National Trauma Data Bank®

NTDB Research Data Set User Manual and Variable Description List

Admission Years 2002-2016

Revised July 2018

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ACKNOWLEDGEMENT

The American College of Surgeons Committee on Trauma thanks the Centers for Disease Control and Prevention (CDC) for their support of the NTDB.

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FOREWORD

In an attempt to modernize this document and make it more user friendly, the NTDB Research Data Set User Manual has been revised to include all variables from each of the research datasets that the NTDB has issued. In the variable description list, we have noted when variables/tables have been issued and/or retired to aid researchers that use multiple datasets. This functions simultaneously as a change log.

Previous versions of this document contained resources such as the Barell Matrix, the Injury Intentionality Matrix, and sample code to help you get started with using NTDB data. These resources are still available on our website at www.ntdb.org but have been removed from this document.

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NTDB RESEARCH DATA SET TABLE DESCRIPTION LIST

The Research Data Set (RDS) is a set of relational tables and consists of 18-20 data files. These files are provided in ASCII-CSV (comma separated value) format, standard SAS (*.sas7bdat) data tables (for datasets Admission Year (AY) 2007 and later), and DBF format (DBASE version 2.0), which can be easily imported to most statistical software. The relational tables are too large to be analyzed in Microsoft Excel, but have been used in Microsoft Access, SAS, STATA, SPSS, and Tableau.

Three different classes of tables exist in the data set:

- **Incident-based tables**
    - Most of the data files include a unique incident identifier (**inc_key**) for merging the data files together.
- **Facility-based tables**
    - One data file (RDS_FACILITY) includes the facility information for participating hospitals and these data can be merged to RDS_ ED, RDS_DEMO, and RDS_DISCHARGE, by using the unique facility identifier (**fac_key**).
- **Lookup tables**
    - The remaining data files (RDS_AISDES, RDS_ECODEDES, RDS_DCODEDES, and RDS_PCODEDES; RDS_DIAGNOSISDESC and RDS_PROCEDUREDESC in Admission Year 2002-2006 data) are look-up tables with the description of the AIS code, ICD-9-CM E-Code, ICD-9-CM diagnosis codes, and ICD-9-CM procedure codes, ICD-10-CM E-Code, ICD-10-CM diagnosis codes, ICD-10-CM procedure codes, and ICD-10-CM location codes. The look-up tables can be merged with the unique RDS_DCODE, RDS_ICD10_DCODE, RDS_ECODE, RDS_ICD10_ECODE, RDS_PCODE, RDS_ICD10_PCODE, and RDS_ICD10_LOC (RDS_DIAGNOS and RDS_PROCEDUR in AY 2002-2006 data) tables.

In 2007 the NTDB adopted the National Trauma Data Standard (NTDS) to improve quality of data submitted to the NTDB. This is reflected in the research data set files as some files and variables have been retired over time. Please note that the research data set for admission years 2002-2006 is considered one data set and is representative of data that was collected prior to the issuance of the National Trauma Data Standard. Admission Year 2007 data and beyond is issued in yearly increments and this data was collected using the NTDS. We strongly caution researchers against combining data from the 2002-2006 data set and later data sets because of the profound difference in data collection and data quality.

Many of the tables and variables available in the Admission Year 2002-2006 dataset have been retired in later datasets and this is denoted in the Variable Description List in the Date Added and Date Retired columns.

AIS© 2005 (AIS 05) data tables are available as a separate data set at an additional cost. Please see the NTDB website for details. Per the agreement between the American College of Surgeons (ACS) and the Association for the Advancement of Automotive Medicine (AAAM), ACS will pay royalties to the AAAM when AIS© 2005 data are released. In addition, only numeric codes are released via the NTDB research dataset and no text descriptors are released for AIS© 2005. AAAM manuals are available for sale at www.aaam.org for parties interested in receiving the narrative descriptors associated with the AIS© 2005 codes.

Sample programs for SAS are available on the NTDB website to help researchers get started with merging files and creating statistical output. Please note that the NTDB does not provide customized datasets and does not run specific analysis for research projects.

This document includes a listing and short description of the research data set files and a detailed description of the variables contained in each file.

DATA FILES AND DESCRIPTIONS

File name	Years	Description
RDS_AISCODE	Admission Year 2002-2006	The AIS (Abbreviated Injury Scale) code submitted by the hospital
RDS_AISPCODE	Admission Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	The AIS (Abbreviated Injury Scale) code submitted by the hospital. (Pre-2016: excluding AIS version 2005; AY 2016: AIS version 2005 only)
RDS_AISCCODE	Admission Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015	The AIS (Abbreviated Injury Scale) code globally calculated with ICDMAP-90
RDS_AISP05CODE	Admission Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015	The AIS version 2005 (Abbreviated Injury Scale) code as submitted by the hospital. Available as a separate data file for an additional fee
RDS_AIS98PCODE	Admission Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015	The AIS (Abbreviated Injury Scale) code globally mapped to AIS version 1998. If the hospital does not submit AIS98, then ISS is based on AIS derived from ICDMAP-90
RDS_AISDES	Admission Years: 2016	Look-up table of the description of the AIS 05/08 injury codes
RDS_COMORBID	Admission Years: 2002-2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	Pre-existing comorbidity information
RDS_COMPLIC	Admission Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	Any NTDS complications
RDS_DEMO	Admission Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	Demographic information
RDS_DIAGNOS	Admission Year 2002-2006	ICD-9-CM Code of Diagnosis Information
RDS_DIAGNOSISDESC	Admission Year 2002-2006	Look-up table of the description of the ICD-9-CM diagnosis codes
RDS_DCODE	Admission Years: 2007, 2008, 2009, 2010, 2011,	ICD-9-CM Code of Diagnosis Information

	2012, 2013, 2014, 2015, 2016	
RDS_DCODEDES	Admission Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	Look-up table of the description of the ICD-9-CM diagnosis codes
RDS_DISCHARGE	Admission Years: 2002-2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	Includes discharge and outcome information
RDS_ECODE	Admission Years: 2002-2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	Includes the ICD-9-CM external cause of injury code
RDS_ECODEDES	Admission Years: 2002-2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	Look-up table of the description of the ICD-9-CM E-Codes
RDS_ED	Admission Years: 2002-2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	Emergency Department information
RDS_EDIT_FLAG	Admission Years: 2002-2006	Edit flags for each incident to denote invalid values
RDS_FACILITY	Admission Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	Facility Information
RDS_FACILITY_INC	Admission Years: 2002-2006	Inclusion and Exclusion criteria for a facility's trauma registry
RDS_ICD10_DCODE	Admission Years: 2015, 2016	ICD-10-CM Code of Diagnosis Information
RDS_ICD10_DCODEDES	Admission Years: 2015, 2016	Look-up table of the description of the ICD-10-CM diagnosis codes
RDS_ICD10_ECODE	Admission Years: 2015, 2016	Includes the ICD-10-CM external cause of injury code
RDS_ICD10_ECODEDES	Admission Years: 2015, 2016	Look-up table of the description of the ICD-10-CM E-Codes
RDS_ICD10_LOC	Admission Years: 2015,	ICD-10-CM Code of Injury Location Information

	2016	
RDS_ICD10_LOCDES	Admission Years: 2015, 2016	Look-up table of the description of the ICD-10-CM location codes
RDS_ICD10_PROCDES	Admission Years: 2015, 2016	Look-up table of the description of the ICD-10-CM procedure codes
RDS_IMPUTED	Admission Years: 2002-2006	Imputed or original values (if not missing) for vital sign information
RDS_INTUB	Admission Years: 2002-2006	Information about intubation performed either at the scene or in the ED.
RDS_MECHDESC	Admission Years: 2002-2006	Lookup table for mechanism of injury
RDS_PREHPROC	Admission Years 2002-2006	Information pertaining to procedures prior to arriving at the hospital
RDS_PCODE	Admission Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	ICD-9-CM and ICD-10-CM procedure codes (Pre-2015: ICD-9-CM only)
RDS_PCODEDES	Admission Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	Look-up table for procedures
RDS_PROCEDUR	Admission Years 2002-2006	Information pertaining to procedures performed for a trauma incident
RDS_PROCEDUREDESC	Admission Years 2002-2006	Lookup table for procedures performed for a trauma incident
RDS_PROTDEV	Admission Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	Protective devices
RDS_SAFETY	Admission Years: 2002-2006	Information pertaining to safety equipment used/worn at time of the injury
RDS_SCENE	Admission Years: 2002-2006	Information pertaining to the scene of the trauma incident
RDS_TRANSPORT	Admission Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	Transport information
RDS_VITALS	Admission Years: 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016	Vital signs from EMS and ED

NTDB RESEARCH DATASET VARIABLE DESCRIPTION LIST

This section includes the definition, format and length of each variable in each of the research data sets. Please see the external NTDS dictionary provided with the data files or visit the data dictionary website for further details on each variable. The data sets are listed in alphabetical order.

NOTE: **All data fields have Common Null Values (blank inappropriate values, here forth known as BIU Values) as valid values unless specified.**

Field Values
1 Not Applicable (-1)

2 Not Known/Not Recorded (-2) [Originally Not

Known and changed Admission Year 2009]

3 Not Recorded (-3) [Originally retired in 2008. This

has been removed from all datasets and combined as

Not Known/Not Recorded]

- *Not Applicable*: This null value code applies if, at the time of patient care documentation, the information requested was "Not Applicable" to the patient, the hospitalization or the patient care event. For example, variables documenting EMS care would be "Not Applicable" if a patient self-transports to the hospital.

- *Not Known/Not Recorded*: This null value applies if, at the time of patient care documentation, information was "Not Known" to the patient, family, or health care provider. This documents that there was an attempt to obtain information but it was unknown by all parties involved at the time of documentation. For example, injury date and time may be documented in the hospital patient care report as "Unknown."

File Name: RDS_AISCODE
Definition: The AIS (Abbreviated Injury Scale) information for the trauma diagnosis
Frequency: Unlimited number of records per incident
Notes: Available for RDS Admission Years 2002-2006 data only and was replaced by RDS_AISCCODE in Admission Year 2007.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
INC_KEY	Incident key	Numeric	10		2002-2006	2007	
AISCODE	Represents the AIS Full Code that describes the diagnosis.	Character	8		2002-2006	2007	
AISSCORE	This represents the severity portion of the AIS Full Code.	Numeric	10		2002-2006	2007	
BODYREGION	Body region based on the AAAM (Association for the Advancement of Automotive Medicine)	Character	30	1=Head, 2=Face, 3=Neck, 4=Thorax, 5=Abdomen, 6=Spin, 7=Upper Extremity, 8=Lower Extremity, 9=Unspecified	2002-2006	2007	

File Name: RDS_AISPCODE
Definition: The AIS© (Abbreviated Injury Scale) code version 1980, 1985, 1990, and 1998 submitted by the hospital for the trauma diagnosis
Frequency: Unlimited number of records per incident
Notes: Available for RDS Admission Years 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2007	none	
AIS Version (AISVER)	The version of AIS used to code the particular incident.	Numeric	4	1980 1985 1990 1998	2007	none	
AIS Predot Code (PREDOT)	The Abbreviated Injury Scale (AIS) predot codes that reflect the patient's injuries.	Numeric	6		2007	none	
AIS Severity (SEVERITY)	This represents the Abbreviated Injury Scale severity code that reflects the patient's injuries.	Numeric	3	1 to 6, 9	2007	none	

File Name: RDS_AISP05CODE
Definition: The AIS© (Abbreviated Injury Scale) code version 2005 submitted by the hospital for the trauma diagnosis
Frequency: Unlimited number of records per incident
Notes: Available for RDS Admission Years 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014 (at an additional cost.)

