



ASCII FORMAT
DATA SUBMISSION FILE FORMAT
(Formerly Version 1.00 Beta 1)

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Intended Audience

The intended audience for this document is Trauma Registry software vendors and hospital Information Systems departments who are responsible for converting data to a format that can be submitted to the National Trauma Data Bank (NTDB®). This document is intended to be used as software specifications for programmers who wish to create files that will be compatible with the NTDB®. Researchers and Trauma Registry end-users need not be concerned with this document, since they are only concerned with its byproduct - a file that can be submitted to the NTDB®.

Getting Started

Each facility who will be contributing data to the NTDB® must obtain a Serial Number. The Serial Number is used to identify a facility's data as it is imported into the NTDB®. Contact Digital Innovation at 800-344-3668 to obtain a Serial Number for each facility.

Definitions

- File A collection of records.
- Record A collection of fields. Records are combined to make files.
- Field An independent piece of data. Fields are combined to make records.
- Facility A location submitting data to the NTDB®.

File Format

A file submitted to the NTDB® is organized as a collection of ASCII CSV (Comma-Separated Values) records. However, the format of the file differs from traditional CSV files since it allows multiple record layouts within a single file. There are three main categories of record layouts in the NTDB® Data Submission File Format:

1. *File Information Record*
2. *Incident Header Record*
3. Incident detail records

The *File Information Record* must ALWAYS be the first record in a file. It identifies global characteristics of the file including its version number and information about the submitting facility. Each incident begins with an *Incident Header Record* and can then be composed of multiple incident detail records in any order. The *Incident Header Record* defines keys for the trauma incident. The incident detail records capture information about a patient trauma incident such as demographic, scene, Emergency Department, diagnosis, comorbidity, procedure, complication and outcome-related information.

The file format can be graphically described as:

File Information Record

Incident
Incident Header Record
Incident detail record
...
Incident detail record

...

Incident
Incident Header Record
Incident detail record
...
Incident detail record

The first field in each record always identifies which record layout is being used for a particular record. In the sample file below, the first record is a *File Information Record* which is identified by the value "FILE-IDHEADER" in its first field.

```
"FILE-IDHEADER",1.00,19960930, ...  
"I-IDHEADER", "0238A968X",19930713  
"I-DEMO",19581102,"F","A","Managed Care Organization"  
"I-DIAG-CODE", "861.10",19961001,441002.3,3,90  
"I-DIAG-CODE", "831.13",19961001,,,  
"I-DIAG-CODE", "",,650409.2,2,90  
"I-IDHEADER", "0238B9TX3",19720104  
"I-DEMO",19211102,"M","W","Blue Cross/Blue Shield"  
"I-SCENE", ...
```

Likewise, the second record begins a patient trauma incident with its "I-IDHEADER" designation. The next four records describe incident detail records using the *Incident Demographics Record* layout ("I-DEMO") and the *Incident Diagnosis Record* layout ("I-DIAG-CODE"). The second patient incident record begins with another "I-IDHEADER" record.

Details on the formatting of each of the record layouts begins on page 7.

Frequently Asked Questions

Q: What if I do not have the data requested in one of the records?

A: If the field is not required, then you are free to ignore it by populating it with a *null* value. Use "" to represent an alphanumeric null, and nothing between two commas for numeric nulls. If the field is required, contact Digital Innovation 800-344-3668 for instructions.

Q: What if my data for a particular field is in a different format than what is required? For example, in the NTDB® it says that the format for the Patient's Gender be recorded as the character "M" for males and "F" for females. In my system however, the Patient's Gender is represented by the words "Male" and "Female".

A: The program which is creating the data submission file should translate the field to a valid value before inserting it into the file.

Q: What if I have a value that is a synonym for one of valid values for a field?

A: The program which is creating the data submission file should translate the field to its valid value before inserting it into the file.

Q: What if I have values that represent an Unknown, Pending or Not Done state for data that is missing?

A: If these states are not valid values for the field, they should be translated to a *null* value before they are inserted into the file.

Rules to Remember

1. Each file must begin with a *File Information Record*.
2. Each incident must begin with a *Incident Information Record*.
3. Each incident may consist of an unlimited number of incident detail records in any order.
4. A file may consist of an unlimited number of incidents.
5. Each record must end with both a carriage return and a line feed character.
6. Each field must be separated by a comma.
7. All alphanumeric fields must be surrounded by double quotation marks (. . . , "ALPHANUMERIC TEXT" , . . .).
8. Use "" to represent an alphanumeric null (. . . , "" , . . .), and nothing between two commas for numeric null (. . . ,, . . .).
9. Synonyms for valid values should be converted before they are inserted in the file.
10. User-defined values should be translated into valid values if the field is a synonym for a valid value or if the value is cryptic.

Record Layout Definitions

The following information will be provided in the definition for each record layout:

1. Record Marker. The value contained in the first field of the record. This value identifies the record layout.
2. Definition. The description of the information contained in the record.
3. Required. Indicates whether a record of this type must be present in the file.
4. Frequency. The number of occurrences of records of its type which are permitted in the file.
5. Placement. Indicates whether the record must be in a specific location in the file relative to another record.
6. Layout. The definition of each individual field in the record. For each field, the following is defined:
 1. Position Number. The position of the field within the record. The order in which the field should appear within the record relative to other fields in the record.
 2. Name. Title of the field.
 3. Definition. Detailed description of the field.
 4. Required (Req). Indicates whether a value for this field must be present in the record.
 5. Data Type. Indicates whether the value should be alphanumeric (AN) or numeric (N). Alphanumeric values should be surrounded in double quotation marks.
 6. Format Required. Indicates whether the information in the field should have a specific format. The legend for the symbols used for this are as follows:

9	=	Any numeric character, 0-9 only.
X	=	Any character, including letters, numbers, symbols and punctuation
YYYYMMDD	=	Date as expressed with a four-digit year (including century), two-digit month (including leading zero if < 10) and two-digit day (including leading zero, if <10).
HHMM	=	Time value, in military format, expressed as a two-digit hour (including leading zero) and two-digit minute.
Any other character	=	A literal character which must be included verbatim in the field at the position indicated.

7. Minimum Length. The minimum length of a field. If a field is required, it must have this minimum length. The minimum length may be ignored if a value null (not required).
8. Maximum Length. The maximum amount of characters accepted by the NTDB® for this field. Any characters beyond this limit are ignored.
9. User-Defined Values OK (UDV Ok). Certain fields allow the submission of user-defined values that are not on the list of valid values (see next field). If user-defined values are permitted for a field, the record layout includes a "Yes" in this definition. User-defined values should only be used when: a. The user-defined value is not a synonym for a valid value in the record layout definition and b. the user-defined value is not a cryptic code. If the user-defined value is a synonym or is somewhat cryptic, the submitting facility should translate it before inserting it into the file. For additional information about user-defined values, contact the Digital Innovation 800-344-3668.
10. Valid Values. Defines the list of all possible acceptable choices for a field.
11. The following fields are required in NTDB:
 - **DOB**
 - **Gender**
 - **ISS**
 - **E-code**
 - **LOS**
 - **Discharge status and disposition**
 - **Procedure codes (missing only)**
 - **Diagnosis codes (missing only)**

File Information Record

Record Marker: *FILE-IDHEADER*

Definition: Includes information about the submission file itself, including the submitting facility and the file format version number.

Required: Yes

Frequency: Once per file.

Placement: Must be the first record in the file.

