Utah Trauma Registry

Data Dictionary

Release 2013

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Utah Department of Health
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Acknowledgements

The success of any trauma system is measured by the monitoring, evaluation and quality improvement at the pre-hospital, hospital and system level. A system must be able to monitor its performance and to assess its impact on trauma mortality and morbidity. This requires continuous evaluation of operations, demonstrations that the system is meeting its stated goals, and the documentation of system performance.

The Utah Department of Health, Bureau of Emergency Medical Services and Preparedness (BEMSP) has implemented a statewide trauma registry to track trauma patients. Trauma data is submitted to the BEMSP for review of system criteria. The data dictionary that follows provides definitions for the consistent interpretation of the data elements throughout the data collection process.

The BEMSP would like to express its sincere appreciation and gratitude to the members of the Utah Trauma Users Group who continually give unselfishly of their time and expertise to maintain this data dictionary. This document is the result of many hours of discussion and collaboration between the BEMSP, Intermountain Injury Control Research Center (IICRC), subject matter experts and hospital personnel. We would also like to thank the American College of Surgeons Committee on Trauma and their publication of the 2013 National trauma Data Bank Data Dictionary. We are committed to adopting the standards of and maintaining synchronization with the NTDB Data Dictionary. Their work and dedication make this publication possible.

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Introduction

From the 2013 NTDB Data Dictionary….

Traumatic injury, both accidental and intentional, is the leading cause of death in the first four decades of life, according to the U.S. Department of Health and Human Services. Trauma typically involves young adults and results in the loss of more productive work years than both cancer and heart disease combined. Each year, more than 140,000 Americans die and approximately 80,000 are permanently disabled as a result of injury. Productivity loss and health care costs account for 100 billion dollars annually.

Research provides evidence of the effectiveness of trauma and emergency medical services (EMS) systems in reducing mortality, morbidity, and lost productivity from traumatic injuries. However, according to the Centers for Disease Control and Prevention, studies of conventional trauma care show that as many as 35% of trauma patient deaths could have been prevented if optimal acute care had been available.

The American College of Surgeons Committee on Trauma (ACS COM) publication, *"Resources for Optimal Care of the Injured Patient"*, recommends the development and implementation of *inclusive* trauma systems, which address the needs of injured patients, regardless of where they are injured and where they receive care. Ideally, inclusive trauma systems maximize the potential of the identified system components: prevention; access; acute hospital care; rehabilitation; and research activities to provide optimal trauma care. By focusing on the development of an inclusive trauma system of care rather than individual trauma centers, we acknowledge that few individual facilities can provide all resources to all patients in all situations.

Given that death and disability from traumatic injuries are highly preventable, the Utah Department of Health convened a Trauma System Task Force in 1993 to assist in the development of a Utah Trauma System Plan. The Task Force modeled the plan after the National Model Trauma Plan, which provides a basic framework and defines essential system components. A key component of the plan, enabling legislation, plus an ongoing appropriation for the trauma plan was accomplished in the 2000 Utah Legislative Session. This has allowed the BEMSP to move forward in the implementation of the trauma plan.

The Utah Trauma System Plan is designed to help policy makers, health care providers, and community organizations establish a coordinated approach to trauma care and prevention. The plan allows local hospitals to determine what level of resources they wish to provide to their community. Ultimately, the goals of the Utah Trauma System Plan are to reduce mortality and morbidity from traumatic injuries through a comprehensive process that encourages the cooperation and coordination of all health care providers.

The Intermountain Injury Control Research Center (IICRC) is assisting in system development, public information, evaluation and quality improvement, injury prevention and research components of the Utah Trauma System Plan. The IICRC helps establish a coordinated effort to thoroughly assess the operation of the current trauma system. Since all hospitals submit trauma data to the BEMSP in perpetuity, the IICRC acts as the data repository and provide assistance in the development of the statewide trauma data collection system. The data collection system provides a foundation for data-driven prevention activities and system quality improvement.

The initial charge given to the IICRC is to develop a confidential and secure database that aggregates data for traumatically injured patients presenting to all hospitals in Utah. The data system will eventually incorporate pre-hospital as well as rehabilitation data. Feedback reports available to all hospitals will include aggregate data and will be tailored to meet the needs of each hospital participating in the Utah Trauma System. The ultimate goal of this data collaboration is to better define what resources are needed to provide optimal care of the injured patient within an appropriately designed and funded system of care.

2013 Patient Inclusion Criteria

For the purpose of consistent data collection for the Utah Trauma Registry, a trauma patient is defined as a patient sustaining a traumatic injury requiring medical care for that injury within 30 days from the injury date and meets the following criteria:

At least one of the following injury diagnostic codes defined in the International Classification of Diseases, Ninth Revision, Clinical Modification ***(ICD-9-CM): 800-959.9***

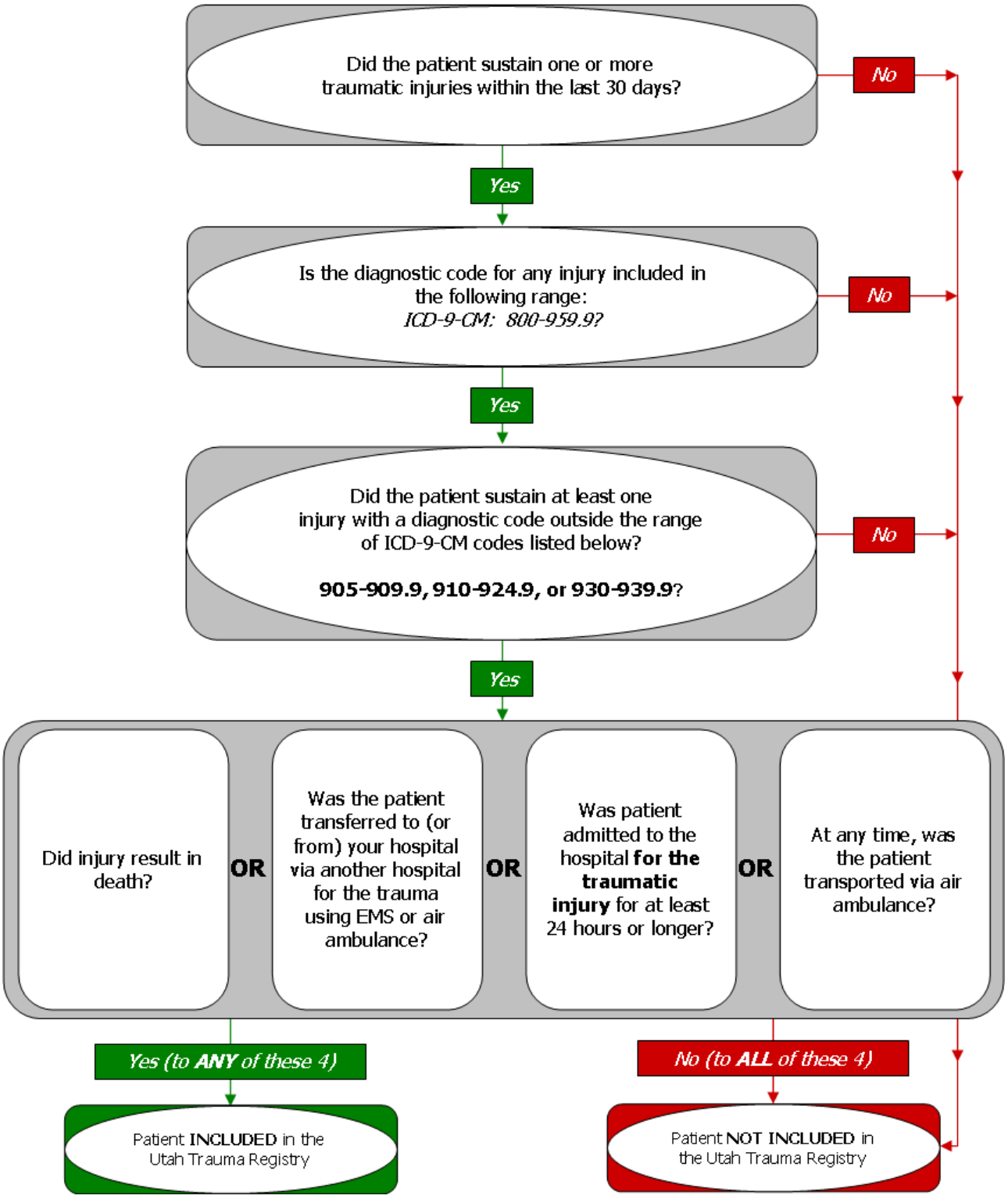
Excluding the following isolated injuries:

- 905-909.9 (late effects of injury)
- 910-924.9 (superficial injuries, including blisters, contusions, abrasions, and insect bites)
- 930-939.9 (foreign bodies)

AND MUST INCLUDE ONE OF THE FOLLOWING IN ADDITION TO (ICD-9-CM 800-959.9)

- Hospital admission **for the traumatic injury** lasting for at least 24 hours; or
- Patient transfer via EMS transport from one hospital to another hospital **for the traumatic injury**; or
- Death resulting **from the traumatic injury** (independent of hospital admission, transfer, or hospital transfer status); or
- Patient transport by air ambulance (including death in transport and patients flown in but not admitted to the hospital);
- Patient scheduled for surgery for the qualifying injury within 30 days of injury

2013 Utah Trauma Registry Inclusion Criteria



Submission Guidelines

As specified in the Utah Emergency Medical Services Act (Utah Code Title 26 Chapter 8a Section 253), all acute care hospitals are required to regularly submit trauma data to the trauma registry. While hospitals are strongly encouraged to submit data monthly, they are required to submit no less frequently than quarterly. The submission schedule for calendar year 2013 is shown below. Late notices and submission status notifications are sent by the IICRC with a copy to BEMSP.

Q1			Q2			Q3			Q4		
Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Submit 2012 Q4 data no later than 03/31/2013. Late Notice sent 04/01/2013			Submit 2013 Q1 data no later than 06/30/2013. Late Notice sent 07/01/2013			Submit 2013 Q2 data no later than 09/30/2013. Late Notice sent 10/01/2013			Submit 2013 Q3 data no later than 12/31/2013. Late Notice sent 01/02/2014		

Common Null Values

These values are to be used with each of the Utah Trauma Registry Data Elements described in this document which have been defined to accept the Null Values.

Utah Values	***NTDS Values***	***Description***
NA	1	Not Applicable
NOT	2	Not Known/Not Recorded

Additional Information: For any collection of data to be of value and reliable, a strong commitment must be made to ensure the correct documentation of incomplete data.

- *Not Applicable*: This null value code should be utilized if at the time of patient care documentation, the information requested did not apply to the case at hand. For example, variables documenting EMS care would be “Not Applicable” if a patient self-transports to the hospital.

- *Not Known/Not Recorded*: This null value applies if, at the time of patient care documentation, information was unknown to the patient, family, or health care provider **or** the information was not documented in the patient’s record. Use of this value documents that there was an attempt to obtain information but it was unknown by all parties involved at the time of documentation, or that the information was not supplied or documented in the patient’s record For example, injury date and time may be documented in the hospital patient care report as “Unknown” or the patient arrived by ambulance; however, no EMS run sheet is in the patient record.

A. Demographic Data

A.1 Tracking Number

Definition: Part 1 of the two-part unique case identifier. It is the sequential number assigned by the registry software program or registrar that provides a unique identifier for a patient within a specific institution.

Software Field Name: TRACKING_NO; TRAUMA_NO

Data Type: Numeric (Single entry allowed)

Values: Minimum of 1-digit number through a maximum of 12-digit number.

Discussion/Uses: Along with the ***Hospital Number***, this number provides a unique identifier for a patient across the Utah Trauma Registry.

EDITS: NONE

UTAH EXPORT: TRAUMA_NO

A.2 Hospital Number

Definition: Part 2 of the two-part unique case identifier. It is the three digit numeric code assigned to your hospital. The combination of Trauma Registry Number and Hospital Number must be unique to the state database.

Software Field Name: INSTITUTE_NO

Data Type: Integer (Single entry allowed)

Values: Your hospital code. The trauma registry software will be defaulted to bring up the code for your hospital. Hospital codes are assigned by the Utah Department of Health. The list of codes can be found in ***Appendix A.***

Discussion/Uses: Along with the ***Tracking Number***, this number provides a unique identifier for a patient across the Utah Trauma Registry.

EDITS: UT.0000S; UT.0000SV

UTAH EXPORT: INSTITUTE_NO_SRC

A.3 Date of Birth

(National Element)

Definition: The patient's date of birth.

Software Field Name: DOB

Data Type: Date – mmddyyyy (Single entry allowed)

Values: Valid dates ("/"s and "-"s not needed in data entry)

If the patient was born on July 15, 1942, the Date of Birth would be entered as 07151942.

Month:

01	January	07	July
02	February	08	August
03	March	09	September
04	April	10	October
05	May	11	November
06	June	12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NOT Not Recorded/Not Known

Discussion/Uses: This data element is used to calculate patient **Age** at time of injury, if both **Date of Birth** and **Injury Date** are known. If **Date of Birth** is unknown or undocumented, enter UNK and then enter estimated or actual patient's age in the **Age** field. Either **Date of Birth** or **Age** must be entered.
If age is less than 24 hours, complete variables: Age and Age Units.