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2007	none	
AIS Version (AISVER)	The version of AIS used to code the particular incident.	Numeric	4	1980 1985 1990 1998 2005	2007	none	
AIS Predot Code (PREDOT)	The Abbreviated Injury Scale (AIS) predot codes that reflect the patient's injuries.	Numeric	6		2007	none	
AIS Severity (SEVERITY)	This represents the Abbreviated Injury Scale severity code that reflects the patient's injuries.	Numeric	3	1 to 6, 9	2007	None	

File Name: RDS_AIS98PCODE
Definition: The crosswalked AIS© (Abbreviated Injury Scale) code. AIS 2005 codes are back-coded to AIS 98, AIS 98 codes remain the same and all other codes are mapped to AIS 90
Frequency: Unlimited number of records per incident
Notes: Available for RDS Admission Years 2009, 2010, 2011, 2012, 2013, 2014, and 2015.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2009	none	
AIS Version (AISVER)	The version of AIS used to code the particular incident.	Numeric	4	1998	2009	none	
AIS Predot Code (PREDOT)	The Abbreviated Injury Scale (AIS) predot codes that reflect the patient's injuries.	Numeric	6		2009	none	
AIS Severity (SEVERITY)	This represents the Abbreviated Injury Scale severity code that reflects the patient's injuries.	Numeric	3	1 to 6, 9	2009	None	

File Name RDS_AISCCODE
Definition: The AIS (Abbreviated Injury Scale) codes calculated from ICDMAP-90 to AIS 90 for the trauma diagnosis
Frequency Unlimited number of records per incident
Notes: Available for RDS Admission Years 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, and 2015.

Field Name	Definition	Data Type	Length	Valid values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2007	None	
AIS Version (AISVER)	The version of AIS used to code the particular incident.	Numeric	4	1980 1985 1990 1998	2007	None	
AIS Predot Code (PREDOT)	The Abbreviated Injury Scale (AIS) predot codes that reflect the patient's injuries.	Numeric	6		2007	None	
AIS Severity (SEVERITY)	This represents the Abbreviated Injury Scale severity code that reflects the patient's injuries.	Numeric	3	1 to 6, 9	2007	None	

File Name RDS_AISDES
Definition: Lookup table of AIS 05/08 injury codes
Frequency: One record per AIS 05/08 injury codes
Notes: Available for RDS Admission Years 2016.

Field Name	Definition	Data Type	Length	Valid values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
AIS Version (AISVER)	The version of AIS used to code the particular incident.	Numeric	4	1980 1985 1990 1998	2016	None	
AIS Predot Code (PREDOT)	The Abbreviated Injury Scale (AIS) predot codes that reflect the patient's injuries.	Numeric	6		2016	None	
AIS Severity (SEVERITY)	This represents the Abbreviated Injury Scale severity code that reflects the patient's injuries.	Numeric	3	1 to 6, 9	2016	None	
AIS Description (AISDESC)	Description of AIS Injury code	Character	255		2016	None	

File Name: RDS_COMORBID
Definition: Information pertaining to any pre-existing comorbid conditions a patient had upon arrival in the ED/hospital
Frequency Unlimited number of records per incident
Notes: Available for all RDS Admission Years.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2002-2006	None	
Pre-existing Comorbid Conditions (PREXCOMOR)	Pertaining to a pre-existing comorbid factor present at the point of patient arrival in the ED.	Character	100	See archived RDS 7.2 manual, Appendix E	2002-2006	2007	Replaced by COMORKEY in for AY 2007 forward.
Comorbidity Code (COMORKEY)	NTDS comorbid conditions	String	50	See the NTDS	2007	None	
Comorbidity Description (COMORDES)	Description of comorbid conditions	String	100	See the NTDS	2002-2006	None	

File Name: RDS_COMPLIC
Definition: Information pertaining to any complications during the course of patient treatment
Frequency: Unlimited number of records per incident
Notes: Available for all RDS Admission Years.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2002-2006	None	
COMP_DESCR	Pertaining to a complication description that arose during the course of treatment.	Character	100	See archived RDS 7.2 manual, Appendix D	2002-2006	2007	Replaced by COMPLDES in AY 2007 forward.
Complication Code (COMPLKEY)	NTDS hospital complications	String	50	See the NTDS	2010	None	
Complication Description (COMPLDES)	Description of complications.	String	100	See the NTDS	2010	None	

File Name: RDS_DEMO
Definition: Includes information about the patient and incident demographics
Frequency: One record per incident
Notes: Available for all RDS Admission Years.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2002-2006	None	
Year of Birth (YOBIRTH)	The patient's birth year.	Numeric	4		2002-2006	None	
Age (AGE)	The patient's age at time of injury	Numeric	5	1-89	2002-2006	None	Age values less than 1 and greater than 89 are censored to '-99'
Sex (GENDER)	The patient's gender at admission	String	100	Male Female	2002-2006	None	
Race1 (RACE1)	The patient's race	String	100	See the NTDS	2002-2006	None	
Race2 (RACE2)	The patient's race (additional)	String	100	See the NTDS	2007	None	
Ethnicity (ETHNIC)	The patient's ethnicity	String	100	Hispanic or Latino Not Hispanic or Latino	2010	None	
Facility Key (FAC_KEY)	Unique identifier for each facility	Numeric	4	No Null Values allowed	2007	None	

File Name: RDS_DIAGNOS
Definition: ICD-9-CM Code of Diagnosis Information for the trauma incident.
Frequency: Unlimited number of records per incident.
Notes: This table occurs only in Admission Year 2002-2006 data and was replaced by RDS_DCODE

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
INC_KEY	Incident Key	Numeric	10		2002-2006	2007	
DCODE	ICD-9-CM Code of Diagnosis.	Character	7		2002-2006	2007	

File Name: RDS_DIAGNOSISDESC
Definition: Information pertaining to a diagnosis made about the trauma incident.
Frequency: One record per Diagnosis code.
Notes: This table occurs only in Admission Year 2002-2006 data and was replaced by RDS_DCODEDES

Field Name	Definition	Data Type	Length	Standard Option	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
DCODE	ICD-9-CM Code of Diagnosis.	Character	7		2002-2006	2007	
DCODEDESCR	Description pertaining to the ICD-9-CM Code of Diagnosis.	Character	255		2002-2006	2007	

File Name: RDS_DCODE
Definition: Includes the ICD-9-CM diagnosis codes
Frequency: Maximum of 50 diagnoses per patient
Notes: Available for RDS Admission Years 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2007	None	
ICD-9-CM Diagnosis (DCODE)	ICD-9-CM Diagnosis Code	String	6	Any valid ICD-9 Diagnosis Code	2007	None	

File Name: RDS_DCODEDES
Definition: Lookup table ICD-9-CM diagnoses codes
Frequency: One record per ICD-9-CM diagnoses codes DCODE
Notes: Available for RDS Admission Years 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Diagnosis Code (DCODE)	Unique ICD-9-CM diagnosis code	String	6		2007	None	Includes non-trauma diagnoses
Diagnosis Code Description (DCODEDES)	Description for ICD-9-CM diagnosis codes	String	100		2007	None	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Nature of Injury (DXTYPE)	Nature of injury as defined by the Barell Injury Diagnosis Matrix	String	50		2007	None	See Barell Matrix
Body Region 1 (REGION1)	ICD-9 body region as defined by the Barell Injury Diagnosis Matrix	String	50		2007	None	See Barell Matrix
Body Region 2 (REGION2)	Second ICD-9 body region as defined by the Barell Injury Diagnosis Matrix	String	50		2007	None	See Barell Matrix
Body Region 3 (REGION3)	Third ICD-9 body region as defined by the Barell Injury Diagnosis Matrix	String	50		2007	None	See Barell Matrix

File Name: RDS_DISCHARGE
Definition: Includes discharge information
Frequency: One record per incident
Notes: Available for all RDS Admission Years.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Facility Key (FAC_KEY)	Unique identifier for each facility	Numeric	4	No Null Values allowed	2002-2006	None	
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2002-2006	None	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Discharge Year (YODISCH)	Year the patient was discharged from the facility	Numeric	4	Admission year and one year after admission year	2002-2006	None	
Hospital Discharge Disposition (HOSPDISP)	The disposition of the patient at hospital discharge.	String	100	See the NTDS	2002-2006	None	
Length of Stay (Minutes) (LOSMIN)	Total Length of Stay in minutes	Numeric	5		2002-2006	None	
Length of Stay in Days (LOSDAYS)	Total Length of Stay in days	Numeric	5	1-364	2002-2006	None	
Intensive Care Unit Days (ICUDAYS)	Total number of days spent in the Intensive Care Unit	Numeric	5	1-364	2002-2006	None	
Ventilator Days (VENTDAYS)	Total number of days spent on the Ventilator	Numeric	5	1-364	2002-2006	None	
Primary Payment Method (PAYMENT)	The patient's primary method of payment	String	150	See the NTDS	2002-2006	None	
FIMFEED	FIM Self-feeding Score At Discharge	Numeric	10	See archived RDS 7.2 manual	2002-2006	2007	
FEEDSTATUS	Status Of FIM Self-feeding Score	Character	9	See archived RDS 7.2 manual	2002-2006	2007	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
FIMLOCOT	FIM Locomotion Score At Discharge	Numeric	10	See archived RDS 7.2 manual	2002-2006	2007	
LOCOMSTATU	Status Of FIM Locomotion Score	Character	9	See archived RDS 7.2 manual	2002-2006	2007	
FIMEXPRESS	FIM Expression Score At Discharge	Numeric	10	See archived RDS 7.2 manual	2002-2006	2007	
EXPSTATUS	Status Of FIM Expression Score	Character	9	See archived RDS 7.2 manual	2002-2006	2007	
FIMTOTAL	Total FIM Score	Numeric	10		2002-2006	2007	
YODISCH	Year Of Discharge Or Death	Numeric	5		2002-2006	2007	
CHARGES	Billed Hospital Charges in U.S. dollars.	Numeric	10		2002-2006	2007	
DISCHDISP	Discharge Disposition	Character	30	See archived RDS 7.2 manual	2002-2006	2007	

File Name: RDS_ECODE
Definition: Includes ICD-9-CM E-Codes (Mechanism of Injury)
Frequency: One record per incident
Notes: Available for all RDS Admission Years.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2002-2006	None	
Primary E-Code (ECODE)	ICD-9-CM External Cause of Injury Code	String	5		2002-2006	None	
ICD-9-CM Additional E-Code (ECODE2)	Additional ICD-9-CM External Cause of Injury Code	String	5		2007	None	

File Name: RDS_ECODEDES
Definition: Look-up table for ICD-9-CM E-Codes
Frequency: One record per ICD-9-CM E-Code
Notes: Available for all RDS Admission Years.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
E-Code (ECODE)	Unique ICD-9-CM E-Code	String	5		2007	None	To merge ECODE2 with descriptions, must change this variable name to ECODE2

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Primary E-Code Description (ECODEDES)	Description of each ICD-9-CM E-Code	String	100		2007	None	
Trauma Type (INJTYPE)	Indication of the type (nature) of trauma produced by an injury	String	4000	Blunt Burn Penetrating Other/Unspecified	2007	None	See Injury Intentionality/Trauma Type Matrix for more information.
Injury Intent (INTENT)	Injury Intentionality as defined by the CDC Injury Intentionality Matrix	String	4000	Unintentional Self-inflicted Assault Undetermined Other	2007	None	See Injury Intentionality/Trauma Type Matrix for more information.
Mechanism of Injury (MECHANISM)	ICD-9-CM Mechanism of Injury E-Code	String	4000		2007	None	See Injury Intentionality/Trauma Type Matrix for more information.

File Name: RDS_ED
Definition: ED and Injury information
Frequency: One record per incident
Notes: Available for all RDS Admission Years.

