

Tri-State Trauma Coalition Trauma Registry

Data Dictionary Instruction Manual

Tri-State Trauma Coalition
2100 Sherman Avenue
Cincinnati, Ohio 45212

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OVERVIEW

INTRODUCTION

The Tri-State Trauma Coalition (TSTC) was formally established in 1999. It is the evolution of a group of local physicians and health care professionals, fire chiefs, and county/city health departments formerly known as the Regionalized Trauma System Task Force and Tri-State Trauma Coalition Committee. Board members currently include health care representatives from:

- ◆ Academy of Medicine, Cincinnati, Ohio
- ◆ Childrens Hospital Medical Center, Cincinnati Ohio
- ◆ Greater Cincinnati Health Council, Cincinnati Ohio
- ◆ The Health Alliance, Cincinnati, Ohio
- ◆ Mercy Health Partners, Cincinnati, Ohio
- ◆ Middletown Regional Hospital, Middletown Ohio
- ◆ Tri-Health, Inc., Cincinnati, Ohio

TSTC is a subsidiary of the Greater Cincinnati Health Council. Funding for TSTC is provided by the Childrens Hospital Medical Center, Mercy Health Partners, The Health Alliance, Tri-Health, Inc. and Middletown Regional Hospital. TSTC is operated exclusively for charitable, educational, and scientific purposes and maintains a nonprofit status [Internal Revenue Code 501(c)(3)].

TSTC MISSION

The mission of TSTC is minimize the human suffering and economic costs created by traumatic injury in the tri-state region surrounding Cincinnati. Key goals are:

- Increase public awareness regarding the impact of injury and develop effective strategies to reduce its incidence in a collaborative manner.
- Enhance and integrate pre-hospital, medical, acute care and rehabilitation resources for trauma care through Performance Improvement (PI/QA), education and coordination.
- Foster access to appropriate level of trauma care through public and provider education.

TSTC purpose is to reduce injuries and save lives through prevention, education, data collection, research, and the coordination of trauma services.

The regional registry of TSTC seeks to benefit the public at large and trauma care providers by maintaining demographic, clinical, and outcome data that can be used to improve trauma care and establish trauma prevention programs in Southwestern Ohio, Southeastern Indiana and Northern Kentucky. The TSTC Registry serves as a repository to the State Trauma Registry for area hospitals to facilitate transfer of data as mandated by law. Confidentiality of patients and hospitals will be maintained within the TSTC Registry and when exporting required data to the State.

TSTC DATABASE CONTRIBUTIONS

TSTC Registry database is comprised of information gained by:

- ◆ The voluntary collection and submission of trauma data by participating hospitals, emergency medical service (EMS) agencies, and the Hamilton County Coroner's Office;
- ◆ The collection of data by TSTC staff, vendors, and contractors;
- ◆ Analysis of Registry data by TSTC staff, Executive Committee (Data Oversight Committee); vendors, and/or consultants.

TSTC employees, members, and affiliates are bound by Confidentiality Agreements and Provider Agreements with contributing hospitals. Discussions regarding database contributors will be limited to official registry business. All individual hospital data is strictly confidential.

TRAUMA REGISTRY PATIENT INCLUSION CRITERIA

The definition of a trauma patient for the TSTC Registry includes patients admitted to the hospital emergency department or floor for further evaluation with at least one injury in an ICD-9-CM diagnosis range of 800-959.9 et al (see INCLUSION CRITERIA) **INCLUDING** also:

1. Patients first or initial admission for at least 23 hours, and who meet one of the following inclusion criteria; or
2. Patients who transfer into or out of the hospital, regardless of their length of stay, and who meets one of the following inclusion; or
3. Patients that arrive from a scene or are transferred from outside hospital and are dead on arrival (DOA'S) and who meet one of the following inclusion criteria;(*See Exclusion Criteria) or
4. Patients that die after receiving any evaluation or treatment while on hospital premises, and who meet one of the following criteria;

◆
◆ **INCLUSION CRITERIA**

ICD-9-CM Diagnoses Codes	ICD-9- Diagnoses Descriptions
800.0-819.9	Fractures
821.0-904.9	Fractures, dislocations/sprains, intracranial injury, internal injury of thorax, abdomen and pelvis, open wounds, injury to blood vessels
911.0, 911.1, 9120.0, 912.1	Abrasions/friction burns to trunk, shoulder, and upper arm
916.0, 916.1, 919.0, 919.1	Abrasions/friction burns hip, thigh, leg, ankle, other or multiple sites
920.0-929.9	Contusions and crush injury
940.0-959.9	Burns, injury to nerves and spinal cord, traumatic complications and unspecified injury
OR ANY OF THE FOLLOWING ICD-9-CM Diagnoses Codes	
348.4	Uncal herniation
348.5	Cerebral Edema
348.8	Pneumocephalus
372.72	Subconjunctival hemorrhage
518.5	Traumatic ARDS
784.7	Epistaxis
820.8, 820.9	*Isolated hip fractures
987.9	Smoke Inhalation
991.0-991.6	Frostbite, hypothermia and external effects of cold
994.0, 994.1, 994.7, 994.8	Asphyxiation, strangulation, drowning, and electrocution
995.5-995.59	Child maltreatment and abuse
OR ANY OF THE FOLLOWING E-CODES	
E800 - E848.9	
E877 – E905.0	
E906-E928.8	
E950-E999	
*Isolated hip fractures as the result of a fall from one level to another or pertaining to a collision (820.8, 820.9 in combination with any E-Codes EXCEPT E885. See Exclusion Criteria-Isolated hip fracture	

EXCLUSION CRITERIA

ICD-9-CM Diagnoses Codes EXCLUDED		ICD-9-Diagnoses Descriptions
820.0-820.9		**Isolated hip fractures
905-909		Late effects of injury
910.0-910.9, 911.2-911.7, 912.0-918.9, 919.2-919.7		Blisters, insect bites
930-939		Foreign bodies
E-Codes EXCLUDED		
E849-E849.9	Place of occurrence	
E850-E869.9	Poisonings	
E870-E879.9	***Misadventures during surgical and medical care	
E905-E905.9	Venomous animals and plants *except snakes	
E929-E929.9	Late effects of Accidental injury	
E930-E949	Drugs, medicinal and biological substances causing adverse effects in therapeutic use	
<p>*Patients that are deceased and brought by funeral homes to be pronounced dead.</p> <p>**Isolated hip fractures as the result of slipping, tripping or stumbling occurring on the same level as the patient (820.8, 820.9 in combination with E885).</p> <p>***Patients with ICD-9-CM and/or E-Codes designating injuries and/or complications secondary to medical intervention.</p>		

Codes separated by a hyphen indicate a range of codes including both codes AND all codes in between.
 Example 800.0-801.5
 Codes separated by a comma indicate a single code
 Example 901.1, 901.2, 901.8

All ICD-9-CM diagnosis and E Codes that apply should be included with the individual patient data. Trauma victims may have more than one ICD-9-CM diagnosis and E Code.

INTERFACE WITH THE STATE TRAUMA REGISTRY

TSTC Registry has incorporated all data elements required by the Ohio Trauma Registry which is housed at the Division of EMS Ohio Department of Public Safety (ODPS). A few additional data elements have been added to TSTC Registry in order to gain a more precise picture of trauma specific to the Southwestern Ohio, Southeastern Indiana and Northern Kentucky regions.

Ohio Hospitals are mandated by Ohio Law to submit trauma data to the State Trauma Registry. The Ohio Revised Code allows hospitals to submit data to the State Trauma Registry via regional registries such as TSTC. Tri-state hospitals have the option of authorizing TSTC Registry to deliver their trauma data to the State Registry. Hospitals may choose to submit trauma data to the State Registry and TSTC Registry separately. Hospitals who choose for TSTC to submit their data to the state on their behalf shall sign -a contract ("Provider Agreement") with TSTC denoting their authorization. TSTC Registry is not responsible to the State of Ohio for data not provided by the individual hospitals to TSTC. Data submitted to the State of Ohio Trauma Registry will be downloaded through the State's database by TSTC personnel.

PROVIDING QUALITY DATA

This Data Elements Instruction Manual is a tool to assist health information abstractors and trauma registrars in interpreting the Data Elements for TSTC Registry. (The data elements mandated by the State Trauma Registry are included in TSTC Registry.) Data abstractors may at times interpret certain data fields differently. Quality data is dependent upon accurate and consistent abstracting of data elements by all registry participants. Data abstractors should read this manual in its entirety before beginning data collection.

All abstractors for TSTC Registry should receive an orientation training session before starting data collection. Data abstractors should call TSTC to schedule an orientation session if they have not yet received TSTC training. For tutorial/training related to the computerized database, Trauma Basic, call CDM at the number listed below. Telephone support is available to answer questions or provide additional clarification as needed.

Tri-State Trauma Coalition

Tonda Francis (513) 531-0267
Suzanne Moody (513) 531-0200

CDM-Trauma Basic (303) 670-3331

Ohio CDM Representative:

Kathy Cookman (614) 855-4777

REPORTING DATA TO THE TSTC

Patient data shall be reported to TSTC Registry based on the date of the patient's *discharge* from the hospital or emergency department Data may be submitted to the Registry via CDM Software to TSTC as an e-mail attachment to Suzanne Moody (<mailto:smoody@gchc.org>).

TIME LINE FOR REPORTING: WHEN IS DATA DUE?

The TSTC Registry should have individual hospital data within 45 days after the patient's discharge, death or transfer from a hospital. For example, data from patients discharged in January should be received by the end of February. Data is needed according to this time frame in order to prepare it for export to the State Registry. Data is to the State Registry within 90 days after the patient's discharge, death or transfer from a hospital. TSTC downloads to the State Registry are quarterly per state-mandated deadlines or more often as needed.

Collection Period	Submission Date to TSTC
01/01/07 – 03/31/07	05/15/07
04/01/07 – 06/30/07	08/15/07
07/01/07 – 09/30/07	11/15/07
10/01/07 – 12/31/07	02/15/07

CONTACTING TSTC REGISTRY

The TSTC on-site personnel include:

Suzanne Moody

Regional Trauma Registrar

Email: <mailto:smoody@gchc.org>

Phone: 513-531-0200

(For **any** questions regarding the registry, data collection, etc...)

REFERENCES

American College of Surgeons, Committee on Trauma, *Resources for the Optimal Care of the Injured Patient*, Chicago, Illinois, 1999

American College of Surgeons, *National Trauma Data Bank*, Chicago, 1996

Central Ohio Trauma System Data Elements Instruction Manual, Sixth Edition, Central Ohio Trauma System, Columbus, Ohio

Greater Cincinnati Health Council Directory, Cincinnati, Ohio, 2005.

Ohio Trauma Registry Data Dictionary 2004, Ohio Department of Public Safety, EMS Division, July 2004.

Taber's Cyclopedic Medical Dictionary, 16th Edition; F.A. Davis Company, Philadelphia, 1989

**DATA
ELEMENTS**

TRAUMA REGISTRY FIELD DEFINITIONS

Unless specifically indicated, these definitions apply to all fields in the database.

- **ND = Not Documented**
 - information is probably known but is not documented, ie. Race,
 - information is not documented but should have been and would have knowable. ie. all vitals are present except for respirations.

- **NA = Not Applicable**
 - if the information requested is not applicable to that field for that patient.
 - information that does not make sense for this field.
Example: seat belt for motorcycle crash

- **0 = Zero**
 - Use only for numeric fields when that is what the correct number is
Example: in length-of-stay fields if the patient did not have a LOS in that area

- **NT = Not Tested**
 - Use for fields in which the desired data is a laboratory test result when the test was not ordered
Example: for alcohol level, when that test was never ordered

- **UNK = Unknown**
 - If the information is unknowable and cannot ever be obtained, that is, there is no way to know the answer.
 - If the information is specifically documented as “unknown” in the medical record.
Example: the time of injury if patient is found unconscious the next morning

TRI-STATE REGIONAL INFORMATION

And

DEMOGRAPHIC DATA

INSTITUTION NUMBER-HOSPITAL CODE

Database Field: INSTITUTE_NO

Definition: Specific hospital identification number; based on hospital code identification number assigned by the TSTC. The facilities listed below are the commonly used facilities in the tri-state area. For a more extensive list of the Ohio facilities, consult Appendix A. This number is actually assigned by the Ohio Department of Health/Ohio Department of Public Safety.

Format: 4 numeric digits

CODE	DESCRIPTION	CODE	DESCRIPTION
1003	The Jewish Hospital	1199	Highland District Hospital
1024	Bethesda North Hospital	1200	Greenfield Area Medical Center
1026	Mercy Hospital Mt. Airy	1704	Department of Veteran Affairs - Cincinnati
1028	Mercy Hospital Clermont	1808	Shriners Hospitals for Children, Cincinnati Burns Hospital
1033	Mercy Hospital Fairfield	1998	Specialty Hospital/LTC (OH)
1100	Adams County Hospital	1999	Free Standing Emergency Center (OH)
1115	Brown County General Hospital		
1116	Middletown Regional Hospital	6000	Other Indiana Hospital
1117	The Fort Hamilton Hospital	6011	Dearborn County Hospital
1119	McCullough-Hyde Memorial Hospital, Inc.	6020	Margaret Mary Community Hospital
1124	Clinton Memorial Hospital	7000	Other Kentucky Hospital
1183	Mercy Hospital Western Hills	7001	St. Elizabeth Medical Center North
1186	Children's Hospital Medical Center	7002	St. Elizabeth Medical Center South
1187	The Christ Hospital	7003	St. Luke Hospital East
1189	The University Hospital	7010	St. Elizabeth Medical Center Grant
1190	Deaconess Hospital	7011	St. Luke Hospital West
1191	Good Samaritan Hospital		
1193	Mercy Hospital Anderson	9333	Hospital in a State other than IN, KY, OH

Suggested Sources:

- TSTC Registry - Data Dictionary Instruction Manual, Appendix A

Ohio Registry Requirement: Yes

TRAUMA NUMBER/TRACKING NUMBER

Database Field: TRACKING_NO

Definition: Individually assigned patient number that is never repeated – a sequential number that identifies the case. Number will be assigned by the software upon initialization of each record. For TSTC Registry use only.

Format: 3 to 10 numeric digits

Suggested Sources:

- None

Ohio Registry Requirement: No

ABSTRACT STATUS

Database Field: ABSTRACT

Definition: This is the status of the abstract. The field can be used to keep tabs on abstracts that are not complete.

C Complete
IC Incomplete

Suggested Sources: None

Ohio Registry Requirement: No

RESIDENCE ZIP CODE

Database Field: ZIP_CODE

Definition: The United States Postal Service zip code of the patient's residence at the time of admission.

Format: The USPS 5 numeric digit code.

<u>Code</u>	<u>Description</u>
99999	If patient resides outside USA
ND	Not documented
UNK	Unknown (only if patient is homeless)

Suggested Sources:

- Demographic Sheet
- EMS Run Sheet

Ohio Registry Requirement: Yes

DATE OF BIRTH

Database Field: **DOB**

Definition: Month/Day/Year that the patient was born.

Format: 8 numeric digits written as MM/DD/YYYY. Enter month as 2 digits (01 for January, 02 for February, etc.) and enter year using all 4 digits.

<u>Code</u>	<u>Description</u>
ND	Not Documented

Suggested Sources:

- Demographic Sheet
- Insurance Card/Driver's License

Ohio Registry Requirement: Yes

GENDER OF PATIENT

Database Field: **SEX**

Definition: A code indicating the patient's gender.