If "Not Recorded/Not Known" complete variables: Age and Age Units

Data Source Hierarchy:

1. ED Admission Form
2. Billing Sheet / Medical Records Coding Summary Sheet
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses Notes

EDITS: UT.0006; CDM_0006

UTAH EXPORT: DOB

NTDS EXPORT: DOB

NTDS Field Name: DateofBirth

NTDS Field Number: D_07

A.4 Age

(National Element)

Definition: The patient's age at the time of injury (best approximation).

Software Field Name: AGE_NUMBER

Data Type: Integer (Single entry allowed)

Values: Range: 00-120

Value for age in the appropriate unit selected. **See A5**. **Age Unit**.

If **Date of Birth** is unknown, **Age** may be estimated

Discussion/Uses: If you have a value entered for **Date of Birth** and **Injury Date** (see B2), Trauma registry software will calculate the **Age** and **Age Unit** for you. If either the **Date of Birth** or the **Injury Date** is unknown, then you must enter the actual or estimated **Age** and **Age Unit**.

This data element provides useful data to assist with public health intervention, identify populations at risk, and rates of injury among age groups**.**

If under 3 weeks old this is the number of days, if under 3 months old this is the number of weeks, if under 3 years old this is the number of months or if older this is the number of years.

Only completed when Date of Birth is "Not Recorded/Not Known" or age is less than 24 hours.

Must also complete variable: Age Units

NOT Not Recorded/Not Known

Data Source Hierarchy:

1. ED Admission Form
2. Billing Sheet / Medical Records Coding Summary Sheet
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses Notes

EDITS: UT.0007; CDM_0007

UTAH EXPORT: AGE_NUMBER

NTDS EXPORT: AGE_NUMBER_NTDS

NTDS Field Name: Age

NTDS Field Number: D_08

A.5 Age Unit

(National Element)

Definition: The units used to document the patient's age (Years, Months, Days, and Hours).

Software Field Name: AGE_UNITS

Data Type: Character (Single entry allowed)

Values: If not automatically calculated from **Date of Birth** and **Injury Date** because either one or both are unknown, enter:

Utah Values	*NTDS Values*	*Description*
Y	4	Years: if actual or estimated Age is 3 years or older.
M	3	Months: if actual or estimated Age is 3 months or older but less than 3 years.
W		Weeks: if actual or estimated Age is 3 weeks or older but less than 3 months.
D	2	Days: if actual or estimated Age is 24 hours or older but less than 3 weeks.
H	1	Hours: if actual or estimated Age is 24 hours or younger.
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: If you have a value entered for **Date of Birth** and **Injury Date**, Trauma registry software will calculate the **Age** and **Age Unit** for you. If either the **Date of Birth** or the **Injury Date** is unknown, then you must enter the actual or estimated **Age** and **Age Unit**.

Only completed when age is less than 24 hours or, "Not Recorded/Not Known".

Must also complete variable: Age.

Data Source Hierarchy:

1. ED Admission Form
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Triage Form / Trauma Flow Sheet
4. EMS Run Sheet
5. ED Nurses Notes

EDITS: UT.0008; CDM_0008

UTAH EXPORT: AGE_UNITS

NTDS EXPORT AGE-UNITS_NTDS

NTDS Field Name: AgeUnits

NTDS Field Number: D_09

A.6 Sex

(National Element)

Definition: The patient's sex.

Software Field Name: SEX

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
M	1	Male
F	2	Female
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: The patient's sex is standard demographic information used in epidemiologic analyses.

Patients who have undergone a surgical and/or hormonal sex reassignment should be coded using the current assignment.

Data Source Hierarchy:

1. ED Admission Form
2. Billing Sheet / Medical Records Coding Summary Sheet
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses Notes

EDITS: UT.0009; UT.0009.S; UT.0009.SV, CDM_0009; CDM_0009.NV; CDM_0009.N

UTAH EXPORT: SEX_SRC

NTDS EXPORT: SEX_NTDS

NTDS Field Name: Sex

NTDS Field Number: D_12

A.7 Race

(National Element)

Definition: The patient's race.

Software Field Name: RACE

Data Type: Character (Single entry allowed)

Values: Automatically defaults to "W"

Utah Values	*NTDS Values*	*Description*
A	1	Asian
B	5	Black or African American
I	4	American Indian
P	2	Native Hawaiian or Other Pacific Islander
W	6	White
O	3	Other race not listed
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: The patient's race is standard demographic information used in epidemiologic analyses.

The patient race should be based upon self-report or identified by a family member.

The maximum number of races that may be reported for an individual patient is 2.

Data Source Hierarchy:

1. ED Admission Form
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Triage Form / Trauma Flow Sheet
4. EMS Run Sheet
5. ED Nurses Notes

EDITS: UT.0137; UT.0137.S; UT0137.SV; CDM_0137; CDM_0137.NV; CDM_0137.N

UTAH EXPORT: RACE

NTDS EXPORT: RACE_NTDS

NTDS Field Name: Race

NTDS Field Number: D_10

A.8 Other Race

Definition: The patient's secondary race (if the first race field is insufficient).

Software Field Name: RACE_OTHER

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
A	1	Asian
B	5	Black or African American
I	4	American Indian
P	2	Native Hawaiian or Other Pacific Islander
W	6	White
O	3	Other race not listed
NA	NA	Not Applicable
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: The patient's race is standard demographic information used in epidemiologic analyses.

The patient race should be based upon self-report or identified by a family member.

EDITS: UT.0997; UT.0997.S; UT.0997.SV; CDM_0997; CDM_0997.NV; CDM_0997.N

UTAH EXPORT: RACE_OTHER

NTDS EXPORT: RACE_NTDS

NTDS Field Name: Race

NTDS Field Number: D_10

A.9 Ethnicity

(National Element)

Definition: The patient's ethnicity.

Software Field Name: ETHNICITY

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
H	1	Hispanic or Latino
N	2	Not Hispanic or Latino
NA	NA	Not Applicable
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: The patient's ethnicity is standard demographic information used in epidemiologic analyses.

Ethnicity is different from RACE. Ethnicity of "Hispanic" refers to a person regardless of race, who is of Spanish culture or origin. This includes, for example, persons from Mexico, Central or South America, Puerto Rico, the Dominican Republic and Cuba.

The patient ethnicity should be based upon self-report or identified by a family member.

The maximum number of ethnicities that may be reported for an individual patient is 1.

Data Source Hierarchy:

1. ED Admission Form
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Triage Form / Trauma Flow Sheet
4. EMS Run Sheet
5. ED Nurses Notes

EDITS: UT.0620; UT.0620.S; UT.0620.SV; CDM_0620; CDM_0620.NV; CDM_0620.N

UTAH EXPORT: ETHNICITY

NTDS EXPORT: ETHNICITY-NTDS

NTDS FIELD NAME: Ethnicity

NTDS FIELD NUMBER: D_11

A.10 Medical Record Number

Definition: The patient's medical record number or any number that uniquely identifies the patient

Software Field Name: MEDICAL_RECORD_NUMBER

Data Type: Character (Free text field)

Values: Can be any value as long as the length does not exceed 15 characters.

NA	Not Applicable
NOT	Not Recorded/Not Known

Discussion/Uses: This data element is for audit and linking purposed only and will never be made public.

EDITS: UT.0002

UTAH EXPORT: MEDICAL_RECORD_NUMBER

A.11 Social Security Number

Definition: The patient's Social Security Number.

Software Field Name: SOCIAL_SECURITY_NUMBER

Data Type: Integer (Single entry allowed)

Values: 9 digit Social Security Number (no dashes)

NA	Not applicable (patient is from a foreign country or does not have a social security number)
NOT	Not Recorded/Not Known

Discussion/Uses: This number is used to match patient records when they are seen at more than one hospital and may be useful for linkage with other data systems. This number is never made public. If the patient's SSN is unkown, input NOT. Never use a "dummy" SSN.

EDITS: UT.0139

UTAH EXPORT: SOCIAL_SECURITY_NUMBER

A.12 Patient's Home Zip Code

(National Element)

Definition: The patient's home ZIP code at usual place of residence, if the patient lives in the United States or Canada.

Software Field Name: ZIP_CODE

Data Type: Character (Single entry allowed)

Values: United States 5 or 9 Digit ZIP Code (without dashes) or Canadian postal code

Numbers from 1000 up to (but excluding) 100000

NA	Not Applicable (not US or Canadian Resident, or does not have a permanent residence)
NOT	Not Recorded/Not Known

Discussion/Uses: This data element provides useful data to assist with public health intervention, identify populations at risk, and link patients with census data so injury rates can be calculated.

If ZIP code is "Not Applicable", complete variable: Alternate Home Residence.

If ZIP code is "Not Recorded/Not Known", complete variables: Patient's Home Country; Patient's Home State; Patient's Home County; and Patient's Home City.

Data Source Hierarchy:

1. Billing Sheet / Medical Records Coding Summary Sheet
2. ED Admission Form
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses Notes

EDITS: UT.0183; CDM_0183

UTAH EXPORT: ZIP_CODE

NTDS EXPORT: ZIP_CODE

NTDS Field Name: HomeZip

NTDS Field Number: D_01

A.13 Patient's Home Country

(National Element)

Definition: The country where the patient resides.

Software Field Name: COUNTRY

Data Type: Character (Single entry allowed)

Values: Software automatically sets to US

See Appendix C for Country Codes.

Discussion/Uses: This data element provides useful data to assist with public health intervention, identify populations at risk, and link patients with census data so injury rates can be calculated.

Only Completed when ZIP code is "Not Recorded/Not Known".

Values are two-character fields representing a country (e.g., US).

Data Source Hierarchy:

1. Billing Sheet / Medical Records Coding Summary Sheet
2. ED Admission Form
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses Notes

EDITS: UT.0716; UT.0716.S; UT.0716.SV

UTAH EXPORT: UT.COUNTRY

NTDS EXPORT: COUNTRY_NTDS

NTDS Field Name: HomeCountry

NTDS Field Number: D_02

A.14 Patient's Home State

(National Element)

Definition: The state (territory or District of Columbia) where the patient resides.

Software Field Name: RES_STATE

Data Type: Character (Single entry allowed)

Values:

Code	*State*	*Code*	*State*
AL	Alabama	MT	Montana
AK	Alaska	NE	Nebraska
AS	American Samoa	NV	Nevada
AZ	Arizona	NH	New Hampshire
AR	Arkansas	NJ	New Jersey
CA	California	NM	New Mexico
CO	Colorado	NY	New York
CT	Connecticut	NC	North Carolina
DE	Delaware	ND	North Dakota
DC	District of Columbia	MP	Northern Mariana Islands
FM	Federated States of Micronesia	OH	Ohio
FL	Florida	OK	Oklahoma
GA	Georgia	OR	Oregon
GU	Guam	PW	Palau
HI	Hawaii	PA	Pennsylvania
ID	Idaho	PR	Puerto Rico
IL	Illinois	RI	Rhode Island
IN	Indiana	SC	South Carolina
IO	Iowa	SD	South Dakota
KS	Kansas	TN	Tennessee
KY	Kentucky	TX	Texas
LA	Louisiana	UT	Utah
ME	Maine	VT	Vermont
MH	Marshall Islands	VI	Virgin Islands
MD	Maryland	VA	Virginia
MA	Massachusetts	WA	Washington
MI	Michigan	WV	West Virginia
MN	Minnesota	WI	Wisconsin
MS	Mississippi	WY	Wyoming
MO	Missouri		

NA Not Applicable (Patient not a resident of the United States, or does not have a permanent residence)

NOT Not Recorded/Not Known

Discussion/Uses: This data element provides useful data to assist with public health intervention, identify populations at risk, and link patients with census data so injury rates can be calculated.

Only completed when ZIP code is "Not Recorded/Not Known".

Data Source Hierarchy:

1. ED Admission Form
2. Billing Sheet / Medical Records Coding Summary Sheet
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses Notes

EDITS: UT.0448; UT.0448.S; UT.0448.SV; CDM_0448; CDM_0448.NV; CDM_0448.N

UTAH EXPORT: RES_STATE

NTDS EXPORT: RES_STATE_NTDS

NTDS Field Name: HomeState

NTDS Field Number: D_03

A.15 Patient's Home County

(National Element)

Definition: The patient's county (or parish) of residence.

Software Field Name: RES_COUNTY_STATE

Data Type: Character (Single entry allowed)

Values: ***All valid US counties.***

Valid Utah Counties

County	*Code*	*FIPS Code*	*County*	*Code*	*FIPS Code*
BEAVER	01	49001	PIUTE	16	49031
BOX_ELDER	02	49003	RICH	17	49033
CACHE	03	49005	SALT_LAKE	18	49035
CARBON	04	49007	SAN_JUAN	19	49039
DAGGETT	05	49009	SANPETE	20	49037
DAVIS	06	49011	SEVIER	21	49041
DUCHESNE	07	49013	SUMMIT	22	49043
EMERY	08	49015	TOOELE	23	49045
GARFIELD	09	49017	UINTAH	24	49047
GRAND	10	49019	UTAH (County)	25	49049
IRON	11	49021	WASATCH	26	49051
JUAB	12	49023	WASHINGTON	27	49053
KANE	13	49025	WAYNE	28	49055
MILLARD	14	49027	WEBER	29	49057
MORGAN	15	49029	OTHER		

NA Not Applicable (Patient not a resident of the United States, or does not have a permanent address)

NOT Not Recorded/Not Known

See Appendix D on for a list of valid cities in each county.

Discussion/Uses: This data element provides useful data to assist with public health intervention, identify populations at risk, and link patients with census data so injury rates can be calculated.

Only recorded when ZIP Code is "Not Recorded/Not Known".