Field Name	Definition	Data Type	Length	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Valid Values	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	2002-2006	None	No Null Values allowed	
Year of Injury (YOINJ)	The year when the patient was injured	Numeric	4	2007	None	Current Year or year previous	
EDARRTIME	First Recorded Time Of Patient's Arrival At Reporting Hospital ED	Character	5	2002-2006	2007		
TSTIMELY	Was Trauma Surgeon Arrival In ED Timely	Character	3	2002-2006	2007		
DAYTOADMIT	Days Between Injury And Admission	Numeric	5	2002-2006	2007		
Admission Year (YOADMIT)	The year when the patient was admitted	Numeric	4	2007	None	Current year	
Work-Related (WORKREL)	Work-relatedness of the injury	String	50	2007	None	Yes No	
Industry of Work (INDUSTRY)	Occupational industry associated with the patient's work environment	String	50	2007	None	See the NTDS	
Occupation (OCCUPATION)	Occupation of the patient	String	50	2007	None	See the NTDS	

Field Name	Definition	Data Type	Length	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Valid Values	Notes
Location E-Code (LECODE)	ICD9-CM External Cause of Injury code	String	50	2007	None	0-9	Value is *x* in 849.x code
Location Description (LOCATION)	Location where injury occurred	String	100	2007	None		
Inter-hospital Transfer (TRANSFER)	Inter-hospital transfer	String	50	2007	None	Yes No	
EDSYSBP	The initial assessment in the ED of the systolic blood pressure	Numeric	10	2002-2006	2007		See Vitals file for similar variables in later datasets
EDRESPRATE	First Unassisted Respiratory Rate In ED	Numeric	10	2002-2006	2007		See Vitals file for similar variables in later datasets
EDTEMP	First Temperature In ED	Numeric	15,1	2002-2006	2007		See Vitals file for similar variables in later datasets
TEMPSCALE	Temperature Scale	Character	1	2002-2006	2007		See Vitals file for similar variables in later datasets
EDHEADCT	Head CT Results	Character	8	2002-2006	2007		
EDABEVAL	Abdominal Evaluation	Character	8	2002-2006	2007		
ABEVALTYPE	Abdominal Evaluation Type	Character	25	2002-2006	2007		
EDBASEDEF	Base Deficit/Excess In ED	Numeric	15,1	2002-2006	2007		
EDGCSEYE	Lowest Glasgow Eye Component In ED	Numeric	10	2002-2006	2007		See Vitals file for similar variables in later datasets

Field Name	Definition	Data Type	Length	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Valid Values	Notes
EDGCSVERB	Lowest Glasgow Verbal Component In ED	Numeric	10	2002-2006	2007		See Vitals file for similar variables in later datasets
EDGCSMOTOR	Lowest Glasgow Motor Component In ED	Numeric	10	2002-2006	2007		See Vitals file for similar variables in later datasets
EDGCSTOTAL	Glasgow Coma Scale Total In ED	Numeric	10	2002-2006	2007		See Vitals file for similar variables in later datasets
EDRTS	Revised Trauma Score In ED	Numeric	15,4	2002-2006	2007		
Alcohol Use (ALCOHOL)	Whether patient used alcohol	String	100	2007	None	See the NTDS	
Drug Use (DRUG1)	Whether patient used drugs	String	100	2007	None	See the NTDS	
Drug Use (DRUG2)	Whether patient used drugs	String	100	2007	None	See the NTDS	
Emergency Department Disposition (EDDISP)	Disposition of the patient at the time of discharge from the ED	String	100	2007	None	See the NTDS	
Death in ED (EDDEATH)	Whether or not the patient died in the ED			2002-2006	2010		
Signs of Life (SIGNSOFLIFE)	Whether or not the patient presented with signs of life	String	150	2011	None	- Arrived with signs of life - Arrived with no signs of life	Replaced EDDEATH in 2011.
EMS Response	Total elapsed time	Numeric	10	2007	None	1 - 40,320	

Field Name	Definition	Data Type	Length	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Valid Values	Notes
Minutes (EMSRESP)	from dispatch of the EMS transporting unit to scene arrival of the EMS transporting unit					min (28 days)	
EMS Scene Time (EMSSCENE)	Total elapsed time from dispatch of the EMS transporting unit to departure from the scene.	Numeric	10	2007	None	1 - 40,320 min (28 days)	
Total Number of EMS Days (EMSDAYS)	Total elapsed days from dispatch of the EMS transporting unit to hospital arrival of the EMS transporting unit.	Numeric	10	2007	None	1 – 28 days	
Total Number of EMS Minutes (EMSMINS)	Total elapsed time from dispatch of the EMS transporting unit to hospital arrival of the EMS transporting unit.	Numeric	10	2007	None	1 - 40,320 min (28 days)	
Total Number of Minutes in the ED (EDMIN)	Total elapsed time the patient was in the emergency department	Numeric	10	2007	None	1 - 524,160 min (364 days)	
Total Number Days in the ED (EDDAYS)	Total elapsed time the patient was in the emergency department	Numeric	10	2007	None	1 - 524,160 min (364 days)	

Field Name	Definition	Data Type	Length	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Valid Values	Notes
ISS	Total Injury Severity Score	Numeric	10	2002-2006	2007	1-75	Replaced by Local ISS (ISSLOC)
Local ISS (ISSLOC)	The Injury Severity Score reflecting the patient's injuries directly submitted by the facility regardless of the method of calculation	Numeric	3	2007	2016	1- 75	Replaced to standardize ISS from submitted AIS. Use ISSAIS.
AIS derived ISS (ISSAIS)	The Injury Severity Score as calculated from AIS submitted directly by hospitals	Numeric	3	2007	None	1- 75 and the number is a sum of 3 squared values ranging from 1 to 6. If any component is 6 then the value is set to 75	
ICDMAP-90 derived ISS (ISSICD)	The Injury The Injury Severity Score as derived by converting ICD-9 codes to AIS using the ICD 90 Mapping program and then calculating ISS with the resulting AIS severity scores	Numeric	3	2007	2016	1- 75 and the number is a sum of 3 squared values ranging from 1 to 6. If any component is 6 then the	

Field Name	Definition	Data Type	Length	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Valid Values	Notes
						value is set to 75	
AIS 98 crosswalked ISS (ISS98)	The Injury Severity Score as derived from a mapping of existing AIS codes to AIS98 for consistency of AIS scores.	Numeric	3	2010	2016	1- 75 and the number is a sum of 3 squared values ranging from 1 to 6. If any component is 6 then the value is set to 75	AIS 98 codes remain the same, AIS 2005 codes are mapped to AIS 98 and others are mapped to AIS 90.
TRISS_ PROB	TRISS Survival Probability	Numeric	10	2002-2006	2007		
ACS_EDRTS	Recalculated Revised Trauma Score In ED by ACS	Numeric	10	2002-2006	2007		
ACS_PS	Recalculated TRISS Survival Probability by ACS.	Numeric	38,30	2002-2006	2007		
RESPRATEAQ	Respiratory Rate Assessment Qualifier In ED	Character	2	2002-2006	2007		Replaced by RRAQ in Vitals table in later years.
EDGCS_AQ	GCS Assessment Qualifier In ED	Character	2	2002-2006	2007	"L" = Initial GCS components in ED are	Replaced by GCS_Q1, GCS_Q2 , and GCS_Q3 in Vitals table in later

Field Name	Definition	Data Type	Length	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Valid Values	Notes
						legitimate values, "S" = Patient chemically sedated when initial GCS components assessed in ED. "T" = Patient intubated when GCS components assess in ED. "TP" = Patient intubated and chemically paralyzed when GCS components assessed in ED.	years.
Facility Key (FAC_KEY)	Unique identifier for each facility	Numeric	4	2002-2006	None	No Null Values allowed	

File Name: RDS_EDIT_FLAG
Definition: Includes the 27 edit flags (see Appendix B) for each incident
Frequency: One record per incident.
Notes: Available for RDS Admission Years 2002-2006.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
INC_KEY	Incident Key	Numeric	10		2002-2006	2007	
EDITSCORE	Number of edit checks that were flagged for the incident	Numeric	10		2002-2006	2007	
EDITDETAIL	A text string of all the edit checks that were flagged for the incident	Character	27		2002-2006	2007	
FLAG_A	Was the incident flagged for Edit check A	Character	4		2002-2006	2007	
FLAG_B	Was the incident flagged for Edit check B	Character	4		2002-2006	2007	
FLAG_C	Was the incident flagged for Edit check C	Character	4		2002-2006	2007	
FLAG_D	Was the incident flagged for Edit check D	Character	4		2002-2006	2007	
FLAG_E	Was the incident flagged for Edit check E	Character	4		2002-2006	2007	
FLAG_F	Was the incident flagged for Edit check F	Character	4		2002-2006	2007	
FLAG_G	Was the incident flagged for Edit check G	Character	4		2002-2006	2007	
FLAG_H	Was the incident flagged for Edit check H	Character	4		2002-2006	2007	
FLAG_I	Was the incident flagged for Edit check I	Character	4		2002-2006	2007	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
FLAG_J	Was the incident flagged for Edit check J	Character	4		2002-2006	2007	
FLAG_K	Was the incident flagged for Edit check K	Character	4		2002-2006	2007	
FLAG_L	Was the incident flagged for Edit check L	Character	4		2002-2006	2007	
FLAG_M	Was the incident flagged for Edit check M	Character	4		2002-2006	2007	
FLAG_N	Was the incident flagged for Edit check N	Character	4		2002-2006	2007	
FLAG_O	Was the incident flagged for Edit check O	Character	4		2002-2006	2007	
FLAG_P	Was the incident flagged for Edit check P	Character	4		2002-2006	2007	
FLAG_Q	Was the incident flagged for Edit check Q	Character	4		2002-2006	2007	
FLAG_R	Was the incident flagged for Edit check R	Character	4		2002-2006	2007	
FLAG_S	Was the incident flagged for Edit check S	Character	4		2002-2006	2007	
FLAG_T	Was the incident flagged for Edit check T	Character	4		2002-2006	2007	
FLAG_U	Was the incident flagged for Edit check U	Character	4		2002-2006	2007	
FLAG_V	Was the incident flagged for Edit check V	Character	4		2002-2006	2007	
FLAG_W	Was the incident flagged for Edit check W	Character	4		2002-2006	2007	
FLAG_X	Was the incident flagged for Edit check X	Character	4		2002-2006	2007	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
FLAG_Y	Was the incident flagged for Edit check Y	Character	4		2002-2006	2007	
FLAG_Z	Was the incident flagged for Edit check Z	Character	4		2002-2006	2007	
FLAG_0	Was the incident flagged for Edit check 0	Character	4		2002-2006	2007	

File Name: RDS_FACILITY
Definition: Information pertaining to the facility dataset
Frequency: One record per facility
Notes: Available for all RDS Admission Years.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Facility Key (FAC_KEY)	Unique identifier for each facility	Numeric	10	No Null Values allowed.	2002-2006	None	
Hospital Type (HOSPTYPE)	Facility Tax Status	String	4000	Public Private	2007	None	
TEACHTYPE	Hospital type	String	4000	For Profit NA Non-profit			Replaced by HOSPTYPE in 2007
Teaching Status (TEACHSTA)	Hospital teaching status	String	4000	Community Non-Teaching University	2007	None	

TEACHSTATU	Hospital teaching status	String	4000	Community Non-Teaching University			Replaced by TEACHSTA in 2007
ACS Verification Level (ACSLEVEL)	ACS Verification Level	String	4000	I II III IV Not Applicable	2002-2006	None	
ACS Pediatric Verification Level (ACSPEDLEV)	ACS Pediatric Verification Level	String	4000	I II Not Applicable	2002-2006	None	
State Designation (STATELEV)	State Designation	String	4000	I II III IV V Other Not Applicable	2007	None	
State Designation (STATELEVEL)	State Designation	String	4000	I II III IV V Other Not Applicable	2002-2006	2007	Replaced by STATELEV in 2007
State Pediatric Designation (STATEPLEV)	State Pediatric Designation	String	4000	I II II IV Other Not Applicable	2002-2006	2007	Replaced by STATEPL in 2007