Format: Alphabetic character

<u>Option</u>	<u>Description</u>
M	Male
F	Female
ND	Not Documented

Suggested Sources:

- Demographic Sheet
- Emergency Department Records
- Admission Note

Ohio Registry Requirement: Yes

RACE OF PATIENT

Database Field: RACE

Definition: A code denoting ethnicity.

Format: Select from options provided on TSTC Data Collection Form(Appendix E) or TraumaBase.

<u>Code</u>	<u>Description</u>
B	Black, not of Hispanic Origin
H	Hispanic
I	American Indian or Alaska Native
A	Asian or Pacific Islander
W	White, not of Hispanic Origin
O	Other
ND	Not Documented
UNK	Unknown

Suggested Sources:

- Demographic Sheet
- Admission Form

Ohio Registry Requirement: Yes

EVENT DATA

WORK RELATED INJURY

Database Field: **INDUST_ACC**

Definition: The injury occurs while the patient is involved in a work-related activity. It may or may not occur at the actual location of employment. A marker that an injury-producing event or illness-producing exposure at work precipitated the patient's visit to the ED. Comprises manual or professional work for salary, bonus, other types of income or duties for which one would not normally gain an income.

Includes:

- Apprentice and vocational activity.
- Breaks on employer premises (in hallway, rest room, cafeteria, storage area)
- Working on, arriving at, or leaving employer parking lot
- Work for pay or compensation at home
- Working in family business, including family farm (activity should be clearly related to profit-oriented business)
- Traveling on business, including to/from customer/business contacts
- Volunteer work and domestic duties such as caring for children and relatives, cleaning, cooking, gardening, and household maintenance

Excludes:

- Engaged in recreational activities on employer controlled facilities
- Visiting for non-work purposes, not on official business
- Homemaker working at homemaking activities
- Working of self-non profit, i.e. mowing lawn, repairing roof, hobby or recreation activity
- Student engaged in school activities
- Operating vehicle (personal or commercial) for non-work purposes
- Commuting to or from work site
- Illicit work, e.g. drug trafficking
- Learning activities, w.g. attending school session or lesson, undergoing education

Format: Select from options provided by TSTC Data Collection Form (Appendix E) or TraumaBase.

<u>Code</u>	<u>Description</u>
N	No, it was not an industrial accident.
Y	Yes, it was an industrial accident.
UNK	Unknown
ND	Not Documented
NA	Not Applicable

Suggested Sources:

- EMS Run Sheet
- Emergency Department Record

Ohio Registry Requirement: Yes

PROTECTIVE DEVICES

Database Field: PROTECTIVE_DEVICES

Definition: These are the protective devices used by the patient at the time of the injury. The protective/safety device(s) in use or worn by the patient at the time of the injury.

Format: Select from options provided by TSTC Data Collection Form (Appendix E) or database. Select all that apply. Multiple options may be selected.

<u>Code</u>	<u>Description</u>
AIR	Airbag Deployed (Inflation and explosion of air bag includes driver and passenger side airbags)
INF seats)	Infant/Child Car Seat (Includes infant carriers, child safety seats and booster seats)
HEL	Helmet (Includes bicycle, motorcycle or any other protective head covering)
NONE	None
BELT	Seatbelt (Includes lap and shoulder harness)
OTHER	Other (Includes eye protection, protective clothing, hard-hat, padding)
UNK	Documented Unknown
NA	Not Applicable
ND	Not Documented

Suggested Sources:

- EMS Run Sheet
- Emergency Department Record

Ohio Registry Requirement: Yes

PROTECTIVE DEVICES USED

Database Field: PROTECTIVE_DEVICES_APPLY

Definition: This is how the devices were applied (correctly or incorrectly).

Format:

<u>Code</u>	<u>Description</u>
N	Not used
Y	Yes, used
NA	Not Applicable
ND	Not Documented

Suggested Sources:

- EMS Run Sheet
- Emergency Department Record

Ohio Registry Requirement: Yes

LOCATION OF INJURY E CODE

Database Field: LOCATION

Definition: The location where the injury occurred.

Format: Select from options provided in database, or refer to ICD-9-CM manual for place of occurrence (E849)

<u>CODE</u>	<u>DESCRIPTION</u>
FARM	Farm - Includes: buildings, land under cultivation, barnyard. Excludes: farm house and home premises of farm.
HOME	Home - Includes: apartment, boarding house, farm house, home premises (residential), non-institutional place of residence, private driveway, garage, home, walk, swimming pool in private house or garden, yard of Home. Excludes:
MINE	Mine/Quarry Gravel pit, sandpit, and tunnel under construction. home under construction but not yet occupied, institutional place of residence.
INDUST/ WORK	Industrial Place – Includes building under construction, dockyard, dry dock, factory building and premises, garage (place of work), industrial yard, loading platform (factory or store), plant, industrial railway yard, shop (place of work), warehouse, workhouse.
REC beach rifle range,	Recreation/sport place – Amusement park, baseball field, basketball court, resort, cricket ground, fives court, football field, golf course, gymnasium, hockey field, holiday camp, ice palace, lake resort, mountain resort, playground including school playground, public park, racecourse, resort NOS, riding school, seashore resort, skating rink, sports ground, sports palace, stadium, public swimming pool, tennis court, vacation resort.
STREET PUBLIC	Street and Highway – includes private subdivisions Public building – Building including adjacent ground used by the general public or by a particular group of the public such as: airport, bank, casino, church, cinema, clubhouse, courthouse, dance hall, garage building, hotel, market (grocery or other commodity), movie house, music hall, nightclub, office, office building, opera house, post office, public hall, radio broadcasting station, restaurant, school (state, public, or private), shop, commercial, station (bus, railway), store,
theater. RES	Residential Institution - Children’s home, dormitory, hospital, jail , nursing home, extended care facility, orphanage, prison , reform school
OTHER	Other specified place – Beach NOS, canal caravan site NOS, derelict house, desert, dock, forest, harbor, hill, lake NOS, mountain, parking lot, parking place, pond, pool (natural), prairie, public place NOS, railway line, reservoir, river, sea, seashore NOS, stream, swamp, trailer court, woods.
UNK	Unknown/unspecified place
ND	Not Documented

Suggested Sources:

- EMS Run Sheet
- Emergency Department Record

Ohio Registry Requirement: Yes

CAUSE OF INJURY CODE

Database Field: CAUSE_CODE

Definition: This is the code for the cause or mechanism of injury. Some codes may prompt you to answer specific questions about this cause of injury.

Format: This field uses the CAUSE file. Each entry in the Cause file is related to appropriate alphanumeric E-Code used in the ICD-9-CM Coding Manual.

<u>Code</u>	<u>Description</u>
ASSAULT	Assault
ATV	All Terrain Vehicle
BIKE	Bicycle
BURN	Burns (Chemical, Thermal, Electrical)
DIVE	Diving
DROWN	Near drowning
EXP	Explosion
FALL	Fall
GSW	Gun Shot Wound
HANG	Hanging
MCC	Motorcycle Crash
MVC	Motor vehicle Crash
OTHER	Other
OV	Other Vehicular
PED	Pedestrian
SMOKE	Smoke Inhalation
SPORT	Sporting Injury
STAB	Stabbing
SUFF	Suffocation

Suggested Sources:

- Emergency Department Record
- EMS Run Sheet
- ICD-9-CM Coding Manual

Ohio Registry Requirement: Yes

CAUSE OF INJURY E-CODE

Database Field: CAUSE_E_CODE

Definition: An ICD-9-CM alphanumeric code for the classification of external causes of injury and poisoning. It may include environmental events, circumstances, and conditions which lead to the injury of a patient. One code is assigned for primary cause/mechanism of injury. Additional codes should be assigned if applicable. E coding is per current ICD-9-CM guidelines. E-coding is per current ICD-9-CM guidelines. *IN DATA ENTRY using TraumaBase or TraumaBasic, THE “E” IS NOT INCLUDED.

Format: Refer to ICD-9-CM manual for cause of injury code (E800 through E999) or use database picklist. To input E-code, Cause Code field must first be entered. Select the E-Code groups that relates to the Cause Code, press Next. Then select the code from the group that best suits the cause of injury. More than one code may be required to describe cause of injury and all that apply should be listed. Sequencing of E codes is per ICD-9-CM guidelines.

Suggested Sources:

- Emergency Department Record
- EMS Run Sheet
- ICD-9-CM Coding Manual

Ohio Registry Requirement: Yes

INJURY DATE

Database Field: INJURY_DATE

Definition: The month, day, and year in which the injury occurred.

Format: 8 numeric digits written as MM/DD/YYYY.

<u>Code</u>	<u>Description</u>
ND	Not Documented
UNK	Unkown

Suggested Sources:

- EMS Run Sheet
- Emergency Department Record

Ohio Registry Requirement: Yes

STATE OF INJURY

Database Field: COUNTY_STATE

Definition: State (if county is not known) where the injury occurred.

IN = Indiana

KY = Kentucky

OH = Ohio

OT = Other State or Country (do not use if residence is in OH, IN, KY)

UNK = Unknown if specifically documented as “Unknown” in the medical record.

Suggested Sources:

- EMS Run Street
- Emergency Department Record

Ohio Registry Requirement: Yes

COUNTY					
CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	DESCRIPTION
01	Adams	33	Hardin	65	Pickaway
02	Allen	34	Harrison	66	Pike
03	Ashland	35	Henry	67	Portage
04	Ashtabula	36	Highland	68	Preble
05	Athens	37	Hocking	69	Putnam
06	Auglaize	38	Holmes	70	Richland
07	Belmont	39	Huron	71	Ross
08	Brown	40	Jackson	72	Sandusky
09	Butler	41	Jefferson	73	Scioto
10	Carroll	42	Knox	74	Seneca
11	Champaign	43	Lake	75	Shelby
12	Clark	44	Lawrence	76	Stark
13	Clermont	45	Licking	77	Summit
14	Clinton	46	Logan	78	Trumbull
15	Columbian	47	Lorain	79	Tuscarawas
16	Coshocton	48	Lucas	80	Union
17	Crawford	49	Madison	81	Van Wert
18	Cuyahoga	50	Mahoning	82	Vinton
19	Darke	51	Marion	83	Warren
20	Defiance	52	Medina	84	Washington
21	Delaware	53	Meigs	85	Wayne
22	Erie	54	Mercer	86	Williams
23	Fairfield	55	Miami	87	Wood
24	Fayette	56	Monroe	88	Wyandot
25	Franklin	57	Montgomery	89	Other County Not Listed
26	Fulton	58	Morgan		
27	Gallia	59	Morrow	OH	Ohio County Not Listed
28	Geauga	60	Muskingham	IN	Indiana
29	Greene	61	Noble	KY	Kentucky
30	Guernsey	62	Ottawa	OT	Other State (Do Not Use if Ohio)
31	Hamilton	63	Paulding	UNK	Unknowable
32	Hancock	64	Perry		

Kentucky Counties

Indiana Counties

KY-8	Boone	KY-94	Owen		IN-6	Boone
KY-12	Bracken	KY-96	Pendleton		IN-8	Carroll
KY-19	Campbell				IN-15	Dearborn
KY-21	Carroll				IN-24	Franklin
KY-39	Gallatin				IN-58	Ohio
KY-41	Grant				IN-69	Ripley
KY-59	Kenton				IN-78	Switzerland

						d
KY-81	Mason					

EMS DATA

EMS DATA SHEET AVAILABLE

Database Field: TRIP_FORM

Definition: The EMS run sheet/form exists in the patient record.

Format: Select from database picklist or the TSTC Data Collection Form (Appendix E).

<u>Code</u>	<u>Description</u>
Y	Yes, EMS run sheet present
N	No, EMS run sheet not present
NA	Not Applicable – Not transported by EMS
ND	Not Documented

Suggested Sources:

- EMS Run Sheet

Ohio Registry Requirement: No

EMS FIELD TRAUMA TRIAGE CRITERIA

Database Field: TRIAGE_CODE

Definition: The EMS personnel's determination of patient's status that would make them applicable for trauma triage. This is a required field and may not be left blank. Document as many criteria as are documented by EMS. If the patient's age is 16 years or older, Adult Criteria are used. If the patient's age is less than 16 years old, the Pediatric Criteria must be used.

ADULT EMS FIELD TRAUMA TRIAGE CRITERIA (FOR PATIENTS 16 YEARS AND OLDER):

<u>Code</u>	<u>Description</u>
A1.	Glasgow Coma Scale (GCS) \leq 13
A2.	Loss of Consciousness (LOC) \geq 5 minutes
A3.	Deteriorating level of consciousness at scene or during transport
A4.	Failure to localize pain (GCS motor score \leq 4)
A5.	Respiration rate $<$ 10, or $>$ 29
A6.	Patient requires endotracheal intubation
A7.	Relief of tension pneumothorax.
A8.	Pulse rate $>$ 120 with evidence of hemorrhagic shock.
A9.	Systolic BP $<$ 90 mm hg, or absent radial pulse with a carotid pulse present ¹
A10.	Penetrating trauma to head, neck, torso
A11.	Significant penetrating trauma to the extremities proximal to knee or elbow, with evidence of neurovascular compromise.
A12.	Injuries to the head, neck or torso with visible crush injury
A13.	Injuries to the torso with abdominal tenderness, distention, or "seatbelt sign"
A14.	Injuries to the torso with evidence of pelvic fracture (exception: isolated hip fracture)
A15.	Injuries to the torso with flail chest
A16.	Injuries to the extremities with amputation proximal to wrist and/or ankle
A17.	Injuries to the extremities with visible crush injury
A18.	Injuries to the extremities with two or more proximal long bone fractures
A19.	Injuries to the extremities with evidence of neurovascular compromise
A20.	Signs or symptoms of a spinal cord injury.
A21.	Second or third degree burns greater than 10% Total Burn Surface Area (BSA) or other significant burns involving the face, feet, hands, genitalia or airway
A22.	Mechanism of injury ² .
A23.	Special considerations ² .
A24.	Non-trauma patient ³ .
A25.	No Criteria Documented ⁴ .
A26.	NA (Not Applicable) ⁵ .

¹ This means an absence of a palpable pulse, not absence of documentation of the pulse rate.

² EMS personnel shall also consider mechanism of injury and Special Considerations when evaluating whether an injured person qualifies as a trauma victim per the Ohio EMT-B, EMT-I, and EMT-P curriculums. The EMS Documentation should reflect that the

mechanism of injury or a special consideration was the reason transport to a trauma center was initiated.