Layout:

File Information Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	File Information Record Marker	This field identifies the record contains information about the submission file.	Yes	AN		13	13	N/A	"FILE-IDHEADER"
2	File Format Version Number	The version number of the file format definition.	Yes	N	9.99	4	4	N/A	1.00
3	Submission Date	The date this file was created.	Yes	N	YYYYMMDD	8	8	N/A	
4	Facility AHA Number	American Hospital Association Number for your Facility.	Yes	AN		20	20	N/A	
5	Facility Serial Number	ACS-defined identifier for your facility. Please call to obtain a Serial Number before submitting data.	Yes	AN		10	10	N/A	
6	Facility Name	Name of your facility.	Yes	AN		1	50	N/A	
7	Facility Address 1	First address line of your facility	Yes	AN		1	75	N/A	
8	Facility Address 2	Second address line of your facility. Use this field to record such things as suite numbers, floor numbers, etc.	Yes	AN			75	N/A	
9	Facility City	City in which your facility is located.	Yes	AN		1	50	N/A	
10	Facility State	State in which your facility is located.	Yes	AN		2	2	No	Any valid 2-letter U.S. postal abbreviation
11	Facility Zipcode	Zipcode in which your facility is located.	Yes	AN	99999-999999	5	12	N/A	At minimum, the five-digit zipcode. A nine and eleven-digit number may also be supplied.
12	Facility Contact Person First Name	First name of individual for ACS to contact to discuss issues with the submission file.	Yes	AN		1	50	N/A	
13	Facility Contact Person Last Name	Last name of individual for ACS to contact to discuss issues with the submission file.	Yes	AN		1	50	N/A	

File Information Record

Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
14	Facility Contact Person Telephone	Telephone number of individual for ACS to contact to discuss issues with the submission file.	Yes	AN	999-999-9999	12	12	N/A	
15	Facility Contact Person Telephone Extension	Telephone extension, if any, of individual for ACS to discuss issues with the submission file.	Yes	AN	9999		4	N/A	Populate this field only in the instance that the contact person has a telephone extension
16	Facility Source System Name	The name of the software product where the data in this file originated.	Yes	AN		1	50	Yes	"Cales/HTR/STR" "Clinical Data Management/Trauma Base" "NATIONAL TRACS" "Lancet/Trauma One" "The San Diego Registry" "Hospital Mainframe" "TriAnalytics Collector" "Other"
17	Facility Source System Version Number	The version number of the software product where the data in this file originated.	Yes	AN		1	10	N/A	
18	ACS Verification Level	The American College of Surgeons trauma level designation for the submitting trauma facility.	Yes	AN		1	3	No	"I" "II" "III" "IV" "N/A"
19	State Designation	A state-specific categorization of your facility. There are no pre-defined valid values for this field.	Yes	AN			25	No	None pre-defined
20	Number of Adult Hospital Beds	The number of beds at your facility designated for adult patient use.	Yes	N	9999		4	N/A	Any integer between 0 and 9999.
21	Number of Pediatric Hospital Beds	The number of beds at your facility designated for pediatric patient use.	Yes	N	9999		4	N/A	Any integer between 0 and 9999.
22	Number of Burn Hospital Beds	The number of beds at your facility designated for Burn patient use.	Yes	N	9999		4	N/A	Any integer between 0 and 9999.
23	Number of ICU Beds Available for Trauma Patients	The number of ICU beds available at your facility for trauma patients.	Yes	N	9999		4	N/A	Any integer between 0 and 9999.
24	Number of ICU Beds Available for Burn Patients.	The number of ICU beds available at your facility for burn trauma patients.	Yes	N	9999		4	N/A	Any integer between 0 and 9999.
25	Hospital Teaching Status	Indicates the type of teaching your facility performs.	Yes	AN		9	12	No	"University" "Community"

File Information Record

Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
									"Non-Teaching"
26	Hospital Type	Designates whether your facility's teaching is conducted at a public or private institution.	Yes	AN		6	7	No	"Public" "Private"

Incident Complication Record

Record Marker: *I-COMP*

Definition: Information pertaining to any complications that arose during the course of patient treatment at your facility.

Required: No

Frequency: Unlimited per Incident Header Record (*I-IDHEADER*).

Placement: Anywhere after the Incident Header Record (*I-IDHEADER*) to which this applies, but before the next patient's Incident Header Record.

Notes: See Appendix B for a listing of valid factors.

Layout:

Incident Complication Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Complication Header Record	This field identifies the record as containing complication information.	Yes	AN		9	9	N/A	"I-COMP"
2	Complication Code	The code from Appendix B that identifies the complication.	Yes	AN	XXXX	4	4	No	A valid code as listed in Appendix B.

Incident Demographics Record

Record Marker: I-DEMO

Definition: Identifies the patient and incident demographics.

Required: No

Frequency: Once per Incident Header Record (I-IDHEADER).

Placement: Anywhere after the Incident Header Record (I-IDHEADER) to which this applies, but before the next patient's Incident Header Record.

Layout:

Incident Demographics Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Incident Demographics Record Marker	This identifies the record as containing incident demographic information.	Yes	AN		6	6	N/A	"I-DEMO"
2	Date of Birth	The patient's date of birth.	Yes	N	YYYYMMDD	8	8	N/A	
3	Gender	The patient's gender at injury date.	Yes	AN		1	1	No	"M" = Male "F" = Female "D" = Not Done/Not Documented "U" = Gender is Unknown
4	Race/Ethnicity	The patient's race/ethnic group.	No	AN		1	3	Yes	"B" = Black, not of Hispanic origin "D" = Not Done/ Not Documented "H" = Hispanic "NA" = Native American or Alaskan Native "A" = Asian or Pacific Islander "W" = White, not of Hispanic Origin "OTH" = Other
5	Principal Payment Source	Indicates the primary source of payment to the hospital for this visit.	No	AN		1	50	Yes	"Blue Cross/Blue Shield" "Managed Care Organization" "Other Commercial Indemnity Plan" "Medicare" "Medicaid" "MCH and Crippled Children's" "CHAMPUS" "Worker's Compensation" "Government/Military Insurance" "Automobile Insurance" "Organ Donor Subsidy" "No Charge" "Other"

Incident Demographics Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
									"Liability Insurance/Under Litigation" "No Fault Insurance"

Incident Diagnosis Record

Record Marker: *I-DIAG-CODE*

Definition: Information pertaining to a diagnosis made about the trauma incident.

Required: No

Frequency: Unlimited per Incident Header Record (*I-IDHEADER*).

Placement: Anywhere after the Incident Header Record (*I-IDHEADER*) to which this applies, but before the next patient's Incident Header Record.

Layout:

Incident Diagnosis Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Diagnosis Record Marker	This field identifies the record as containing diagnosis information	Yes	AN		11	11	N/A	"I-DIAG-CODE"
2	ICD-9-CM Code of Diagnosis	The ICD-9-CM code that describes the diagnosis * Both the ICD-9-CM and the AIS Full Code need not be supplied, but at least one or the other must be present. <i>Related Definitions:</i> <u>ICD-9-CM Code</u> : Issued by the U.S. Department of Health and Human Services to describe why services were rendered.	Yes *	AN	X999.99	3	7	N/A	A defined ICD-9-CM diagnosis code. If the diagnosis represents a pre-existing condition, this code must be prefixed with a "V". Otherwise, no prefix is necessary.
3	ICD-9-CM Effective Date	For the supplied ICD-9-CM code, this identifies the effective date of the ICD-9s from which this code is defined (e.g., 19961001). If an ICD-9-CM code is provided in this record, this field is required. Otherwise, it may be left null.	No*	N	YYYYMMDD	8	8	N/A	
4	AIS Full Code of Diagnosis	If the diagnosis represents a trauma, this represents the AIS Full Code that describes the diagnosis. * Both the ICD-9-CM and the AIS Full Code need not be supplied, but at least one or the other must be present.	Yes *	N	For AIS 85: 99999.9 For AIS 90: 999999.9	8	8	N/A	A defined AIS numerical injury identifier.
5	AIS Severity Score	This represents the severity portion of the AIS Full Code. Use this field only if the Full Code is not provided in the previous field.	No	N	9	1	1	N/A	Any integer between 1 and 6, or 9.
6	AIS Revision	The Revision of the AAAM Manual from where the AIS-related information is defined.	No*	N	99	2	2	No	80 85

Incident Diagnosis Record

Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
		* If the AIS Full Code or Severity Score is provided, this field is required. Otherwise, it may be left null.							90 95

Incident Diagnosis Statistics Record

Record Marker: *I-DIAG-STATS*

Definition: Information pertaining to the statistics gathered for a trauma incident through evaluation of all an incident's diagnoses.