State Pediatric Designation (STATEPL)	State Pediatric Designation	String	4000	I II II IV Other Not Applicable	2007	None	
TRALEVEL	Trauma level combining the ACS verification and State designation	String	4000	I II II IV Other Not Applicable	2002-2006	2007	
Bedsize (BEDSIZE)	Number of licensed beds in facility	String	4000	≤200 200-400 401-600 >600 Not Provided	2002-2006	None	
Comorbidity Recording (COMOR_CODE)	How a facility records comorbidities	String	4000	-Derived from ICD-9 coding -Chart abstraction by trauma registrar -Calculated by software registry program -Not collected	2002-2006	2007	

Comorbidity Recording (COMORCD)	How a facility records comorbidities	String	4000	-Derived from ICD-9 coding -Chart abstraction by trauma registrar -Calculated by software registry program -Not collected	2007	2013	This variable was no longer collected after 2013 and has been removed from all research data sets issued after September 2015
Complication Recording (COMPL_CODE)	How a facility records complications	String	4000	-Derived from ICD-9 coding -Chart abstraction by trauma registrar -Calculated by software registry program -Not collected	2002-2006	2007	
Complication Recording (COMPLCD)	How a facility records complications	String	4000	-Derived from ICD-9 coding -Chart abstraction by trauma registrar -Calculated by software registry program -Not collected	2007	2013	This variable was no longer collected after 2013 and has been removed from all research data sets issued after September 2015

Number of Adult Beds (NOADULTBED)	Number of beds dedicated adult patients	Numeric	10		2002-2006	2007	Replaced by ADULTBED in 2007
Number of Adult Beds (ADULTBED)	Number of beds dedicated adult patients	String	10		2007	None	
Number of Burn Beds (NOBURNBED)	Number of beds dedicated to burn patients	Numeric	10		2002-2006	2007	Replaced by BURNBED in 2007
Number of Burn Beds (BURNBED)	Number of beds dedicated to burn patients	String	10		2007	None	
Number of ICU Burn Beds (NOBURNICU)	Number of ICU beds dedicated to burn patients	Numeric	10		2002-2006	2007	Replaced by ICUBRBED in 2007
Number of ICU Burn Beds (ICUBRBED)	Number of ICU beds dedicated to burn patients	String	10		2007	None	
Number of ICU Beds (NOTRAICU)	Number of ICU beds dedicated to trauma patients	Numeric	10		2002-2006	2007	Replaced by ICUTRBED in 2007
Number of ICU Beds (ICUTRBED)	Number of ICU beds dedicated to trauma patients	String	10		2007	None	
Number of Pediatric Beds (NOPEDBEDS)	Number of beds dedicated to pediatric patients	Numeric	10		2002-2006	2007	Replaced by PEDBED in 2007
Number of Pediatric Beds (PEDBED)	Number of beds dedicated to pediatric patients	String	10		2007	None	
NOREGISTRA	Number registrars that are certified	Numeric	10		2002-2006	2007	

Number of Certified Trauma Registrars (TRCERREG)	Number of trauma registrars certified by ATS	Numeric	10		2007	None	Replaced NOREGISTRA in 2007
Number of Neurosurgeons (NEUROSUR)	Number of neurosurgeons at your facility	String	10		2007	None	
Number of Neurosurgeons (NONEUROSUR)	Number of neurosurgeons at your facility	Numeric	10		2002-2006	2007	Replaced by NEUROSUR in 2007
Number of Orthopedic Surgeons (ORTHOSUR)	Number of orthopedic surgeons at your facility	String	10		2007	None	
Number of Orthopedic Surgeons (NOORTHOSUR)G	Number of orthopedic surgeons at your facility	Numeric	10		2002-2006	2007	Replaced by ORTHOSUR in later years.
NOTRAREGIS	Number of trauma registrars (FTEs)	Numeric	10	`	2002-2006	2007	Replaced by TRAMREG in 2007
Number of Trauma Registrars (TRAMREG)	Number of Trauma Registrars at your facility	Numeric	10		2007	None	
NOTRASURG	Number of core trauma surgeons at your facility	Numeric	10		2002-2006	2007	Replaced by TRAUMSUR in 2007
Number of Trauma Surgeons (TRAUMSUR)	Number of core trauma surgeons at your facility	Numeric	10		2007	None	
Pediatric Hospital Association (PEDASSOC)	Is your facility associated with a pediatric facility?	String	5	True False	2002-2006	None	
PEDCAREALL	This hospital provide all acute care service to injured children	String	3	Yes No	2002-2006	2007	Replaced in 2007 by PEDCARE

PEDCARENO	This hospital do not provide care to injured children (not applicable)	String	3	Yes No	2002-2006	2007	Replaced in 2007 by PEDCARE
PEDCRSHARE	This hospital share role with another center when it comes to providing care to injured children. (Resuscitation and care of acute injuries, followed by transfer)	String	3	Yes No	2002-2006	2007	Replaced in 2007 by PEDCARE
Care for Injured Children (PEDCARE)	How do you care for injured children?	String	4000	No children (N/A) Shared role with another center Provide all acute care services	2007	None	
Pediatric ICU Unit (PEDICU)	Do you have a pediatric ICU unit?	String	5	True False	2002-2006	None	Variable was PED_ICU in 2002-2006 data

PED_NONE	This hospital have none of the associations following to pediatric care: association with a pediatric hospital, pediatric ward, pediatric ICU, or transfer bulk of injured children.	String	3	Yes No	2002-2006	2007	
PEDTRANSF	Does the hospital transfer bulk of severely injured children to other specialty centers			Yes No			
Pediatric Transfer (PEDTRANS)	Do you transfer pediatric patients?	String	5	True False	2002-2006	2007	
PED_WARD	Do you have a pediatric ward?	String	5	Yes No	2002-2006	2007	
Pediatric Ward (PEDWARD)	Do you have a pediatric ward?	String	5	True False	2007	None	
Oldest Pediatric Patient (PEDAGECT)	How old is your oldest pediatric patient?	String	4000	14, 15, 16, 17, 18, 19, 20, 21, none	2002-2006	2007	
Transfers In (TRANSIN)	Are transfers into the facility included?	String	4000	All transfers Within 12 hours Within 24 hours Within 48 hours Within 72 hours	2002-2006	2007	
Transfers Out (TRANSOUT)	Does your facility transfer patients out to other facilities?	String	5	True False	2002-2006	2007	

Length of Stay (LOSINCL)	What length of stay is included?	String	4000	All Admissions 23 hour holds ≥24 hours ≥48 hours ≥72 hours	2002-2006	2007	
Deaths After (DEATHAFT)	Deaths after 15 minutes in the ED	String	5	True False	2002-2006	2007	
DOAs included (DOAINC)	Dead on Arrival included in registry	String	5	True False			
Hip Fractures Included (HIPINCL)	The age cutoff for including hip fractures in non-elderly patients, if applicable	String	4000	None Patients ≤ 18 years Patients ≤ 50 years Patients ≤ 55 years Patients ≤ 60 years Patients ≤ 65 years Patients ≤ 70 years All			
Excluded AIS Codes (AISEXCL)	Range of AIS Codes excluded from registry	String	500				
Included AIS Codes (AISINCL)	Range of AIS Codes included in registry	String	500				
ICD-9 Exclusion Range (ICD9EXCL)	ICD-9-CM codes the facility Excludes in their registry	String	500				

ICD-9 Inclusion Range (ICD9INCL)	ICD-9-CM codes the facility includes in their registry	String	500				
ICD-9 Inclusion Range the same as NTDB (ICD9NTDB)	ICD-9 Inclusion Criteria is 800-959.9, excluding 905-909, 910-924, and 930-939	String	5	True False			
Inclusion/Exclusion Other (OTHERINC)	Does the facility have any other inclusion/exclusion criteria	String	5	True False			
Inclusion/Exclusion Other Specify (INCSPEC)	Explanation of other inclusion/exclusion criteria	String	1050				Only present when OTHERINC is 'True"
Geographic Region (REGION)	Geographic region for the hospital	String	40	"Midwest", "Northeast", "South", "West"	2011	None	

File Name: RDS_FACILITY_INC
Definition: Information about the participating facilities' inclusion and exclusion criteria for registry data.
Frequency: One record per Facility.
Notes: Available for RDS Admission Years 2002-2006. Consolidated into RDS_FACILITY in later years.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
FAC_KEY	Facility key	Numeric	10		2002-2006	2007	
HIPFRACAGE	The Age cutoff for including hip fractures in	Character	10		2002-2006	2007	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
	non-elderly patients, if applicable						
HIPFRACALL	Were all isolated hip fractures included in data set	Character	3		2002-2006	2007	
HIPFRACELD	Were isolated hip fractures included in the non-elderly	Character	3		2002-2006	2007	
DOA_INC	Were Dead On Arrival (DOA) in ED included in data set	Character	3		2002-2006	2007	
DEATHSAFT	Were Deaths After Receiving Any Evaluation/Treatment Including Died in ED included in the data set	Character	3		2002-2006	2007	
TRANSIN	All patients transferred into hospital included in the data set	Character	3		2002-2006	2007	
TRANSINWIT	Were only	Character	3		2002-2006	2007	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
	patients that were transferred into the hospital within specified number of hours included in the data set						
TRANSINWHR	Number of hours cutoff for patients to be included	Numeric	10		2002-2006	2007	
TRANSOUT	Were all patients transferred out included in the data set	Character	3		2002-2006	2007	
ICD9EXC	ICD-9 Exclusion range	Character	2000		2002-2006	2007	
ICD9RANGE	ICD-9 Inclusion range	Character	2000		2002-2006	2007	
ICD_MAP	AIS coding is done with ICD-9 map	Character	3		2002-2006	2007	
AIS05_FULL	AIS coding is done with AIS 05 full code (description plus severity)	Character	3		2002-2006	2007	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
AIS05_ONLY	AIS coding is done with AIS 05 only (severity only)	Character	3		2002-2006	2007	
AIS80_FULL	AIS coding is done with AIS 80 full code (description plus severity)	Character	3		2002-2006	2007	
AIS80_ONLY	AIS coding is done with AIS 80 only (severity only)	Character	3		2002-2006	2007	
AIS85_FULL	AIS coding is done with AIS 85 full code (description plus severity)	Character	3		2002-2006	2007	
AIS85_ONLY	AIS coding is done with AIS 85 only (severity only)	Character	3		2002-2006	2007	
AIS90_FULL	AIS coding is done with AIS 90 full code (description plus severity)	Character	3		2002-2006	2007	
AIS90_ONLY	AIS coding is done with AIS 90 only	Character	3		2002-2006	2007	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
	(severity only)						
AIS95_FULL	AIS coding is done with AIS 95 full code (description plus severity)	Character	3		2002-2006	2007	
AIS95_ONLY	AIS coding is done with AIS 95 only (severity only)	Character	3		2002-2006	2007	
AIS98_FULL	AIS coding is done with AIS 98 full code (description plus severity)	Character	3		2002-2006	2007	
AIS98_ONLY	AIS coding is done with AIS 98 only (severity only)	Character	3		2002-2006	2007	
AISCODEEXC	AIS code exclusion range	Character	2000		2002-2006	2007	
AISCODEINC	AIS code inclusion range	Character	2000		2002-2006	2007	
AISNOTDONE	AIS coding was not done (not applicable)	Character	3		2002-2006	2007	
AIS_OTHER	AIS coding was done with other method	Character	3		2002-2006	2007	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
AISOSPEC	Specify of other method used for AIS coding	Character	50		2002-2006	2007	
TRICODE	AIS coding is done with ICD-9 map	Character	3		2002-2006	2007	
LOSINC	What length of stay cutoff is used for including patient in data set	Character	25		2002-2006	2007	

File Name: RDS_ICD10_DCODE
Definition: Includes the ICD-10-CM diagnosis codes
Frequency: One record per incident
Notes: Available for RDS Admission Years 2015, 2016.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2015	None	
ICD-10-CM Diagnosis (DCODE)	ICD-10-CM Diagnosis Code	String	10	Maximum of 50 diagnoses per patient. This field	2015	None	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
				includes comorbid conditions and complications.			