- 3 If the patient arrives by EMS and was not triaged by EMS as a trauma patient, and this is documented as such, *select A24-non-trauma patient.*
- 4 If a run sheet has no documentation to indicate that the field trauma triage criteria were used by the EMS personnel at the scene, *select A25-No Criteria Documented.*
- 5 If the patient arrives by any means other than ground or air EMS (i.e. private vehicle, walk-in, law enforcement, etc.) *select A26-Not Applicable.*

PEDIATRIC EMS FIELD TRAUMA TRIAGE CRITERIA (FOR PATIENTS LESS THAN 16 YEARS OF AGE)

<u>Code</u>	<u>Description</u>
P1.	Glasgow Coma Scale (GCS) \leq 13
P2.	Loss of Consciousness (LOC) \geq 5 minutes
P3.	Deteriorating level of consciousness at scene or during transport
P4.	Failure to localize pain (GCS motor score \leq 4)
P5.	Evidence of poor perfusion
P6.	Evidence of respiratory distress or failure
P7.	Penetrating trauma to head, neck, torso.
P8.	Significant penetrating trauma to the extremities proximal to knee or elbow, with evidence of neurovascular compromise.
P9.	Injuries to the head, neck or torso with visible crush injury
P10.	Injuries to the torso with abdominal tenderness, distention, or “seatbelt sign”
P11.	Injuries to the torso with evidence of pelvic fracture (exception: isolated hip fracture)
P12.	Injuries to the torso with flail chest
P13.	Injuries to the extremities with amputation proximal to wrist and/or ankle
P14.	Injuries to the extremities with visible crush injury
P15.	Injuries to the extremities with two or more proximal long bone fractures
P16.	Injuries to the extremities with evidence of neurovascular compromise
P17.	Signs or symptoms of a spinal cord injury
P18.	Second or third degree burns greater than 10% Total Burn Surface Area (BSA) or other significant burns involving the face, feet, hands, genitalia or airway
P19.	Mechanism of injury ¹ .
P20.	Special considerations ¹ .
P21.	Non-trauma patient ² .
P22.	No Criteria Documented ³ .
P23.	NA (Not Applicable) ⁴ .

¹ EMS personnel shall also consider mechanism of injury and Special Considerations when evaluating whether an injured person qualifies as a trauma victim per the Ohio EMT-B, EMT-I, and EMT-P curriculums. The EMS Documentation should reflect that the mechanism of injury or a special consideration was the reason transport to a trauma center was initiated.

² If the patient arrives by EMS and was not triaged by EMS as a trauma patient, and this is documented as such, *select P21-non-trauma patient.*

³ If a run sheet has no documentation to indicate that the field trauma triage criteria were used by the EMS personnel at the scene, *select P22-No Criteria Documented.*

- ⁵ If the patient arrives by any means other than ground or air EMS (i.e. private vehicle, walk-in, law enforcement, etc.) *select P23-Not Applicable.*

Format: Select from options provided in database picklist, or refer to the TSTC Data Collection Form (Appendix E).

Suggested Sources:

- EMS Run Sheet

Ohio Registry Requirement: Yes

SCENE GLASGOW COMA SCALE OR MODIFIED PEDIATRIC COMA SCORE

Definition: Quick, standardized methods for assessing the degree of conscious impairment in an adult or pediatric patient respectively by rating a best response of eye opening, verbalization, and motor activity.

Variations include scoring for adults/children greater than 2 years old; and for infants/children two years old and under. The patient's coma score should be obtained from initial (first) documentation at:

- Scene
- Arrival to initial or hospital #1 emergency department (ED)
- Departure from initial hospital (hospital #1) ED or transporting agency
- Arrival to receiving hospital (hospital #2) ED or inpatient unit for direct admission

Intubation and chemical paralysis will affect a patient's coma score. Chemical paralysis refers to drugs which impede the patient's ability to respond normally in eye opening, speech, and/or motor activity. Chemical paralysis may be induced as a therapeutic intervention and include neuromuscular blocking agents (see Appendix D).

NOTE: If a patient's coma score is documented in ranges, enter the best response (the highest number). Example: If patient's eye opening response is charted "3 to 4," enter "4."

For patients chemically paralyzed (having received neuromuscular blocking drugs; see Appendix D), or for those in cardiac arrest, the initial (and lowest possible) Glasgow coma score for each category is "1." Patients who are intubated receive a "1" for best verbal response. The highest possible total coma score is 15; the lowest possible total score is 3. If data is undiscoverable, enter "ND" for Blank/Unknown.

TOTAL SCENE GCS

Database Field: **GLASCOW**

Definition: The total score (sum of the above components) for the initial GCS at the scene.

Format: This field is used if individual GCS scores are not available.

Suggested Sources:

- EMS Run Street
- Emergency Department Record

Ohio Registry Requirement:

SCENE GCS – EYE OPENING

Database Field: EYE_OPENING

Definition: The initial eye opening score for the patient at the scene. The other two components of a GCS Score – best verbal and best motor response – have different assessment parameters for adults, children and infants. The Eye Opening Score of the GCS is the same for all ages. A “normal” GCS **Eye Opening** response (indicating no neurological problems in the respective area of the brain) is “4” for spontaneous eye opening.

Format: Select from database picklist or options provided on TSTC Data Collection Form (Appendix E).

<u>Option</u>	<u>Description</u>
4	Spontaneous: Opens eyes spontaneously
3	Voice: Opens eyes to verbal stimuli
2	Pain: Opens eyes to noxious stimuli*
1	None: No eye opening
ND	Not Documented
5	Not Applicable: No EMS involvement with patient

*Noxious stimuli refers to a physical stimulus that is applied with the intent to get the victim to open their eyes. Examples are sternal rubs and nail bed pressure.

Suggested Sources:

- EMS Run Street
- Emergency Department Record

Ohio Registry Requirement: Yes

SCENE GCS – BEST VERBAL RESPONSE

Database Field: VERBAL_RESPONSE

Definition: The initial verbal score for the patient at the scene. A “normal” GCS **Verbal** response (indicating no neurological problems in the respective area in the brain) is “5” for all ages.

Format: Select from database picklist or on options provided on TSTC Data Collection Form (Appendix E).

ADULT (Defined for the GCS as a person > 5 years of age)

<u>Option</u>	<u>Description</u>
5	Oriented: Converses with logic and orientation to self, place, and time
4	Confused: Words indicate that the person is confused
3	Inappropriate words: Verbalizes words out of context
2	Incomprehensible sounds: Makes incomprehensible sounds
1	None: No vocalization
ND	Not Documented
6	Not Applicable: No EMS involvement with patient

CHILD (1 to 5 years of age)

<u>Option</u>	<u>Description</u>
5	Oriented: Smiles, oriented to self (3-5 year old), interacts
4	Confused: Cries, but is consolable, inappropriate interactions; verbalization is out of context
3	Inappropriate cries: Inconsistently consolable, moaning
2	Incomprehensible sounds: Inconsolable, agitated sounds
1	None: No vocal response
ND	Not Documented
6	Not Applicable: No EMS involvement with patient

INFANT (Birth to 1 year of age)

<u>Option</u>	<u>Description</u>
5	Coos, babbles
4	Irritable cries
3	Cries to pain
2	Moans to pain
1	No response
ND	Not Documented
6	Not Applicable: No EMS involvement with patient

Suggested Sources:

- EMS Run Street
- Emergency Department Record

Ohio Registry Requirement: Yes

SCENE GCS – BEST MOTOR RESPONSE

Database Field: MOTOR_RESPONSE

Definition: The initial motor score for the patient at the scene. A “normal” GCS **Motor** response (indicating no neurological problems in the respective area of the brain) is “6” for all ages.

Format: Select from database picklist or options provided on TSTC Data Collection Form (Appendix E).

ADULT (Defined for the GCS as a person > 5 years of age)

<u>Option</u>	<u>Description</u>
6	Obeys commands with appropriate motor response
5	Localization of painful stimulation
4	General withdrawal in response to painful stimulation
3	Flexor posturing in response to painful stimulation
2	Extensor posturing in response to painful stimulation
1	None
ND	Not Documented
7	Not Applicable, No EMS involvement

BIRTH TO 5 YEARS of age

<u>Option</u>	<u>Description</u>
6	Normal spontaneous movement
5	Withdraws to touch
4	Withdraws to pain
3	Abnormal flexion
2	Abnormal extension
1	None
ND	Not Documented
7	Not Applicable, No EMS involvement

Suggested Sources:

- EMS Run Street
- Emergency Department Record

Ohio Registry Requirement: Yes

SCENE - PARALYTICS

Database Field: PARALYTICS

Definition: Drugs given to impede the patient's ability to respond normally at the scene or prior to arrival at the initial hospital. See Appendix C for list of paralytics given to patient to determine definitively if patient was paralyzed.

Format: Select from database picklist or options provided on TSTC Data Collection Form (Appendix E).

<u>Option</u>	<u>Description</u>
1	Intubated when GCS assessed
2	Intubated and chemically paralyzed
3	Sedated
NONE	No intubation or paralytics
ND	Not Documented
NA	Not Applicable

The circumstances related to the patient upon initial assessment. If patient is intubated or has been chemically paralyzed, the GCS is not valid. Patients are chemically paralyzed if they have been medicated with a neuromuscular blocking agent to induce paralysis. Examples of neuromuscular blocking agents can be found on Appendix C.

If the patient did not arrive by EMS vehicle, select NA for Not Applicable.

Suggested Sources:

- EMS Run Sheet
- Appendix C

Ohio Registry Requirement: No

SCENE - INTUBATION

Database Field: INTUBATED

Definition: Was a mechanical or surgical airway placed prior to arrival (at the scene or enroute to hospital) at initial hospital?

Format: Select from database picklist or on TSTC Data Collection Form (Appendix E).

<u>Option</u>	<u>Description</u>
NETT	Nasal ETT (Endotracheal tube)
OETT	Oral ETT (Endotracheal tube)
TRACH	Trach
CRIC	Cricothyrotomy
ESOPH	Unintentional esophageal intubation
FAIL	Attempted but failed
NONE	Airway assessed but no airway placed
OTHER	Other
ND	Not documented
NA	Not applicable

Format: Select from options provided in database picklist, or refer to the TSTC Data Collection Form (Appendix E).

Suggested Sources:

- EMS Run Sheet

Ohio Registry Requirement: Yes

SCENE - SYSTOLIC BP

Database Field: **SYS_BP**

Definition: First Systolic Blood Pressure at the Scene denotes the patient's first documented blood pressure at the scene. The systolic blood pressure may be measured by manual auscultation or palpation, or automatic methods. It is assumed that First Systolic Blood Pressure correlates to millimeters-of-mercury scale.

For each indicate value:

<u>Option</u>	<u>Description</u>
Numbers	Whole numbers from 0 up to 300
ND	Not Documented
NA	Not Applicable
P	Palpable Pulse Only

Suggested Sources:

- EMS Run Sheet

Ohio Registry Requirement: Yes

SCENE - RESPIRATORY RATE

Database Field: **RESP_RATE**

Definition: The patient's rate of independent breaths per minute. **A patient who is receiving mechanical ventilation either through a bag/mask device or ventilator and not taking breaths on his own has an independent ventilatory rate of "0."** A patient who is on mechanical ventilation and is taking additional breaths on his own should have the respiratory rate documented at the higher rate. (For example if a patient on a ventilator has a set ventilator rate of 10 but is breathing 20 times a minute, the respiratory rate is 20.) If EMS documents "Agonal respirations" and does not write a rate, the independent respiratory rate may be considered to be "0." Patients chemically paralyzed for intubation ("rapid sequence intubation") have a respiratory rate of "0".

For each indicate value:

<u>Option</u>	<u>Description</u>
Numbers	Whole numbers from 0 up to 99
ND	Not Documented
NA	Not Applicable
RA	Respiration Assistance

Suggested Sources:

- EMS Run Sheet

Ohio Registry Requirement: Yes

SCENE PROCEDURES - INTERVENTIONS AT SCENE

Definition: These are procedures performed at the scene or en route to the FIRST hospital. Select all that apply.

Format: Select from options provided by TSTC Data Collection Form or database picklist or from below.

SCENE – CPR

Database Field: CPR

- Was CPR performed on the patient at the scene or enroute to the hospital?

SCENE – FLUIDS

Database Field: FLUIDS

- Were IV fluids administered to the patient at the scene or enroute to the hospital?

SCENE - NEEDLE CHEST DECOMPRESSION

Database Field: CHEST

- Was a Chest Decompression performed at the scene or enroute to the hospital?
- Chest Decompression is the insertion of a needle or tube in the chest to relieve pressure.

SCENE - SPINAL IMMOBILIZATION

Database Field: IMMOB

- Was the patient's spinal column immobilized at the scene or enroute to the hospital?

SCENE - CERVICAL COLLAR

Database Field: COLLAR

- Was a cervical collar used at the scene or enroute to the hospital?

SCENE – BACKBOARD

Database Field: BBOARD

- Was a backboard used at the scene or enroute to the hospital?

SCENE – THORACENTESIS

Database Field: THORA

- Was thoracentesis used at the scene or enroute to the hospital?

For each indicate value:

<u>Option</u>	<u>Description</u>
N	No
Y	Yes

UNK Unknown
ND Not Documented
NA Not Applicable

If patient did not arrive by EMS vehicle select NA.

Suggested Sources:

- EMS Run Sheet
- Emergency Department Record

Ohio Registry Requirement: Yes.

NOTE: The Ohio Trauma Registry recognizes immobilization as use of both a cervical collar and a backboard.

WAS EXTRICATION NEEDED?

Database Field: **EXTRICATION**

Definition: If the patient was entrapped and required extrication (i.e. vehicle, building, trench, etc.).

Format: Select from database picklist or the TSTC Data Collection Form (Appendix E).

<u>Code</u>	<u>Description</u>
N	No, patient was not extricated.
Y	Yes, patient was extricated.
ND	Not Documented.
NA	Not Applicable.

Suggested Sources:

- EMS Run Sheet
- Emergency Department Record

Ohio Registry Requirement: No

ED DATA

ADMISSION SOURCE

Database Field: ADMIT_SOURCE

Definition: This is the source of the admission.

Format: Select from database picklist or the TSTC Data Collection Form (Appendix E).

<u>Option</u>	<u>Description</u>
1	Patient arrived from the scene
2	Transferred from another Ohio hospital
3	Transferred from an out of state hospital

Suggested Sources:

- Transfer Sheets
- Outside Hospital Documents
- ED Records

Ohio Registry Requirement: Yes

TYPE OF ADMISSION

Database Field: ADMIT_TYPE

Definition: This identifies/classifies the type of admission.

Format: Select from database picklist or the TSTC Data Collection Form (Appendix E).

<u>Option</u>	<u>Description</u>
E	Emergency Department
D	Direct

Suggested Sources:

- Transfer Sheets
- Outside Hospital Documents
- ED Records

Ohio Registry Requirement: No

HOSPITAL TRANSFER

Database Field: HOSPITAL_TRANSFER

Definition: The patient was transferred from ANOTHER hospital to YOUR hospital by ambulance.

Format: Select from database picklist or the TSTC Data Collection Form (Appendix E).

<u>Option</u>	<u>Description</u>
Y	Yes
N	No
NA	Not Applicable

Suggested Sources:

- Transfer Sheets
- Outside Hospital Documents
- ED Records

Ohio Registry Requirement: Yes

MEANS OF TRANSPORTATION

Database Field: **TRANS**

Definition: This is the main means of transport of the patient to your facility

Format: Select from options provided by TSTC Data Collection Form (Appendix E) or database.

<u>Option</u>	<u>Description</u>
AR	Ambulance from Referring Facility
AS	Ambulance from Scene
HR	Helicopter from Referring Hospital
HS	Helicopter from Scene
POL	Police Vehicle
POV	Private Vehicle
ND	Not Documented

Suggested Sources:

- EMS Run Sheet
- Emergency Department Record

Ohio Registry Requirement: No

NAME OF TRANSPORT AGENCY

Database Field: **TRANSPORT_AGENCY_CODE**

Definition: Either the scene agency or transferring agency.