Data Source Hierarchy:

1. Billing Sheet / Medical Records Coding Summary Sheet
2. ED Admission Form
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses Notes

EDITS: UT.0245; UT.0245.S; UT.0245.SV; CDM_0245

UTAH EXPORT: RES_COUNTY_STATE

NTDS EXPORT: RES_COUNTY_STATE_NTDS

NTDS Field Name: HomeCounty

NTDS Field Number: D_04

A.16 Patient's Home City

(National Element)

Definition: The patient's city (or township, or village) of residence.

Software Field Name: RES_CITY

Data Type: Character (Single entry allowed)

Values: All valid US and International cities.

NA	Not Applicable (Patient does not have a permanent address)
NOT	Not Recorded/Not Known

See Appendix D for a list of valid cities in each county of the State.

Discussion/Uses: This data element provides useful data to assist with public health intervention, identify populations at risk, and link patients with census data so injury rates can be calculated.

Only completed when ZIP code is "Not Recorded/Not Known".

Data Source Hierarchy:

1. ED Admission Form
2. Billing Sheet / Medical Records Coding Summary Sheet
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses Notes

EDITS: UT.0256; CDM_0256

UTAH EXPORT: RES_CITY

NTDS EXPORT: RES_CITY

NTDS Field Name: HomeCity

NTDS Field Number: D_05

A.17 Alternate Home Residence

(National Element)

Definition: Documentation of the type of patient without a home zip code.

Software Field Name: HOME

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
H	1	Homeless
U	2	Undocumented Citizen
M	3	Migrant
F	4	Foreign Visitor
NA	NA	Not Applicable
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: This data element provides useful data to assist with public health intervention, identify populations at risk, and link patients with census data so injury rates can be calculated.

Only completed when ZIP code is “Not Applicable”.

Homeless is defined as a person who lacks housing. The definition also includes a person living in transitional housing or a supervised public or private facility providing temporary living quarters.

Undocumented Citizen is defined as a citizen of another country who has entered or stayed in another country without permission.

Migrant Worker is defined as a person who temporarily leaves his/her principal place of residence within a country in order to accept seasonal employment in the same country.

Foreign Visitor is defined as any person visiting a country other than his/her usual place of residence for any reason without intending to receive earnings in the visited country.

Data Source Hierarchy:

1. Billing Sheet / Medical Records Coding Summary Sheet
2. ED Admission Form
3. EMS Run Sheet
4. Triage Form / Trauma Flow Sheet
5. ED Nurses Notes

EDITS: UT.0704; UT.0704.S; UT.0704.SV; CDM_0704; CDM_0704.NV; CDM_0704.N

UTAH EXPORT: HOME

NTDS EXPORT: HOME_NTDS

NTDS Field Name: HomeResidence

NTDS Field Number: D_06

B. Event Data

B.1 Injury Time

(National Element)

Definition: The time the injury occurred.

Software Field Name: INJURY_TIME

Data Type: Military Time – hh:mm (Single entry allowed)

Values: Range: 00:00 to 23:59 (actual or reliably estimated time of injury)

For example, if the patient was injured at 12:30 A.M., the value would be 00:30.

NA	Not Applicable
NOT	Not Recorded/Not Known

Discussion/Uses: Convert time to the time zone in which your facility is located, if not already done so. Preferable to use EMS documented time.

When a patient is injured while already an inpatient for another reason, record the **Injury Time** accurately. The **Hospital Arrival Time** and **Inpatient Admission Time** will also need to be recorded as this **Injury Time**, not the initial hospital admission time that put them in the hospital to begin with.

This is a critical field for many other calculations. This data element is used to calculate time-lapse from **Injury Date/Time** to **Hospital Arrival Date/Time** and if applicable, **Inpatient Admission Date/Time**.

Estimates of date of injury should be based upon report by patient, witness, family, or health care provider. Other proxy measures (e.g., 911 call time) should not be used. Record Not if time of injury cannot be reliably estimated.

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses Notes

EDITS: UT.0021; UT.0021.T1; CDM_0021

UTAH EXPORT: INJURY_TIME

NTDS EXPORT: INJURY_TIME

NTDS Field Name: IncidentTime

NTDS Field Number: I_02

B.2 Injury Date

(National Element)

Definition: The date the injury occurred.

Software Field Name: INJURY_DATE

Data Type: Date – mmddyyyy (Single entry allowed)

Values: Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Month:

01	January	07	July
02	February	08	August
03	March	09	September
04	April	10	October
05	May	11	November
06	June	12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA Not Applicable

NOT Not Recorded/Not Known

Discussion/Uses: The patient's **Injury Date** must be within 30 days prior to the **Hospital Arrival Date** for this patient to meet the criteria for inclusion into the Utah Trauma database.

When a patient is injured while already an inpatient for another reason, record the **Injury Date** accurately. The **Hospital Arrival Date** and **Inpatient Admission Date** will also need to be recorded as this **Injury Date**, not the initial hospital admission date which put them in the hospital to begin with.

This is a critical field for many other calculations. This data element is used to calculate time-lapse from **Injury Date/Time** to **Hospital Arrival Date/Time** and if applicable, **Inpatient Admission Date/Time**.

Estimates of date of injury should be based upon report by patient, witness, family, or health care provider. Other proxy measures (e.g., 911 call time) should not be used.

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses Notes

EDITS:	UT.0022; UT.0022.T1; UT.0022.T2; UT.0022.T3; UT.0022.T4; CDM_0022
UTAH EXPORT:	INJURY_DATE
NTDS EXPORT:	INJURY_DATE
NTDS Field Name:	IncidentDate
NTDS Field Number	I_01

B.3 Cause Code

Definition: The mechanism or external factor that caused the traumatic injury event.

Software Field Name: CAUSE_CODE

Data Type: Character (Single entry allowed)

Values: Since only one value can be entered, select the cause code that is most relevant to patient injury. For example, if a person was attacked by a dog and sustained moderate bites, and then fell 20 feet resulting in a severe head injury, then select the code that caused the most significant trauma; in this case the fall.

ANIMAL	Animal related
ASSAULT	Assaulted by another person (excludes gunshot or stabbing assault)
BIKE	Bicycle crash (includes bicycle vs. MV)
BURN	Burn (electric, thermal or chemical)
CAUGHT	Crushed or caught between objects
DIVE	Diving related
EXP	Explosive force
FALL	Fall (from one level to another or ground level)
FB	Foreign body
GSW	Gunshot wound
HANG	Hanging
MACHINE	Farm or heavy equipment or power tools
MC	Motorcycle crash (includes MC vs. MV)
MV	Motor vehicle Auto or Truck crash
OV	Other vehicular cause (includes ATV, 3-wheel or 4-wheel)
OTHER	Other cause not listed
PED	Pedestrian (not bicycle vs. MV)
STRUCK	Struck against object
SMOKE	Smoke inhalation
SPORT	Sporting injury
STAB	Stab wound (includes cut, slice or pierce)
NOT	Not Recorded/Not Known

Discussion/Uses: The ICD-9-CM **E-Code** data element is a multiple value field. All causes of injury can be included in that field.

EDITS: UT.0076; UT.0076.S; UT.0076.SV

UTAH EXPORT: CAUSE_CODE_SRC

B.4 Trauma Type

Definition: The type of force that caused the injury.

Software Field Name: TRAUMA_TYPE

Data Type: Character (Single entry allowed)

Values:

B	Blunt – Injury caused by diffuse force
P	Penetrating – Injury caused by point force ONLY
Burn	Burn – Injury caused by burn (electrical, chemical, or thermal)

Discussion/Uses: If both blunt and penetrating force were present, select the type of trauma that caused the highest Injury Severity Score.

This field is critical for calculation of the Probability of Survival. Therefore in this particular field, UNK or NA is not allowed. You must pick one of the three values listed.

EDITS: UT.0052; UT.0052.S; UT.0052.SV; UT.0052.L1

UTAH EXPORT: TRAUMA_TYPE_SRC

B.5 Work-Related

(National Element)

Definition: Indication of whether the injury occurred during paid employment.

Software Field Name: INDUST_ACC

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
N	2	No, patient was not working when trauma event occurred.
Y	1	Yes, patient was working when trauma event occurred.
NA	NA	Not Applicable (child, unemployed, retiree)
NOT	NOT	Not Recorded/Not Known

Discussion/Uses:

If work-related =”Y,” then two additional fields must be completed: Patient’s Occupational Industry and Patient’s Occupation.

Work-Related comprises manual or professional work for salary, bonus, other types of income or duties for which one would not normally gain an income. Use best judgment as to whether patient was working or not.

This data element may be used to gather information about the incidence of work-related injuries and may be useful in the planning and development of work-related injury prevention programs.

Work-Related *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 clearly be 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

Work-Related *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-nonprofit, i.e. mowing lawn, repairing own 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, attending school or lesson, undergoing education

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses Notes

EDITS: UT.0216; UT.0216.S; UT.0216.SV; CDM_0216; CDM_0216.NV; CDM_0216.N

UTAH EXPORT: INDUST_ACC_SRC

NTDS EXPORT: INDUST_ACC_NTDS

NTDS Field Name: WorkRelated

NTDS Field Number: I_03

B.6 Patient's Occupational Industry

(National Element)

Definition: The occupational industry associated with the patient's work environment.

Software Field Name: INDUSTRY_TYPE

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
AGR	5	Agriculture, Forest, Fishing
BUS	6	Business and Professional Services
CON	8	Construction
FIN	1	Finance, Insurance and Real Estate
GOV	9	Government
HEA	7	Education and Health Services
INS	11	Information Services
MAN	2	Manufacturing
MIN	10	Natural Resources and Mining
REC	13	Recreation, Leisure and Hospitality
RET	3	Retail Trade
TRA	4	Transportation and Public Utilities
WHO	12	Wholesale Trade
OTH	14	Other Services
NA	NA	Not Applicable, was not work related
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: Code as Not Applicable if injury is not work-related.
If work related, also complete Patient's Occupation.

Based upon US Bureau of Labor Statistics Industry Classification.

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. EMS Run Sheet
3. ED Nurses Notes

EDITS: UT.0244.L1; UT.0224.S; UT.0224.SV; CDM_0244; CDM_0244.NV; CDM_0244.N

UTAH EXPORT: INDUSTRY_TYPE

NTDS EXPORT: INDUSTRY_TYPE_NTDS

NTDS Field Name: PatientsOccupationalIndustry

NTDS Field Number: I_04

B.7 Patient's Occupation

(National Element)

Definition: The occupation of the patient.

Software Field Name: OCCUPATION

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
ARC	2	Architecture and Engineering
BUS	1	Business and Financial Operations
CONS	21	Construction and Extraction
COM	3	Community and Social Services
COMP	13	Computer and Mathematics
ED	4	Education, Training, and Library
ENT	16	Arts, Design, Entertainment, Sports, and Media
FARM	9	Farming, Fishing and Forestry
FOOD	18	Food Preparation and Serving Related
HEALTH	5	Healthcare Practitioners and Technical
HS	17	Healthcare Support
LEGAL	15	Legal Occupations
MAIN	7	Building and Grounds Cleaning and Maintenance
MAN	12	Management
MIL	23	Military Specific
OFFICE	20	Office and Administration
PER	19	Personal Care and Service
PRO	6	Protective Service
PROD	22	Production
REP	10	Installation, Maintenance and Repair
SALE	8	Sales and Related
SCI	14	Life, Physical, and Social Science
TRANS	11	Transportation and Material Moving
NA	NA	Not Applicable
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: Only complete if injury is work-related.

If work related, also complete Patient's Occupational Industry.

Based upon 1999 US Bureau of Labor Statistics Standard Occupational Classification (SOC).

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. EMS Run Sheet
3. ED Nurses Notes

EDITS: UT.0010.L1; UT.0010.S; UT.0010.SV; CDM_0010; CDM_0010.NV; CDM_0010.N

UTAH EXPORT: OCCUPATION

NTDS EXPORT: OCCUPATION_NTDS

NTDS Field Name: PatientsOccupation

NTDS Field Number: I_05

B.8 ICD-9 Primary E-Code

(National Element)

Definition: E-code used to describe the mechanism (or external factor) that caused the injury event.

Software Field Name: CAUSE_E_CODES

Data Type: Numeric (Multiple values allowed)

Values: Range: E800.0—E999 (Do not submit the E prefix.)

E988.9 Injury by unspecified means (Not Recorded/Not Known)

See E-Codes found in the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) for available value codes.

Discussion/Uses: **The Primary E-code should describe the main reason a patient is admitted to the hospital.**

This field cannot be left blank. If medical chart lists E-Code(s), record the code(s) starting with the one most relevant to the cause of injury. If no E-codes are found in medical chart, code using software code-finder lookup.

This data element permits classification of environmental events, circumstances, and conditions as the cause of injury, poisoning, and other adverse effects.

Activity Codes should not be reported in this field.

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. Billing Sheet / Medical Records Coding Summary Sheet
4. ED Nurses Notes

EDITS: UT.0125; CDM_0125

UTAH EXPORT: CAUSE_E_CODES

NTDS EXPORT: CAUSE_E_CODES1

NTDS Field Name: PrimaryEcode

NTDS Field Number: I_06

B.9 ICD-9 Location E-Code

(National Element)

Definition: Additional E-code used to describe the mechanism, for example, a mass casualty, or other external cause.

Software Field Name: CAUSE_E_CODES

Data Type: Numeric (Multiple values allowed)

Values: Range: E800.0—E999 (Do not submit the E prefix.)