Required: No

Frequency: Once per Incident Header Record (*I-IDHEADER*).

Placement: Anywhere after the Incident Header Record (*I-IDHEADER*) to which this applies, but before the next patient's Incident Header Record.

Layout:

Incident Diagnosis Statistics Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Diagnosis Statistics Record Marker	This field identifies the record as containing diagnosis-related statistical information.	Yes	AN		12	12	N/A	"I-DIAG-STATS"
2	Total Injury Severity Score	The ISS is a sum of the squares of the highest AIS code in each of the three most severely injured ISS body regions. The six body regions of injury used in the ISS are: those for Head, Face, Chest, Abdominal or Pelvic contents, Extremities or Pelvic girdle and External. (The Abbreviated Injury Scale, 1990 Revision. Association for the Advancement of Automotive Medicine. Des Plaines, IL) Use this field only if no AIS-90 codes can be provided in the <i>Diagnosis</i> records. If AIS-90 codes are provided, this value is calculated in the NTDB®.	Yes	N	99	1	2	N/A	An integer between 0 and 75.
3	TRISS Survival Probability	Using the TRISS methodology, Ps is calculated using ED admission values of the Revised Trauma Score (RTS), the Injury Severity Score (ISS) based on the final diagnoses, patient age and the type of injury (blunt or penetrating).	No	N	9.99	1	4	N/A	Any real number between 0.00 and 1.00 OR 9 = Not Done/Not Documented

Incident Emergency Department Record

Record Marker: I-ED

Definition: Information pertaining events and measurements that take place in the ED.

Required: No

Frequency: Once per Incident Header Record (I-IDHEADER).

Placement: Anywhere after the Incident Header Record (I-IDHEADER) to which this applies, but before the next patient's Incident Header Record.

Layout:

Incident Emergency Department Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Incident Emergency Department Record Marker	This field identifies the record as containing information related to Emergency Department treatment for the incident.	Yes	AN		4	4	N/A	"I-ED"
2	First Recorded Date & Time of Patient's Arrival at Reporting Hospital ED	Date and Time patient actually arrived at your hospital.	Yes	N	YYYYMMDDHHMM	8	12	N/A	
3	Was Trauma Surgeon Arrival in ED Timely	Indicates whether the Trauma Surgeon arrived in the ED in an acceptable amount of time. This is a judgement call for the submitting facility.	No	AN		1	1	No	"Y" = Yes "N" = No "P" = Pending "D" = Not Done/Not Documented
4	First Systolic Blood Pressure in ED	The initial assessment in the ED of the systolic blood pressure in either arm by auscultation or palpation measured in mm (Hg) by manual or automatic method.	No	N		1	3	N/A	Any integer between 0 and 300.
5	First Unassisted Respiratory Rate in ED	The first unassisted patient respiratory rate expressed as number per minute assessed in the Emergency Department.	No	N		1	3	N/A	Any integer between 0 and 99. OR 666 = Agonal 777 = Respiratory assistance with manual or mechanical ventilation 888 = Not obtained 999 = Unknown
6	Respiratory Rate Assessment Qualifier in ED	See options.	No	AN		1	2	No	"T" = Patient intubated when initially assessed in ED. "TP" = Patient intubated and chemically paralyzed when initially assessed in ED.

Incident Emergency Department Record

Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
									"S" = Patient chemically sedated when initially assessed in ED. "L" = Initial respiratory rate in ED is a legitimate value, without interventions such as intubation and sedation.
7	First Temperature in ED	The patient's initial temperature measured in the ED.	No	N	999.9	1	5	N/A	Any real number between 0 and 110.
8	Temperature Scale	The scale of measurement represented in the value of the First Temperature in ED field. * If a value is present in the previous field, then this field is required.	No	AN		1	1	No	"C" = Celsius "F" = Fahrenheit
9	Head CT Results	The results of a diagnostic procedure done in ED of the reporting hospital that utilizes a computer to analyze x-ray data of the skull and cranial contents.	No	AN		1	1	No	"P" = Positive "N" = Negative "D" = Not Done / Not Documented
10	Abdominal Evaluation	The results from the peritoneal lavage done in the ED.	No	AN		1	1	No	"P" = Positive "N" = Negative "D" = Not Done / Not Documented
11	Abdominal Evaluation Type	See options.	No	AN			25	Yes	"CT" "DPL" "Ultrasound"
12	Base Deficit/Excess in ED	Arterial blood gas component showing the degree of acid/base imbalance with a normal range being +/- 2 mEq/L.	No	N	-99.9 or 99.9	1	5	N/A	Any integer between -80 and +80.
13	Lowest Glasgow Eye Component in ED	Glasgow Coma Scale for Eye Opening.	No	N		1	1	N/A	Values for Adults (>5 years old): 4 = Spontaneous Eye Opening 3 = Opens Eyes to Commands 2 = Opens Eyes to Pain 1 = Does Not Open Eyes Values for Infants and Children: 4 = Spontaneous 3 = Verbal Stimuli 2 = Pain 1 = No Response
14	Lowest Glasgow Verbal Component in ED	Glasgow Coma Scale for Best Verbal Response.	No	N		1	1	N/A	Values for Adults (>5 years old): 5 = Oriented 4 = Confused 3 = Inappropriate Words

Incident Emergency Department Record

Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
									2 = Incomprehensible words 1 = None Values for Child: 5 = Oriented 4 = Confused 3 = Inappropriate Cries 2 = Incomprehensible sounds 1 = No Response Values for Infant: 5 = Coos, Babbles 4 = Irritable Cries 3 = Cries to Pain 2 = Moans to Pain 1 = No Response
15	Lowest Glasgow Motor Component in ED	The initial Glasgow Coma Scale Motor Response in ED.	No	N	9	1	1	No	Values for Adults (>5 years old): 9 = Not Done/Not Documented 6 = Obeys commands with appropriate motor response 5 = Localization of painful stimulation 4 = General withdrawal in response to painful stimulation 3 = Flexor posturing in response to painful stimulation 2 = Extensor posturing in response to painful stimulation 1 = None Values for Infants and Children: 9 = Not Done/Not Documented 6 = Normal Spontaneous Movement 5 = Withdraws to touch 4 = Withdraws to pain 3 = Abnormal flexion (decerebrate) 2 = Abnormal flexion (decerebrate) 1 = None
16	GCS Assessment Qualifier in ED	See options.	No	AN	XX	1	2	No	"T" = Patient intubated when GCS components assess in ED. "TP" = Patient intubated and chemically paralyzed when GCS components assessed in ED. "S" = Patient chemically sedated when initial GCS components assessed in ED. "L" = Initial GCS components in ED are