Format: Select from database picklist for squads/agencies in your area or write name of EMS agency in the appropriate format on TSTC Data Collection Form (Appendix E). They are organized according to state and county.

OHIO SQUADS			
Code	Description	Code	Description
Adams Co.		OH031	Wayne Twp Fire Dept
OH001	Jefferson Twp Vol Fire Dept.	OH032	West Chester Twp Fire Dept
OH002	Manchester Fire Dept	OH033	West College Corner Ind Vol FD
OH003	Monroe Twp Vol Fire Dept	Clermont Co.	
OH004	Peebles Fire Dept	OH034	BMOP Fire Dept
OH005	Scott Twp Fire Dept	OH035	Batavia Twp Fire Dept
OH006	Seaman Vol Life Squad	OH036	Bethel-Tate Joint Ambulance Dist
OH007	Wayne Twp Fire Dept	OH037	Eastern Area Specialty Trans., Inc
OH008	West Union Vol Life Squad	OH038	Felicity Franklin Fire Dept
OH009	Winchester Comm Fire Dept	OH039	Franklin Twp EMS
Brown Co.		OH040	Goshen Twp Fire & EMS
OH010	Byrd Twp Vol Fire Dept	OH041	Jackson Twp Fire Dept
OH011	Fayetteville Fire Dept	OH042	Miami Twp Fire & EMS
OH012	Georgetown Vol Life Squad	OH043	Milford Community Fire Dept
OH013	Mt. Orab Fire Dept	OH044	Monroe Twp Vol Life Squad
OH014	Ripley Life Squad	OH045	New Richmond EMS
OH015	Russellville Life Squad	OH046	Owensville Fire and Rescue
OH016	Sardinia Life Squad & Rescue Unit	OH047	Pierce Twp Fire Dept
Butler Co.		OH048	Union Twp Fire Dept
OH017	City of Monroe Fire Division	OH049	Washington Twp EMS
OH018	Fairfield Twp Fire Dept	OH050	Wayne Twp Fire & Rescue
OH019	Hamilton Fire Dept	OH051	Williamsburg Fire Dept
OH020	Liberty Twp Fire Dept	Clinton Co.	
OH021	Madison Twp Fire Dept	OH052	Blanchester Comm Serv
OH022	Millville Fire Dept	OH053	Blanchester Marion
OH023	Morgan Twp Vol Fire Dept	OH054	Chester Twp New Burlington FD
OH024	Oxford Fire Dept	OH055	Clark Twp Life Squad
OH025	Reilly Twp Fire Dept	OH056	Clarksville Fire & Rescue
OH026	Ross Twp Fire Dept	OH057	Clinton Medical Transport
OH027	Seven Mile Fire Dept	OH058	Clinton/Highlan Joint Fire Dist/EMS
OH028	Somerville Vol Fire Dept	OH059	Martinsville Fire Dept
OH029	St. Clair Twp & New Miami LS	OH060	Port William Fire Dept
OH030	Trenton Rescue Squad	OH061	Wilmington Fire Dept

Code	Description	Code	Description
Hamilton Co.		Ham Co cont	
OH062	Amberly Village Fire Dept	OH101	Sharonville Fire Dept
OH063	Anderson Twp Fire Dept	OH102	Southwest Regional Paramedics
OH064	Arlington Hts Fire Dept	OH103	Sharonville Fire Dept
OH065	Blue Ash Fire Dept	OH104	Springdale Fire Dept
OH066	Cheviot Fire Dept	OH105	Springfield Twp Fire Dept
OH067	Children's Hospital Trans	OH106	St. Bernard Fire Dept
OH068	Cincinnati Fire Dept	OH107	Sycamore Twp Fire Dept
OH069	City of Wyoming EMS	OH108	The Christ Hospital Mobile Unit
OH070	Cleves Vol Fire Dept	OH109	University Hospital Mobile Care
OH071	Colerain Twp Fire & EMS	OH110	Village of Mariemont Fire Dept
OH072	Crosby Twp Fire Dept	OH111	Western Joint Ambulance District
OH073	Deer Park/Silverton Joint Fire Dist	OH112	Whitewater Twp Fire Dept
OH074	Delhi Twp Fire Dept	OH113	Woodlawn Fire Dept
OH075	Eastern Emergency Joint Amb Dist	Highland Co.	
OH076	Elmwood Place Fire Dept	OH114	Brushcreek Life Squad
OH077	Evendale Fire Dept	OH115	Greenfield Area Life Squad
OH078	Fairfax Fire Dept	OH116	Highland Co. N Joint Fire & Amb Dist
OH079	First Community Ambulance Serv	OH117	Hillsboro Fire & Rescue
OH080	Forest Park Fire Dept	OH118	Lynchburg Joint Fire & Amb Distr
OH081	Glendale Fire Dept	OH119	Marshall Twp Vol Fire Dept
OH082	Golf Manor Fire Dept	OH120	Mowrystown Fire Dept
OH083	Green Twp Fire Dept		
OH084	Greenhills Fire Dept		
OH085	Harrison Fire Dept	Warren Co.	
OH086	Life Care	OH121	Carlisle Fire Dept
OH087	Lincoln Hts Fire Dept	OH122	City of Mason Fire Dept
OH088	Lockland Fire Dept	OH123	Clearcreek Fire Dept
OH089	Loveland-Symmes Fire Dept	OH124	Deerfield Twp Fire Dept
OH090	Madeira-Indian Hill Joint Fire Dept	OH125	Franklin Division of Fire
OH091	MedCorp	OH126	Hamilton Twp Rescue
OH092	Miami Twp Fire Dept	OH127	Harlan Twp Fire and Rescue
OH093	Montgomery Fire Division	OH128	Joint Emergency Medical Services
OH094	Mt Healthy Fire Dept	OH129	Kings Islan Fire Dept
OH095	Newtown Fire & Rescue	OH130	Lebanon Fire Division
OH096	North College Hill Fire Dept	OH131	Massie Twp Fire Dept
OH097	Norwood Fire Dept	OH132	Morrow Fire Dept
OH098	Patient Transport Services, Inc	OH133	Turtlecreek Twp Fire Dept
OH099	Reading Fire Dept	OH134	Union Twp/South Lebanon Fire Dept
OH100	Rural Metro	OH135	Wayne Twp Fire Dept
		OH136	East Ambulance
		OH137	Leesburg Life Squad
		OH138	Aircare

OH139	AirMed Phi	OH160	Germantown
OH140	Care Flight	OH161	Division of Middletown Fire
OH141	Edgemont	OH162	Addyston
OH142	Lifenet Air	OH163	Amelia Life Squad
OH143	Little Miami	OH164	Brown County
OH144	Med Flight	OH165	Miami Valley Care Flight Helicopter
OH145	Northbend	OH166	Central Joint Fire-EMS District
OH146	Silverton	OH167	Fransican Mobile Care
OH147	Sycamore (Montgomery)	OH168	First Care
OH148	Terrace Park	OH169	Hillcrest
OH149	Christ Hospital	OH170	Mason Fire Department
OH150	Harrison	OH171	Northern Hills
OH151	MedicOne	OH172	Withamsville
OH152	ProMed	OH181	Wyoming Life Squad
OH153	Union Twp (Butler Co.)		
OH154	Union Twp (Clermont Co.)		
OH155	Camden Emergency Squad		
OH156	EMT, Inc.		
OH157	Farmersville		
OH158	City of Fairfield	OH999	Ohio – Other Unlisted Agency
OH159	Gratis	UNK	Unknown

KENTUCKY SQUADS

Code	Description	Code	Description
Bracken Co.		Grant Co.	
Boone Co.		Kenton Co.	
KY001	Bellview-McVille Fire & Rescue	KY019	Bromley Fire Dept
KY002	Burlington Fire Dept	KY020	Covington Fire Dept
KY003	Cincinnati/Northern KY Int'l Airport	KY021	Crescent Springs Fire Dept
KY004	Florence Fire & EMS	KY022	Edgewood Fire Dept
KY005	Hebron Fire Protection District	KY023	Elsmere Fire Dept
KY006	Petersburg Fire & EMS	KY024	Erlanger Fire Dept
KY007	Point Pleasant Fire Dept	KY025	Fort Mitchell Fire Dept
KY008	Union EMS	KY026	Fort Wright Fire Dept
KY009	Verona EMS	KY027	Independence Fire District
KY010	Walton Fire Protection District	KY028	Kenton Fire & EMS
Campbell Co.			
KY011	Alexandria Fire/EMS/Rescue	KY029	Park Hills Fire Dept
KY012	Bellview Fire Dept	KY030	Piner-Fiskburg Fire Dept/Amb Serv
KY013	Camp Springs Fire Dept	KY031	Ryland Heights Fire & Life Squad
KY014	Dayton Fire Dept	KY032	Taylor Mill Fire & EMS
KY015	Eastern Campbell Co. Fire District	Mason Co.	
KY016	Fort Thomas Fire Dept		
KY017	Highland Heights Fire Dept	Pendleton Co.	
KY018	Melbourne Fire Dept		
Carroll Co.		Roberts Co.	
Gallatin Co.		KY999	KY – Other Unlisted Agency
		UNK	Unknown

INDIANA SQUADS

Code	Description	Code	Description
Dearborn Co.		Ohio Co.	
IN001	Aurora Emergency Rescue	IN010	Rising Sun Rescue Service
IN002	Bright Fire & EMS	Ripley Co.	
IN003	Dillsboro Emergency Unit	IN011	Batesville Rescue
IN004	Greendale EMS	IN012	Milan Rescue 30
IN005	Lawrenceburg Emergency Rescue	IN013	Southern Ripley Co. Emer. Unit
IN006	Manchester Twp Vol Fire & Rescue	IN014	Sunman Area Life Squad
IN007	Moores Hill Sparta Vol Fire Dept	Switzerland Co.	
IN008	TriCounty Ambulance	IN015	Switzerland Co. EMS
Franklin Co		IN999	Indiana – Other Unlisted Agency
IN009	Franklin Co., Cedar Grove	UNK	Unknown

Ohio Registry Requirement: No

AGENCY DEPARTURE TIME

Database Field: DEPARTURE_TIME

Definition: Time agency departed the scene or referring hospital.

Format: Military times are required (see Appendix B).

<u>Code</u>	<u>Description</u>
ND	Not Documented
UNK	Unknown

Suggested Sources:

- EMS Run Sheet
- Emergency Department Record

Ohio Registry Requirement: No

AGENCY DEPARTURE DATE

Database Field: DEPARTURE_DATE

Definition: Date agency departed the scene or referring hospital

Format: 8 numeric digits written as MM/DD/YYYY.

<u>Code</u>	<u>Description</u>
ND	Not documented
UNK	Unknown

Suggested Sources:

- EMS Run Sheet
- Emergency Department Record

Ohio Registry Requirement: No

AGENCY DESTINATION

Database Field: **TRANSPORT_DESTINATION**

Definition: Destination of agency from the scene and/or referring hospital.

Format: Select from database picklist for facilities/hospitals in your area or write name of EMS agency in the appropriate format on TSTC Data Collection Form (Appendix E). The facilities in this list are facilities in the tri-state region. For a more extensive list, consult Appendix A.

CODE	DESCRIPTION	CODE	DESCRIPTION
1	Department of Veteran Affairs	1199	Highland District Hospital
1003	The Jewish Hospital	1200	Greenfield Area Medical Center
1024	Bethesda North Hospital	1808	Shriners Hospitals for Children, Cincinnati Burns Hospital
1026	Mercy Hospital Mt. Airy	1998	Specialty Hospital/LTC (OH)
1028	Mercy Hospital Clermont	1999	Free Standing Emergency Center (OH)
1033	Mercy Hospital Fairfield		
1100	Adams County Hospital		
1115	Brown County General Hospital	6000	Other Indiana Hospital
1116	Middletown Regional Hospital	6011	Dearborn County Hospital
1117	The Fort Hamilton Hospital	6020	Margaret Mary Community Hospital
1119	McCullough-Hyde Memorial Hospital, Inc.	7000	Other Kentucky Hospital
1124	Clinton Memorial Hospital	7001	St. Elizabeth Medical Center North
1183	Mercy Hospital Western Hills	7002	St. Elizabeth Medical Center South
1186	Children's Hospital Medical Center	7003	St. Luke Hospital East
1187	The Christ Hospital	7010	St. Elizabeth Medical Center Grant
1189	The University Hospital	7011	St. Luke Hospital West
1190	Deaconess Hospital		
1191	Good Samaritan Hospital	9333	Hospital in a State other than IN, KY, OH
1193	Mercy Hospital Anderson		

Suggested Sources:

- EMS Report
- Transferring Hospital's Medical Record or
- Transfer Form
- Transferring EMS Agency's Report
- Emergency Department Record
- Demographic Sheet

Ohio Registry Requirement: Yes

AGENCY ARRIVAL DATE

Database Field: ARRIVAL_DATE

Definition: Date agency was arrived on scene and/or at referring hospital.

Format: 8 numeric digits written as MM/DD/YYYY.

<u>Code</u>	<u>Description</u>
ND	Not documented
UNK	Unknown

Suggested Sources:

- EMS Run Sheet
- Emergency Department Record

Ohio Registry Requirement: No

AGENCY ARRIVAL TIME

Database Field: ARRIVAL_TIME

Definition: Date agency arrived on scene and/or at referring hospital.

Format: Military times are required (see Appendix B).

<u>Code</u>	<u>Description</u>
ND	Not Documented
UNK	Unknown

Suggested Sources:

- EMS Run Sheet
- Emergency Department Record

Ohio Registry Requirement: No

ED ADMISSION AND DISCHARGE DATA

Database Field: ED_ADMIT_TIME

Database Field: ED_ADMIT_DATE

Database Field: ED_DC_TIME

Database Field: ED_DC_DATE

Definition: The patient's time and date of admission and discharge into and out of the emergency department. If the patient is a direct admission to a patient unit from a transferring hospital, there will not be emergency department times, select NA. All times are in military time (see Appendix B). Dates are written as MM/DD/YYYY. (January is 01; February, 02, etc.)

Format: Military time required (see Appendix B). Dates are 8 numeric digits written as MM/DD/YYYY. Enter month as 2 digits (01 for January, 02 for February, etc.) and enter year using all 4 digits.

Suggested Sources:

- Emergency Department Record
- Admission Record Sheet

Ohio Registry Requirement: Yes

TRAUMA TYPE

Database Field: **TRAUMA_TYPE**

Definition: Trauma is injury to human tissues or organs resulting from the transfer of energy from the environment to the human body, in which the human body lacks resilience to resist the energy transference. Trauma refers to critical injury that threatens life or permanent loss of function of a body part. There are four classifications of trauma, also referred to as Trauma Type.