File Name: RDS_ICD10_DCODEDES
Definition: Lookup table ICD-10-CM diagnoses codes
Frequency: One record per ICD-10-CM diagnoses codes DCODE
Notes: Available for RDS Admission Years 2015, 2016.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Diagnosis Code (ICD10_DCODE)	Unique ICD-10-CM diagnosis code	String	10		2015	None	Includes non-trauma diagnoses
Diagnosis Code Description (ICD10_DCODEDES)	Description for ICD-10-CM diagnosis codes	String	350		2015	None	
Level 1 (LEVEL1)	The chapter of the ICD-10 code	String	150		2015	None	
Level 2 (LEVEL2)	Subcategory representing general injury/disease and body area	String	150		2015	None	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Level 3 (LEVEL3)	Subcategory representing intermediate description of injury/disease and body area	String	150		2015	None	
Level 4 (LEVEL4)	Subcategory representation specific injury/disease and body area	String	150		2015	None	
ICD10 Version (ICD10_Version)	The version of ICD10 code	String	20		2015	None	

File Name: RDS_ICD10_ECODE
Definition: Includes ICD-10-CM E-Codes (Mechanism of Injury)
Frequency: One record per incident
Notes: Available for RDS Admission Years 2015, 2016.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2015	None	
ICD10 Primary E-Code (ICD10_ECODE)	ICD-10-CM External Cause of Injury Code	String	10		2015	None	

File Name: RDS_ICD10_ECODEDES
Definition: Look-up table for ICD-10-CM E-Codes
Frequency: One record per ICD-10-CM E-Code
Notes: Available for RDS Admission Years 2015, 2016.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
ICD10 E-Code (ECODE)	Unique ICD-10-CM E-Code	String	10		2015	None	
ICD10 E-Code Description (ECODEDES)	Description of each ICD-10-CM E-Code	String	350		2015	None	
Injury Intent (INTENT)	Injury Intentionality as defined by the CDC Injury Intentionality Matrix	String	150	Unintentional Assault Other Self-inflicted Undetermined Unintentional	2015	None	
Mechanism of Injury (MECHANISM)	ICD-10-CM Mechanism of Injury E-Code	String	150		2015	None	
Trauma Type (Trauma_Type)	Indication of the type (nature) of trauma produced by an injury	String	150	Blunt Burn Penetrating Other/Unspecified	2015	None	

File Name: RDS_ICD10_LOC
Definition: Includes ICD-10-CM Location Codes
Frequency: One record per incident
Notes: Available for RDS Admission Years 2015, 2016.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2015	None	
ICD10 Location Code (ICD10_LOC)	ICD-10-CM Injury Location Code	String	10		2015	None	

File Name: RDS_ICD10_LOCDES
Definition: Lookup table ICD-10-CM location codes
Frequency: One record per ICD-10-CM location code
Notes: Available for RDS Admission Years 2015, 2016.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Location Code (ICD10_LOC)	Unique ICD-10-CM location code	String	10		2015	None	Includes non-trauma diagnoses
Location Code Description (ICD10_LOC_DESCRIPTION)	Description for ICD-10-CM location codes	String	350		2015	None	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Level 1 (LEVEL1)	The chapter of the ICD-10 code	String	150		2015	None	
Level 2 (LEVEL2)	Subcategory representing general location type	String	150		2015	None	
ICD10 Version (ICD10_Version)	The version of ICD10 code	String	20		2015	None	

File Name: RDS_ICD10_PCODEDES
Definition: Lookup table ICD-10-CM procedure codes
Frequency: One record per ICD-10-CM procedure code
Notes: Available for RDS Admission Years 2015, 2016.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Procedure Code (ICD10_PROC)	Unique ICD-10-CM procedure code	String	10		2015	None	Includes non-trauma diagnoses
Procedure Code Description (ICD10_PROC_DESCRIPTION)	Description for ICD-10-CM diagnosis codes	String	350		2015	None	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
ICD10 Version (ICD10_Version)	The version of ICD10 code	String	20		2015	None	

File Name: RDS_IMPUTED
Definition: Includes the imputed values or the original value, if value is not missing.
Frequency: One record per facility.
Notes: Available for RDS Admission Year 2002-2006.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
INC_KEY	Incident key	Numeric	10		2002-2006	2007	
SCENEEYE	Imputed or Original value for Lowest Glasgow Eye Component At The Scene. Imputation rule for missing values: GCS Eye=1 when GCS total = 3 GCS Eye=4 when GCS total = 15 GCS Eye = GCS total minus the sum of GCS verbal and GCS motor.	Numeric	10	Values for Adults (> 5 yrs old): 1 = None 2 = Pain 3 = Voice 4 = Spontaneous Values for Children and Infants: 1 = No Response 2 = Pain 3 = Verbal Stimuli 4 = Spontaneous	2002-2006	2007	

SCENEVERB	Imputed or Original Lowest Glasgow Verbal Component At The Scene Imputation rule for missing values: GCS Verbal=1 when GCS total = 3 GCS Verbal=5 when GCS total = 15 GCS Verbal = GCS total minus the sum of GCS Eye and GCS motor.	Numeric	10	Values for Adults (>5 yrs old): 1 = None 2 = Incomprehensible words 3 = Inappropriate Words 4 = Confused 5 = Oriented Values for Child: 1 = No Response 2 = Incomprehensible sounds 3 = Inappropriate Cries 4 = Confused 5 = Oriented Values for Infant: 1 = No Response 2 = Moans to Pain 3 = Cries to Pain 4 = Irritable Cries 5 = Coos, Babbles			

SCENEMOTOR	Imputed or Original Lowest Glasgow Motor Component At The Scene Imputation rule for missing values: GCS Motor=1 when GCS total = 3 GCS Motor=6 when GCS total = 15 GCS Motor = GCS total minus the sum of GCS Eye and GCS verbal.	Numeric	10	Values for Adults (>5 yrs old): 1 = None 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 Values for Infants and Children: 1 = None 2 = Extension to pain (decerebrate) 3 = Abnormal flexion (decorticate) 4 = Withdraws to pain 5 = Withdraws to touch 6 = Normal Spontaneous Movement	2002-2006	2007	
SCENETOTAL	Imputed or Original Glasgow Coma Scale Total At The Scene Imputation rule for missing values: GCS Total = sum of GCS Eye, GCS Motor and GCS verbal.	Numeric	10	Any integer between 3 and 15.	2002-2006	2007	

EDSYSBP	Imputed or Original first systolic blood pressure value in the ED of the Imputation rule for missing values: A Systolic blood pressure of 0 was imputed when patient's discharge disposition from ED/Hospital was DOA (Dead on Arrival)	Numeric	10	Any integer between 0 and 300.	2002-2006	2007	
EDRESPRATE	Imputed or Original First Unassisted Respiratory Rate In ED Imputation rule for missing values: A Systolic blood pressure of 0 was imputed when patient's discharge disposition from ED/Hospital was DOA (Dead on Arrival)	Numeric	10	Any integer between 0 and 99.	2002-2006	2007	
EDGCSEYE	Imputed or Original Lowest Glasgow Eye Component In ED Imputation rule for missing values: GCS Eye=1 when GCS total = 3 GCS Eye=4 when GCS total = 15 GCS Eye = GCS total minus the sum of GCS verbal and GCS motor.	Numeric	10	Values for Adults (> 5 yrs old): 1 = None 2 = Pain 3 = Voice 4 = Spontaneous Values for Children and Infants: 1 = No Response 2 = Pain 3 = Verbal Stimuli 4 = Spontaneous	2002-2006	2007	

EDGCSVERB	Imputed or Original Lowest Glasgow Verbal Component In ED Imputation rule for missing values: GCS Verbal=1 when GCS total = 3 GCS Verbal=5 when GCS total = 15 GCS Verbal = GCS total minus the sum of GCS Eye and GCS motor.	Numeric	10	Values for Adults (>5 yrs old): 1 = None 2 = Incomprehensible words 3 = Inappropriate Words 4 = Confused 5 = Oriented Values for Child: 1 = No Response 2 = Incomprehensible sounds 3 = Inappropriate Cries 4 = Confused 5 = Oriented Values for Infant: 1 = No Response 2 = Moans to Pain 3 = Cries to Pain 4 = Irritable Cries 5 = Coos, Babbles	2002-2006	2007	

EDGCSMOTOR	Imputed or Original Lowest Glasgow Motor Component In ED Imputation rule for missing values: GCS Motor=1 when GCS total = 3 GCS Motor=6 when GCS total = 15 GCS Motor = GCS total minus the sum of GCS Eye and GCS verbal.	Numeric	10	Values for Adults (>5 yrs old): 1 = None 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 Values for Infants and Children: 1 = None 2 = Extension to pain (decerebrate) 3 = Abnormal flexion (decorticate) 4 = Withdraws to pain 5 = Withdraws to touch 6 = Normal Spontaneous Movement	2002-2006	2007	
EDGCSTOTAL	Imputed or Original Glasgow Coma Scale Total In ED Imputation rule for missing values: GCS Total = sum of GCS Eye, GCS Motor and GCS verbal.	Numeric	10	Any integer between 3 and 15.	2002-2006	2007	

FIMFEED	Imputed or Original FIM Self-feeding Score At Discharge Imputation rule for missing values: FIM Feeding=1 when FIM total = 3 FIM Feeding =4 when GCS total = 12 FIM Feeding = FIM total minus the sum of FIM Locomotion and FIM Express.	Numeric	10	1 = Dependent-Total Help Required 2 = Dependent-Partial Help Required 3 = Independent with Device 4 = Independent 8 = Not Applicable (e.g., < 7 yrs. old or died)	2002-2006	2007	
FIMLOCOMT	Imputed or Original FIM Locomotion Score At Discharge Imputation rule for missing values: FIM Locom=1 when FIM total = 3 FIM Locom =4 when GCS total = 12 FIM Locom = FIM total minus the sum of FIM Feeding and FIM Express.	Numeric	10	1 = Dependent-Total Help Required 2 = Dependent-Partial Help Required 3 = Independent with Device 4 = Independent 8 = Not Applicable (e.g., < 7 yrs. old or died)	2002-2006	2007	

FIMEXPRESS	Imputed or Original FIM Expression Score At Discharge Imputation rule for missing values: FIM Express=1 when FIM total = 3 FIM Express =4 when GCS total = 12 FIM Express = FIM total minus the sum of FIM Feeding and FIM Locomotion.	Numeric	10	1 = Dependent-Total Help Required 2 = Dependent-Partial Help Required 3 = Independent with Device 4 = Independent 8 = Not Applicable (e.g., < 7 yrs. old or died)	2002-2006	2007	
FIMTOTAL	Imputed or Original Total FIM Score Imputation rule for missing values: FIM total =sum of FIM Feeding, FIM FIM Locomotion, and FIM Express.	Numeric	10	Any integer between 1 and 12.			