Incident Emergency Department Record

Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
									legitimate values, without interventions such as intubation and sedation.
17	Glasgow Coma Scale Total in ED	Patient's Total Glasgow Coma Scale score assessed in ED. The valid range is 3 to 15. The GCS is used to determine a score based on the total of three readings on the patient.	No	N	99	1	2	N/A	Any integer between 3 and 15.
18	Revised Trauma Score in ED	<p>Based on the values of the Glasgow Coma Scale, systolic blood pressure and respiratory rate. Raw values are used for triage; coded values are weighted and summed for outcome evaluation (RTS).</p> <p>Glasgow Coma Scale total points (GCSc): 13-15 = 4 4-5 = 1 9-12 = 3 3 = 0 6-8 = 2</p> <p>Respiratory Rate (RRc): 10-29 = 4 1-5 = 1 >29 = 3 0 = 0 6-9 = 2</p> <p>Systolic Blood Pressure (SBPc): >89 = 4 1-49 = 1 76-89 = 3 0 = 0 50-75 = 2</p> <p>Calculated values for use in Ps equation: $RTS = 0.9368 * GCSc + 0.7326 * SBPc + 0.2908 * RRc$</p>	No	N	9.9999	6	6	N/A	Any real number between 0 and 8. Use a 9 for Not Done / Not Documented.
19	Alcohol Present in Blood	The presence of any ethyl alcohol in any biological specimen obtained from patient for laboratory examination.	No	AN		1	2	No	"Y" = Yes "N" = No "D" = Not Done / Not Documented "NA" = Not Applicable
20	Drugs Present	Indicates if drugs were present in the blood by a laboratory test used to detect the presence of controlled substances other than alcohol in the patient's blood or urine. Do not include drugs given to the patient during any phase of resuscitation.	No	AN		11	1	No	"Y" = Yes "N" = No "D" = Not Done / Not Documented
21	Admitting Service	The service to which the patient is designated upon admission to your hospital or, in the case of death in the ED, the service which gives the patient primary care in the ED.	No	AN			20	Yes	"Burn" = Burn "Pediatric" = Pediatric Surgery "Neuro" = Neurosurgery "Ortho" = Orthopedic Surgery

Incident Emergency Department Record

Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
									"Other" = All Other Surgical Services "Trauma" = Trauma Surgery "Medical" = Nonsurgical Services
22	Emergency Department Disposition	The location or status of the patient following treatment in the ED.	No	AN			25	Yes	"ED Observation" = Admitted to ED for 23 hour observation "DOA (Death)" = Expired (DOA) "Die in ED" = Expired, Death in ED after any treatment "Floor" = Admitted to hospital floor bed "ICU" = Admitted to ICU "Not Done/Doc" = Not Done/Not Documented "OR" = Admitted to OR "Telemetry" = Admitted to monitored telemetry floor bed "Transfer" = Transferred to other hospital "Other" = Other "Unknown" = Unknown

Incident Header Record

Record Marker: *I-IDHEADER*

Definition: Identifies a patient involved in a trauma incident for which detailed information will immediately follow.

Required: Yes

Frequency: Unlimited per file.

Placement: Anywhere after the File Information Header Record (*FILE-IDHEADER*).

Layout:

Incident Header Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Incident Header Record Marker	This field identifies this record as containing identification information for the incident.	Yes	AN		10	10	N/A	"I-IDHEADER"
2	Incident Identifier	Uniquely identifies a trauma incident for the patient Once assigned, this number must remain constant to identify this incident in future file submissions to the National Trauma Data Bank. The format of this field is facility-defined. The format of this field is facility-defined. Formatting characters are allowed (such as '-', ':', '/') for this field.	Yes	AN		1	25	N/A	
3	Incident Revision Date	Date the information for this trauma incident was last modified. If this date is not available, use the creation date for this file.	No	N	YYYYMMDD	8	8	N/A	

Incident Inter-Hospital Transfer Record

Record Marker: *I-HOSPTRANS*

Definition: Information pertaining to the referring hospital, if any, involved with the trauma incident. If there was not referring hospital involved for this incident, do not include this record with the patient incident's record set.

Required: No

Frequency: Once per Incident Header Record (*I-IDHEADER*).

Placement: Anywhere after the Incident Header Record (*I-IDHEADER*) to which this applies, but before the next patient's Incident Header Record.

Layout:

Incident Inter-Hospital Transfer Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Incident Inter-Hospital Transfer Record Marker	This field identifies this record as containing referring hospital information for the incident.	Yes	AN		11	11	N/A	"I-HOSPTRANS"
2	Inter-Hospital Transfer	If the patient arrived at your hospital as an inter-hospital transfer from another acute care facility, this indicates the type of facility from where the patient was transferred. This should exclude satellite and other free-standing emergency care sites.	No	AN		14	50	No	"Emergency: NOS" "Emergency: Trauma Level 1" "Emergency: Trauma Level 2" "Emergency: Trauma Level 3" "Emergency: Trauma Level 4" "Inpatient: Acute/Rehabilitation Facility" "Home Health: NOS" "Not Done/Not Documented"

Incident Intubation Record

Record Marker: *I-INTUB*

Definition: Information indicates whether intubation was performed either at the scene or in the ED.

Required: No

Frequency: No more than twice per Incident Header Record (*I-IDHEADER*). Once per scene intubation and once per ED intubation.

Placement: Anywhere after the Incident Header Record (*I-IDHEADER*) to which this applies, but before the next patient's Incident Header Record.

Layout:

Incident Intubation Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Intubation Record Marker	This field identifies the record as containing intubation information.	Yes	AN		7	7	N/A	"I-INTUB"
2	Intubation Location Indicator	Indicates whether the intubation took place at the scene or in the ED.	No	AN		2	5	No	"Scene" "ED"
3	Intubation Type	Indicates the type of mechanical or surgical airway placed.	No	AN			40	Yes	"Nasal ETT" "Oral ETT" "ETT Route Not Recorded" "Tracheostomy" "Cricothyrotomy" "Unintentional Esophageal Intubation" "No Airway Placed" "Not Done/Not Documented"

Incident Outcome Record

Record Marker: *I-OUTCOME*

Definition: Information pertaining to the outcome of the trauma incident.

Required: No

Frequency: Once per Incident Header Record (*I-IDHEADER*).

Placement: Anywhere after the Incident Header Record (*I-IDHEADER*) to which this applies, but before the next patient's Incident Header Record.

Layout:

Incident Outcome Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Incident Outcome Record Marker	This field identifies the record as containing information related to the incident's outcome.	Yes	AN		9	9	N/A	"I-OUTCOME"
2	Length of Stay in Hospital	The total number of patient days for an inpatient episode, calculated by subtracting the date of admission from the date of discharge. If a patient is admitted and discharged on the same date, the LOS is one day.	Yes	N	999	1	3	N/A	Any integer between 0 and 999.
3	Days of Total Stay in ICU	The total number of patient days for an ICU episode, calculated by subtracting the date of admission from the date of discharge. If a patient is admitted and discharged on the same date, the LOS is one day.	No	N	999	1	3	N/A	Any integer between 0 and 999.
4	Ventilator Support Days	The total number of ventilator support days calculated by subtracting the start date from the end date. If a patient starts and ends on the same date, the ventilator support days is one day.	No	N	999	1	3	N/A	Any integer between 0 and 999.
5	FIM Self-Feeding Score at Discharge	Assessed as close to discharge as possible, includes using suitable utensils to bring food to mouth, chewing, and swallowing (once meal is appropriately prepared). Opening containers, cutting meat, buttering bread and pouring liquids are not included as they are often part of meal preparation.	No	N	9	1	1	No	4 = Independent 3 = Independent with Device 2 = Dependent-Partial Help Required 1 = Dependent-Total Help Required 8 = Not Applicable (e.g., pat < 7 yrs. old or died) 9 = Unknown
6	Status of FIM Self-Feeding Score	Indication whether the Self-Feeding component of the FIM score is temporary, permanent or not done/not documented. FIM only applies to those patients greater than 7 years of	No	AN		1	1	No	"T" = Temporary "P" = Permanent "D" = Not Done / Not Documented