Format: Select from options provided on TSTC Data Collection Form (Appendix E) or database. More than one option may be chosen as appropriate. There are four classifications of external causes of trauma:

<u>Code</u>	<u>Description</u>
B	Blunt Trauma - Injury secondary to a violent diffuse force that displaces tissues and or underlying structures. It is also the absence of oxygen as in asphyxiation from smoke or drowning. Examples include: major vehicle collisions, fights, assaults, fall, motorcycles/bike/pedestrian.
P	Penetrating Trauma - Injury resulting from a projectile or thrust foreign object with perforation of tissues and underlying structures. This can be as the result of gunshot wounds, stabbings, impalements, bites (animal, snake, and human) and deep lacerations requiring operative intervention.
TH	Burns/Cold (Thermal): Injury as a result of exposure to fire or flames, or extremes of heat or cold. Includes thermal, chemical, electrical, radiation burn injury; hypothermia, frosbite, immersion foot and chillblains.
A	Asphyxial: Includes inhalation injury and carbon monoxide (CO) poisoning, drowning, asphyxiation, hanging, strangulation, suffocation.
ND	Not Documented

Suggested Sources:

- EMS Run Sheet
- Emergency Department Record
- Admission Note

Ohio Registry Requirement: Yes

ED - RESPIRATORY RATE

Database Field: **RESP_RATE**

Definition: The patient's rate of independent breaths per minute. **A patient who is receiving mechanical ventilation either through a bag/mask device or ventilator and not taking breaths on his own has an independent ventilatory rate of "0."** A patient who is on mechanical ventilation and is taking additional breaths on his own should have the respiratory rate documented at the higher rate. (For example if a patient on a ventilator has a set ventilator rate of 10 but is breathing 20 times a minute, the respiratory rate is 20.) If "Agonal respirations" is documented and a rate is not written, the independent respiratory rate may be considered to be "0." Patients chemically paralyzed for intubation ("rapid sequence intubation") have a respiratory rate of "0".

For each indicate value:

<u>Option</u>	<u>Description</u>
Numbers	Whole numbers from 0 up to 99
ND	Not Documented
NA	Not Applicable
RA	Respiration Assistance

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Coroner's Report

Ohio Registry Requirement: Yes

ED - SYSTOLIC BP

Database Field: **SYS_BP**

Definition: First Systolic Blood Pressure at Emergency Department denotes the patient's first documented blood pressure in the Emergency Department. The systolic blood pressure may be measured by manual auscultation or palpation, or automatic methods.

For each indicate value:

<u>Option</u>	<u>Description</u>
Numbers	Whole numbers from 0 up to 300
ND	Not Documented
NA	Not Applicable
P	Palpable Pulse Only

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Coroner's Report

Ohio Registry Requirement: Yes

ED - TOTAL GCS

Database Field: GLASCOW

Definition: The total score (sum of the above components) for the initial GCS in the emergency department.

Format: This field is used if individual GCS scores are not available.

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Coroner's Report

NOTE: If a patient's coma score is documented in ranges, enter the best response (the highest number). Example: If patient's eye opening response is charted "3 to 4," enter "4."

For patients chemically paralyzed (having received neuromuscular blocking drugs; see Appendix C, or for those in cardiac arrest, the initial (and lowest possible) Glasgow coma score for each category is "1." Patients who are intubated receive a "1" for best verbal response. The highest possible total coma score is 15; the lowest possible total score is 3. If data is undiscoverable, enter "ND" for Blank/Unknown.

Ohio Registry Requirement: Yes

ED GCS – EYE OPENING

Database Field: **EYE_OPENING**

Definition: The initial eye opening score for the patient at the emergency department. The other two components of a GCS Score – best verbal and best motor response – have different assessment parameters for adults, children and infants. The Eye Opening Score of the GCS is the same for all ages. A “normal” GCS **Eye Opening** response (indicating no neurological problems in the respective area of the brain) is “4” for spontaneous eye opening.

Format: Select from database picklist or options provided on TSTC Data Collection Form (Appendix E)..

<u>Option</u>	<u>Description</u>
4	Spontaneous: Opens eyes spontaneously
3	Voice: Opens eyes to verbal stimuli
2	Pain: Opens eyes to noxious stimuli*
1	None: No eye opening
ND	Not Documented
5	Not Applicable: No EMS involvement with patient

*Noxious stimuli refers to a physical stimulus that is applied with the intent to get the victim to open their eyes. Examples are sternal rubs and nail bed pressure.

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Coroner’s Report

Ohio Registry Requirement: Yes

ED GCS – BEST VERBAL RESPONSE

Database Field: VERBAL_RESPONSE

Definition: The initial verbal score for the patient at the emergency department. A “normal” GCS **Verbal** response (indicating no neurological problems in the respective area in the brain) is “5” for all ages.

Format: Select from database picklist or on options provided on TSTC Data Collection Form (Appendix E).

ADULT (Defined for the GCS as a person > 5 years of age)

<u>Option</u>	<u>Description</u>
5	Oriented: Converses with logic and orientation to self, place, and time
4	Confused: Words indicate that the person is confused
3	Inappropriate words: Verbalizes words out of context
2	Incomprehensible sounds: Makes incomprehensible sounds
1	None: No vocalization
ND	Not Documented
6	Not Applicable: No EMS involvement with patient

CHILD (1 to 5 years of age)

<u>Option</u>	<u>Description</u>
5	Oriented: Smiles, oriented to self (3-5 year old), interacts
4	Confused: Cries, but is consolable, inappropriate interactions; verbalization is out of context
3	Inappropriate cries: Inconsistently consolable, moaning
2	Incomprehensible sounds: Inconsolable, agitated sounds
1	None: No vocal response
ND	Not Documented
6	Not Applicable: No EMS involvement with patient

INFANT (Birth to 1 year of age)

<u>Option</u>	<u>Description</u>
5	Coos, babbles
4	Irritable cries
3	Cries to pain
2	Moans to pain
1	No response
ND	Not Documented
6	Not Applicable: No EMS involvement with patient

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Coroner’s Report

Ohio Registry Requirement: Yes

ED GCS – BEST MOTOR RESPONSE

Database Field: MOTOR_RESPONSE

Definition: The initial motor score for the patient at the emergency department. A “normal” GCS **Motor** response (indicating no neurological problems in the respective area of the brain) is “6” for all ages.

Format: Select from database picklist or options provided on TSTC Data Collection Form (Appendix E).

ADULT (Defined for the GCS as a person > 5 years of age)

<u>Option</u>	<u>Description</u>
6	Obeys commands with appropriate motor response
5	Localization of painful stimulation
4	General withdrawal in response to painful stimulation
3	Flexor posturing in response to painful stimulation
2	Extensor posturing in response to painful stimulation
1	None
ND	Not Documented
7	Not Applicable, No EMS involvement

BIRTH TO 5 YEARS of age

<u>Option</u>	<u>Description</u>
6	Normal spontaneous movement
5	Withdraws to touch
4	Withdraws to pain
3	Abnormal flexion
2	Abnormal extension
1	None
ND	Not Documented
7	Not Applicable, No EMS involvement

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Coroner’s Report

Ohio Registry Requirement: Yes

ALCOHOL LEVEL RANGE

Database Field: ETOH

Definition: The amount of the ethyl alcohol present in the patient's blood as confirmed by a laboratory.

Format: Numeric amount of alcohol found.

<u>Option</u>	<u>Description</u>
Y1	0.01 – 0.07 mg%
Y2	0.08 – 0.10 mg%
Y3	0.11 – 0.19 mg%
Y4	Greater than 0.20 mg%
NT	Not Tested
NEG	Tested, Results Negative
RNA	Tested, Results Not Available
ND	Not Documented

Suggested Sources:

- Emergency Department Record
- Laboratory Report
- Inpatient Medical Record
- Coroner's Report

Ohio Registry Requirement: Yes

TOXICOLOGY SCREEN – DRUG CATEGORY

Database Field: TOX

Definition: A laboratory screen of blood and/or urine for the presence of controlled substances other than alcohol.

Format: Select from options provided by TSTC Data Collection Form (Appendix E) or database picklist.

<u>Option</u>	<u>Description</u>
AMP	Amphetamine
BEN	Benzodiazepine
COC	Cocaine
MJ	Marijuana
OPI	Opiate
PCP	PCP
OTHER	Other Illegal substance not listed
NT	Not Tested
ND	Not Documented

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Coroner's Report

Ohio Registry Requirement: Yes

TOXICOLOGY RESULTS

Database Field: TOX_RESULT

Definition: Provides the answer to the toxicology values chosen from the Toxicology Field.

Format: Select from options provided by TSTC Data Collection Form (Appendix E) or database picklist.

<u>Option</u>	<u>Description</u>
POS	Positive
NEG	Negative
ND	Not Documented
NT	Not Tested

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Coroner's Report

Ohio Registry Requirement: Yes

ED DISPOSITION CODE

Database Field: ED_DISPOSITION

Definition: The code of the location of the patient following treatment in your ED. Enter the location of the patient disposition from your ED. If patient was transferred to another treatment facility, the ED transfer to hospital, discharge time and discharge date must be completed.

Format: Select from options provided by TSTC Data Collection Form (Appendix E) or database picklist.

<u>Option</u>	<u>Description</u>
FLOOR	Admitted to floor
ICU	Admitted to Intensive Care Unit
OR	Admitted to operating room (OR, or Surgery)
STEP	Admitted to step-down unit
OBS	Admitted to observation
COR	Transfer to Morgue/Coroner/Funeral home
TRANS.OH	Transfer to another Ohio hospital
TRANS.OOS	Transfer to an out of state hospital
HOME	Home
HC	Home with Home Health Services
AMA	Left against medical advice
OTHER	Other
NA	Not Applicable – Arrival at the hospital was to an area other than the emergency department
ND	Not Documented/Unknowable

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Coroner's Report

Ohio Registry Requirement: Yes

DESTINATION FACILITY

Database Field: ED_DESTINATION_CODE

Definition: This is the destination that the transferring agency will bring the patient to for further evaluation and/or admission.

Format: This field can be used as free text filed also, if the destination is not a facility or agency, but a geographical location.

- Not referred from another Hospital: on TSTC Data Collection Form (Appendix E). (if the patient is not a referral) check the indicator box. If the patient is not a referral and this box is checked, no other lines in this field need to be filled in.
- “Referral Hospital” If the patient is a referred to another hospital, indicate the hospital by proper name or TSTC institution code.

CODE	DESCRIPTION	CODE	DESCRIPTION
1	Department of Veteran Affairs	1199	Highland District Hospital
1003	The Jewish Hospital	1200	Greenfield Area Medical Center
1024	Bethesda North Hospital	1808	Shriners Hospitals for Children, Cincinnati Burns Hospital
1026	Mercy Hospital Mt. Airy	1998	Specialty Hospital/LTC (OH)
1028	Mercy Hospital Clermont	1999	Free Standing Emergency Center (OH)
1033	Mercy Hospital Fairfield		
1100	Adams County Hospital		
1115	Brown County General Hospital	6000	Other Indiana Hospital
1116	Middletown Regional Hospital	6011	Dearborn County Hospital
1117	The Fort Hamilton Hospital	6020	Margaret Mary Community Hospital
1119	McCullough-Hyde Memorial Hospital, Inc.	7000	Other Kentucky Hospital
1124	Clinton Memorial Hospital	7001	St. Elizabeth Medical Center North
1183	Mercy Hospital Western Hills	7002	St. Elizabeth Medical Center South
1186	Children’s Hospital Medical Center	7003	St. Luke Hospital East
1187	The Christ Hospital	7010	St. Elizabeth Medical Center Grant
1189	The University Hospital	7011	St. Luke Hospital West
1190	Deaconess Hospital		
1191	Good Samaritan Hospital	9333	Hospital in a State other than IN, KY, OH
1193	Mercy Hospital Anderson		

Suggested Sources:

- Transfer Form
- Transferring EMS Agency's Report
- Emergency Department Record
- TSTC Registry Manual

Ohio Registry Requirement: Yes

HOSPITAL DATA

HOSPITAL ARRIVAL DATES & TIMES

Database Field: HOSPITAL_ARRIVAL_TIME

Database Field: HOSPITAL_ARRIVAL_DATE

Definition: The time and date that the patient actually arrived in YOUR emergency department or hospital.

Format: Military time required (see Appendix B). Dates are 8 numeric digits written as MM/DD/YYYY. Enter month as 2 digits (01 for January, 02 for February, etc.) and enter year using all 4 digits. Direct Admit should be marked with a Y or N. All fields relating to the emergency department should be left blank.

Suggested Sources:

- Emergency Department Record
- EMS Run Sheet

Ohio Registry Requirement: Yes

FIRST DOCUMENTED TEMPERATURE

Database Field: **TEMPS**

Definition: Patient's first documented temperature. Temperatures are documented in Fahrenheit.

Format:

<u>Option</u>	<u>Description</u>
Numbers	Enter patient's first documented temperature in Fahrenheit degrees
ND	Not Documented

Suggested Sources:

- Transfer Form
- Transferring EMS Agency's Report
- Emergency Department Record

Ohio Registry Requirement: Yes

ED MECHANICAL OR SURGICAL AIRWAY

Database Field: INTUBATED

Definition: Was a mechanical or surgical airway used in the emergency department, and what type of artificial airway was used?

Format: Select from database picklist or on TSTC Data Collection Form (Appendix E)..

<u>Option</u>	<u>Description</u>
NETT	Nasal ETT (Endotracheal tube)
OETT	Oral ETT (Endotracheal tube)
TRACH	Trach
CRIC	Cricothyrotomy
ESOPH	Unintentional esophageal intubation
FAIL	Attempted but failed
NONE	Airway assessed but no airway placed
OTHER	Other
ND	Not documented
NA	Not applicable

Suggested Sources:

- Transfer Form
- Transferring EMS Agency's Report
- Emergency Department Record

Ohio Registry Requirement: Yes

ED - CPR

Database Field: CPR

Definition: Was CPR (closed chest cardiac massage) performed on the patient in your emergency department.

Format: Select from options provided by TSTC Data Collection Form (Appendix E) or database picklist. Select all that apply.

<u>Option</u>	<u>Description</u>
N	No
Y	Yes
ND	Not Documented
NA	Not Applicable

Suggested Sources:

- Transfer Form
- Transferring EMS Agency's Report
- Emergency Department Record

Ohio Registry Requirement: Yes

ED – NEEDLE CHEST DECOMPRESSION

Database Field: CHEST

Definition: The insertion of a needle or tube in the chest to relieve pressure while in your emergency department. If more than one needle or tube was inserted into the patient's chest, choose Y once.

Format: Select from options provided by TSTC Data Collection Form (Appendix E) or database picklist. Select all that apply.

<u>Option</u>	<u>Description</u>
N	No
Y	Yes
ND	Not Documented
NA	Not Applicable

Suggested Sources:

- Transfer Form
- Transferring EMS Agency's Report
- Emergency Department Record

Ohio Registry Requirement: Yes

ED – SPINAL IMMOBILIZATION

Database Field: IMMOB

Definition: Was Spinal Immobilization initiated on the patient in your ED?

Format: Select from options provided by TSTC Data Collection Form (Appendix E) or database picklist. Select all that apply.

<u>Option</u>	<u>Description</u>
N	No
Y	Yes
ND	Not Documented
NA	Not Applicable

Suggested Sources:

- Transfer Form
- Transferring EMS Agency's Report
- Emergency Department Record

Ohio Registry Requirement: Yes

ED - CERVICAL COLLAR

Database Field: COLLAR

Definition: Was a cervical collar used on the patient while in your emergency department?

Format: Select from options provided by TSTC Data Collection Form (Appendix E) or database picklist. Select all that apply.

<u>Option</u>	<u>Description</u>
N	No
Y	Yes
ND	Not Documented
NA	Not Applicable

Suggested Sources:

- Transfer Form
- Transferring EMS Agency's Report
- Emergency Department Record

Ohio Registry Requirement: No

ED – BACKBOARD

Database Field: **BBOARD**

Definition: Was a backboard used while the patient was in your emergency department?