File Name: RDS_INTUB
Definition: Information about intubation performed either at the scene or in the ED.
Frequency: Unlimited number of records per incident record.
Notes: Available for RDS Admission Years 2002-2006.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to the RDS (Admission Year)	Date Removed from the RDS (Admission Year, if applicable)	Notes
INC_KEY	Incident Key	Numeric	10		2002-2006	2007	
INTUB_LOC	Location of where	Character	16	"Scene", "ED"	2002-2006	2007	

	intubation took place						
INTUB_TYPE	Intubation Type. Indicates the type of mechanical or surgical airway placed.	Character	35	"Cricothyrotomy", "ETT Route Not Recorded", "Nasal ETT", "No Airway Placed", "Not Done/Not Documented", "Oral ETT", "Tracheostomy", "Tracheostomy/ Cricothyrotomy","Unintentional Esophageal Intubation"	2002-2006	2007	

File Name: RDS_MECHDESC
Definition: Look-up table for the mechanism of injury
Frequency: One record per mechanism code.
Notes: Available for RDS Admission Years 2002-2006. Subsumed by RDS_ECODE and RDS_ECODEDESC in later years.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
ECODE	External-cause-of-injury code	Character	5		2002-2006	2007	
PASSENGER	Indicates if patient was passenger	Character	1	"Y"	2002-2006	2007	
DESCR	E-code description	Character	254		2002-2006	2007	
MECH_CDC	CDC external cause of injury	Character	50	See External Cause Matrix on website	2002-2006	2007	
INTENT	Intent of injury	Character	30	"Assault", "Other", "Self-Inflicted", "Undetermined", "Unintentional"	2002-2006	2007	

File Name: RDS_PREHPROC
Definition: Information pertaining to the procedure prior to arriving at the hospital.
Frequency: Unlimited per incident record.
Notes: Available for RDS Admission Years 2002-2006.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
INC_KEY	Incident Key	Numeric	10		2002-2006	2007	
PREHOSPPRO	Information pertaining to the pre-hospital procedure information	Character	50		2002-2006	2007	

File Name: RDS_PROCEDUR
Definition: Information pertaining to the procedure performed for a trauma incident.
Frequency: Unlimited per incident record.
Notes: Available for RDS Admission Years 2002-2006. RDS_PCODE in later years.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
INC_KEY	Incident Key.	Numeric	10		2002-2006	2007	
PCODE	ICD-9-CM Code of Procedure. The ICD-9-CM code that describes the procedure.	Character	7		2002-2006	2007	
YOPROC	Year the patient underwent the operation or procedure.	Numeric	15		2002-2006	2007	

PROC_TIME	The time the patient underwent the operation or procedure.	Character	5		2002-2006	2007	
DAYTOPROC	The number of days after ED arrival the procedure was done.	Numeric	15	DAYTOPROC is 0 for procedures occurring on same day as ED arrival.	2002-2006	2007	
HOURTOPRO	The number of hours within ED arrival that procedure was done.	Numeric	15	Calculated hours are rounded up to closest integer.	2002-2006	2007	

File Name: RDS_PROCEDUREDESC
Definition: Look-up table for the procedure performed for a trauma incident.
Frequency: One record per procedure record.
Notes: Available for RDS Admission Years 2002-2006. RDS_PCODEDESC in later years.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
PCODE	The ICD-9-CM code that describes the procedure.	Character	7		2002-2006	2007	
PCODEDESCR	Description pertaining to the ICD-9-CM Code of Procedure.	Character	255		2002-2006	2007	

File Name: RDS_SAFETY
Definition: Information pertaining to the safety equipment used/worn at time of the injury.
Frequency: Unlimited per incident record.
Notes: Available for RDS Admission Year 2002-2006. RDS_PROTDEV in later years.

Field Name	Definition	Data Type	Length	Standard Option	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
INC_KEY	Incident Key	Numeric	10		2002-2006	2007	
SAFETY_DES	Safety equipment used. Identifies the protective/safety device(s) in use or worn by the patient at the time of injury.	Character	25		2002-2006	2007	

File Name: RDS_SCENE
Definition: Includes information pertaining to the scene of the trauma incident.
Frequency: One record per incident.
Notes: Available for RDS Admission Year 2002-2006. Subsumed by RDS_ED in later years.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
INC_KEY	Incident Key (Primary key to identify an incident)	Numeric	10		2002-2006	2007	
YOINJ	Year of Injury	Numeric	5		2002-2006	2007	
INJURYCOU	Country In Which Injury Occurred	Character	30		2002-2006	2007	

HOSPTRANS	Inter-hospital Transfer	Character	50	"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"	2002-2006	2007	
WORKREL	Work Relatedness Of Injury	Character	15	3 = Paid Work (Work Related) 4 = Unpaid Work (Non-work related) 99 = Unknown	2002-2006	2007	
INJURYSITE	Site At Which Injury Occurred	Character	50	Home Farm Mine and Quarry Industrial Places and Premises Place for Recreation and Sport Street and Highway Public Building Residential Institution Other Specified Places Unspecified Places	2002-2006	2007	
SCENEEYE	Lowest Glasgow Eye Component At The Scene	Numeric	10	Values for Adults (> 5 yrs old): 1 = None 2 = Pain 3 = Voice 4 = Spontaneous Values for Children and Infants: 1 = No Response 2 = Pain 3 = Verbal Stimuli 4 = Spontaneous	2002-2006	2007	

SCENEVER	Lowest Glasgow Verbal Component At The Scene	Numeric	10	Values for Adults (>5 yrs old): 1 = None 2 = Incomprehensible words 3 = Inappropriate Words 4 = Confused 5 = Oriented Values for Child: 1 = No Response 2 = Incomprehensible sounds 3 = Inappropriate Cries 4 = Confused 5 = Oriented Values for Infant: 1 = No Response 2 = Moans to Pain 3 = Cries to Pain 4 = Irritable Cries 5 = Coos, Babbles	2002-2006	2007	

SCENEMOTOR	Lowest Glasgow Motor Component At The Scene	Numeric	10	Values for Adults (>5 yrs old): 1 = None 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 9 = Not Done/Not Documented Values for Infants and Children: 1 = None 2 = Extension to pain (decerebrate) 3 = Abnormal flexion (decorticate) 4 = Withdraws to pain 5 = Withdraws to touch 6 = Normal Spontaneous Movement 9 = Not Done/Not Documented	2002-2006	2007	

SCENEGCSAQ	GCS Assessment Qualifier At The Scene	Character	27	"L" = Initial GCS components at scene are legitimate values, without interventions such as intubation and sedation. "S" = Patient chemically sedated when initial GCS components assessed at scene. "T" = Patient intubated when GCS components assess at scene. "TP" = Patient intubated and chemically paralyzed when GCS components assessed at scene	2002-2006	2007	
SCENETOTAL	Glasgow Coma Scale Total At The Scene	Numeric	10	Any integer between 3 and 15.	2002-2006	2007	
INJURYTYPE	Injury Type	Character	10	"Blunt" , "Burn" , "Penetrating"	2002-2006	2007	
FAC_KEY	Facility Key	Numeric	10		2002-2006	2007	

File Name: RDS_PCODE
Definition: ICD-9-CM and ICD-10-CM procedure codes
Frequency: Multiple records per incident
Notes: Available for RDS Admission Years 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016. Replaces RDS_PROCEDUR.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values Allowed	2007	None	
ICD-9-CM Procedure Code (PCODE)	ICD-9-CM Procedure Code	String	5		2007	None	
ICD-10-CM Procedure Code (ICD10_PCODE)	ICD-10-CM Procedure Code	String	7		2015	None	
Year of Procedure (YOPROC)	Year in which the procedure occurred	String	100	2006, 2007	2007	None	
Days to Procedure (DAYTOPROC)	Number of days until the beginning of procedure	String	10	1-364	2007	None	
Hours to Procedure (HOURTOPRO)	Number of hours until the beginning of procedure	String	10	1 - 8736 (364 days)	2007	None	
Procedure Start Time (PROC_TIME)	Time when the procedure began	String	14	00:00 to 24:00	2007	2011	Has been removed from all datasets issued after September 2015

File Name: RDS_PCODEDES
Definition: Look-up table for ICD-9-CM Procedure Codes
Frequency: One record per procedure code
Notes: Available for RDS Admission Years 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016. Replaces RDS_PROCEDUREDESC.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
ICD-9-CM Procedure Code (PCODE)	ICD-9-CM Procedure Code	String	5		2007	None	
Procedure Description (PCODEDESCR)	Descriptor for procedure codes	String	100		2007	None	

File Name: RDS_PROTDEV
Definition: Information on protective devices
Frequency: Multiple records per incident
Notes: Available for Admission Years 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016. Replaces RDS_SAFETY.

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values Allowed	2007	None	
Protective Device Description (PROTDEV)	Descriptor for protective devices	String	100		2007	None	
Airbag Description (AIRBAG)	Descriptor for airbags	String	100		2007	None	

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Child Restraint Description (CHILDRES)	Descriptor for child restraints	String	100		2007	None	

File Name: RDS_ TRANSPORT
Definition: Information on mode of transportation to the ED
Frequency: Multiple records per incident
Notes: Available for RDS Admission Years 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values Allowed	2007	None	
Transport Type (TRANTYPE)	Type of Transportation	String	7	Primary Other	2007	None	Indicates either primary or other mode of transportation
Transportation Mode (TMODE)	Mode of Transportation	String	10		2007	None	

File Name: RDS_VITALS
Definition: Information on patient vital signs for both EMS and ED
Frequency: Multiple records per incident
Notes: Available for RDS Admission Years 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016

Field Name	Definition	Data Type	Length	Valid Values	Date Added to RDS (Admission Year)	Date Retired from RDS (Admission Year, if applicable)	Notes
Incident Key (INC_KEY)	Unique identifier for each record	Numeric	10	No Null Values allowed	2007	None	
Vital Type (VSTYPE)	Type of vital sign: EMS or ED	String	3	EMS ED	2007	None	
Systolic Blood Pressure (SBP)	Systolic blood pressure	Numeric	5	0-299	2007	None	
Pulse Rate (PULSE)	The patient's pulse rate	Numeric	5	0-299	2007	None	
Respiratory Rate (RR)	The patient's respiratory rate	Numeric	5	0-99	2007	None	
Pulse Oximetry/Oxygen Saturation (OXYSAT)	First recorded oxygen saturation in the ED or hospital	Numeric	5	0-100	2007	None	
Supplemental Oxygen (SUPPOXY)	Determination of the presence of supplemental oxygen during assessment of ED/hospital saturation	String	15	"Supplemental Oxygen" "No Supplemental Oxygen"	2007	None	

Temperature (TEMP)	The patient's temperature in Centigrade	Numeric	5	0-45	2007	None	
Glasgow Coma Scale: Eye (GCSEYE)	First recorded Glasgow Coma Score (Eye)	Numeric	5	1 to 4; See the NTDS data dictionary for detail	2007	None	
Glasgow Coma Scale: Verbal (GCSVERB)	First recorded Glasgow Coma Score (Verbal)	Numeric	5	1 to 5; See the NTDS data dictionary for detail	2007	None	
Glasgow Coma Scale: Motor (GCSMOT)	First recorded Glasgow Coma Score (Motor)	Numeric	5	1 to 6; See the NTDS data dictionary for detail	2007	None	
Glasgow Coma Scale Total (GCSTOT)	First recorded Glasgow Coma Score (total)	Numeric	5	Range is from 3-15	2007	None	
Glasgow Coma Scale Assessment Qualifier 1 (GCS_Q1)	Assessment Qualifier for Total GCS Score 1	String	100	See the NTDS data dictionary for detail	2007	None	Added 2010 Current
Glasgow Coma Scale Assessment Qualifier 1 (GCS_Q2)	Assessment Qualifier for Total GCS Score 1	String	100	See the NTDS data dictionary for detail	2007	None	Added 2010 Current
Glasgow Coma Scale Assessment Qualifier 1 (GCS_Q3)	Assessment Qualifier for Total GCS Score 1	String	100	See the NTDS data dictionary for detail	2007	None	Added 2010 Current

Respiratory Assistance Description (RRAQ)	Respiratory assistance assessment qualifier	String	100	"Unassisted Respiratory Rate" "Assisted Respiratory Rate"	2007	None	Added 2010 Current
Supplemental Oxygen Description (OXYGAQ)	Supplemental oxygen (intubation) qualifier	String	100				Added 2010 Removed 2012

NTDB RESEARCH DATA SET FREQUENTLY ASKED QUESTIONS

What are the system requirements of downloading the NTDB?