E988.9 Injury by unspecified means (Not Recorded/Not Known)

See E-Codes found in the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) for available value codes.

Discussion/Uses: This data element permits classification of environmental events, circumstances, and conditions as the cause of injury, poisoning, and other adverse effects

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. Billing Sheet / Medical Records Coding Summary Sheet
4. ED Nurses Notes

EDITS: UT.0125; CDM_0125

UTAH EXPORT: CAUSE_E_CODES

NTDS EXPORT: CAUSE_E_CODES2

NTDS Field Name: AdditionalEcode

NTDS Field Number: I_08

B.10 Protective Devices

(National Element)

Definition: Protective devices (safety equipment) in use or worn by the patient at the time of the injury.

Software Field Name: PROTECTIVE_DEVICES

Data Type: Character (Multiple values allowed)

Values: Enter all that apply.

Utah Values	*NTDS Values*	*Description*
AIR	8	Airbag Present
BELT	2	Lap Belt or Unspecified Restraint
BELT.SHLDR	10	Shoulder Belt
CHILD	6	Child Restraint (e.g., booster seat, child car seat)
FLOAT	3	Personal Floatation Device
GLASS	5	Protective Eyewear
HEL	7	Helmet (e.g., bicycle, skiing, motorcycle)
PAD	9	Protective Clothing (e.g., padded leather pants)
PAD.O	4	Protective Non-Clothing (e.g. shin guard)
OTHER	11	Other Protective Device not Listed
NONE	1	No personal protective devices used
NA	NA	Not Applicable (Not injured where Protective Devices were warranted)
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: **Evidence of the use of safety equipment may be reported or observed.**

If “Child Restraint” is present, complete variable “Child Specific Restraint”**.**

If “Airbag” is present, complete variable “Airbag Deployment”.

Lap Belt should be used to include those patients that are restrained, but not further specified.

If chart indicates “3 point restraint” chose 2 and 10.

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses Notes

EDITS: UT.0080; UT.0080.S; UT.0080.SV; CDM_0080; CDM_0080.NV; CDM_0080.N

UTAH EXPORT: PROTECTIVE_DEVICES_SRC

NTDS EXPORT: PROTECTIVE_DEVICES_NTDS

NTDS Field Name: ProtectiveDevices

NTDS Field Number: I_14

B.11 Child Specific Restraint

(National Element)

Definition: Protective child restraint devices used by patient at the time of injury.

Software Field Name: CHILD_RESTRAINT

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
BOOSTER	3	Child Booster Seat
CHILD	1	Child Car Seat
INFANT	2	Infant Car Seat
NA	NA	Not Applicable
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: **Evidence of the use of child restraint may be reported or observed.**

Only to be completed when **Protective Devices** include “Child Restraint”.

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses Notes

EDITS: UT.0977.L1; UT.0977.S; UT.0977.SV; CDM_0977; CDM_0977.NV; CDM_0977.N

UTAH EXPORT: CHILD_RESTRAINT

NTDS EXPORT: CHILD_RESTRAINT_NTDS

NTDS Field Name: ChildSpecificRestraint

NTDS Field Number: I_15

B.12 Airbag Deployment

(National Element)

Definition: Indication of an airbag deployment during a motor vehicle crash.

Software Field Name: AIRBAG

Data Type: Character (Multiple values allowed)

Values:

Utah Values	*NTDS Values*	*Description*
F	2	Airbag Deployed Front
N	1	Airbag Not Deployed
O	4	Airbag Deployed Other (knee, airbelt, curtain, etc.)
S	3	Airbag Deployed Side
NA	NA	Not Applicable
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: **Evidence of the use of airbag deployment may be reported or observed.**

Only to be completed when Protective Devices in “Airbag”.

Check all that apply.

Airbag Deployed Front should be used for patients with documented airbag deployments, but are not further specified.

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses Notes

EDITS: UT.0978,L1; UT.0978.S; UT.0978.SV; CDM_0978; CDM_0978.NV; CDM_0978.N

UTAH EXPORT: AIRBAG

NTDS EXPORT: AIRBAG_NTDS

NTDS Field Name: AirbagDeployment

NTDS Field Number: I_16

B.13 Incident Country

(National Element)

Definition: The country where the patient was found or to which the unit responded (or best approximation).

Software Field Name: INJURY_COUNTRY

Data Type: Character (Single entry allowed)

Values: ***See relevant values in Appendix C.***

NOT Not Recorded/Not Known

Discussion/Uses: Allows data to be sorted based upon the geographic location of the injury event.

Only complete when Incident Location ZIP code is “Not Applicable” or “Not Recorded/Not Known”.

Values are two character fields representing a country (e.g., US).

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses Notes

EDITS: UT.0870; UT.0870.S; UT.0870.SV; CDM_0870; CDM_0870.NV; CDM_0870.N

UTAH EXPORT: INJURY_COUNTRY

NTDS EXPORT: INJURY_COUNTRY_NTDS

NTDS Field Name: IncidentCountry

NTDS Field Number: I_09

B.14 Incident Location ZIP Code

(National Element)

Definition: The ZIP code of the incident location.

Software Field Name: INJURY_ZIP

Data Type: Character (Single entry allowed)

Values: United States 5 or 9 Digit Zip Code (without dashes) or Canadian Zip Code

NA Not Applicable (Did not occur within the United States or Canada)

NOT Not Recorded/Not Known

See Appendix D for a list of Utah Counties, Cities, and Zip Codes.

Discussion/Uses: Record zip code only if zip code of injury is listed in the medical record or if town/city of injury noted in medical record covers an entire zip code area. If unsure, use software to lookup zip code for the town/city of injury. It is suspected that some cases will have inadequate documentation on this variable.

If “Not Applicable” or “Not Recorded/Not Known” complete variables: Incident State; Incident County; Incident City; Incident Country.

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses Notes

EDITS: UT.0219; CDM_0219

UTAH EXPORT: INJURY_ZIP

NTDS EXPORT: INJURY_ZIP

NTDS Field Name: InjuryZip

NTDS Field Number: I_13

B.15 Incident State

(National Element)

Definition: The state or territory where the patient was found or to which the unit responded (or best approximation).

Software Field Name: INJURY_ST

Data Type: Character (Single entry allowed)

Values:

Code	*State*	*Code*	*State*
AL	Alabama	MT	Montana
AK	Alaska	NE	Nebraska
AS	American Samoa	NV	Nevada
AZ	Arizona	NH	New Hampshire
AR	Arkansas	NJ	New Jersey
CA	California	NM	New Mexico
CO	Colorado	NY	New York
CT	Connecticut	NC	North Carolina
DE	Delaware	ND	North Dakota
DC	District of Columbia	MP	Northern Mariana Islands
FM	Federated States of Micronesia	OH	Ohio
FL	Florida	OK	Oklahoma
GA	Georgia	OR	Oregon
GU	Guam	PW	Palau
HI	Hawaii	PA	Pennsylvania
ID	Idaho	PR	Puerto Rico
IL	Illinois	RI	Rhode Island
IN	Indiana	SC	South Carolina
IO	Iowa	SD	South Dakota
KS	Kansas	TN	Tennessee
KY	Kentucky	TX	Texas
LA	Louisiana	UT	Utah
ME	Maine	VT	Vermont
MH	Marshall Islands	VI	Virgin Islands
MD	Maryland	VA	Virginia
MA	Massachusetts	WA	Washington
MI	Michigan	WV	West Virginia
MN	Minnesota	WI	Wisconsin
MS	Mississippi	WY	Wyoming
MO	Missouri		

NA	Not Applicable (Injury did not occur within the US)
NOT	Not Recorded/Not Known

Discussion/Uses: Only complete when Incident Location ZIP code is “Not Applicable” or, “Not Recorded/Not Known”.

This field provides useful data to assist with public health intervention, identify populations at risk, focus injury prevention programs, and assess transport issues.

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses Notes

EDITS: UT.0994; UT.0994.S; UT.0994.SV; CDM_0994; CDM_0994.NV; CDM_0994.N

UTAH EXPORT: INJURY_ST

NTDS EXPORT: INJURY_ST_NTDS

NTDS Field Name: IncidentState

NTDS Field Number: I_10

B.16 Incident County

(National Element)

Definition: The county or parish where the patient was found or to which the unit responded (or best approximation).

Software Field Name: COUNTY_STATE

Data Type: Character (Single entry allowed)

Values: ***All valid US counties.***

Valid Utah Counties

County	*Code*	*FIPS Code*	*County*	*Code*	*FIPS Code*
BEAVER	01	49001	PIUTE	16	49031
BOX_ELDER	02	49003	RICH	17	49033
CACHE	03	49005	SALT_LAKE	18	49035
CARBON	04	49007	SAN_JUAN	19	49039
DAGGETT	05	49009	SANPETE	20	49037
DAVIS	06	49011	SEVIER	21	49041
DUCHESNE	07	49013	SUMMIT	22	49043
EMERY	08	49015	TOOELE	23	49045
GARFIELD	09	49017	UINTAH	24	49047
GRAND	10	49019	UTAH (County)	25	49049
IRON	11	49021	WASATCH	26	49051
JUAB	12	49023	WASHINGTON	27	49053
KANE	13	49025	WAYNE	28	49055
MILLARD	14	49027	WEBER	29	49057
MORGAN	15	49029	OTHER		

NA	Not Applicable
NOT	Not Recorded/Not Known

Discussion/Uses: Provides useful data to assist with public health intervention, identify populations at risk, focus injury prevention programs, and assess transport issues.

Only completed when Incident Location ZIP is “Not Applicable/Not Known”.

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses Notes

EDITS: UT.0121; UT.0121.S; UT.0121.SV; CDM_0121

UTAH EXPORT: COUNTY_STATE_SRC

NTDS EXPORT: COUNTY_STATE_NTDS
NTDS Field Name: IncidentCounty

NTDS Field Number: I_11

B.17 Incident City

(National Element)

Definition: The city or township where the patient was found or to which the unit responded (or best approximation).

Software Field Name: NEAREST_TOWN

Data Type: Character (Free text field)

Values: All values are allowed.

See Appendix D for a list of all Utah cities.

Discussion/Uses: This is not the city/town of the nearest hospital.

Along with **Incident Location Zip Code**, this data element is used to calculate local fatality/injury rates using available population data, to help identify "hotspots" and local agencies to conduct public health interventions, and to gain information about the socioeconomic status of the neighborhoods in which injuries occur (by use of US Census data).

Only completed when Incident Location ZIP code is "Not Applicable" or, "Not Recorded/Not Known".

If incident location resides outside of formal city boundaries, report nearest city/town.

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. ED Nurses Notes

EDITS: UT.0081; CDM_0081

UTAH EXPORT: NEAREST_TOWN

NTDS EXPORT: NEAREST_TOWN

NTDS Field Name: IncidentCity

NTDS Field Number: I_12

B.18 Location E-Code

(National Element)

Definition: E-code used to describe the place/site/location of the injury event (E 849.X).

Software Field Name: LOCATION

Data Type: **Character (Single entry allowed)**

Values: Range: 849.0-849.9 (Use ICD-9-CM E849 place of occurrence codes. Do not submit the E prefix.)

Utah Values	*NTDS Values*	*Description*
HOME	0	849.0 **Includes:** apartment, boarding house, farm house, home premises, house (residential), non-institutional place of residence, private [driveway, garage, garden, home, walk], swimming pool in private house or garden, yard of home), retirement community **Excludes:** home under construction but not yet occupied (849.3), institutional place of residence (849.7)
FARM	1	849.1 **Includes:** buildings, land under cultivation **Excludes:** farm house and home premises of farm (849.0)
MINE (and quarry)	2	849.2 **Includes:** gravel pit, sand pit, tunnel under construction
WORK (Industrial place and premises)	3	849.3 **Includes:** building under construction, dockyard, dry dock, factory building or premises, garage (place of work), industrial yard, loading platform (factory or store), industrial plant, railway yard, shop (place of work), warehouse, workhouse, any work site
Utah Values	*NTDS Values*	*Description*

REC (Place for recreation and sport)	4	849.4 **Includes:** amusement park, baseball field, basketball court, beach resort, cricket ground, fives court, football field, golf course, gymnasium, hockey field, holiday camp, ice palace, lake resort, mountain resort, public park, racecourse, resort NOS, riding school, rifle range, seashore resort, skating rink, sports ground, sports palace, stadium, swimming pool (public), tennis court, vacation resort **Excludes:** playground (including school playground) (PLAY), that in private house or garden (849.0)
STREET	5	849.5 **Includes:** Street and Highway
PUBLIC (Public Building)	6	849.6 **Includes:** building (including adjacent grounds) used by the general public or by a particular group of the public, such as: airport, bank, cafe, casino, church, cinema, clubhouse, courthouse, dance hall, garage building (for car storage), hotel, market (grocery or other commodity), movie house, music hall, nightclub, office, office building, opera house, post office, public hall, radio broadcasting station, restaurant, shop - commercial, station (bus, railway), store, theater **Excludes:** home garage (849.0), industrial building or workplace (849.3), school -state, public, private (SCHOOL),
RES (Residential institution)	7	849.7 **Includes:** children's home, dormitory, hospital, jail, old people's home, orphanage, prison, reform school, shelter, protective services, and nursing home.
Utah Values	***NTDS Values***	***Description***
OTHER (Other	8	849.8 **Includes:** beach NOS, canal,

specified place)		caravan site NOS, derelict house, desert, dock, forest, harbor, hill, lake NOS, mountain, parking lot, parking place, pond or pool (natural), prairie, public place NOS, railway line, reservoir, river, sea, seashore NOS, stream, swamp, trailer court, woods, national park
PLAY	4	**Includes:** playground (including school playground)
SCHOOL	6	**Includes:** school -state, public, private
UNSPEC (Unspecified place)	9	849.9
NA	NA	Not Applicable
NOT	NOT	Not Recorded/Not Known

Discussion/Uses:

This data element describes the site itself regardless of the patient's reason for being there. For example: The code for a patient who works at a ski resort and is injured there would be "rec. and sport" not industrial.