Incident Outcome Record

Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
		<p>age and that "D" should be used for those patient under 7 years of age or those patients that died. These assumptions will be updated as additional clarifications are obtained from the CDC.</p> <p><i>Related Definitions:</i> <u>Temporary</u>: Likely to improve. <u>Permanent</u>: Unlikely to improve.</p>							
7	FIM Locomotion Score at Discharge	Assessed as close to discharge as possible. Includes walking once in a standing position, or using a wheelchair, once in a seated position, indoors. Also referred to as Independence.	No	N	9	1	1	No	4 = Independent 3 = Independent with Device 2 = Dependent-Partial Help Required 1 = Dependent-Total Help Required 8 = Not Applicable (e.g., patient < 7 yrs. old or died) 9 = Unknown
8	Status of FIM Locomotion Score	<p>Indication whether the Locomotion component of the FIM Score is temporary, permanent or not done/not documented.</p> <p>FIM only applies to those patients greater than 7 years of age and that "D" should be used for those patient under 7 years of age or those patients that died. These assumptions will be updated as additional clarifications are obtained from the CDC.</p> <p><i>Related Definitions:</i> <u>Temporary</u>: Likely to improve. <u>Permanent</u>: Unlikely to improve.</p>	No	AN		1	1	No	"T" = Temporary "P" = Permanent "D" = Not Done / Not Documented
9	FIM Expression Score at Discharge	Assessed as close to discharge as possible. Includes clear expression of verbal or nonverbal language. This means expressing linguistic information verbally or graphically with appropriate and accurate meaning and grammar. Also referred to as the Motor component.	No	N	9	1	1	No	4 = Independent 3 = Independent with Device 2 = Dependent-Partial Help Required 1 = Dependent-Total Help Required 8 = Not Applicable (e.g., patient < 7 yrs. old or died) 9 = Unknown
10	Status of FIM Expression Score	<p>Indication whether the expression component of the FIM Score is temporary, permanent or not done/not documented.</p> <p>FIM only applies to those patients greater than 7 years of age and that "D" should be used for those patient under 7 years of age or those patients that died. These assumptions will be updated as additional clarifications are obtained</p>	No	AN		1	1	No	"T" = Temporary "P" = Permanent "D" = Not Done/Not Documented

Incident Outcome Record

Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
		from the CDC. <i>Related Definitions:</i> <u>Temporary</u> : Likely to improve. <u>Permanent</u> : Unlikely to improve.							
11	Total FIM Score	A score calculated to derive a baseline of trauma patient disability at discharge from an acute care facility, using three components; Feeding, Locomotion (Independence) and Motor (Expression)	No	N	99	1	2	N/A	Any integer between 1 and 12.
12	Date of Discharge or Death	The date of patient discharge or death from your hospital.	No	N	YYYYMMDD	8	8	N/A	
13	Discharge Disposition	The place to which the patient was released when discharged from your hospital.	Yes	AN			30	Yes	"Burn" = Transfer to Acute Burn Fac. "Death" = Death in Hospital "Death (DOA)" = Dead on Arrival in ED "Died During Treatment" "Discharged, SNF" = Discharged, Extended Care Facility "Home" "Home Health" "Hosp Transfer" = Transferred to Other Hospital "Jail" = Jail or Prison "Nursing Home" "Rehab" = Rehabilitation Center "Unable to Complete Treatment"
14	Billed Hospital Charges	The final billed amount charged for this admission, excluding professional fees, at the acute care facility, expressed in a whole dollar figure.	No	N	9999999		7	N/A	Any integer between 0 and 9999999.
15	Discharge Status	Identifies whether the patient was deceased at moment of discharge.	Yes	AN		4	5	No	"Alive" "Dead"

Incident Pre-Existing Comorbidity Factors Record

Record Marker: *I-COMBDTY*

Definition: Information pertaining to any pre-existing comorbidity diseases the patient had upon arrival in your ED.

Required: No

Frequency: Unlimited per Incident Header Record (*I-IDHEADER*).

Placement: Anywhere after the Incident Header Record (*I-IDHEADER*) to which this applies, but before the next patient's Incident Header Record.

Notes: See Appendix A for a listing of valid factors.

Layout:

Incident Pre-Existing Comorbidity Factors Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Comorbidity Factors Header Record	This field identifies the record as containing comorbidity information.	Yes	AN		9	9	N/A	"I-COMBDTY"
2	Factor Code	The code from Appendix A that identifies the pre-existing comorbid factor present at the point of patient arrival in the ED.	No	AN	X.99	4	4	No	A valid code as listed in Appendix A.

Incident Prehospital Procedures Record

Record Marker: *I-PREHOSP-PROC*

Definition: Information pertaining to the procedures performed for a trauma incident.

Required: No

Frequency: Unlimited per Incident Header Record (*I-IDHEADER*).

Placement: Anywhere after the Incident Header Record (*I-IDHEADER*) to which this applies, but before the next patient's Incident Header Record.

Layout:

Incident Prehospital Procedures Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Prehospital Procedures Record Marker	This field identifies the record as containing prehospital procedures information	Yes	AN		14	14	N/A	"I-PREHOSP-PROC"
2	Prehospital Procedure	See options.	No	AN			40	Yes	"CPR" "Chest Decompression" "MAST" "Intravenous Fluids" "None" "Not Done/Not Documented" "Thoracentesis/Thoracostomy"

Incident Procedure Record

Record Marker: *I-PROC-CODE*

Definition: Information pertaining to the procedures performed for a trauma incident.

Required: No

Frequency: Unlimited per Incident Header Record (*I-IDHEADER*).

Placement: Anywhere after the Incident Header Record (*I-IDHEADER*) to which this applies, but before the next patient's Incident Header Record.

Layout:

Incident Procedure Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Procedure Record Marker	This field identifies the record as containing procedure information	Yes	AN		11	11	N/A	"I-PROC-CODE"
2	ICD-9-CM Code of Procedure	The ICD-9-CM code that describes the procedure. * Both the ICD-9-CM and CPT-4 need not be supplied, but at least one or the other must be present. If a CPT-4 code is provided in this record, this field may be left null.	Yes *	AN	99.99	4	5	N/A	A defined ICD-9-CM procedure code.
3	ICD-9-CM Effective Date	For the supplied ICD-9-CM code, this identifies the effective date of the ICD-9s from which this code is defined (e.g., 19961001). * If an ICD-9-CM code is provided in this record, this field is required. Otherwise, it may be left null.	No*	N	YYYYMMDD	8	8	N/A	
4	CPT-4 Code of Procedure	The CPT-4 code that describes the procedure. * Both the ICD-9-CM and CPT-4 need not be supplied, but at least one or the other must be present. If an ICD-9 code is provided in this record, this field may be left null.	Yes *	N	99999	5	5	N/A	A defined CPT-4 code.
5	CPT-4 Effective Year	For the supplied CPT-4 code, this identifier the effective year of the CPT-4s from which this code is defined (e.g., 1996). * If a CPT-4 code is provided in this record, this field is required. Otherwise, it may be left null.	No*	N	YYYY	4	4	N/A	
6	Date and Time at Which Procedure Occurred	The date and time the patient underwent the operation or procedure.	No	N	YYYYMMDDHHMM	8	12	N/A	
		If this procedure was performed in the Operating Room,							

Incident Procedure Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
7	OR Visit Number	this field indicates the sequential visit number to the OR.	No	N	99	1	2	N/A	Any number between 1 and 99.