- Minimum of 10 GB of disk space for data files (CSV, DBF, or SAS)
- Minimum of 1GB of RAM strongly recommended

Is the data set HIPAA compliant or confidential?

- Yes, the data set is de-identified and no protected health information is provided.
- To further limit possible identification of hospitals or patients, facilities that have patient counts of less than 30 have been removed from the dataset and all datasets issued after July 2015 have certain facility characteristics that are grouped.
- NTDB data are maintained in a secure database with limited internal access. External users must gain permission to the database and data; users are then supplied data at the aggregate level only. Use of NTDB data is in strict compliance with the Health Insurance Portability and Accountability Act of 1996 (HIPAA).[7] The NTDB does not distribute or report hospital information in any manner that allows the reporting hospital to be identified without the express written permission of the hospital. The dataset collected by NTDB is considered a limited dataset under HIPAA.

Can I estimate the number of trauma patients in the US based on NTDB?

- The NTDB is an incident-based database and there are no patient identifiers in the database. If a patient has more than one trauma incident during an admission year, this patient will be in the database twice.

How can I merge the data sets in NTDB?

- The NTDB data files can be merged by using the unique incident key for each incident (inc_key).
- Facility data can be merged onto patient demographic data by using the unique facility key (fac_key).

What are the differences between the file types (CSV, DBF, SAS)

- SAS files are standard SAS data tables.
- CSV files are comma separated value files and DBF files are from the FoxPro database format. Some statistical packages will handle one file type better than the other. We are aware that SAS handles CSVs inconsistently when using PROC IMPORT. Please use caution and check your datasets prior to analysis, including checking variable values against the variable list.
- The inconsistencies include: truncation of values, and changing of variable type (numeric to character). We are working to improve these inconsistencies, but strongly recommend the use of DBF files with SAS.

What are the patient inclusion criteria for the NTDB?

- All patients with ICD-9-CM diagnosis 800.00–959.9
    - Excluding 905-909 (late effects of injury)
    - Excluding 910-924 (blisters, contusions, abrasion, and insect bites)
    - Excluding 930-939 (foreign bodies)
    - AND who were admitted; or died after receiving any evaluation or treatment; or were dead on arrival.

Why are there negative values for certain variables when there should not be any?

- Negative values represent BIU (Blank, Inappropriate, Unintentional) values and represent null values. The BIU values for numerical values are coded with the numbers -2 and -1 and are represented in text for character fields. It is recommended to either exclude or set these values to missing before doing any statistical analyses of these values.

There are multiple types of Injury Severity Scores (ISS) in the RDS_ED file, which one do I use?

There are four different Injury Severity Scores (ISS) in NTDB:

- **ISSLOC** is the ISS submitted by the hospital to NTDB and no further changes are made to this value.
- **ISSAIS** is the ISS score that is derived from the AIS scores submitted by the hospitals.
- **ISS98** is the ISS score that has been derived from a mapping of existing AIS codes to AIS98 for consistency.
- **ISSICD** is derived from the AIS score that is calculated from the ICD/AIS map, ICDMAP-90, 1995 update (computer program: ICODERI.DLL, Windows version. Johns Hopkins University, 1997.) Each injury is allocated to one of six body regions based on the Abbreviated Injury Scale (AIS) score according to:

    1. Head or neck
    2. Face
    3. Chest
    4. Abdominal or pelvic contents
    5. Extremities or pelvic girdle
    6. External

The 3 most severely injured body regions have their AIS severity score squared and added together to produce the ISS score. Only the highest AIS score in each body region is used.

There are multiple types of Abbreviated Injury Scale (AIS) score files in the dataset. Which one do I use?

Three Abbreviated Injury Scale scores are included in NTDB.

- RDS_*AISPCODE* is the AIS score that is submitted to the NTDB for the trauma diagnosis.
- RDS_*AISCCODE* is the AIS score that is calculated from the ICDMAP90 crosswalk for the trauma diagnosis and
- RDS_*AIS98PCODE* (2010 and later years) which contains AIS codes that have been mapped or "crosswalked" to a common AIS 98 code for consistency.

I am finding inconsistencies between fields, how do I decide what data to include?

- For information on valid values for each variable, consult the variable description list and the NTDS Data Dictionary. It is equally important that the researcher makes sure that the data that are used for analyses are consistent and valid for their purpose Data cleaning is limited when it comes to consistencies between variables in order to avoid incorrectly deleting values. That is, there are instances where the ICU length of stay (ICUDAYS) is greater than the total hospital length of stay (LOSDAYS) and it is up to the researchers to decide how to use that information.

Where can I find the external cause of injury and what information about external cause codes is available in the data set?

- The RDS_ECODE table includes the primary (first-listed) ICD-9 external cause of injury code. There are two ICD-9 external-cause-of-injury codes per incident. Please see the injury intentionality matrix for more information.

Where can I find the diagnosis? How many diagnoses per incident are available in the data set?

The RDS_DCODE table includes all of the ICD-9-CM Codes of Diagnosis for each incident. The AISPCODE, AIS98PCODE, AISCCODE, (and AISCODE in early versions) tables include all the AIS codes for each incident. These diagnosis codes are not listed in hierarchical order and there is no way to identify the principal diagnosis.

What data cleaning was performed on the dataset before release?

Logical inconsistencies and out of range values were corrected in the dataset by replacing the values with the appropriate common null value.
Vent days > LOS are set to BIU -2
ICU days > LOS are set to BIU -2
ED or LOS times > 364 days are set to BIU -2.
EMS times > 28 days set to BIU -2.
YOADMIT or YOPROC that are greater than the admission year are set to BIU -2.
YOINJ greater than two years from the admission date is set to BIU -2
YOBIRTH that is equal to or less than the admission year is set to BIU -2
YOINJ that is greater than the admission year is set to BIU -2

HISTORY OF THE NTDB®

Injury remains a public health problem of vast proportions, although much has been done to reduce its incidence and mitigate its effects. A report from the Institute of Medicine (IOM) has stressed the need for accountability in all phases of emergency care systems, and called for measurements of quality that "evaluate the performance of individual providers within the system, as well as that of the system as a whole."[1]

As part of their pioneering work in the development of trauma centers during the 1970's, Boyd and colleagues developed a hospital trauma registry for research and monitoring.[2] As trauma centers and personal computers became more widespread, the use of registries grew to include entire trauma systems,[3] and standards were developed at a national level.[4] Starting in 1982, the American College of Surgeons Committee on Trauma (ACSCOT) coordinated the Major Trauma Outcome Study (MTOS), which until recently served as a standard reference database of seriously injured patients in the United States, and was the basis for many of the analytic methods that have become familiar to trauma surgeons.[5]

At the conclusion of MTOS in 1989, the ACSCOT renewed its commitment to trauma research and quality improvement by developing trauma registry software, with the intention that multiple users of this product could combine their results to produce a national database. After several years of slow progress, a recommendation was made to separate the development of a national database from the development of registry software.[6] This recommendation was implemented in 1997, and a subcommittee was established to direct the National Trauma Data Bank (NTDB), which would combine data from various trauma registry products.

Currently, the NTDB contains detailed data on over six million cases from over 900 registered U.S. trauma centers and launched the Trauma Quality Improvement Program (TQIP) in 2010. The data have been shared with hundreds of researchers, and numerous articles have been published based upon the NTDB. The annual NTDB Call for Data (CFD) occurs each spring and all hospitals with trauma registries are encouraged to participate. After the conclusion of the CFD, the data are cleaned and summarized in the NTDB Annual Report and distributed in September. The National Trauma Data Bank has adopted the National Trauma Data Standard (NTDS) as the basis for data collection. The NTDS is a standardized definition of the trauma injury information submitted to the NTDB by participating hospitals (see www.ntdsdictionary.org).

Additional information about the NTDB, TQIP, annual reports, and this user manual is available at www.ntdb.org.

LIMITATIONS OF NTDB DATA

1. NTDB data quality

Data quality of the NTDB is dependent on how well the NTDS is implemented for the data submitted by the individual hospital. The NTDB is continually cleaning and standardizing the data to improve data quality. Data files received from contributing hospitals are screened upon submission by the Validator, NTDB's edit check program (see Appendix 2 of the NTDS Data Dictionary). Any files receiving policy level errors, level 1

or level 2 flags are rejected for resubmission after corrections are made. Level 3 and 4 flags function as logical consistency checks and are optional to correct. For more information on validation and error checks, please see the NTDS Data Dictionary.

2. Selection and information bias

As a "convenience sample," the NTDB is subject to various forms of bias. The NTDB data are submitted voluntarily from hospitals that have shown a commitment to monitoring and improving the care of injured patients. These may not be representative of all hospitals, and have not been systematically selected to represent any population base. By definition, cases not admitted to a hospital will not be included in the NTDB, including injury victims who die before they can be transported to a hospital. Hospitals may have differing criteria for including deaths on admission, deaths in the Emergency Department, or other cases, which should be evaluated before making comparisons.

Some of the theoretical issues resulting from the use of trauma registries to assess institutional performance were discussed as part of the Skamania Symposium on Trauma Systems in 1998.[8-10] The most obvious problems are selection bias, inconsistency in the measurement of clinical variables, and inter-hospital differences other than quality of care. MTOS was limited to selected trauma centers and utilized centralized coding to maximize the consistency of data, while NTDB has become more inclusive and depends on decentralized data entry at contributing hospitals.

The variability in trauma registry inclusion criteria across the country has been noted, [11] and the ACSCOT has participated in the resulting national effort to standardize data elements for trauma registries. Focused review of "outlier" hospitals is expected to reveal differences in data entry and patient inclusion criteria that could be made more uniform before concluding that outcome differences among hospitals are truly related to differences in care.