For Utah Trauma Registry purposes, additions have been made to some categories. “Retirement community” has been added to Home (849.0). “Any work site” has been added to Industrial place and premises (849.3). “Shelter, protective services, and nursing home” have been added to Residential institution (849.7).

This data element is useful in describing the injury-producing event and is valuable for planning and evaluating prevention programs.

Data Source Hierarchy:

1. EMS Run Sheet
2. Triage Form / Trauma Flow Sheet
3. Billing Sheet / Medical Records Coding Summary Sheet
4. ED Nurses Notes

EDITS: UT.0145; UT.0145.S; UT.0145.SV; CDM_0145; CDM_0145.NV; CDM_0145.N

UTAH EXPORT: LOCATION_SRC

NTDS EXPORT: LOCATION_NTDS

NTDS Field Name: LocationEcode

NTDS Field Number: I_07

B.19 Injury Details

Definition: The details of the injury. This can be any supporting or supplemental data about the injury, environmental conditions, other circumstances, etc.

Software Field Name: INJURY_DETAILS

Data Type: Character (Free text field)

Values: All values are allowed. Enter the details of the injury. This information should not repeat information contained in other fields.

Discussion/Uses: This data element helps to better convey the context of the injury event and to include important information such as intentionality that is not otherwise captured in the other data elements

EDITS: UT.0077

UTAH EXPORT: INJURY_DETAIL

C. Referring Hospital Data

C.1 Hospital Transfer

(National Element)

Definition: A flag used to indicate the patient was transferred from an initial acute care hospital to your hospital.

Outlying facilities purporting to provide emergency care services or utilized to stabilize a patient are considered acute care facilities.

Software Field Name: HOSPITAL_TRANSFER

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
N	2	No, the patient was not transferred to our hospital from another hospital ***or*** the patient *was* transferred to our hospital from a doctor's office, clinic, or stand-alone ambulatory surgery center
Y	1	Yes, the patient was transferred to our hospital from another acute care hospital

Discussion/Uses: **Patients transferred from a private doctor's office, stand-alone ambulatory surgery center, or delivered to your hospital by a non-EMS transport is not considered an inter-facility transfer. Enter "N" for these types of transfers.**

This data element must be answered. NOT and NA are not allowed in this field.
If the answer to this field is 'N', the remaining data elements in this section should be answered 'NA' (Not applicable), meaning the patient is not a transfer therefore the referring hospital data elements do not apply. The trauma registry software will do an auto-fill of 'NA' in the fields for this section if the answer to this question is 'N'.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0136; UT.0136.S; UT.0136.SV; CDM_0136; CDM_0136.NV; CDM_0136.N

UTAH EXPORT: HOSPITAL_TRANSFER_SRC

NTDS EXPORT: HOSPITA_TRANSFER_NTDS

NTDS Field Name: InterFacilityTransfer

NTDS Field Number: P_17

C.2 Transport Mode into Referring Hospital

Definition: The mode of transport into the referring hospital. From this point on, "referring hospital" is defined as the hospital that referred the patient to your hospital.

Software Field Name: TRANSFER_MODE

Data Type: Character (Single entry allowed)

Values:

AMB	Ground ambulance
FIX	Fixed wing air
HELI	Helicopter
LAW	Law enforcement (Non-EMS)
COM	Commercial transportation/taxi (Non-EMS)
POV	"Per other vehicle" (private vehicle, walk-in, bus, non-EMS)
NA	Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')
NOT	Not Recorded/Not Known

Discussion/Uses: Patient may be transported into referring hospital via non-EMS provider. However, in order to meet Utah Trauma Registry inclusion criteria, patient must be transferred out of referring facility to ED/admitting hospital via EMS transport.

This data can be found on the medical record information that accompanies the patient from the referring hospital.

EDITS: UT.0491; UT.0491.S; UT.0491.SV;

UTAH EXPORT: TRANSFER_MODE

C.3 Referring Hospital

Definition: The three digit numeric code assigned to the referring hospital.

Software Field Name: FROM_HOSPITAL

Data Type: Integer (Single entry allowed)

Values: Hospital codes are assigned by the Utah Department of Health.

The list of codes can be found in Appendix A.

Codes under 100 (non-hospital codes) are not valid responses for this question.

NA	Not applicable, no referring hospital (Trauma registry software will auto-fill this field if **Hospital Transfer** = 'N')
NOT	Not Recorded/Not Known

Discussion/Uses: This field and the following fields in Section C are conditional. Complete only if the patient was transferred from another hospital to your hospital (if **Hospital Transfer** = 'Y')

This data can be found on the medical record information that accompanies the patient from the referring hospital.

Values under 100 in the hospital code list are clinics, doctor's offices, etc., and should not be entered because they do not meet the definition of a **Referring Hospital**.

EDITS: UT.0168; UT.0168.S; 0168.SV

UTAH EXPORT: FROM_HOSPITAL_SRC

C.4 Referring Hospital Arrival Time

Definition: The time the patient arrived at the referring hospital.

Software Field Name: REFERRING_ARRIVAL_TIME

Data Type: Military Time – hh:mm (Single entry allowed)

Values: Range: 00:00 to 23:59 (For example, if the patient arrived at 12:30 A.M., the value would be 00:30).

NA	Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')
NOT	Not Recorded/Not Known

Discussion/Uses: This data can be found on the medical record information that accompanies the patient from the referring hospital.

EDITS: UT.0473.L1

UTAH EXPORT: REFERRING_ARRIVAL_TIME

C.5 Referring Hospital Arrival Date

Definition: The date the patient arrived at the referring hospital.

Software Field Name: REFERRING_ARRIVAL_DATE

Data Type: Date – mmddyyyy (Single entry allowed)

Values: Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Month:

01	January	07	July	
02	February		08	August
03	March		09	September
04	April		10	October
05	May		11	November
06	June		12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')

NOT Not Recorded/Not Known

Discussion/Uses: This data can be found on the medical record information that accompanies the patient from the referring hospital.

EDITS: UT.0473

UTAH EXPORT: REFERRING_ARRIVAL_DATE

C.6 Referring Hospital Discharge Time

Definition: The time the patient was discharged from the referring hospital.

Software Field Name: REFERRING_DISCHARGE_TIME

Data Type: Military Time – hh:mm (Single entry allowed)

Values: Range: 00:00 to 23:59 (For example, if the patient was discharged at 12:30 A.M., the value would be 00:30).

NA	Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')
NOT	Not Recorded/Not Known

Discussion/Uses: This data can be found on the medical record information that accompanies the patient from the referring hospital.

EDITS: UT.0474

UTAH EXPORT: REFERRING_DISCHARGE_TIME

C.7 Referring Hospital Discharge Date

Definition: The date the patient was discharged from the referring hospital.

Software Field Name: REFERRING_DISCHARGE_DATE

Data Type: Date – mmddyyyy (Single entry allowed)

Values: Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Month:

01	January	07	July	
02	February		08	August
03	March		09	September
04	April		10	October
05	May		11	November
06	June		12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')

NOT Not Recorded/Not Known

Discussion/Uses: This data can be found on the medical record information that accompanies the patient from the referring hospital.

EDITS: UT.0475

UTAH EXPORT: REFERRING_DISCHARGE_DATE

C.8 Referring Hospital Admission Type

Definition: The type of admission at referring hospital.

Software Field Name: REFERRING_ADMIT_TYPE

Data Type: Character (Single entry allowed)

Values:

A	Admitted as an inpatient or to the OR
E	ED care only
NA	Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')
NOT	Not Recorded/Not Known

Discussion/Uses: This data can be found on the medical record information that accompanies the patient from the referring hospital.

EDITS: UT.0524

UTAH EXPORT: REFERRING_ADMIT_TYPE

C.9 Referring Hospital Pulse Rate

Definition: The first palpable pulse rate expressed as number per minute initially assessed upon arrival in the referring hospital.

Software Field Name: PREF

Data Type: Integer (Single entry allowed)

Values: Range: 0-400

NA	Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')
NOT	Not Recorded/Not Known

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in referring hospital. If it is not done in this time period, record NOT.

This data can be found on the medical record information that accompanies the patient from the referring hospital.

EDITS: UT.0055.L3

UTAH EXPORT: PULSE

C.10 Referring Hospital Respiratory Rate

Definition: The first unassisted patient respiratory rate expressed as number per minute initially assessed upon arrival in the referring hospital.

Software Field Name: RRREF

Data Type: Integer (Single entry allowed)

Values: Range: 0-100

*If patient is apneic prior to intervention, record as 0.

ASSIST	Unassisted rate is not measurable due to sedation, paralysis or assisted ventilation (including bag-valve-mask and EOA)
NA	Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')
NOT	Not Recorded/Not Known

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in referring hospital. If it is not done in this time period, record NOT.

This data can be found on the medical record information that accompanies the patient from the referring hospital.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

EDITS: UT.0053.L3

UTAH EXPORT: RESP_RATE

C.11 Referring Hospital Systolic Blood Pressure

Definition: The systolic blood pressure initially assessed upon arrival in the referring hospital.

Software Field Name: SYS_BP

Data Type: Integer (Single entry allowed)

Values: Range: 0-300

NA	Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')
NOT	Not Recorded/Not Known

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in the referring hospital. If it is not done in this time period, record NOT.

This data can be found on the medical record information that accompanies the patient from the referring hospital.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

EDITS: UT.0056.L3

UTAH EXPORT: SYS_BP

C.12 Referring Hospital GCS - Eye

Definition: The first assessment of the patient's eye opening response for the Glasgow Coma Score upon arrival in the referring hospital.

Software Field Name: EYE_OPENING, EYEREF

Data Type: Character (Single entry allowed)

Values: Range: 1-4

1	No eye movement when assessed
2	Opens eyes in response to painful stimulation
3	Opens eyes in response to verbal stimulation
4	Opens eyes spontaneously
NA	Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')
NOT	Not Recorded/Not Known

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in the referring hospital. If it is not done in this time period, record NOT.

This data can be found on the medical record information that accompanies the patient from the referring hospital.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

EDITS: UT.0059.L3

UTAH EXPORT: EYE_OPENING

C.13 Referring Hospital GCS - Verbal

Definition: The first assessment of the patient's verbal response for the Glasgow Coma Score upon arrival in the referring hospital.

Software Field Name: VERBAL_RESPONSE, VERBALREF

Data Type: Character (Single entry allowed)

Values: Range: 1-5

Pediatric (< 2 years):

1	No vocal response
2	Inconsolable, agitated
3	Inconsistently consolable, moaning
4	Cries but is consolable, inappropriate interactions
5	Smiles, oriented to sounds, follows objects, interacts

Adult:

1	No verbal response
2	Incomprehensible sounds
3	Inappropriate words
4	Confused
5	Oriented

NA	Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')
NOT	Not Recorded/Not Known

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in the referring hospital. If it is not done in this time period, record NOT.

This data can be found on the medical record information that accompanies the patient from the referring hospital.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

EDITS: UT.0061.L3

UTAH EXPORT: VERBAL_RESPONSE

C.14 Referring Hospital GCS - Motor

Definition: The first assessment of the patient's motor response for the Glasgow Coma Score upon arrival in the referring hospital.

Software Field Name: MOTOR_RESPONSE, MOTORREF

Data Type: Character (Single entry allowed)

Values: Range: 1-6

Pediatric (< 2 years):

1	No motor response
2	Extension to pain
3	Flexion to pain
4	Withdrawal from pain
5	Localizing pain
6	Appropriate response to stimulation

Adult:

1	No motor response
2	Extension to pain
3	Flexion to pain
4	Withdrawal from pain
5	Localizing pain
6	Obeys commands

NA	Not Applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')
NOT	Not Recorded/Not Known

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in the referring hospital. If it is not done in this time period, record NOT.

This data can be found on the medical record information that accompanies the patient from the referring hospital.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

EDITS: UT.0062.L3

UTAH EXPORT: MOTOR_RESPONSE

C.15 Referring Hospital GCS Assessment Qualifiers

Definition: Documentation of factors potentially affecting the first assessment of GCS upon arrival in the referring hospital.

Software Field Name: PARALYTICS

Data Type: Character (Single entry allowed)

Values:

Utah Choices	*Description*
I	Patient intubated
IO	Patient intubated and obstruction to eye
O	Obstruction to the patient's eye
S	Patient chemically sedated
SI	Patient chemically sedated and intubated
SIO	Patient chemically sedated, intubated, and obstruction to eye
SO	Patient chemically sedated and obstruction to eye
NA	Not Applicable
NOT	Not Recorded/Not Known

Discussion/Uses: Provides documentation of assessment and care.

Used in quality management for the evaluation of care and EMS Agency Performance.

EDITS: None

UTAH EXPORT: PARALYTICS

C.16 Referring Hospital GCS - Total

Definition: The severity of injury as reflected by the first assessment of total GCS upon arrival in the referring hospital.

Software Field Name: GLASCOW

Data Type: Character (Single entry allowed)

Values: Range: 3-15

If “A & O X 3” or “A & 0 X 4” is documented in medical chart, record GCS as 15.