Incident Safety Equipment Record

Record Marker: *I-SAFETY-EQUIP*

Definition: Information pertaining to the safety equipment used or worn by the patient at the time of the injury.

Required: No

Frequency: Unlimited per Incident Header Record (*I-IDHEADER*).

Placement: Anywhere after the Incident Header Record (*I-IDHEADER*) to which this applies, but before the next patient's Incident Header Record.

Layout:

Incident Safety Equipment Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Safety Equipment Record Marker	This field identifies the record as containing safety equipment information	Yes	AN		14	14	N/A	"I-SAFETY-EQUIP"
2	Safety Equipment Used	Identifies the protective/safety device(s) in use or worn by the patient at the time of injury.	Yes	AN			25	Yes	"Seat Belt" "Air Bag Deployed" "Infant/Child Car Seat" "Helmet" "Eye Protection" "Protective Clothing" "Hard Hat" "Padding" "None Used" "Not Done/Not Documented"

Incident Scene Record

Record Marker: *I-SCENE*

Definition: Information pertaining to the scene of the trauma incident.

Required: No

Frequency: Once per Incident Header Record (*I-IDHEADER*).

Placement: Anywhere after the Incident Header Record (*I-IDHEADER*) to which this applies, but before the next patient's Incident Header Record.

Layout:

Incident Scene Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
1	Incident Scene Record Marker	This field identifies the record as containing information pertaining to the scene of the injury	Yes	AN		7	7	N/A	"I-SCENE"
2	Site at Which Injury Occurred	The type of place of occurrence of the injury.	No	AN	E999.9	6	6	No	E849.0 = Home E849.1 = Farm E849.2 = Mine and Quarry E849.3 = Industrial Places and Premises E849.4 = Place for Recreation and Sport E849.5 = Street and Highway E849.6 = Public Building E849.7 = Residential Institution E849.8 = Other Specified Places E849.9 = Unspecified Places
3	Work Relatedness of Injury	A marker that an injury-producing event or illness-producing exposure at work precipitated the patient's visit to the Emergency Department.	No	N	9	1	2	N/A	3 = Paid Work 4 = Unpaid Work 99 = Unknown
4	E-Code	A code for the ICD-9-CM external cause of injury that permits classification of environmental events, circumstances, and conditions as the cause of injury, poisoning, and other adverse effects.	Yes	AN	999.9	5	6	N/A	Any valid ICD-9-CM E-Code.
5	ICD-9-CM Effective Date	For the supplied ICD-9-CM E-Code, this identifies the effective date of the ICD-9s from which this code is defined (e.g., 19961001). * If the E-Code above is provided in this record, this field is required. Otherwise, it may be left null.	Yes *	N	YYYYMMDD	8	8	N/A	
6	Lowest Glasgow Eye Component at the Scene	The Glasgow Coma Scale for Eye Opening.	No	N	9	1	1	No	Values for Adults (> 5 years old): 4 = Spontaneous

Incident Scene Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
	Component at the Scene								3 = Voice 2 = Pain 1 = None Values for Children and Infants: 4 = Spontaneous 3 = Verbal Stimuli 2 = Pain 1 = No Response
7	Lowest Glasgow Verbal Component at the Scene	The Glasgow Coma Scale for Best Verbal Response.	No	N	9	1	1	No	Values for Adults (>5 years old): 5 = Oriented 4 = Confused 3 = Inappropriate Words 2 = Incomprehensible words 1 = None Values for Child: 5 = Oriented 4 = Confused 3 = Inappropriate Cries 2 = Incomprehensible sounds 1 = No Response Values for Infant: 5 = Coos, Babbles 4 = Irritable Cries 3 = Cries to Pain 2 = Moans to Pain 1 = No Response
8	Lowest Glasgow Motor Component at the Scene	The initial Glasgow Coma Scale Motor Response at the scene.	No	N	9	1	1	No	Values for Adults (>5 years old): 9 = Not Done/Not Documented 6 = Obeys commands with appropriate motor response 5 = Localization of painful stimulation 4 = General withdrawal in response to painful stimulation 3 = Flexor posturing in response to painful stimulation 2 = Extensor posturing in response to painful stimulation 1 = None Values for Infants and Children: 9 = Not Done/Not Documented 6 = Normal Spontaneous Movement 5 = Withdraws to touch 4 = Withdraws to pain

Incident Scene Record									
Position Number	Name	Definition	Req	Data Type	Format Required	Min Len	Max Len	UDV Ok	Valid Values
									3 = Abnormal flexion (decerebrate) 2 = Abnormal flexion (decerebrate) 1 = None
9	GCS Assessment Qualifier at the Scene	See options.	No	AN	XX	1	2	No	"T" = Patient intubated when GCS components assess at scene. "TP" = Patient intubated and chemically paralyzed when GCS components assessed at scene "S" = Patient chemically sedated when initial GCS components assessed at scene. "L" = Initial GCS components at scene are legitimate values, without interventions such as intubation and sedation.
10	Glasgow Coma Scale Total at the Scene	Patient's Total Glasgow Coma Scale score assessed at the scene. The valid range is 3 to 15. The GCS is used to determine a score based on the total of three readings on the patient.	No	N	99	1	2	N/A	Any integer between 3 and 15.
11	Date on Which Injury Occurred	The day, month and year on which the injury occurred.	No	N	YYYYMMDD	8	8	N/A	
12	State in Which Injury Occurred	The name of the state in which the injury occurred.	No	AN	XX	2	2	No	Any valid 2-letter U.S. postal abbreviation.
13	County in Which Injury Occurred	The name of the county within the state where the injury occurred.	No	AN			50	Yes	
14	Country in Which Injury Occurred	The country in which the injury occurred.	No	AN			30	Yes	"USA"
15	Injury Type	Broad categorization of primary injury type.	No	AN		4	11	No	"Blunt" = Blunt injury, primarily "Burn" = Burn injury "Penetrating" = Penetrating injury, primarily

Appendix A : Pre-Existing Comorbidity Factors

Below is the list of factors that are applicable for the *Incident Pre-Existing Comorbidity Factors* record (*I-COMBDTY*). ICD-9-CM codes are listed for each comorbid factor. These codes are provided in the event that your system records comorbidities in the form of ICD-9-CM codes. If this is the case, please translate each comorbid ICD-9-CM code (if present for the patient incident) to create a *Pre-Existing Comorbidity Factors* record with the associated Data Submission File Format code as indicated in the first column.