Format: Select from options provided by TSTC Data Collection Form (Appendix E) or database picklist. Select all that apply.

<u>Option</u>	<u>Description</u>
N	No
Y	Yes
ND	Not Documented
NA	Not Applicable

Suggested Sources:

- Transfer Form
- Transferring EMS Agency's Report
- Emergency Department Record

Ohio Registry Requirement: No

NOTE: The Ohio Trauma Registry recognizes immobilization as use of both a cervical collar and a backboard.

ED - HEAD CT

Database Field: HEADCT

Definition: A Head CT was done on the patient while the patient was in your emergency department.

Format: Select from options provided by TSTC Data Collection Form (Appendix E) or database picklist. Select all that apply.

<u>Option</u>	<u>Description</u>
N	No
Y	Yes
NA	Not Applicable (Direct Admission to a unit other than the ED)

Suggested Sources:

- Transfer Form
- Transferring EMS Agency's Report
- Emergency Department Record

Ohio Registry Requirement: Yes

ED - ABDOMINAL EVALUATION

Database Field: ABDCT

Definition: Was an abdominal assessment, CT, Diagnostic Peritoneal Lavage (DPL) or Ultrasound performed on the patient while in the ED?

Format: Select from options provided by TSTC Data Collection Form (Appendix E) or database picklist. If an Abdominal/Pelvic CT*, Abdominal Ultrasound*, or Diagnostic Peritoneal Lavage (DPL), is/are done while patient is in your ED,* indicate yes or no.

<u>Option</u>	<u>Description</u>
Y	Yes
N	No
NA	Not Applicable (Direct Admission to a unit other than the ED)

*If the CT scan or Ultrasound is done enroute to the next level of care (i.e. operating room, intensive care unit, etc...) this is considered to have been done while the patient was still in the ED. You DO NOT have to have a CT scanner or Ultrasound machine in your ED to meet this definition.

Suggested Sources:

- Transfer Form
- Transferring EMS Agency's Report
- Emergency Department Record

Ohio Registry Requirement: Yes

ED - PARALYTICS

Database Field: PARALYTICS

Definition: Drugs given to impede the patient's ability to respond normally. See Appendix D for list of paralytics given to patient to determine definitively if patient was paralyzed.

Format: Select from database picklist or choose from the options on TSTC Data Collection Form (Appendix E).

<u>Option</u>	<u>Description</u>
1	Intubated when GCS assessed
2	Intubated and chemically paralyzed
3	Sedated
NONE	No intubation or paralytics
ND	Not Documented
NA	Not Applicable

The circumstances related to the patient upon initial assessment. If patient is intubated or has been chemically paralyzed, the GCS is not valid.

Patients are chemically paralyzed if they have been medicated with a neuromuscular blocking agent to induce paralysis. Examples of neuromuscular blocking agents can be found on Appendix C.

Suggested Sources:

- EMS Run Sheet

Ohio Registry Requirement: No

VITAL SIGNS LOCATION

Database Field: VS_LOCATION

Definition: These are where the Vital Signs were measured.

Format: Select from database picklist or choose from the options on the TSTC Data Collection Form.

SCENE – Prehospital EMS 1st set of vital signs recorded.

ED – Your ED 1st set of vital signs recorded.

REF – Referring Hospital 1st set of vital signs recorded

FLOOR – 1st set of vital signs recorded at YOUR hospital if other than an ED point of origin

Suggested Sources:

Ohio Registry Requirement:

VITAL SIGNS NUMBER

Database Field: VS_NUMBER

Definition: These are the related numeric identifiers for where the vital signs were initially measured.

Format: Select from database picklist or chose from the options on TSTC Data Collection Form.

1 = 1st Set at the SCENE

2 = 1st Set at YOUR Emergency Department

3 = 1st Set at YOUR Nursing Unit (Only used when patient is a direct admission)

4 = 1st Set at the REFERRING hospital.

Suggested Sources:

- Emergency Department Record
- Referring Hospital Record
- Inpatient Nursing Records

Ohio Registry Requirement: No

ADMITTING SERVICE

Database Field: ADM_SVC

Definition: The medical specialty that admits the patient for inpatient care.

Format: Select from options provided by TSTC Data Collection Form (Appendix E). or database picklist.

<u>Option</u>	<u>Description</u>
0	Not Admitted: Died in ED, or was transferred to another hospital
1	General Surgery (includes adult general and adult trauma surgeons)
2	Neurosurgery
3	Orthopedic Surgery
4	Pediatric Surgery (includes pediatric general surgeons)
5	Burn
6	Thoracic Surgery
7	Plastic Surgery
8	All other Surgical Services
1	Non-Surgical Services

Select the medical specialty of the attending physician who admits the patient. This is not necessarily the service to which the patient is designated upon admission to your hospital. Enter the service to which the patient was admitted from the available options.

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record

Ohio Registry Requirement: Yes

TOTAL DAYS IN ICU

Database Field: TOTAL_DAYS_ICU

Definition: The total number of days that the patient occupied a bed in the intensive care unit and hospital. The total number of patient days for an ICU episode, calculated by subtracting the date of admission from the date of discharge. If a patient is admitted and discharged on the same date, the LOS is 1 day.

Intensive care unit length of stay is recorded in days and is rounded up to the next day such that any time spent in an ICU after midnight, time code 0000, qualifies as a day in the ICU. Enter the total number of days patient spent in the ICU. For patients in the ICU < 24 hours, this is equal to 1 ICU day. Intensive care unit days are also defined by any intensive/critical care unit stay in an acute care facility not necessarily limited to stays in surgical or shock/trauma intensive care units. The total days in the ICU should include initial days in an ICU as well as subsequent days spent as a readmission to an ICU after discharge to the step-down unit of the floor but do not include ICU days in a referring hospital.

Examples:

Admit to ICU at 2200, DC at 0200 the next day, actual LOS is 4 hours and is recorded as 2 days.

Admit to ICU at 0100, DC at 2300 the same day, actual LOS is 22 hours and is recorded as 1 day.

Format: Numeric digits This is a calculated field. If data entry has been completed within the HOSPITAL_ARRIVAL_DATE and the DISCHARGE_DATE fields, this will automatically be calculated. It is not a field for data entry.

Suggested Sources:

- ICU Records

NOTE: Document days in whole numbers (not measured hourly or by half days). If the patient was admitted to and discharged from an ICU in one day, the length of stay is one day. If the patient did not utilize these areas, enter "0."

Ohio Registry Requirement: Yes

TOTAL DAYS ON VENTILATOR SUPPORT

Database Field: VENTDAYS

Definition: The total number of patient days that the patient received ventilator support.

Format: Numeric digits. The total number of patient days that the patient received ventilator support is calculated by subtracting the date of the start of ventilator support from the date of the discontinuance of ventilator support. If ventilator support is started and discontinued on the same date, the ventilator support days is 1 day.

Note – ventilator support is the active mechanical support of a patient’s respiratory effort. It is NOT the presence or absence of endotracheal tube. While it is true that an endotracheal tube is in place during the use of ventilatory support, there are situations where the patient may have an endotracheal or tracheostomy tube in place and the patient is NOT on ventilatory support.

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Operating Room Record

Ohio Registry Requirement: Yes

FINAL ANATOMIC DIAGNOSIS - ICD-9-CM

Database Field: ICD9

Definition: This is the ICD9 code for the diagnosis. You may enter as many diagnostic codes as you need. You may enter injury and non-injury codes, but only the injury codes will have and AIS value and be included in the ISS.

Format: Pick designated code for each specific anatomic injury as outlined by ICD-9-CM coding procedures. **Enter the most severe injury ICD-9 code first (on the top line).**

Suggested Sources:

- EMS Run Report
- Inpatient Medical Record
- Discharge Summary
- Operative Reports
- Consultations
- Progress Notes
- Lab and Radiology Reports
- Pathology Reports
- Autopsy Report

Ohio Registry Requirement: Yes

ADMITTING DIAGNOSIS

Database Field: **DIAGNOSES**

Definition: This is the admitting diagnosis.

Format: This is a free text field so you may type in as much information as needed while keeping it as short and consistent as possible.

Suggested Sources:

- EMS Run Report
- Inpatient Medical Record
- Discharge Summary
- Operative Reports
- Consultations
- Progress Notes
- Lab and Radiology Reports
- Pathology Reports
- Autopsy Report

Ohio Registry Requirement: No

ABBREVIATED INJURY SEVERITY SCORE

Database Field: AIS

Definition: This is the abbreviated injury severity score (AIS 98) for this diagnosis. The information entered into this field is used to calculate the ISS (injury severity score). This field also assists in predicting the outcomes of trauma victims and will be assigned by TSTC Registry.

Format: Pick designated for each specific anatomic injury as outlined by ICD-9-CM coding procedures. Click in field and AIS will automatically be calculated.

<u>Code</u>	<u>Description</u>
1	Minor
2	Moderate
3	Serious
4	Severe
5	Critical
6	Maximum
9	Vague description of injuries which cannot be assigned a severity score (i.e. “Blunt trauma”, or “closed head injury”)

NOTE: ICD-9-CM coding is per current coding guidelines.

Suggested Sources:

- EMS Run Report
- Inpatient Medical Record
- Discharge Summary
- Operative Reports
- Consultations
- Progress Notes
- Lab and Radiology Reports
- Pathology Reports
- Autopsy Report

Ohio Registry Requirement:

AIS (ABBREVIATED INJURY SCALE) CODE

Database Field: AIS_CODE

Definition: Assists in predicting the outcomes of trauma victims.

Format: Pick codes designated for each specific anatomic injury as outlined by ICD-9-CM coding procedures. Click in field and similar codes corresponding to ICD-9-CM codes on same line will appear.

Suggested Sources:

Ohio Registry Requirement: Yes

REGION OF INJURY

Database Field: REGION

Definition: Assists in predicting the outcomes of trauma victims.

Format: The AIS and Region columns will be left blank when completing TSTC Data Collection Form. Click in field and region will appear

<u>Code</u>	<u>Description</u>
ABD	Abdomen/Pelvic Contents
ARM	Upper Extremities
CHEST	Thorax
CS	Cervical Spine
EXT	External
FACE	Face
HEAD	Head
LEG	Lower Extremities
LS	Lumbar Spine
NECK	Neck
SPINE	Spine
TS	Thoracic Spine
NA	Not Applicable

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Operating Room Record

Ohio Registry Requirement: No

INJURY SEVERITY SCORE

Database Field: ISS

Definition: This field is a calculated Injury Severity Score (ISS 1-75). It used the fields REGION and AIS (above in the list of diagnoses) to calculate it. This field will be defaulted for you if you push the enter key and will automatically be updated if you add diagnoses to your list.

Format: Click in this field and the ISS will automatically be calculated.

Suggested Sources:

Ohio Registry Requirement: Yes

COMPLICATIONS

Database Field: COMP_TYPE

Definition: Diseases or conditions that develop during the course of treatment which affect the patient's course of treatment and recovery.

Format: Select from options provided TSTC Data Collection Form (Appendix E). or TraumaBase. For definitions of each complication, consult Appendix D.

<u>Option</u>	<u>Description</u>
ARDS	ARDS
ARREST	Cardiac Arrest
ASP	Aspiration Pneumonia
BACT	Bacteremia
COAG	Coagulopathy
COMP	Compartment Syndrome
DEHIS	Dehiscence, Evisceration
DFI	Disseminated Fungal Infection
DVT	DVT-Deep Vein Thrombosis-Lower extremity
EMPY	Empyema
ESOPH	Esophageal Intubation
HYPO	Hypothermia
IAA	Intra-abdominal Abscess
INF	Wound Infection
JAUN	Jaundice
LOR	Loss of Operative Reduction/fixation
MI	Myocardial Infarction
MORT	Mortality
NEUR	Progression of Neurological Insult
PANC	Pancreatitis
PE	Pulmonary Embolus
PNEU	Pneumonia
PNEUMO	Pneumothorax
RF	Renal Failure
SLS	Sepsis or Sepsis-like syndrome
SKIN	Skin Breakdown
UTI	Urinary Tract Infection
DEATH	All Deaths
NONE	None
OTH	Other
NA	Not Applicable
ND	Not Documented
NOT	Not Done
UNK	Unknown
NORESP	No response to resuscitation

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record

- Autopsy Report

NOTE: This list comprises those complications mandated by Ohio Department of Public Safety. If data is undiscoverable, select "Unknown."

Ohio Registry Requirement: Yes

COMORBIDITY FACTORS

Database Field: RISK_TYPE

Definition: A medical or psychosocial condition existing prior to admission as determined by chart documentation which might effect the outcome of the patient and is/are synonymous with ‘comorbid conditions’.

Format: Select from options provided by TSTC Data Collection Form or database picklist.

TYPE	CODE	DESCRIPTION	TYPE	CODE	DESCRIPTION
CARDIAC	A01	History of Cardiac Surgery	MUSC/SKEL	I01	Rheumatoid Arthritis
	A02	Coronary Artery Disease			
	A03	Congestive Heart failure			I02
	A04	Cor Pulmonale		I99	Other Metabolic Disorder
	A05	Myocardial Infarction	NEURO	J01	Spinal Cord Injury
	A06	Hypertension		J02	Multiple Sclerosis
A99	Other cardiac	J03		Alzheimer’s Disease	
DIABETIC	B01	Diabetes insulin dependent		J04	Seizure
	B02	Diabetes non-insulin dependent		J05	Chronic Demyelinating Disease
	B99	Other Diabetes		J06	Chronic Dementia
G/I	C01	Peptic Ulcer Disease		J07	Organic Brain Syndrome
	C02	Gastric/Esophageal Varices		J08	Parkinson’s Disease
	C03	Pancreatitis		J09	CVA/Hemiparesis
				J10	Mental Retardation
	C04	Inflammatory Bowel Disease		J99	Other musculoskel/neuro
	C99	Other GI	OBESITY	K00	Obesity
HEMATOL	D01	Acquired Coagulopathy	PULMON	L01	Documented Hx ongoing Txmt
	D02	Coumadin Therapy		L02	Asthma
	D03	Hemophilia		L03	COPD
	D04	Pre-existing Anemia		L04	Chronic Pulmonary Condition
	D05	DVT			
	D06	Sickle Cell Disease			
	D99	Other Hematol Disorder		L99	Other Pulmonary Disorder
PSYCH	E00	Psychiatric Disorders	RENAL	M01	Serum Creatinine >2mg% admit
IMMUN	F01	HIV/AIDS			M02
	F02	Routine Steroid Use		M99	Other Renal Disorder
	F03	Transplant(s)	SUBST ABUSE	N01	Chronic Drug Abuse
	F04	Active Chemotherapy		N02	Chronic Alcohol Abuse
	F99	Other Immunsupp Ther		N99	Other Substance Abuse
HEPATIC	G01	Bilirubin >2mg%-admission	PREG	P00	Pregnancy
	G02	Cirrhosis			
MALIGN	H01	CA-Undergoing Therapy		ND	Not Documented

	H02	CA-Concurrent w/ Mets		NONE	No Risks
	H99	Other Malignancy			

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Autopsy Report

Ohio Registry Requirement: Yes

SUMMARY OF PROCEDURES

Database Field: **PROCEDURE_CODE**

Definition: This is the ‘easy’ code for this procedure. This field also contains procedure codes that may have been entered earlier during scene or ED segments, so that you can see all procedures that have been done in the field, ED, and OR..