NA	Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = ‘N’)
NOT	Not Recorded/Not Known

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in the referring hospital. If it is not done in this time period, record NOT.

This data can be found on the medical record information that accompanies the patient from the referring hospital.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

EDITS: None

UTAH EXPORT: GLASCOW

C.17 Referring Procedures with ICD9

Definition: Operative or essential procedures conducted during referring hospital stay.

Software Field Name: PROCEDURE_LOCATION_CODE; PROCEDURE_ICD9

Data Type: Numeric (Multiple values allowed)

Values:

Discussion/Uses: Operative and/or essential procedures is defined as procedures performed in the Operating Room, Emergency Department, or Intensive Care Unit that were essential to the diagnoses, stabilization, or treatment of the patient's specific injuries.

Repeated diagnostic procedures (e.g., repeated CT scan) should not be recorded (record only the first procedure).

EDITS: NONE

UTAH EXPORT: PROCEDURE_LOCATION_CODE; PROCEDURE_ICD9

D. Pre-Hospital Information

D.1 Transport Mode Into Hospital

(National Element)

Definition: The mode of transport delivering the patient to your hospital.

Software Field Name: TRANS

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
AMB	1	Ground Ambulance
COM	4	Commercial transportation/taxi (Non-EMS)
FIX	3	Fixed Wing Ambulance
HELI	2	Helicopter Ambulance
LAW	5	Law enforcement (Non-EMS)
OTHER	6	Other mode of transport
POV	4	"Per other vehicle" (private vehicle, walk-in, bus, non-EMS)
NA	NA	Not Applicable
NOT	NOT	Not Recorded

Discussion/Uses: This is a key field for completing other Pre-hospital/EMS data elements.

If **Transport Mode Into Hospital** indicates an **EMS Agency** was involved in transport ('AMB', 'FIX', or 'HELI'), then data for remaining Pre-hospital/EMS fields is required.

If **Transport Mode Into Hospital** indicates an **EMS Agency** was not involved in transport ('LAW', 'COM', or 'POV'), then the remaining data elements in this section should be answered 'Not applicable', meaning, the patient was not transferred by an **EMS Agency** therefore the Pre-hospital/ EMS data elements do not apply.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0169; UT.0169S; UT.0169SV

UTAH EXPORT: TRANS

NTDS EXPORT: TRANS_NTDS

NTDS Field Name: TransportMode

NTDS Field Number: P_07

D.2 Other Transport Mode

(National Element)

Definition: All other modes of transport used during patient care event, except the mode delivering the patient to the hospital.

Software Field Name: TRANS_OTHER

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
AMB	1	Ground Ambulance
COM	4	Commercial transportation/taxi (Non-EMS)
FIX	3	Fixed-Wing Ambulance
HELI	2	Helicopter Ambulance
LAW	5	Law enforcement (Non-EMS)
OTHER	6	Other mode of transport
POV	4	"Per other vehicle" (private vehicle, walk-in, bus, non-EMS)
NA	NA	Not Applicable
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: This is a key field for completing other Pre-hospital/EMS data elements.

If **Transport Mode Into Hospital** indicates an **EMS Agency** was involved in transport ('AMB', 'FIX', or 'HELI'), then data for remaining Pre-hospital/EMS fields is required.

If **Transport Mode Into Hospital** indicates an **EMS Agency** was not involved in transport ('LAW', 'COM', or 'POV'), then the remaining data elements in this section should be answered 'Not applicable', meaning, the patient was not transferred by an **EMS Agency** therefore the Pre-hospital/ EMS data elements do not apply.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: CDM_0996; CDM_0996.NV; CDM_0996.N

UTAH EXPORT: TRANS_OTHER

NTDS EXPORT: TRANS_OTHER_NTDS

NTDS Field Name: OtherTransportMode

NTDS Field Number: P_08

D.3 EMS Agency

Definition: The code for each **EMS Agency** involved in transporting the patient from the scene of injury to arrival in your hospital.

Software Field Name: TRANSPORT_AGENCY_CODE

Data Type: Character (Multiple values allowed)

Values: Range: 0101L—2931L; 3000L

*Each **EMS Agency** in the state of Utah is assigned a code by the Utah Department of Health*.*

See Appendix B for the list of Licensed Utah EMS Agency codes.

3000L	Unspecified Utah EMS agency
OTHER	Other out of state EMS agency
NA	Not applicable, no EMS transport
NOT	Not Recorded/Not Known

Discussion/Uses: The first row of data entry should be the agency that transported the patient to your hospital.

After the first row, optionally enter other **EMS Agencies and Responding Units** involved in transporting the patient.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

EDITS: UT.0017; UT.0017S; UT.0017SV

UTAH EXPORT: TRANSPORT_AGENCY_CODE_SRC

D.4 EMS Origin

Definition: The place where patient transport by an **EMS Agency** began.

Software Field Name: TRANSPORT_ORIGIN

Data Type: Character (Multiple values allowed)

Values:

SCENE	Transporting agency from the scene of injury
REF	Referring hospital (includes clinics and doctors' offices)
TRANS	Rendezvous point with other EMS transport unit, (i.e. ground ambulance, fixed wing or helicopter)
NONTRANS	Non-transporting EMS agency (i.e. first responder, fire department, etc.)
NA	Not applicable, no EMS transport
NOT	Not Recorded/Not Known

Discussion/Uses: Sequentially enter all the origins where patient transports by an **EMS Agency** began, starting with the first leg of EMS transport.

The last **EMS Origin** should be the place patient was seen at prior to transport by an **EMS Agency** to your hospital, if applicable.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

Only one occurrence of 'SCENE' should be input. This should be used to identify the EMS agency transporting the patient from the scene of the accident.

EDITS: UT.0278; UT.0278S; UT.0278SL (checks for more than one TRANSPORT_ORIGIN of 'SCENE')

UTAH EXPORT: TRANSPORT_ORIGIN_SRC

D.5 EMS Notify Time

(National Element)

Definition: The time the unit transporting to your hospital was notified by dispatch.

Software Field Name: NOTIFY_TIME

Data Type: Military Time – hh:mm (Multiple values allowed)

Values: Range: 00:00 to 23:59

NA Not applicable, no EMS transport

NOT Not Recorded/Not Known

Discussion/Uses: Sequentially enter all the notification times for each **EMS Agency** involved in transporting the patient, starting with the first leg of EMS transport.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0023; CDM_0023

UTAH EXPORT: NOTIFY_TIME

NTDS EXPORT: NOTIFY_TIME

NTDS Field Name: EmsDispatchTime

NTDS Field Number: P_02

D.6 EMS Notify Date

(National Element)

Definition: The date the unit transporting to your hospital was notified by dispatch.

Software Field Name: NOTIFY_DATE

Data Type: Date – mmddyyyy (Multiple values allowed)

Values: Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Month:

01	January	07	July
02	February	08	August
03	March	09	September
04	April	10	October
05	May	11	November
06	June	12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA Not applicable, no EMS transport

NOT Not Recorded/Not Known

Discussion/Uses: Sequentially enter all the notification dates for each **EMS Agency** involved in transporting the patient, starting with the first leg of EMS transport.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0024; CDM_0024

UTAH EXPORT: NOTIFY_DATE

NTDS EXPORT: NOTIFY_DATE

NTDS Field Name: EmsDispatchDate

NTDS Field Number: P_01

D.7 EMS Respond Time

Definition:

The time the **EMS Agency** began travel to place where patient EMS transport was to begin.

Depending on the EMS transport leg defined by the **EMS Origin** and **EMS Destination** points, the place where patient transport began can be at either the scene of injury (SCENE), referring hospital (REF) or rendezvous point (TRANS).

Software Field Name:

TIME_OUT

Data Type:

Military Time – hh:mm (Multiple values allowed)

Values:

Range: 00:00 to 23:59

NA	Not applicable, no EMS transport
NOT	Not Recorded/Not Known

Discussion/Uses:

Sequentially enter all the respond/departure times for each **EMS Agency** involved in transporting the patient, starting with the first leg of EMS transport.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

EDITS:

UT.0025.L1

UTAH EXPORT:

TIME_OUT

D.8 EMS Respond Date

Definition:

The date the **EMS Agency** began travel to place where patient EMS transport was to begin.

Depending on the EMS transport leg defined by the **EMS Origin** and **EMS Destination** points, the place where patient transport began can be at either the scene of injury (SCENE), referring hospital (REF) or rendezvous point (TRANS).

Software Field Name:

DATE_OUT

Data Type:

Date – mmddyyyy (Multiple values allowed)

Values:

Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Month:

01	January	07	July	
02	February		08	August
03	March		09	September
04	April		10	October
05	May		11	November
06	June		12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA	Not applicable, no EMS transport
NOT	Not Recorded/Not Known

Discussion/Uses:

Sequentially enter all the respond/departure dates for each **EMS Agency** involved in transporting the patient, starting with the first leg of EMS transport.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

EDITS:

UT.0026.L1

UTAH EXPORT:

DATE_OUT

D.9 EMS Unit Arrival on Scene Time

(National Element)

Definition: The time the unit transporting to your hospital arrived on the scene (the time the vehicle stopped moving).

Software Field Name: ARRIVAL_TIME

Data Type: Military Time – hh:mm (Multiple values allowed)

Values: Range: 00:00 to 23:59

NA Not applicable, no EMS transport

NOT Not Recorded/Not Known

Discussion/Uses: **Scene may be defined as "initial hospital" for inter-facility transfers.**

Sequentially enter all the patient arrival times for each **EMS Agency** involved in transporting the patient, starting with the first leg of EMS transport.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0027; UT.0027.L1; CDM_0027

UTAH EXPORT: ARRIVAL_TIME

NTDS EXPORT: ARRIVAL_TIME

NTDS Field Name: EmsArrivalTime

NTDS Field Number: P_04

D.10 EMS Unit Arrival on Scene Date

(National Element)

Definition: The date the unit transporting to your hospital arrived on the scene (the time the vehicle stopped moving).

Software Field Name: ARRIVAL_DATE

Data Type: Date – mmddyyyy (Multiple values allowed)

Values: Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Month:

01	January	07	July	
02	February		08	August
03	March		09	September
04	April		10	October
05	May		11	November
06	June		12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA Not applicable, no EMS transport

NOT Not Recorded/Not Known

Discussion/Uses: **Scene may be defined as "initial hospital" for inter-facility transfers.**

Sequentially enter all the patient arrival dates for each **EMS Agency** involved in transporting the patient, starting with the first leg of EMS transport.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0028; CDM_0028

UTAH EXPORT: ARRIVAL_DATE

NTDS EXPORT: ARRIVAL_DATE

NTDS Field Name: EmsArrivalDate

NTDS Field Number: P_03

D.11 EMS Unit Scene Departure Time

(National Element)

Definition: The time the unit transporting to your hospital left the scene (the time the vehicle started moving).

Software Field Name: DEPARTURE_TIME

Data Type: Military Time – hh:mm (Multiple values allowed)

Values: Range: 00:00 to 23:59

NA	Not applicable, no EMS transport
NOT	Not Recorded/Not Known

Discussion/Uses: Sequentially enter all the patient departure times for each **EMS Agency** involved in transporting the patient, starting with the first leg of EMS transport.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0029; CDM_0029

UTAH EXPORT: DEPARTURE_TIME

NTDS EXPORT: DEPARTURE_TIME

NTDS Field Name: EmsLeftTime

NTDS Field Number: P_06

D.12 EMS Unit Scene Departure Date

(National Element)

Definition: The date the unit transporting to your hospital left the scene (the time the vehicle started moving).

Software Field Name: DEPARTURE_DATE

Data Type: Date – mmddyyyy (Multiple values allowed)

Values: Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Month:

01	January	07	July	
02	February		08	August
03	March		09	September
04	April		10	October
05	May		11	November
06	June		12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA Not applicable, no EMS transport

NOT Not Recorded/Not Known

Discussion/Uses: Sequentially enter all the destination arrival times for each **EMS Agency** involved in transporting the patient, starting with the first leg of EMS transport.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0030; CDM_0030

UTAH EXPORT: DEPARTURE_DATE

NTDS EXPORT: DEPARTURE_DATE

NTDS Field Name: EmsLeftDate

NTDS Field Number: P_05

D.13 EMS Destination Arrival Time

Definition: The time the EMS Agency arrived with the patient at the destination of EMS transport.

Depending on the EMS transport leg defined by the **EMS Origin** and **EMS Destination** points, this can be arrival at the definitive care hospital or rendezvous point, such as a transporting unit, airport, etc.

Software Field Name: DESTINATION_ARRIVAL_TIME

Data Type: Military Time – hh:mm (Multiple values allowed)

Values: Range: 00:00 to 23:59

NA	Not applicable, no EMS transport
NOT	Not Recorded/Not Known

Discussion/Uses: Sequentially enter all the destination arrival times for each **EMS Agency** involved in transporting the patient, starting with the first leg of EMS transport.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

EDITS: UT.0147.L1

UTAH EXPORT: DESTINATION_ARRIVAL_TIME

D.14 EMS Destination Arrival Date

Definition:

The date the **EMS Agency** arrived with patient at the destination of EMS transport.

