examples of trauma-related intracranial lesions include epidural and subdural hematomas; traumatic subarachnoid hemorrhage; and contusions, lacerations, traumatic hemorrhages, or trauma-induced edema of the brain or brain stem.

11s. Neurological Abnormalities (NEUROABN)

Description: Specifies whether trauma-related abnormalities of neurological function were noted in the medical record.

Field length: 1

Values: 0 = No, record states no neurological abnormalities noted
1 = Yes, record states Neurological abnormalities noted
8 = Not applicable (patient died before examination)
9 = Neurological functions NOT STATED in medical record

Note: Abnormalities of neurological function include impairment of motor function, sensory function, or abnormal reflexes attributable to acute brain or spinal cord trauma. Also included are impairment of language function (aphasias or dysphasias) or focal or generalized seizures of new onset attributable to brain trauma.

11t. Post Traumatic Amnesia (AMNESIA)

Description: Specifies whether post-traumatic amnesia was documented.

Field length: 1

Values: 0 = No, record states no amnesia noted
1 = Yes, record states amnesia noted
8 = Not applicable (i.e. persisting coma, or death before return of consciousness; isolated spinal cord injury)
9 = Not STATED in medical record

11u. Abbreviated Injury Scale-Head (AIS)

Description: The most severe AIS score for the head region. **If not applicable or not stated in the record, do not attempt to score, enter "8" or "9" as appropriate.**

Field length: 1

Values: 1 = Minor Injury
2 = Moderate injury
3 = Serious injury, not life threatening
4 = Severe injury, life threatening, but survival probable
5 = Critical injury, survival uncertain
6 = Maximum injury, untreatable and virtually unsurvivable
8 = Not applicable
9 = Not STATED in medical record

11v. Injury Severity Score (ISS)

Description: An indicator of the cumulative severity of all injuries sustained by the individual. **If not applicable or not stated in the record, do not attempt to score, enter “88” or “99” as appropriate.**

Field length: 2

Values: Range 1 to 75

88 = Unable to calculate ISS due to lack of data

99 = ISS calculation not attempted or not STATED in medical record

SECTION 12: DISCHARGE DISPOSITION

Patient discharged to (DISCHTO)

Description: Determines the type of facility the patient was discharged to.

Field length: 1

Values: 0 = Transferred to another acute care hospital
1 = Returned home, self-care
2 = Returned home, requiring non-skilled assistance (family member, etc.)
3 = Returned home, requiring home health services and/or outpatient rehabilitation
4 = Transferred to a residential facility without skilled nursing services or with an unknown level of nursing care
5 = Transferred to a residential facility with skilled nursing services
6 = Transferred to an inpatient rehabilitation facility
7 = Died
8 = Other
9 = Unknown/Not STATED in medical record

12b. Discharge Facility Name (DISNAME)

Description: The name of the facility that the individual was discharged to.

Field Length: 25

Values: Any name

Note: Enter 9 if not STATED in medical record.

12c. Facility Information Available (DISINFO)

Description: Determine if additional information on facility that individual was discharged to is available in chart.

Field length: 1

Values: 1 = Yes

2 = No *(If No, program skips to section 13.)*

12d. Contact Name at Discharge Facility (DISCTNAM)

Description: The name of the contact person at the discharge facility.

Field Length: 30

Values: Any name

Note: Enter 9 if not STATED in medical record.

12e. Discharge Facility Street Address (DISADDR)

Description: The street address of the discharge facility.

Field length: 40

Values: Any street address

Note: Be sure to get apartment and route numbers if applicable.

Note: Enter 9 if not STATED in medical record.

12f. Discharge Facility City (DISCITY)

Description: The city of the discharge facility.

Field length: 20

Values: Any city name

Note: Enter 9 if not STATED in medical record.

12g. Discharge Facility State (DISSTATE)

Description: The state of the discharge facility.

Field length: 2

Values: SC = South Carolina

NC = North Carolina

GA = Georgia

OT = Other

UK = Unknown/Not STATED in medical record

12h. Discharge Facility Zip Code (DISZIP)

Description: The zip code of the discharge facility.

Field length: 5

Values: Five digit number *Note: Enter 9 if not STATED in medical record.*

12i. Discharge Facility Number (DISPHONE)

Description: The telephone or other telecommunications number of the discharge facility.

Field Length: 13

Values: A telephone number with area code

Note: Enter (000) 000-0000 if not STATED in medical record. If the area is missing, enter (000) for area code and then the 7-digit number.

12j. Discharge Facility Comments (DISCOMNT)

Description: Other applicable information about the discharge facility.

Field length: 40

Values: Any comments

Note: Enter 9 if not STATED in medical record.

SECTION 13: REFERRALS

13a. Referral for Alcohol Treatment (REFALC)

Description: Did individual receive a referral for alcohol treatment?

Field length: 1

Values: 1 = Yes

2 = No

9 = Not STATED in medical record

13b. Referral for Drug Treatment (REFDRUG)

Description: Did individual receive a referral for drug treatment?
Field length: 1
Values: 1 = Yes
2 = No
9 = Not STATED in medical record

13c. Referral for Psychological Treatment (REFPSYCH)

Description: Did individual receive a referral for psychological treatment?
Field length: 1
Values: 1 = Yes
2 = No
9 = Not STATED in medical record

13d. Referral for Physical Rehabilitation (REFPHYS)

Description: Did individual receive a referral for physical rehabilitation?
Field length: 1
Values: 1 = Yes
2 = No
9 = Not STATED in medical record

13e. Referral for Vocational Rehabilitation (REFVOC)

Description: Did individual receive a referral for vocational rehabilitation?
Field length: 1
Values: 1 = Yes
2 = No
9 = Not STATED in medical record

SECTION 14: CLOSING

14a. Record Type (RECTYPE)

Description: Format of the record the abstracter reviewed for information.
Field Length: 1
Values: 1 = Hard copy (paper format)
2 = Microfilm
3 = Microfiche
8 = Other—put comment in comment section

14b. Record Condition (RECCOND)

Description: The abstractors opinion of how easily the information could be read in the patient's record, i.e. the hand written components by doctors, nurses, etc.
Field Length: 1
Values: 1 = Writing was clear and legible
2 = Writing was mostly clear and legible; read with some difficulty
3 = Writing was mostly unclear and illegible; read with much difficulty
4 = Writing was unclear and illegible

14c. Missing Record Comments (RECCOMNT)

Description: Reason record was not available for abstraction.
Field Length: 40

Values: Any narrative
Note: Enter 9 in first column if not applicable (record was available).

14d. Contact Comments (CTCOMNT)

Description: Any other miscellaneous contact information.

Field Length: 40

Values: Any narrative

Note: Enter 9 in first column if no contact comments.

14e. Abstractor Comments (COMMENTS)

Description: Does the abstractor have any comments about this record?

Field length: 1

Values: 1 = Yes

2 = No *(If No, program skips to Flag.)*

14f-i. Abstractor Comments (COMMENT1-4)

Description: Informative remarks made by the data abstractor to add additional insight to this particular patient record.

Field Length: 40 for each of 4 lines

Values: Any narrative

Note: Enter 9 in first column if not STATED in medical record.

14j. Flagged for Special Review (FLAG)

Description: Does this record need to be flagged for special review?

Field length: 1

Values: 1 = Yes

2 = No

Note: A record would need to be reviewed by another abstractor if there is contradictory information in the chart (ex. a pregnant male), information in medical record not matching random sample or other problems.

Note: Reason(s) for flag should be recorded in Abstractor Comments.