Format:

<u>Code</u>	<u>Description</u>
CPR	CPR
CHEST	Needle or Thoracostomy Chest Decompression (EMS only)
FLUIDS	All types excluding blood
HEADCT	CT Head
ABDCT	Abdominal CT
DPL	Diagnostic Peritoneal Lavage
ABDUS	Abdominal Ultrasound
IMMOB	Spinal Immobilization
BBOARD	Back Board
CCOLLAR	Cervical Collar
THORA	Needle or Thoracostomy Chest Decompression (ED/Hospital only)
VENT	Mechanical Ventilation/Intubation
NONE	None
ND	Not Documented

Suggested Sources:

- Inpatient Medical Record
- Autopsy Report

Ohio Registry Requirement: Yes

PROCEDURE EPISODE

Database Field: **PROCEDURE_EPISODE**

Definition: This is the episode indicator for the operative procedure. Use this number to identify groups of procedures done at the same time in the OR and only in the surgery suite. Bedside procedures are not included. All of the procedures done in the first visit to the OR would be given a number 1 for that episode. All of the procedures done in the second visit to the OR would be given a number 2 for that episode, etc...

Format:

<u>Option</u>	<u>Description</u>
1	First Operative Episode
2	Second Operative Episode
3	Third Operative Episode
4	Fourth Operative Episode
5	Fifth Operative Episode

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Autopsy Report

Ohio Registry Requirement: Yes

PROCEDURE LOCATION

Database Field: **PROCEDURE_LOCATION_CODE**

Definition: This is the unit location where the procedure was done. This indicates whether procedures were done at the scene, in ED, in the OR, in Radiology, etc...If procedures are entered under the individual screen procedure buttons, i.e. ED Immobilization under ED procedures, then the location code will default for those entered on the Prehospital, Referring or ED Procedure screens. Then only OR location would be entered separately. If these buttons do not appear, then the location field should be completed as necessary.

Format:

<u>Code</u>	<u>Description</u>
ED	Emergency Department
HOSP	Referring Hospital
ICU	ICU
ND	Not Documented
OBS	Observation
OR	Operating Room
SCENE	Scene of Injury
STEP	Step Down Unit
TRANS	Transport Unit
FLOOR	Nursing Unit

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Autopsy Report

Ohio Registry Requirement: Yes

PROCEDURE ICD-9-CM

Database Field: PROCEDURE_ICD-9

Definition: These are the designated codes in the ICD-9-CM book for the procedures.

Format: The codes as outlined in the ICD-9-CM book.

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Autopsy Report

Ohio Registry Requirement: Yes

PROCEDURE RESULT

Database Field: PROCEDURE_RESULT

Definition: This is a free text field description of the results of the procedure. If the procedure is therapeutic, this could be the response of the patient to the therapy. If the procedure is diagnostic (as in CT scans), this is the finding or result of the test.

Format:

<u>Code</u>	<u>Description</u>
N	No
POS	Positive
NEG	Negative
UNK	Documented Unknown
ND	Not Documented
NA	Not Applicable

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Autopsy Report

Ohio Registry Requirement: Yes

FUNCTIONAL OUTCOME MEASURE: FEEDING

Database Field: FEED

Definition: FOM self-feeding score is the functional outcome measure of a patient's self-feeding abilities upon discharge from the hospital. Includes using suitable utensils to bring food to mouth, chewing and swallowing. Opening containers, cutting meat, buttering bread, and pouring liquids are not included, as they are often part of meal preparation. Also included in this measure is the status of the FOM score. The options are listed below the self feeding score options.

Format: Select from options provided on TSTC Data Collection Form (Appendix E) or TraumaBase.

<u>Option</u>	<u>Description</u>
4	Independent, eats and drinks in a customary way.
3	Independent with device, eats and drinks with device assistance.
2	Dependent, requires supervision with eating.
1	Dependent, does not eat or drink by mouth.
NA	Less than 7 years old or death.
ND	Not Documented

Suggested Sources:

- Inpatient Medical Record
- Rehabilitation Records

Ohio Registry Requirement: Yes

FUNCTIONAL OUTCOME MEASURE: LOCOMOTION

Database Field: LOC

Definition: The FOM locomotion score is the functional score outcome measure of patient locomotion abilities upon discharge from the hospital. Includes walking once in a standing position or using a wheelchair, once in a seated position indoors. Also included in this measure is the status of the FOM score. The options are listed below the locomotion score options.

Format: Select from options provided on TSTC Data Collection Form (Appendix E). or TraumaBase.

<u>Option</u>	<u>Description</u>
4	Independent, walks 150 feet without device assistance.
3	Independent with device, walks or wheels 150 feet with device assistance.
2	Dependent with some assistance, walks or wheels 50 feet with supervision.
1	Dependent, does not walk or wheel at least 50 feet.
NA	Child not yet walking.
ND	Not documented.

Suggested Sources:

- Inpatient Medical Record
- Rehabilitation Records

Ohio Registry Requirement: Yes

FUNCTIONAL OUTCOME MEASURE: EXPRESSION

Database Field: **EXP**

Definition: The FOM expression score is a functional score outcome measure of expression. Includes clear expression of verbal or nonverbal language. This means expressing linguistic information verbally or graphically with appropriate and accurate meaning and grammar.

Format: Select from options provided on TSTC Data Collection Form (Appendix E). or TraumaBase.

<u>Option</u>	<u>Description</u>
4	Independent, expressed ideas intelligently and fluently
3	Independent with device, expresses ideas with mild difficulty
2	Dependent, expressed basic needs half the time.
1	Dependent, expresses basic needs with prompting.
NA	Less than 7 years old or death.
ND	Not Documented.

Suggested Sources:

- Inpatient Medical Record
- Rehabilitation Records

Ohio Registry Requirement: Yes

DISCHARGE DISPOSITION

Database Field: DC_DISPOSITION_CODE

Definition: This classifies the patients disposition after inpatient discharge. This is not the specific facility the patient was transferred to, if applicable. If the patient is transferred to another facility, list the receiving facility by its full name or the Ohio Department of Public Safety/State Trauma Registry's institution code number (see Appendix A) on the blank provided in the TSTC Form (Appendix E).

Format: Select from options provided on TSTC Data Collection Form (Appendix E). or TraumaBase.

<u>Option</u>	<u>Description</u>
AMA	Against Medical Advice
COR	Coroner
D	Death in ED
DOA	Dead on Arrival in ED
H	Home
HHS	Home with Professional Health Services
JAIL	Jail or prison
NUR	Extended Care Facility (including skilled nursing facility and nursing home)
OTH	Other
REH	Rehabilitation Center
TRANS.OH	Transfer to another Ohio hospital
TRANS.OOS	Transfer to an out of state hospital
NA	Not Applicable
ND	Not Documented, Unknowable

Suggested Sources:

- Inpatient Record
- Discharge Summary

Ohio Registry Requirement: Yes

HOSPITAL DISCHARGE DATE

Database Field: DISCHARGE_DATE

Definition: Date the patient was discharged from the hospital after an inpatient stay

Format: 8 numeric digits written as MM/DD/YYYY.

<u>Code</u>	<u>Description</u>
ND	Not documented
UNK	Unknown

Suggested Sources:

- Inpatient Record
- Discharge Summary

Ohio Registry Requirement: No

DATE OF DEATH

Database Field: **DEATH_DATE**

Definition: This is the date of official (pronounced) death.

Format: Dates are 8 numeric digits written as MM/DD/YYYY. Enter month as 2 digits (01 for January, 02 for February, etc.) and enter year using all 4 digits.

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Death Certificate
- Autopsy Report

Ohio Registry Requirement: Yes

FINAL OUTCOME

Database Field: **OUTCOME**

Definition: This is the patient's final outcome at hospital discharge.

Format:

A Alive

D Dead**

**If D is chosen, the 'Patient Died' screen will pop up and offer the below fields to be completed.

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Death Certificate
- Autopsy Report

Ohio Registry Requirement: Yes.

HOSPITAL CHARGE TOTAL

Database Field: CHARGE_TOTAL

Definition: The dollar amount of billed hospital charges.

Format: Designate the dollar amount of billed hospital charges (enter whole dollar amount only).

<u>Code</u>	<u>Description</u>
TOTAL	Total Charge

Suggested Sources:

- Billing Records

Ohio Registry Requirement: Yes

PRINCIPLE PAYMENT SOURCE

Database Field: PAYMENT_SOURCE

Definition: The entity that is expected to be responsible for the largest percentage of the patient's bill for the current encounter.

Format: Select from options provided on TSTC Data Collection Form (Appendix E) or TraumaBase.

<u>Code</u>	<u>Description</u>
I	Commercial Insurance
MCAID	Medicaid
MCARE	Medicare
SELF	Self Pay
ND	Not Documented
WORK	Worker's Compensation

Suggested Sources:

- Registration Form
- Billing Records

Ohio Registry Requirement: Yes

LENGTH OF STAY

Database Field: LOS

Definition: The total days that the patient occupied a bed in the intensive care unit and hospital. The total number of patient days for an episode, calculated by subtracting the date of admission from the date of discharge. If a patient is admitted and discharged on the same date, the LOS is 1 day.

Format: Whole numbers from 0 up to (but excluding) 600. This is a calculated field. If data entry has been completed within the HOSPITAL_ARRIVAL_DATE and the DISCHARGE_DATE fields, this will automatically be calculated. It is not a field for data entry.

Suggested Sources:

- Registration Form
- Discharge Summary

Ohio Registry Requirement:

ORGANS REQUESTED/GRANTED

Database Field: DONATION_STATUS

Definition: This is whether organ donation was solicited and granted.

Format:

<u>Code</u>	<u>Description</u>
YY	Requested and Granted
YN	Requested and Not Granted
NN	Not Requested and Not Granted
ND	Not Documented
NA	Not Applicable

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Death Certificate
- Autopsy Report

Ohio Registry Requirement: Yes

ORGANS DONATED

Database Field: **ORGANS_DONATED**

Definition: These are the organs that were donated.

Format:

<u>Code</u>	<u>Description</u>
CORNEA	Cornea
EAR	Ear
HEART	Heart
LUNG	Lung
KIDNEY	Kidney
LIVER	Liver
MARROW	Marrow
PANCREAS	Pancreas
SKIN	Skin
TISSUE	Tissue
OTHER	Other
UNK	Unknown
NA	Not Applicable (Not death)
NONE	No organs donated
NOT	Not Done

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Death Certificate
- Autopsy Report

Ohio Registry Requirement: No

AUTOPSY CHARTED

Database Field: AUTOPSY

Definition: This is whether the autopsy was performed and charted.

Format:

<u>Code</u>	<u>Description</u>
Y	Yes
N	No
ND	Not Documented
NA	Not Applicable, not dead

Suggested Sources:

- Emergency Department Record
- Inpatient Medical Record
- Death Certificate
- Autopsy Report

Ohio Registry Requirement: Yes

APPENDICES

APPENDIX A**STATE TRAUMA REGISTRY OHIO HOSPITAL CODE NUMBERS**

CODE NUMBER	HOSPITAL	CITY
1275	AKRON CITY SAINT THOMAS HOSPITAL	AKRON
1276	AKRON GENERAL MEDICAL CENTER	AKRON
1277	CHILDREN'S HOSPITAL MEDICAL CENTER	AKRON
1278	ST. THOMAS HOSPITAL MEDICAL CENTER	AKRON
1269	ALLIANCE COMMUNITY HOSPITAL	ALLIANCE
1215	AMHERST HOSPITAL (EHM)	AMHERST
1104	SAMARITAN REGIONAL HEALTH SYSTEM	ASHLAND
1106	ASHTABULA COUNTY MEDICAL CENTER	ASHTABULA
1109	O'BLENESS MEMORIAL HOSPITAL	ATHENS
1279	BARBERTON CITZEN'S HOSPITAL	BARBERTON
1421	INTENSIVE HOSPITAL OF AKRON	AKRON
1112	BARNSVILLE HOSPITAL ASSOCIATION	BARNESVILLE
1028	MERCY HOSPITAL CLERMONT	BATAVIA
1141	UHHS BEDFORD MEDICAL CENTER	BEDFORD
1113	BELMONT COMMUNITY HOSPITAL	BELLAIRE
1214	MARY RUTAN HOSPITAL	BELLEFONTAIN
1261	THE BELLEVUE HOSPITAL	BELLEVUE
1101	BLANCHARD VALLEY REGIONAL HEALTH	BLUFFTON
1295	WOOD COUNTY HOSPITAL	BOWLING GREEN
1293	COMMUNITY HOSPITAL OF WILLIAMS COUNTY	BRYAN
1130	BUCYRUS COMMUNITY HOSPITAL	BUCYRUS
1022	HARRISON COMMUNITY HOSPITAL	CADIZ
1181	SOUTHEASTERN OHIO REGIONAL MEDICAL	CAMBRIDGE
1270	AULTMAN HOSPITAL	CANTON
1271	MERCY MEDICAL CENTER	CANTON
1001	UNIVERSITY HOSPITAL HEALTH SYSTEM	CHARDON
1029	ADENA REGIONAL MEDICAL CENTER	CHILLICOTHE
1024	BETHESDA NORTH	CINCINNATI
1186	CHILDREN'S HOSPITAL MEDICAL CENTER	CINCINNATI
1190	DEACONESS	CINCINNATI
1026	MERCY HOSPITAL MT. AIRY	CINCINNATI

CODE NUMBER	HOSPITAL	CITY
1183	MERCY HOSPITAL WESTERN HILLS	CINCINNATI
1003	HEALTH ALLIANCE THE JEWISH HOSPITAL KENWOOD	CINCINNATI
1187	HEALTH ALLIANCE THE CHRIST HOSPITAL	CINCINNATI
1189	HEALTH ALLIANCE THE UNIVERSITY HOSPITAL	CINCINNATI
1193	MERCY HOSPITAL ANDERSON	CINCINNATI
1808	SHRINERS HOSPITAL FOR CHILDREN- CINCINNATI BURNS HOSPITAL	CINCINNATI
1191	TRI-HEALTH GOOD SAMARITAN HOSPITAL	CINCINNATI
1704	VETERAN AFFAIRS MEDICAL CTR	CINCINNATI
1254	BERGER HEALTH SYSTEM	CIRCLEVILLE
1151	CLEVELAND CLINIC FOUNDATION	CLEVELAND
1155	COLUMBIA ST. VINCENT CHARITY	CLEVELAND
1152	DEACONESS HOSPITAL CLEVELAND	CLEVELAND
1145	FAIRVIEW HEALTH SYSTEM	CLEVELAND
1147	GRACE HOSPITAL	CLEVELAND
1416	HEALTH HILL HOSPITAL FOR CHILDREN	CLEVELAND
1149	LUTHERAN HOSPITAL	CLEVELAND
1148	MERIDIA HURON HOSPITAL	CLEVELAND
1150	METROHEALTH MEDICAL CENTER	CLEVELAND
1154	ST. LUKE'S MEDICAL CENTER	CLEVELAND
1158	ST. MICHAEL HOSPITAL	CLEVELAND
1142	UNIVERSITY HOSPITAL OF CLEVELAND & RAINBOW BABIES & CHILDRENS	CLEVELAND
1240	MERCER COUNTY JOINT TOWNSHIP COMMUNITY HOSPITAL	COLDWATER
1818	ARTHUR C. JAMES CANCER RESEARCH	COLUMBUS
1169	CHILDRENS HOSPITAL	COLUMBUS
1174	COLUMBUS COMMUNITY HOSPITAL	COLUMBUS
1015	DOCTORS HOSPITAL WEST	COLUMBUS
1173	GRANT MEDICAL CENTER	COLUMBUS
1005	RIVERSIDE METHODIST HOSPITAL	COLUMBUS
1027	MT. CARMEL EAST HOSPITAL	COLUMBUS
1175	MT. CARMEL WEST HOSPITAL	COLUMBUS
1171	THE OHIO STATE UNIVERSITY MEDICAL CENTER	COLUMBUS