Depending on the EMS transport leg defined by the **EMS Origin** and **EMS Destination** points, this can be arrival at the definitive care hospital or rendezvous point, such as a transporting unit, airport, etc

Software Field Name:

DESTINATION_ARRIVAL_DATE

Data Type:

Date – mmddyyyy (Multiple values allowed)

Values:

Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Month:

01	January	07	July
02	February	08	August
03	March	09	September
04	April	10	October
05	May	11	November
06	June	12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA Not applicable, no EMS transport

NOT Not Recorded

Discussion/Uses:

Sequentially enter all the destination arrival dates for each **EMS Agency** involved in transporting the patient, starting with the first leg of EMS transport.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

EDITS:

UT.0146.L1

UTAH EXPORT:

DESTINATION_ARRIVAL_DATE

D.15 EMS Destination

Definition: The destination where each leg of patient EMS transports ended.

Software Field Name: TRANSPORT_DESTINATION

Data Type: Integer (Multiple values allowed)

Values: Destination/Hospital codes are assigned by the Utah Department of Health***. The list of codes can be found in Appendix A***. If this leg of EMS transport did not end in a hospital, chose from options 010—090.

NA Not applicable, no EMS transport

NOT Not Recorded/Not Known

Discussion/Uses: Sequentially enter all the destinations where each leg of the **EMS Agency** transport ended, starting with the first destination to which the patient was transported. The last **EMS Destination** should be the Hospital Code for your hospital, if applicable.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient..

EDITS: UT.0062; UT.0062S; UT.0062SV

UTAH EXPORT: TRANSPORT_DESTINATION_SRC

D.16 EMS Trip Form Received

Definition: Indicates whether the EMS Trip Form or Run Sheet is available in the medical record (for the trauma registrar/data abstractor) for each leg of an **EMS Agency** patient transport.

Software Field Name: TRIP_FORM

Data Type: Character (Multiple values allowed)

Values:

Y	Yes, trip form is available
N	No, trip form is not available
NA	Not applicable, no EMS transport

Discussion/Uses: This is used to indicate the availability of data for the trauma registry from the EMS Trip Form or Run Sheet for each leg of an **EMS Agency** patient transport.

EDITS: UT.0019; UT.0019S; UT.0019SV

UTAH EXPORT: TRIP_FORM_SRC

D.17 Initial Field Pulse Rate

(National Element)

Definition: First recorded pulse in the pre-hospital setting (palpated or auscultated), expressed as a number per minute.

Software Field Name: P1

Data Type: Integer (Single entry allowed)

Values: Range: 0-400

NA	Not applicable, no scene EMS
NOT	Not assessed per documentation

Discussion/Uses: This measure should be in the first set of vital signs recorded within 15 minutes of each other upon arrival at the scene of injury.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency.**

If the patient is transferred to your facility with no EMS run sheet from the scene of injury, record as “Not Recorded/Not Known”.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0055.L1

UTAH EXPORT: PULSE

NTDS EXPORT: P1

NTDS Field Name: EmsPulseRate

NTDS Field Number: P_10

D.18 Initial Field Respiratory Rate

(National Element)

Definition: First recorded respiratory rate in the pre-hospital setting (expressed as a number per minute).

Software Field Name: RR1

Data Type: Integer (Single entry allowed)

Values: Range: 0—100 (Do not report ranges.)

*If patient is apneic prior to intervention, record as 0.

ASSIST	Unassisted rate is not measurable due to sedation, paralysis or assisted ventilation (including bag-valve-mask and EOA).
NA	Not applicable, no scene EMS
NOT	Not assessed (reason other than ASSIST) per documentation

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival at the scene of injury. If it is not done in this time period, record NOT.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

If the patient is transferred to your facility with no EMS run sheet from the scene of injury record as “Not Recorded/Not Known”.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0052.L1

UTAH EXPORT: RESP_RATE

NTDS EXPORT: RR1

NTDS Field Name: EmsRespiratoryRate

NTDS Field Number: P_11

D.19 Initial Field Systolic Blood Pressure

(National Element)

Definition: First recorded systolic blood pressure in the pre-hospital setting.

Software Field Name: SBP1

Data Type: Integer (Single entry allowed)

Values: Range: 0—300

NA	Not applicable, no scene EMS
NOT	Not assessed per documentation

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival at the scene of injury. If it is not done in this time period, record NOT.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. **See Appendix G.**

If patient is transferred to your facility with no EMS run sheet from the scene of injury, record as “Not Known/Not Recorded”.

Data Source Hierarchy:

1. EMS Run Sheet

EDITS: UT.0056.L1

UTAH EXPORT: SYS_BP

NTDS EXPORT: SBP1

NTDS Field Name: EmsSbp

NTDS Field Number: P_09

D.20 Initial Field Oxygen Saturation

(National Element)

Definition: First recorded oxygen saturation in the pre-hospital setting (expressed as a percentage).

Software Field Name: VS_PAO2

Data Type: Integer (Single entry allowed)

Values: Range: 0—100

NA	Not applicable, no scene EMS
NOT	Not assessed per documentation

Discussion/Uses: Provides documentation of assessment and care.

Used in quality management for the evaluation of care and EMS Agency Performance.

If the patient is transferred to your facility with no EMS run sheet from the scene of injury, record as “Not Recorded/Not Known”.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0872.L1

UTAH EXPORT: OX1

NTDS EXPORT: OX1

NTDS Field Name: EmsPulseOximetry

NTDS Field Number: P_12

D.21 Initial Field GCS - Eye

(National Element)

Definition: The first assessment of eye opening response for the Glasgow Coma Score upon arrival at the scene of injury.

Software Field Name: EYE1

Data Type: Character (Single entry allowed)

Values: Range: 1-4

1	No eye movement when assessed
2	Opens eyes in response to painful stimulation
3	Opens eyes in response to verbal stimulation
4	Opens eyes spontaneously
NA	Not Applicable
NOT	Not done per documentation

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival at the scene of injury. If it is not done in this time period, record NOT.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

If the patient is transferred to your facility with no EMS run sheet from the scene of injury, record as “Not Recorded/Not Known”.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0059.L1

UTAH EXPORT: EYE_OPENING

NTDS EXPORT: EYE1

NTDS Field Name: EmsGcsEye

NTDS Field Number: P_13

D.22 Initial Field GCS - Verbal

(National Element)

Definition: The first assessment of verbal response for the Glasgow Coma Score upon arrival at the scene of injury.

Software Field Name: VERBAL1

Data Type: Character (Single entry allowed)

Values: Range: 1-5

Pediatric (≤ 2 years):

1	No vocal response
2	Inconsolable, agitated
3	Inconsistently consolable, moaning
4	Cries but is consolable, inappropriate interactions
5	Smiles, oriented to sounds, follows objects, interacts

Adult:

1	No verbal response
2	Incomprehensible sounds
3	Inappropriate words
4	Confused
5	Oriented

NA	Not Applicable
NOT	Not done per documentation

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival at the scene of injury. If it is not done in this time period, record NOT.

If patient is intubated, then the GCS Verbal score is equal to 1.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.
The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

If the patient is transferred to your facility with no EMS run sheet from the scene of injury, record as “Not Known/Not Recorded”.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0061.L1

UTAH EXPORT: VERBAL_RESPONSE

NTDS EXPORT: VERBAL1

NTDS Field Name: EmsGcsVerbal

NTDS Field Number: P_14

D.23 Initial Field GCS - Motor

(National Element)

Definition: First assessment of motor response for the Glasgow Coma Score upon arrival at the scene of injury.

Software Field Name: MOTOR1

Data Type: Character (Single entry allowed)

Values: Range: 1-6

Pediatric (< 2 years):

1	No motor response
2	Extension to pain
3	Flexion to pain
4	Withdrawal from pain
5	Localizing pain
6	Appropriate response to stimulation

Adult:

1	No motor response
2	Extension to pain
3	Flexion to pain
4	Withdrawal from pain
5	Localizing pain
6	Obeys commands

NA	Not Applicable
NOT	Not done per documentation

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival at the scene of injury. If it is not done in this time period, record NOT.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.
The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

If the patient was transferred to your facility with no EMS run sheet from the scene of injury, record as “Not Known/Not Recorded”.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0062.L1

UTAH EXPORT: MOTOR_RESPONSE

NTDS EXPORT: MOTOR1

NTDS Field Name: EmsGcsMotor

NTDS Field Number: P_15

D.24 Initial Field GCS Assessment Qualifiers

Definition: Documentation of factors potentially affecting the first assessment of GCS upon arrival in the pre-hospital setting.

Software Field Name: PARALYTICS

Data Type: Character (Single entry allowed)

Values:

Utah Choices	*Description*
I	Patient intubated
IO	Patient intubated and obstruction to eye
O	Obstruction to the patient's eye
S	Patient chemically sedated
SI	Patient chemically sedated and intubated
SIO	Patient chemically sedated, intubated, and obstruction to eye
SO	Patient chemically sedated and obstruction to eye
NA	Not Applicable
NOT	Not Recorded/Not Known

Discussion/Uses: Provides documentation of assessment and care.

Used in quality management for the evaluation of care and EMS Agency Performance.

EDITS: UT.0521.L1

UTAH EXPORT: PARALYTICS1

D.25 Initial Field GCS - Total

(National Element)

Definition: The severity of injury as reflected by the first assessment of total GCS upon arrival at the scene of injury.

Software Field Name: GCS1

Data Type: Character (Single entry allowed)

Values: Range: 3-15

If “A & O X 3” or “A & 0 X 4” is documented in medical chart, record GCS as 15.

NA	Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = ‘N’)
NOT	Not assessed per documentation

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival at the scene of injury. If it is not done in this time period, record NOT.

This data can be found on the EMS Trip Form, Run Sheet or other information from the **EMS Agency** that transported the patient.
The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

Use only if total score is available without component scores.

If the patient is transferred to your facility with no EMS run sheet from the scene of injury, record as “Not Known/Not Recorded”.

If a patient does not have a numeric GCS recorded, but with documentation related to their level of consciousness such as “AAOx3”. “awake, alert and oriented,” or “patient with normal mental status, interpret this as GCS of 15 IF there is no other contraindicating documentation.

Data Source Hierarchy: 1. EMS Run Sheet

EDITS: UT.0164.L1

UTAH EXPORT: GLASGOW

NTDS EXPORT: GLASGOW1

NTDS Field Name: EmsGcsTotal

NTDS Field Number: P_16

E. Emergency Department / Hospital Information

E.1 Admit Type

Definition: The specific type of patient admission at your hospital.

Software Field Name: ADMIT_TYPE

Data Type: Character (Single entry allowed)

Values:

E	Admitted through ED
D	Direct admission
T	Seen in ED then transferred out by EMS
R	Seen in ED then released or referred POV
X	Died in ED or DOA

Discussion/Uses: None

EDITS: UT.0198; UT.0198.L1; UT.0198.L2; UT.0198.L3
2009 – Logic edits have been added – If Admit type is “R”, then ED Disposition Code must not be HOSP. If Admit type is “T”, then ED Disposition Code must be HOSP.
If Admit type is “X” then ED Disposition Code must be D, DOA, or DF

UTAH EXPORT: ADMIT_TYPE

E.2 Admit Service

Definition: The specific service to which the patient is admitted after discharge from the ED.

Software Field Name: ADM_SVC

Data Type: Character (Single entry allowed)

Values:

BURN	Burn service
MED	Other medical service not listed
NSR	Neurosurgery
OB	Obstetrics
ORTHO	Orthopedic surgery
PED	Pediatric service
PSYCH	Psychiatric
SURG	General surgery or other surgical services not listed
TS	Trauma Service (only organized Trauma Service or designated Trauma Center)
NA	Not applicable, patient seen in ED only (ED Discharge Disposition = 'HOME', 'HOSP', 'D', 'DOA', or 'NA')
NOT	Not Recorded/Not Known

Discussion/Uses: None

EDITS: UT.0221; UT.0221S; UT.0221SV

UTAH EXPORT: ADM_SVC_SRC

E.3 ED / Hospital Arrival Time

(National Element)

Definition: The time the patient arrived to the ED / hospital.

Software Field Name: HOSPITAL_ARRIVAL_TIME

Data Type: Military Time – hh:mm (Single entry allowed)

Values: Range: 00:00 to 23:59

NA Not Applicable

NOT Not Recorded/Not Known

Discussion/Uses: **If the patient was brought to the ED, enter time patient arrived at ED. If patient was directly admitted to the hospital, enter time patient was admitted to the hospital.**

This time may or may not coincide with the first time a patient was seen by medical personnel, the **ED Admission Time**. For example, the patient was dropped off by EMS Agency at 23:45 12/01/2001 (**Hospital Arrival Time**= 23:45) but was not triaged or seen by medical personnel until 00:10 12/02/2001 (**ED Admission Time**= 00:10).

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Billing Sheet / Medical Records Coding Summary Sheet
4. Hospital Discharge Summary

EDITS: UT.0031; CDM_0031

UTAH EXPORT: HOSPITAL_ARRIVAL_TIME

NTDS EXPORT: HOSPITAL_ARRIVAL_TIME

NTDS Field Name: HospitalArrivalTime

NTDS Field Number: ED_02

E.4 ED / Hospital Arrival Date

(National Element)

Definition: The date the patient arrived to the ED / hospital.

Software Field Name: HOSPITAL_ARRIVAL_DATE

Data Type: Date - mmddyyyy (Single entry allowed)

Values: Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Month:

01	January	07	July
02	February	08	August
03	March	09	September
04	April	10	October
05	May	11	November
06	June	12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')

NOT Not Recorded/Not Known

Discussion/Uses: **If the patient was brought to the ED, enter date patient arrived at ED. If patient was directly admitted to the hospital, enter data patient was admitted to the hospital.**

This date may or may not coincide with the first date the patient was seen by medical personnel, the **ED Admission Date**. For example, the patient was dropped off by EMS Agency at 23:45 12/01/2001 (**Hospital Arrival Date** = 12/01/2001) but was not triaged or seen by medical personnel until 00:10 12/02/2001 (**ED Admission Date**= 12/02/2001).