Code	Name	Related ICD-9-CM Codes
A.01	History of Cardiac Surgery	V45.0, P35.00-39.99, V42.1, V42.2, V42.2, V43.3
A.02	Coronary Artery Disease	414.9, 414.0
A.03	Congestive Heart Failure	428.0, 425.0-425.9
A.04	Cor Pulmonale	416.8, 415.0, 416.9
A.05	Myocardial Infarction	410.0-412.0, 428, 429.0-429.3, 429.8, 429.9
A.06	Hypertension	any 401, 402.00, 402.10, 402.90
B.01	Insulin Dependent	250 (5 th digit assignment for each comorbid factor)
B.02	Non-Insulin Dependent	250 (5 th digit assignment for each comorbid factor)
C.01	Peptic Ulcer Disease	any 533
C.02	Gastric or Esophageal Varices	456.0-456.2
C.03	Pancreatitis	577.0
C.04	Inflammatory Bowel Disease	558.9
D.01	Acquired Coagulopathy	286.7
D.02	Coumadin Therapy	
D.03	Hemophilia	286.0-286.4
D.04	Pre-existing Anemia	285.0, 285.8, 285.9
E.00	History of Psychiatric Disorders	any V11, V40.2
F.01	HIV/AIDS	079.53
F.02	Routine Steroid Use	

Code	Name	Related ICD-9-CM Codes
F.03	Transplants	V42
F.04	Active Chemotherapy	V58.1
G.01	Bilirubin > 2 mg % (on Admission)	
G.02	Documented History of Cirrhosis	571.2, 571.5
H.01	Undergoing Current Therapy	
H.02	Concurrent or Existence of Metastasis	
I.01	Rheumatoid Arthritis	714.0-714.9
I.02	Systemic Lupus Erythematosus	710.0
J.01	Spinal Cord Injury	any 806, 952-954
J.02	Multiple Sclerosis	340
J.03	Alzheimers Disease	290.0-290.13, 331.0
J.04	Seizures	780.3
J.05	Chronic Demyelinating Disease	341.0-341.9
J.06	Chronic Dementia	290.10
J.07	Organic Brain Syndrome	310.9
J.08	Parkinsons Disease	332.0
J.09	CVA/Hemiparesis (Stroke with Residual)	342.0-342.9
K.00	Obesity	278.00-278.01
L.01	Documented Prior History of Pulmonary Disease with Ongoing Active Treatment	
L.02	Asthma	493.0-493.9
L.03	Chronic Obstructive Pulmonary Disease	493.2, 496
L.04	Chronic Pulmonary Condition	496
M.01	Serum Creatinine > 2 mg % (On Admission)	
M.02	Dialysis (Excludes Transplant Patients)	V56.0, V45.1, V56.8
N.01	Chronic Drug Abuse	304.0-304.9

Code	Name	Related ICD-9-CM Codes
N.02	Chronic Alcohol Abuse	303.9
P.00	Pregnancy	any V22

Appendix B : Complications

Below is a list of complications as defined by the Committee On Trauma Quality Improvement Subcommittee. Each complication has been tagged with its identifying code which is used in field position 2 in the *Incident Complication Record*. If your system records complications in another format (e.g., boolean Y/N fields), please translate each complication present for a patient incident to an *Incident Complication Record* that contains the appropriate complication code as defined in the table below.

COT Complication Name	File Format Complication Code	Definition	Related ICD-9-CM Codes
Acute Respiratory Distress Syndrome (ARDS)	"ARDS"	PaO ₂ /fI _O ₂ >= 200, decreased compliance, diffuse pulmonary infiltrates associated with normal capillary wedge pressure in an appropriate setting. "Decreased compliance" is defined as abnormal per criteria established by institution.	518.5
Aspiration Pneumonia	"ASPP"	History of aspiration of gastric contents followed by clinical and new radiologic findings of pneumonitis within 48 hours.	507
Bacteremia	"BACT"	Any positive blood culture (<i>not</i> contaminants).	790.7
Cardiac Arrest	"CARA"	Sudden cessation of cardiac activity <i>after arrival</i> in ED, resulting in deprivation of sufficient oxygen to maintain viability of heart and brain.	427.5
Coagulopathy	"COAG"	Uncontrolled diffuse bleeding in the presence of coagulation abnormalities, e.g., increased PT or PTT, decreased platelets, or DIC.-requires treatment.	286.6
Compartment Syndrome	"COMS"	Clinical evidence of increased compartment pressure with or without development of sensory or motor deficit not present on admission in a patient following blunt or penetrating extremity injury.	958.8
DVT (Lower Extremity)	"DVTL"	Venous thrombosis proximal to or involving popliteal vein confirmed by autopsy, venogram, duplex scan or non-invasive vascular evaluation.	453.8
Disseminated Fungal Infection	"DFUI"	Clinical picture of sepsis with isolation of fungus from the blood, <i>or</i> two or more non-hematogenous sites, <i>or</i> tissue biopsy, <i>or</i> positive fundoscopic findings.	117.9
Dehiscence/+Evisceration	"DEEV"	Breakdown of fascial closure confirmed by discharge of preitoneal fluid, evisceration or palpable fascial defect.	998.3
Empyema	"EMPY"	Positive culture of purulent material from pleural space requiring thoracostomy tube drainage.	510.9
Esophageal Intubation	"ESOP"	Endotracheal tube in esophagus and not immediately repositioned. Esophageal location determined by physical examination, x-ray, capnography or endoscopy.	
Hypothermia	"HPOT"	Temperature <= 35 C.	780.9
Intra-Abdominal Abscess	"INAA"	Localized collection of purulent material in the abdominal cavity confirmed by Gram stain or culture.	682.2
Jaundice	"JAUN"	Total bilirubin >= 2.5 and AST or ALT greater than twice normal.	774.4
Loss of Operative Reduction/Fixation	"LORF"	Configuration of reduced fracture changed enough to warrant reoperative reposition of fragments.	

Myocardial Infarction	"MYCI"	Acute, irreversible myocardial injury and necrosis documented by increased CK-MB isoenzyme and serial T wave, S-T segment; or Q wave ECG changes; or a diagnostic radionuclide scan.	410.9
Pancreatitis	"PANC"	Any hypermylasemia associated with ultrasound or CT findings compatible with pancreatic inflammation.	577.0
Pneumonia	"PNEU"	Presence of fever, leukocytosis, gram stain of sputum with a predominant organism and white blood cells, chest radiograph with a pneumonic infiltrate and culture of sputum demonstrating a pathogen.	482.9
Pneumothorax	"PNTH"	Presence of intra-pleural air.	512.99
Skin Breakdown	"SKBD"	Contact pressure induced skin breakdown	707
Progression Of Original Neurologic Insult	"PONI"	Deterioration of additional loss of function from that noted on arrival in ED.	
Pulmonary Embolus	"PEMB"	Embolus to the lungs documented by arteriography, nuclear scan or autopsy	415.1
Renal Failure	"RENF"	Creatine \geq 3.5 mg/dl or BUN \geq 100 mg/dl	584.8
Urinary Tract Infection	"UNTI"	Clean voided or catheter urine specimen with \geq 10 WBC/hpf or \geq 50K organisms/ml on C/S.	any 599
Wound Infection	"WNDI"	Drainage of purulent material from wound or active treatment of the wound, including opening a closed wound or antibiotics for the wound.	958.3

Appendix C : NTDB™ Data Dictionary Cross-Reference

This appendix is intended for persons wanting to identify the location in the Data Submission File Format for information contained in the NTDB™ Data Dictionary. For each item defined in the NTDB™ Data Dictionary, the relevant record layout, field position number and page number in the Data Submission File Format is outlined.