1170	THE OHIO STATE UNIVERSITY HOSPITALS EAST	COLUMBUS
CODE NUMBER	HOSPITAL	CITY
1107	BROWN MEMORIAL HOSPITAL	CONNEAUT
1129	COSHOCTON COUNTY MEMORIAL HOSPITAL	COSHOCTON
1280	CUYAHOGA FALLS GENERAL HOSPITAL	CUYAHOGA FALLS
1248	FRANCISCAN MEDICAL CENTER	DAYTON
1245	GOOD SAMARITAN HOSPITAL	DAYTON
1246	GRANDVIEW HOSPITAL	DAYTON
1247	MIAMI VALLEY HOSPITAL	DAYTON
1035	SOUTHVIEW HOSPITAL & FAMILY HEALTH	DAYTON
1411	THE CHILDREN'S MEDICAL CENTER	DAYTON
1160	DEFIANCE HOSPITAL	DEFIANCE
1163	GRADY MEMORIAL HOSPITAL	DELAWARE
1284	TWIN CITY HOSPITAL	DENNISON
1285	UNION HOSPITAL	DOVER
1127	EAST LIVERPOOL CITY HOSPITAL	EAST LIVERPOOL
1217	EMH REGIONAL MEDICAL CENTER	ELYRIA
1133	MERIDIA EUCLID HOSPITAL	EUCLID
1194	BLANCHARD VALLEY REGIONAL HOSPITAL	FINDLAY
1033	MERCY HOSPITAL FAIRFIELD	FAIRFIELD
1195	FOSTORIA COMMUNITY HOSPITAL	FOSTORIA
1263	FREMONT MEMORIAL HOSPITAL	FREMONT
1132	GALION COMMUNITY HOSPITAL	GALION
1021	HOLZER MEDICAL CENTER	GALLIPOLIS
1136	MARYMOUNT HOSPITAL	GARFIELD
1108	MEMORIAL HOSPITAL GENEVA	GENEVA
1115	BROWN COUNTY GENERAL HOSPITAL	GEORGETOWN
1318	ST. FRANCIS HEALTH CARE CENTER	GREEN SPRINGS
1200	GREENFIELD AREA MEDICAL CENTER	GREENFIELD
1159	WAYNE HOSPITAL	GREENFIELD
1117	THE FT. HAMILTON HOSPITAL	HAMILTON
1118	MERCY HOSPITAL HAMILTON	HAMILTON
1161	COMMUNITY MEMORIAL HOSPITAL	HICKSVILLE
1199	HIGHLAND DISTRICT HOSPITAL	HILLSBORO
1196	HARDIN MEMORIAL HOSPITAL	KENTON
1017	KETTERING MEMORIAL HOSPITAL	KETTERING
1031	SYCAMORE HOSPITAL	MIAMISBURG

1134	LAKWOOD HOSPITAL	LAKWOOD
1167	FAIRFIELD MEDICAL CENTER	LANCASTER
CODE NUMBER	HOSPITAL	CITY
1102	LIMA MEMORIAL HOSPITAL	LIMA
1103	SAINT RITA'S MEDICAL CENTER	LIMA
1234	LODI COMMUNITY	LODI
1201	HOCKING VALLEY	LOGAN
1011	MADISON COUNTY HOSPITAL	LONDON
1018	COMMUNITY HEALTH PARTNERS (WEST)	LORAIN
1218	LORAIN COMMUNITY/ ST. JOSEPH'S HOSPITAL	LORAIN
1257	MEDCENTRAL HEALTH SYSTEM	MANSFIELD
1258	PEOPLE'S HOSPITAL	MANSFIELD
1289	MARIETTA MEMORIAL HOSPITAL	MARIETTA
1288	SHELBY COUNTY HOSPITAL	MARIETTA
1233	MARION GENERAL HOSPITAL	MARION
1114	EAST OHIO REGIONAL HOSPITAL	MARTIN'S FERRY
1286	MEMORIAL HOSPITAL OF UNION COUNTY	MARYSVILLE
1016	DOCTOR'S HOSPITAL MASSILLON	MASSILLON
1272	MASSILLON COMMUNITY HOSPITAL	MASSILLON
1224	ST. LUKE'S HOSPITAL	MAUMEE
1019	MERIDIA HILLCREST HOSPITAL	MAYFIELD HEIGHTS
1236	MEDINA GENERAL HOSPITAL	MEDINA
1140	SOUTHWEST GENERAL HEALTH	MIDDLEBURG HEIGHTS
1116	MIDDLETOWN REGIONAL HOSPITAL	MIDDLETOWN
1202	JOEL POMERENE MEMORIAL HOSPITAL	MILLERSBURG
1030	KNOX COMMUNITY HOSPITAL	MOUNT VERNON
1294	COMMUNITY HOSPITAL OF WILLIAMS COUNTY	MONTPELIER
1249	MORROW COUNTY HOSPITAL	MOUNT GILEAD
1198	HENRY COUNTY HOSPITAL	NAPOLEON
1110	DOCTORS HOSPITAL OF NELSONVILLE	NELSONVILLE
1213	LICKING MEMORIAL HOSPITAL	NEWARK
1204	FISHER-TITUS MEDICAL CENTER	NORWALK
1219	ALLEN MEMORIAL HOSPITAL	OBERLIN
1223	ST. CHARLES HOSPITAL	OGEGON
1291	DUNLAP MEMORIAL HOSPITAL	ORRVILLE
1211	LAKE EAST HOSPITAL	PAINSVILLE
1007	PARMA COMMUNITY GENERAL	PARMA
1253	PAULDING COUNTY HOSPITAL	PAULDING
1243	PIQUA MEMORIAL MEDICAL CENTER	PIQUA

1012	VETERANS MEMORIAL HOSPITAL	POMEROY
CODE NUMBER	HOSPITAL	CITY
1252	H.B. MAGRUDER MEMORIAL HOSPITAL	PORT CLINTON
1264	SOUTHERN OHIO MEDICAL CENTER	PORTSMOUTH
1255	ROBINSON MEMORIAL HOSPITAL	RAVENNA
1008	RICHMOND HEIGHTS GENERAL HOSPITAL	RICHMOND
1125	SALEM COMMUNITY HOSPITAL	SALEM
1164	FIRELANDS COMMUNITY HOSPITAL	SANDUSKY
1166	FIRELANDS COMMUNITY HOSPITAL-HAYES AVE. FACILITY	SANDUSKY
1165	PROVIDENCE HOSPITAL	SANDUSKY
1259	MEDICAL CENTRAL HEALTH SYSTEMS/SHELBY HOSPITAL	SHELBY
1268	WILSON HOSPITAL	SHELBY
1122	COMMUNITY HOSPITAL OF SPRINGFIELD	SPRINGFIELD
1123	MERCY MEDICAL CENTER SPRINGFIELD	SPRINGFIELD
1111	JOINT TOWNSHIP DISTRICT MEMORIAL	ST. MARY'S
1208	TRINITY MEDICAL CENTER EAST	STEUBENVILLE
1004	TRINITY MEDICAL CENTER WEST	STEUBENVILLE
1227	FLOWER HOSPITAL	SYLVANIA
1267	MERCY HOSPITAL OF TIFFIN	TIFFIN
1228	MEDICAL COLLEGE HOSPITAL	TOLEDO
1220	MERCY HOSPITAL	TOLEDO
1222	RIVERSIDE MERCY HOSPITAL	TOLEDO
1225	SAINT VINCENT MERCY HOSPITAL	TOLEDO
1226	THE TOLEDO HOSPITAL/ CHILDRENS HOSPITAL	TOLEDO
1242	UPPER VALLEY MEDICAL CENTER	TROY
1296	WYANDOT MEMEORIAL HOSPITAL	UPPER SANDUSKY
1121	MERCY MEMORIAL HOSPITAL	URBANA
1287	VAN WERT COUNTY HOSPITAL	VANWERT
1235	WADSWORTH-RITTMAN HOSPITAL	WADSWORTH
1000	ST. JOSEPH HEALTH CENTER	WARREN
1283	TRUMBULL MEMORIAL HOSPITAL	WARREN
1297	MERIDIA SOUTH POINTE HOSPITAL	WARRENSVILLE
1168	FAYETTE COUNTY MEMORIAL HOSPITAL	WASHINGTON COURT HOUSE
1177	FULTON COUNTY HEALTH CENTER	WAUSEON
1299	PIKE COMMUNITY HOSPITAL	WAVERLY
1100	ADAMS COUNTY HOSPITAL	WEST UNION

1606	MOUNT CARMEL ST. ANN'S HOSPITAL	WESTERVILLE
CODE NUMBER	HOSPITAL	CITY
1034	COLUMBIA ST. JOHN WEST SHORE HOSPITAL	WESTLAKE
1205	MERCY HOSPITAL WILLARD	WILLARD
1006	LAKE WEST HOSPITAL	WILLOUGHBY
1124	CLINTON MEMORIAL HOSPITAL	WILMINGTON
1292	WOOSTER COMMUNITY HOSPITAL	WOOSTER
1180	WRIGHT PATTERSON MEDICAL CENTER	WRIGHT PATTERSON
1817	GREENE MEMORIAL HOSPITAL	XENIA
1230	ST. ELIZABETH HEALTH CENTER	YOUNGSTOWN
1232	WESTERN RESERVE SOUTHSIDE	YOUNGSTOWN
1231	NORTHSIDE MEDICAL CENTER	YOUNGSTOWN
1229	YOUNGSTOWN OSTEOPATHIC HOSPITAL	YOUNGSTOWN
1250	GENESIS HEALTHCARE SYSTEM BETHESDA	ZANESVILLE
1251	GENESIS HEALTHCARE SYSTEM GOOD SAMARITAN MEDICAL CENTER	ZANESVILLE

APPENDIX B

MILITARY TIME CONVERSIONS

Civilian	Military
12am (midnight)	0001
1am	0100
2am	0200
3am	0300
4am	0400
5am	0500
6am	0600
7am	0700
8am	0800
9am	0900
10am	1000
11am	1100
12pm (noon)	1200
1pm	1300
2pm	1400
3pm	1500
4pm	1600
5pm	1700
6pm	1800
7pm	1900
8pm	2000
9pm	2100
10pm	2200
11pm	2300

APPENDIX C

NEUROMUSCULAR BLOCKING MEDICATIONS FOR CHEMICAL PARALYSIS

Neuromuscular blocking agents are medications which paralyze a patient for therapeutic reasons. These medications are typically used in patients who are intubated or under general anesthesia for an operative procedure. It is important to know if neuromuscular blocking agents were used because they will significantly alter the patient's coma score.

Neuromuscular blocking medications include but are not limited to:

- Atracurium Besylate (Tracrium)
- Cisatracurium Besylate (Nimbex)
- Gallamine Triethiodide (Flaxedil)
- Metocurine Iodide (Metubine Iodide)
- Mivacurium Chloride (Mivacron)
- Pancuronium Bromide (Pavulon)
- Pipecuronium Bromide (Arduan)
- Rocuronium Bromide (Zemuron)
- Succinylcholine Chloride (Anectine, Brevidil-M, Min-I-Nfix, Quelicin, Scaline, Sucostrin, Sux-Cert)
- Tubocurarine Chloride (Tubarine, Tubocuraine)
- Vecuronium Bromide (Norcuron)

APPENDIX D

COMPLICATION DEFINITIONS

1. **ARDS:** Acute Respiratory Distress Syndrome. $PaO_2/fiO_2 \leq 200$, decreased compliance, diffuse pulmonary infiltrates associated with normal capillary wedge pressure in an appropriate setting. "Decreased compliance" is defined as abnormal per criteria established by institution.
2. **Aspiration pneumonia:** History of aspiration of gastric contents followed by clinical and radiological findings of pneumonitis within 48 hours.
3. **Bacteremia:** Any positive blood culture (not contaminated).
4. **Cardiac arrest:** Sudden cessation of cardiac activity after arrival in ED, resulting in deprivation of sufficient oxygen to maintain viability of heart and brain.
5. **Coagulopathy:** Uncontrolled diffuse bleeding in the presence of coagulation abnormalities, e.g. increased PT or PTT, decreased platelets, or DIC; requires treatment.
6. **Compartment syndrome:** Clinical evidence of increased compartment pressure with or without development of sensory or motor deficit not present on admission in a patient following blunt or penetrating extremity injury.
7. **DVT:** Deep Vein Thrombosis of the *lower extremity*. Venous thrombosis to or involving popliteal vein confirmed by an autopsy, venogram, duplex scan or non-invasive vascular evaluation.
8. **Fungal infection:** Clinical picture of sepsis with isolation of fungus from blood OR 2 or more non-hematogenous sites, OR tissue biopsy, OR positive fundoscopic findings.
9. **Dehiscence/Evisceration:** Breakdown of fascial closure confirmed by discharge of peritoneal fluid, evisceration, or palpable fascial defect.
10. **Empyema:** Positive culture of purulent material from pleural space requiring thoracostomy tube drainage.
11. **Esophageal intubation:** Endotracheal tube in esophagus and not immediately repositioned; esophageal location determined by physical examination, x-ray, capnography, or endoscopy.
12. **Hypothermia:** Temperature ≤ 35 degrees Celsius or ≤ 92 degrees Fahrenheit.
13. **Intra-abdominal abscess:** Localized collection of purulent material in the abdominal cavity confirmed by Gram stain or culture.
14. **Jaundice:** Total bilirubin ≥ 2.5 and AST or ALT greater than twice normal.
15. **Loss of operative reduction/fixation:** Configuration of reduced fracture changed enough to warrant reoperative repositioning of fragments.

16. **Myocardial infarction:** Acute, irreversible myocardial injury, and necrosis documented by increased CK-MK isoenzyme and serial T wave, S-T segment or Q wave ECG changes; or diagnostic radionuclide scan.
17. **Pancreatitis:** Any hyperamylasemia associated with ultrasound or CT findings compatible with pancreatic inflammation.
18. **Pneumonia:** Presence of fever, leukocytosis, gram stain of sputum with predominant organism and white blood cells, chest radiograph with a pneumonic infiltrate and culture of sputum demonstrating pathogen.
19. **Pneumothorax:** Presence of intrapleural air.
20. **Skin breakdown:** Contact pressure-induced skin breakdown.
21. **Progression of neurological insult:** Deterioration of additional loss of function from that noted on arrival in ED.
22. **Pulmonary embolus:** Embolus to the lungs documented by arteriography, nuclear scan, or autopsy.
23. **Renal failure:** Creatinine ≥ 3.5 mg/dl; or Bun ≥ 100 mg/dl.
24. **UTI:** Clean voided or catheter urine specimen with ≥ 10 WBC/hpf or ≥ 50 K organisms/ml on culture and sensitivity.
25. **Wound infection:** Drainage of purulent material from wound or active treatment of the wound, including opening a closed wound or antibiotics for the wound.