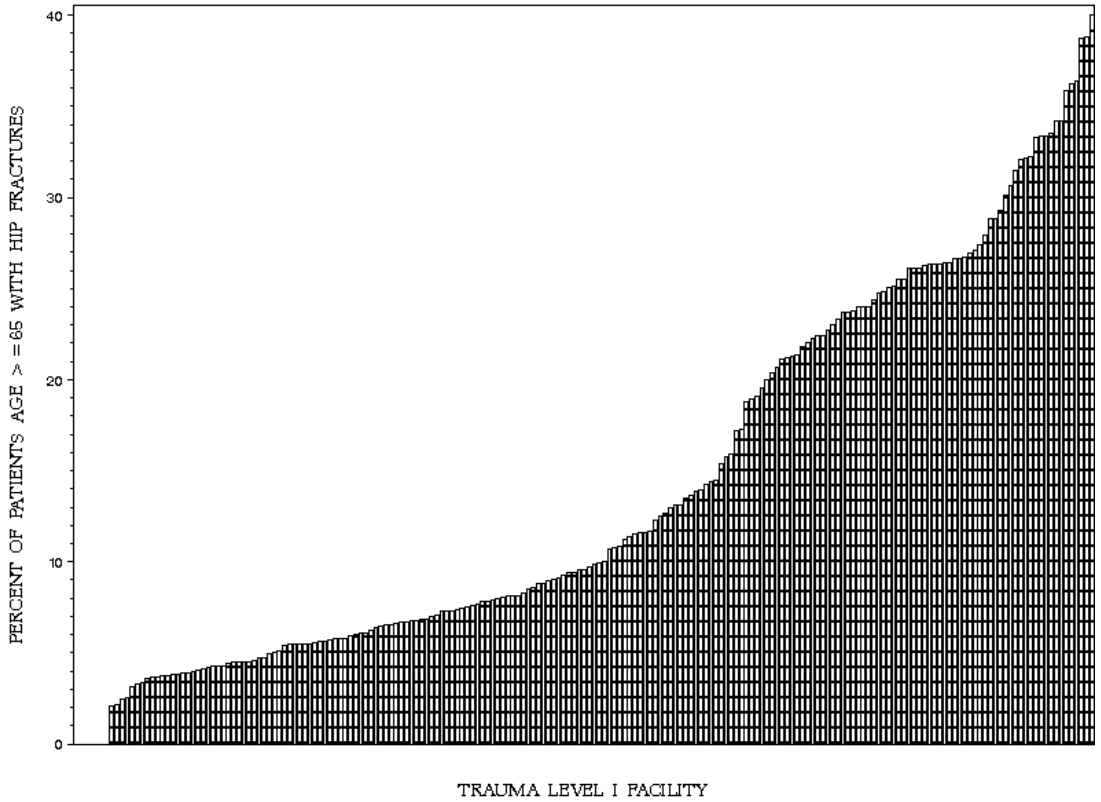
Selection bias refers to an apparent difference between two groups that is actually caused by different inclusion criteria. For example, if one trauma center includes isolated hip fractures in its registry and another does not, and if mortality for this injury is lower than for other injuries with the same severity score, the hospital that included isolated hip fractures will appear to have a lower "risk-adjusted" mortality. Any difference in inclusion/exclusion criteria could produce a selection bias.

The NTDB data have been evaluated with respect to several possible sources of selection bias, including the inclusion of hip fractures or transferred patients. Hip fractures comprise about 45% of injuries requiring hospitalization in the U.S. population over age 65.[12] As mentioned above, a difference in the mortality for this population could produce an apparent difference in overall mortality depending whether or not they were included. Some surgeons consider hip fractures a degenerative disease rather than trauma and believe that the effort to gather data on this population may not be worthwhile for quality improvement by their trauma services. The average percentage of patients over 65 with hip fractures (ICD-9-CM code 820, AIS codes 850699.1, 850606.1, 850610.2, 850614.2, 850618.2) in the NTDB ranges between for the 201 trauma level I centers ranges between 0 - 40% (Figure 1).

Patients transferred from one institution to another have obviously been able to survive an initial resuscitation, but the reason for transfer is often that the injuries are more severe or that other risk factors are present. Transferred patients thus represent a different population from those admitted directly. The proportion of patients in NTDB Admission Year 2012 which were transferred into or out of level I trauma centers ranges drastically (Figure 2).

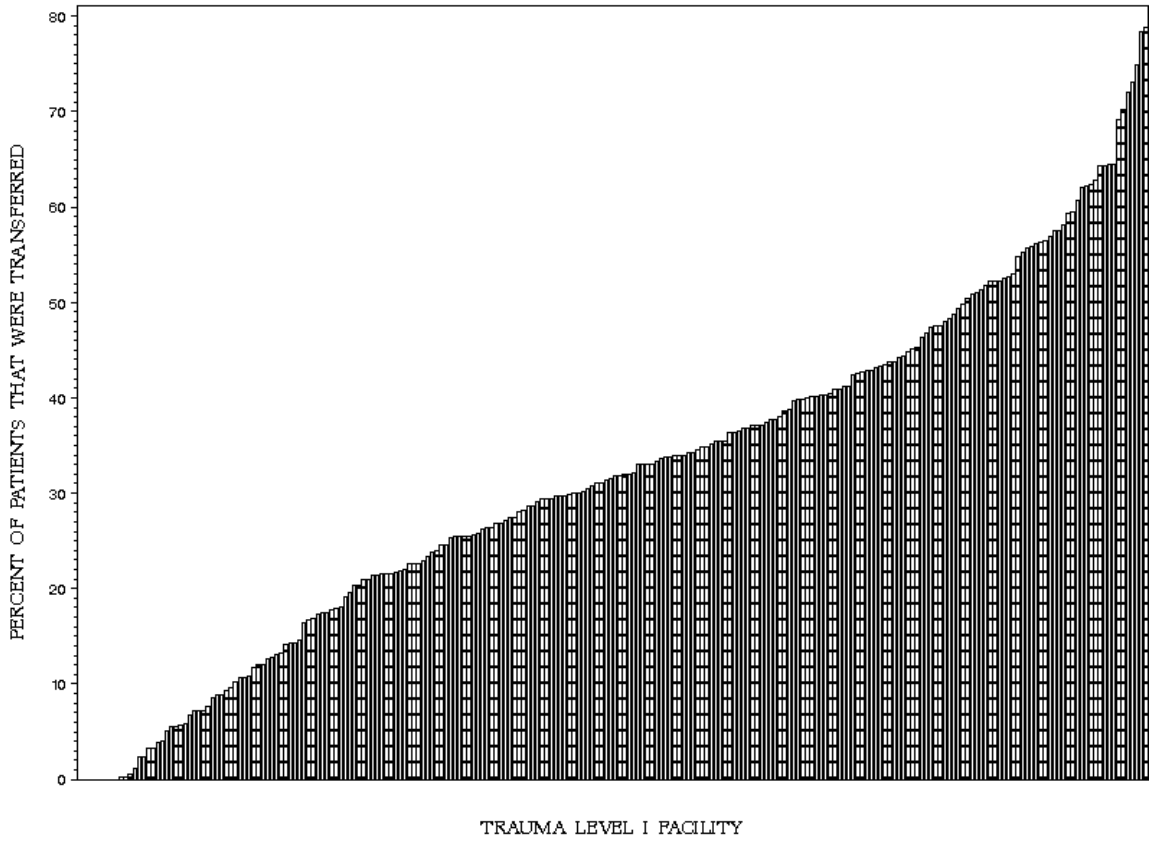
When analyzing NTDB data we encourage researchers to be aware of the limitations of a non-population based dataset and create and specify inclusion criteria for their analysis in order to create a homogenous population. For certain types of analysis, a given injury (e.g., hip fractures) could either be excluded or analyzed separately; another approach would be to designate cases included by some but not all hospitals using an indicator term (0 if absent, 1 if present) added to a regression equation. For some analyses, all the data from hospitals with excessive missing or unreliable data might be excluded. These decisions are the most difficult part of conducting research, and require good judgment and scientific honesty more than computing skill or mathematical training.

Figure 1: Percent of incidents for patients ≥ 65 with hip fractures.



Note: 7 trauma centers out of the 201 level I trauma centers had 0% incidents with hip fractures in patients over 65 years old and were not included in the figure.

Figure 2: Percent of patients that were transferred in per facility for level I trauma centers.



Note: 9 trauma centers out of the 234 level I trauma centers had 0% incidents transferred in and were not included in the figure.

Information bias refers to an apparent difference between two groups that is actually caused by a difference in the data available to compare them. With regard to certain fields, differences in the proportion of cases with missing data may be responsible for apparent differences among hospitals. Lucas et al, have found that injury severity scores are calculated differently by different registry programs.[13] To account for this, NTDB primarily uses an ISS score that uses AIS 98 as the common denominator. The AIS 98 Crosswalked ISS retains AIS 98 scores for hospitals that submit it and converts AIS 2005 scores to AIS 98. For facilities that do not submit either AIS 98 or AIS 2005, the ICDMAP-90 AIS score is substituted. In older data (prior to 2010), the NTDB exclusively used ICDMAP-90 data that is based on the ICD-9-CM codes that are required by NTDB. There is a high amount of variability in AIS version between hospitals. In an attempt to regulate the quality of injury data, the NTDB will require AIS 2005 data for all admissions beginning in January 2016.

4. Missing data in NTDB

The proportion of missing data varies across data elements in the NTDB with most the missingness occurring in pre-hospital data with a concentration on times. Researchers should develop a plan to deal with missingness before conducting analysis.

In most cases NTDB data are not missing at random. If missing data are ignored, then analyses are subject to bias and results may be misleading when excluding all observations with missing data. Excluding observations with missing values is the default for most software programs when running statistical analyses.

Another option is to provide plausible values for the missing data, by either single or multiple imputation. Single imputation of a value may be an educated guess at the value, substitution of the mean value, or substitution based on a regression equation using other (observed) values. For example, one can assume that the verbal component of the Glasgow Coma Scale (GCS) for intubated patients would be approximately the same as for non-intubated patients with the same Motor and Eye GCS.[14]

Most statistical software packages have the ability to impute values, however, it is important to explore the impact of missing data with sensitivity analyses by repeating the analysis with and without imputation to detect important differences.

PUBLICATIONS

In addition to the studies specifically cited above, we are pleased to note the increasing number of publications utilizing the NTDB, a listing of which we try to keep updated on our website. We recognize that the quality of these studies is variable, and that some of them fail to acknowledge the limitations we have described above. We request that researchers using NTDB notify us of any publications, and hope that the criticism of these studies will also help us find ways to improve the quality of the database. Authors should be aware that the following recommendations have been provided to the editors of journals most likely to publish articles based upon NTDB data:

Recommendations for Peer Review of Studies using the NTDB
(From the NTDB Subcommittee, ACS Committee on Trauma, March 2007)

The ACS Committee on Trauma does not presume or desire to involve itself directly in the editorial process by which manuscripts are selected for publication. However, we do wish to inform this process and maximize the quality of these publications by making editors and reviewers aware of the obligations of licensees to the National Trauma Data Bank (NTDB®), as well as some of the technical issues posed by research involving this database.

Licensees have agreed to include a statement in their manuscripts acknowledging that "the NTDB remains the full and exclusive copyrighted property of the American College of Surgeons. The American College of Surgeons is not responsible for any claims arising from works based on the original Data, Text, Tables, or Figures."

Licensees have further agreed to include language indicating which version of the NTDB (e.g., Version 6.1 issued in January 2007) they are using. This is important since the database is updated frequently, and other researchers should be provided with sufficient information to allow replication of the findings using the same data set.

The NTDB files provide only general information about contributing institutions, such as trauma center verification status and categorical number of beds. We and our licensees are committed to maintaining the confidentiality of contributing institutions and patients as mandated by federal law. Studies claiming to add information about hospitals or patients from sources outside the NTDB should therefore be evaluated with great caution. Reviewers may wish to verify assertions about the characteristics of contributing hospitals against the characteristics actually available in the research data set.

Like any large database, the NTDB does not have complete data for all cases; therefore authors should be expected to state how they dealt with missing data (exclusion, imputation, etc.). Similarly, the NTDB is not a population-based dataset; therefore statements about the incidence of specific conditions are inappropriate if based only on NTDB data. A Reference Manual, which describes these and other sources of potential bias inherent to the NTDB, has been provided to all researchers with the database files. Reviewers are advised to look for explicit discussion of these biases and their possible effects on the analysis.

CONTACT INFORMATION

For further assistance in using the NTDB Research Dataset contact the NTDB at ntdb@facs.org.

For more information about the NTDB, TQIP, and publications related to either program, visit www.ntdb.org and www.acstqip.org.

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RESOURCES

THE BARELL INJURY DIAGNOSIS MATRIX, CLASSIFICATION BY BODY REGION AND NATURE OF INJURY

GROUPING FOR PRESENTING INJURY MORTALITY AND MORBIDITY DATA

SAMPLE SAS AND STATA CODE