NTDB™ Data Dictionary Item Number	NTDB™ Data Dictionary Item Name	Record Layout That Contains Item	Record Position Number(s)	Page Number(s)
1	Site at Which Injury Occurred	Incident Scene Record	2	31
2	Work-Relatedness of Injury	Incident Scene Record	3	31
3	Safety Equipment	Incident Safety Equipment Record	2	30
4	E Code # and Description of Injury	Incident Scene Record	4	31
5	Lowest Glasgow Eye Component at the Scene	Incident Scene Record	6	32
6	Lowest Glasgow Verbal Component at the Scene	Incident Scene Record	7	32
7	Lowest Glasgow Motor Component at the Scene	Incident Scene Record	8	33
8	Glasgow Coma Scale Assessment Qualifier at the Scene	Incident Scene Record	9	33
9	Glasgow Coma Scale Total at the Scene	Incident Scene Record	10	33
10	Intubated	Incident Intubation Record	2,3	23
11	Date on Which Injury Occurred	Incident Scene Record	11	33
12	State in Which Injury Occurred	Incident Scene Record	12,14	33
13	County in Which Injury Occurred	Incident Scene Record	13	13
14	Pre-Hospital Procedures Limited to: CPR, MAST, ...	Incident Prehospital Procedures Record	2	28
15	Blunt/Penetrating/Burn Injury Type	Incident Scene Record	15	34
16	Inter-Hospital Transfer	Incident Inter-Hospital Transfer Record	2	22
17	Patient's Date of Birth	Incident Demographics Record	2	11
18	Gender	Incident Demographics Record	3	11
19	Race/Ethnicity	Incident Demographics Record	4	11
20	First Recorded Date & Time of Patient's Arrival at Reporting Hospital ED	Incident Emergency Department Record	2	16

NTDB™ Data Dictionary Item Number	NTDB™ Data Dictionary Item Name	Record Layout That Contains Item	Record Position Number(s)	Page Number(s)
21	Was Trauma Surgeon Arrival In ED Timely?	Incident Emergency Department Record	3	16
22	First Systolic Blood Pressure in ED	Incident Emergency Department Record	4	16
23	First Unassisted Respiratory Rate in ED	Incident Emergency Department Record	5	16
24	Lowest Glasgow Eye Component in ED	Incident Emergency Department Record	13	17
25	Lowest Glasgow Verbal Component in ED	Incident Emergency Department Record	14	18
26	Lowest Glasgow Motor Component in ED	Incident Emergency Department Record	15	18
27	Glasgow Assessment Qualifier in ED	Incident Emergency Department Record	16	19
28	Glasgow Coma Scale Total in ED	Incident Emergency Department Record	17	19
29	Revised Trauma Score in ED	Incident Emergency Department Record	18	19
30	Was Alcohol Present in the Patient's Blood (Y/N)?	Incident Emergency Department Record	19	19
31	Drugs (Y/N)?	Incident Emergency Department Record	20	20
32	Emergency Department Disposition	Incident Emergency Department Record	22	20
33	Additional Information to Consider	File Information Record	4-11, 18-26	7-9
34	ID Number of Hospital	File Information Record	4	7
35	First Temperature in ED	Incident Emergency Department Record	7,8	17
36	Head CT Results	Incident Emergency Department Record	9	17
37	Abdominal Evaluation	Incident Emergency Department Record	10,11	17
38	Base Deficit/Excess in ED	Incident Emergency Department Record	12	17
39	Intubated in ED	Incident Intubation Record	2,3	23
40	Admitting Service	Incident Emergency Department Record	21	20
41	ICD-9-CM Diagnosis Code and Description for Injuries	Incident Diagnosis Record	2	13
42	Injury Severity Coding Methodology	Incident Diagnosis Record	Footnote 1	Footnote 1
43	AIS Code	Incident Diagnosis Record	4	13
44	Total ISS	Incident Diagnosis Statistics Record	2	15
45	Operating Room - OR Visit Number, Procedures, Date, Time	Incident Procedure Record	2-7	29

NTDB™ Data Dictionary Item Number	NTDB™ Data Dictionary Item Name	Record Layout That Contains Item	Record Position Number(s)	Page Number(s)
46	Days of Total Stay in ICU	Incident Outcome Record	3	24
47	Ventilator Support Days	Incident Outcome Record	4	24
48	Pre-Existing Comorbidity Factors	Incident Pre-Existing Comorbidity Factors Record	2	27, A-1, A-2
49	FIM Self-Feeding Score at Discharge	Incident Outcome Record	5	24
50	Status of FIM Self-Feeding Score	Incident Outcome Record	6	25
51	FIM Locomotion Score at Discharge	Incident Outcome Record	7	25
52	Status of FIM Locomotion Score	Incident Outcome Record	8	25
53	FIM Expression Score at Discharge	Incident Outcome Record	9	25
54	Status of FIM Expression Score	Incident Outcome Record	10	26
55	Total FIM Score	Incident Outcome Record	11	26
56	Date of Discharge or Death	Incident Outcome Record	12	26
57	Discharge Disposition	Incident Outcome Record	13	26
58	Billed Hospital Charges	Incident Outcome Record	14	26
59	Discharge Status (Alive vs. Dead)	Incident Outcome Record	15	26
60	Principal Payment Source	Incident Demographics Record	5	12
61	TRISS Survival Probability	Incident Diagnosis Statistics Record	3	15
62	Length of Stay in Hospital	Incident Outcome Record	2	24
63	Acute Respiratory Distress Syndrome (ARDS)	Incident Complication Record	2	10, B-1
64	Aspiration Pneumonia	Incident Complication Record	2	10, B-1
65	Bacteremia	Incident Complication Record	2	10, B-1
66	Cardiac Arrest	Incident Complication Record	2	10, B-1
67	Coagulopathy	Incident Complication Record	2	10, B-1
68	Compartment Syndrome	Incident Complication Record	2	10, B-1
69	DVT (Lower Extremity)	Incident Complication Record	2	10, B-1
70	Disseminated Fungal Infection	Incident Complication Record	2	10, B-1

NTDB™ Data Dictionary Item Number	NTDB™ Data Dictionary Item Name	Record Layout That Contains Item	Record Position Number(s)	Page Number(s)
71	Dehiscence/+Evisceration	Incident Complication Record	2	10, B-1
72	Empyema	Incident Complication Record	2	10, B-1
73	Esophageal Intubation	Incident Complication Record	2	10, B-1
74	Hypothermia	Incident Complication Record	2	10, B-1
75	Intra-Abdominal Abscess	Incident Complication Record	2	10, B-1
76	Jaundice	Incident Complication Record	2	10, B-1
77	Loss of Operative Reduction/Fixation	Incident Complication Record	2	10, B-1
78	Myocardial Infarction	Incident Complication Record	2	10, B-1
79	Pancreatitis	Incident Complication Record	2	10, B-2
80	Pneumonia	Incident Complication Record	2	10, B-2
81	Pneumothorax	Incident Complication Record	2	10, B-2
82	Skin Breakdown	Incident Complication Record	2	10, B-2
83	Progression of Original Neurologic Insult	Incident Complication Record	2	10, B-2
84	Pulmonary Embolus	Incident Complication Record	2	10, B-2
85	Renal Failure	Incident Complication Record	2	10, B-2
86	Urinary Tract Infection	Incident Complication Record	2	10, B-2
87	Wound Infection	Incident Complication Record	2	10, B-2

Footnotes

- 1 The Data Dictionary item *Injury Severity Coding Methodology* describes the coding system being used to represent a diagnosis. The *Diagnosis Record* in the Data Submission File Format contains separate fields to record multiple coding systems including ICD-9-CM, AIS 85, AIS90 and the AIS Severity. In the Data Submission File Format, the coding system being used is determined by which of these fields contains a non-null value. For example, if the *ICD-9-CM Code* in the *Diagnosis Record* contains a non-null value, then we already know that the ICD-9-CM is being used to represent a diagnosis. Therefore, an additional field to tell us the ICD-9-CM coding system is being used would be of no additional value. See the *Diagnosis Record* layout for additional information on how different diagnosis coding systems are represented in this file format.