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Billing Sheet / Medical Records Coding summary Sheet
4. Hospital Discharge Summary

EDITS: UT.0032; CDM_0032

UTAH EXPORT: HOSPITAL_ARRIVAL_DATE

NTDS EXPORT: HOSPITAL_ARRIVAL_DATE
NTDS Field Name: HospitalArrivalDate

NTDS Field Number: ED_01

E.5 ED Admission Time

Definition: The time the patient was triaged or seen by medical personnel at your emergency department.

Software Field Name: ED_ADM_TIME

Data Type: Military Time – hh:mm (Single entry allowed)

Values: Range: 00:00 to 23:59

NA Not applicable, not an ED patient at your hospital

NOT Not Recorded/Not Known

Discussion/Uses: This time may or may not coincide with the **Hospital Arrival Time**. For example, the patient was dropped off by EMS Agency at 23:45 12/01/2001 but was not triaged or seen by medical personnel until 00:10 12/02/2001. (**Hospital Arrival Time** = 23:45 and **ED Admission Time** = 00:10.)

EDITS: UT.0470

UTAH EXPORT: ED_ADM_TIME

E.6 ED Admission Date

Definition: The date the patient was triaged or seen by medical personnel at your emergency department.

Software Field Name: ED_ADM_DATE

Data Type: Date – mmddyyyy (Single entry allowed)

Values: Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Month:

01	January	07	July
02	February	08	August
03	March	09	September
04	April	10	October
05	May	11	November
06	June	12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')

NOT Not Documented

UNK Unknown (either inadequate or no documentation)

Discussion/Uses: This time may or may not coincide with the **Hospital Arrival Date**. For example, the patient was dropped off by EMS Agency at 23:45 12/01/2001 but was not triaged or seen by medical personnel until 00:10 12/02/2001. (**Hospital Arrival Date** = 12/01/2001 and **ED Admission Date** = 12/02/2001.)

EDITS: UT.0469

UTAH EXPORT: ED_ADM_DATE

E.7 ED Discharge Time

(National Element)

Definition: The time the patient was discharged from the ED.

Software Field Name: ED_DC_TIME

Data Type: Military Time – hh:mm (Single entry allowed)

Values: Range: 00:00 to 23:59

NA Not applicable, not an ED patient at your hospital

NOT Not Recorded/Not Known

Discussion/Uses: If the patient is directly admitted to the hospital, code as “Not Applicable”.

Data Source Hierarchy:

1. Hospital Record
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Physician’s Progress Notes

EDITS: UT.0261; CDM_0261

UTAH EXPORT: ED_DC_TIME

NTDS EXPORT: ED_DC_TIME

NTDS Field Name: EdDischargeTime

NTDS Field Number: ED_20

E.8 ED Discharge Date

(National Element)

Definition: The date the patient was discharged from the ED.

Software Field Name: ED_DC_DATE

Data Type: Date – mmddyyyy (Single entry allowed)

Values: Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Month:

01	January	07	July
02	February	08	August
03	March	09	September
04	April	10	October
05	May	11	November
06	June	12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')

NOT Not Documented

Discussion/Uses: If patient is directly admitted to the hospital, code as "Not Applicable".

Data Source Hierarchy:

1. Hospital Discharge Summary
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Physician's Progress Notes

EDITS: UT.0262; CDM_0262

UTAH EXPORT: ED_DC_DATE

NTDS EXPORT: ED_DC_DATE

NTDS Field Name: EdDischargeDate

NTDS Field Number: ED_19

E.9 Inpatient Admission Time

Definition: The time the patient was admitted as an inpatient at your hospital.

Software Field Name: HOSPITAL_ADMISSION_TIME

Data Type: Military Time – hh:mm (Single entry allowed)

Values: Range: 00:00 to 23:59

NA	Not applicable, not an inpatient at your hospital
NOT	Not Recorded/Not Known

Discussion/Uses: This time may or may not coincide with the **Hospital Arrival Time**. For example, the patient was dropped off by EMS Agency at 23:45 12/01/2001 but was not admitted as an inpatient until 00:10 12/02/2001. (**Hospital Arrival Time** = 23:45 and **Inpatient Admission Time** = 00:10.)

EDITS: UT.0300

UTAH EXPORT: HOSPITAL_ADMISSION_TIME

E.10 Inpatient Admission Date

Definition: The date the patient was admitted as an inpatient at your hospital.

Software Field Name: HOSPITAL_ADMISSION_DATE

Data Type: Date – mmddyyyy (Single entry allowed)

Values: Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Month:

01	January	07	July	
02	February		08	August
03	March		09	September
04	April		10	October
05	May		11	November
06	June		12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA Not applicable, not an inpatient at your hospital

NOT Not Recorded/Not Known

Discussion/Uses: This time may or may not coincide with the **Hospital Arrival Date**. For example, the patient was dropped off by EMS Agency at 23:45 12/01/2001 but was not admitted as an inpatient until 00:10 12/02/2001. (**Hospital Arrival Date** = 12/01/2001 and **Inpatient Admission Date** = 12/02/2001.)

EDITS: UT.0247

UTAH EXPORT: HOSPITAL_ADMISSION_DATE

E.11 Hospital Discharge Time

(National Element)

Definition: The time the patient was discharged from the hospital.

Software Field Name: DISCHARGE_TIME

Data Type: Military Time – hh:mm (Single entry allowed)

Values: Range: 00:00 to 23:59

NA	Not applicable, not an inpatient at your hospital
NOT	Not Recorded/Not Known

Discussion/Uses: Provides a rough estimate of severity of injury and resource utilization. If ED Discharge Disposition = 5 (Died), then Hospital Discharge Time should be NA. If ED Discharge Disposition = 4,6,9,10, or 11 then Hospital Discharge Time must be NA.

Data Source Hierarchy:

1. Hospital Record
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Physician Discharge Summary

EDITS: UT.0144; CDM_0144

UTAH EXPORT: HOSPITAL_DESPARTURE_TIME

NTDS EXPORT: DISCHARGE_TIME

NTDS Field Name: HospitalDischargeTime

NTDS Field Number: O_04

E.12 Hospital Discharge Date

(National Element)

Definition: The date the patient was discharged from the hospital.

Software Field Name: DISCHARGE_DATE

Data Type: Date – mmddyyyy (Single entry allowed)

Values: Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Month:

01	January	07	July
02	February	08	August
03	March	09	September
04	April	10	October
05	May	11	November
06	June	12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')

NOT Not Recorded/Not Known

Discussion/Uses: If ED Discharge Disposition = 5 (Died), then Hospital Discharge Date should be NA. If ED Discharge Disposition = 4, 6, 9, 10 or 11 then Hospital Discharge Date must be NA.

Data Source Hierarchy;

1. Hospital Record
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Physician Discharge Summary

EDITS: UT.0143; CDM_0143

UTAH EXPORT: HOSPITAL_DEPARTURE_DATE

NTDS EXPORT: DISCHARGE_DATE

NTDS Field Name: HospitalDischargeDate

NTDS Field Number: O_03

E.13 ED Discharge Disposition

(National Element)

Definition: The disposition of the patient at the time of discharge from the ED.

Software Field Name: ED_DISPOSITION_CODE

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
AMA	10	Left against medical advice
D	5	Death in ED (other than failed resuscitation attempt)
DF	5	Death in ED after failed resuscitation attempt
DOA	5	Dead on arrival with minimal or no resuscitation attempt
FLOOR	1	Floor bed
HHOME	4	Home with services
HOME	9	Home without services
HOSP	11	Transferred to another hospital
ICU	8	Intensive Care Unit
OBS	2	Observation Unit <24 hours
OR	7	Operating Room
OTHER	6	Other – jail, institutional care, mental health, etc.
TELE	3	Telemetry/Step-down <acuity than ICU
NA	NA	Not applicable, patient was not seen in the ED and/or was a Direct Admit (Admit Type = D)
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: This field is also in association with the NTDS field, ED_OUTCOME. Both elements are being collected for the NTDS through this one field.

Based upon UB-92 disposition coding.

Patients treated in accordance with a “Do Not Resuscitate” (DNR) order should be coded under “Died in ED (other than failed resuscitation attempt)”.

Dead on Arrival is defined as arrival at the hospital with no signs of life, but with pre-hospital CPR as indicated below.

Age >12 years
- -Blunt trauma, more than 5 minutes pre-hospital CPR
- -Penetrating head/neck/abdomen trauma, more than 5 minutes pre-hospital CPR
- -Penetrating chest trauma, more than 15 minutes pre-hospital CPR

Age ≤12 years
- -Blunt trauma, more than 15 minutes pre-hospital CPR
- -Penetrating trauma, more than 15 minutes pre-hospital CPR

If the patient is directly admitted to the hospital, code as “Not Applicable”.

If ED Discharge Disposition is 4, 5, 6, 9, 10, 11, then Hospital Discharge Date, Time, and Disposition should be “Not Applicable”.

Data Source Hierarchy:
1. Discharge Sheet
2. Nursing Progress Notes
3. Social Worker Notes

EDITS: UT.0471; UT.0471S; UT.0471SV; CDM_0471; CDM_0471.NV; CDM_0471.N

UTAH EXPORT: ED_DISPOSITION_CODE_SRC

NTDS EXPORT: ED_DISPOSITION_CODE_NTDS, ED_OUTCOME_NTDS

NTDS Field Name: EdDischargeDisposition

NTDS Field Number: ED_17, ED_18

E.14 ED Transferring EMS Agency

Definition: The EMS Agency that transferred the patient out of your ED, if patient was discharged to another hospital (**ED Discharge Disposition** = 'HOSP').

Software Field Name: ED_TRANSFER_MODE

Data Type: Character (Single entry allowed)

Values: Range: 0101L-3011L

*Each **EMS Agency** in the state of Utah is assigned a code by the Utah Department of Health. ***See Appendix B*** for the list of Licensed Utah EMS Agency codes.

OTHER	Other
NA	Not applicable, patient not transferred to another hospital (**ED Discharge Disposition** does not = 'HOSP')
NOT	Not Recorded/Not Known

Discussion/Uses: This field is conditional. Complete only if the patient was transferred from your hospital to another hospital (**ED Discharge Disposition** = 'HOSP' and ADMIT_TYPE = 'T').

EDITS: UT.0075S; UT.0075SV

UTAH EXPORT: ED_TRANSFER_MODE_SRC

E.15 ED Discharge Destination Hospital

Definition: The receiving hospital if the patient was transferred out of the ED to another hospital (**ED Discharge Disposition** = 'HOSP').

Software Field Name: ED_DESTINATION_CODE

Data Type: Integer (Single entry allowed

Values: Hospital codes are assigned by the Utah Department of Health. The list of codes can be found in ***Appendix A.***

Codes under 100 (non-hospital codes) are not valid.

NA	Not applicable, patient not transferred to another hospital (**ED Discharge Disposition** does not = 'HOSP')
NOT	Not Recorded/Not Known

Discussion/Uses: This field is conditional. Complete only if the patient was transferred from your hospital to another hospital (**ED Discharge Disposition** = 'HOSP').

EDITS: UT.0076S; UT.0076SV; UT.0071.L1

UTAH EXPORT: ED_DESTINATION_CODE_SRC

E.16 Transfer Reason

Definition: The reason for transferring the patient ot another Hospital.

Software Field Name: TRANSFER_REASON

Data Type: Character (Single entry allowed)

Values:

INS	Insurance
HIGHER	Specialty Care / Higher Level Care
RESOURCE	Resources Unavailable (Beds, Equipment, Staff, MD)
PTREQ	Patient Request
LOWER	Lower Level Care
NA	Not Applicable, Not Transferred
NOT	Not Recorded/Not Known

Discussion/Uses: Added in 2004 to clarify transfers.

This field will appear as a popup question in trauma registry software if EITHER the ED or DC Disposition is “HOSP”.

EDITS: UT.0049L1; UT.0049S; UT.0049SV

These edits should only trip if the HOSPTIAL_DEPARTURE_YEAR is 2004 or greater AND if either the ED or DC Disposition code is “HOSP”.

UTAH EXPORT: TRANSFER_REASON_SRC

E.17 Hospital Discharge Disposition

(National Element)

Definition: The disposition of the patient when discharged from the hospital.

Software Field Name: DC_DISPOSITION_CODE

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
AMA	4	Left against medical advice
D	5	Death
EOL	8	Discharged/Transferred to hospice care
HH	3	Discharged/Transferred to home under care of organized home health service
HOME	6	Discharged home with no home services
HOSP	1	Discharged/Transferred to a short-term general hospital for inpatient care
JAIL	6	Release to jail facility or other detention center
NH	7	Discharged/Transferred to Skilled Nursing Facility
OTHER	6	Other
REHAB	9	Rehabilitation center
SWING	9	Hospital long term care bed
TCU	2	Discharged/Transferred to an Intermediate Care Facility (ICF)
NA	NA	Not applicable, not an inpatient at your hospital
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: This field is used in determining Utah Inclusion: Transfer Out of your hospital to another acute care facility. If either the ED or DC Disposition State Report Codes equal “HOSP,” and was transferred by an EMS agency, the patient meets inclusion criteria. IN addition to being transferred out, the patient needs to have at least one qualifying Trauma ICD9 code.

Field value = “HOME” refers to any place of residence (jail, institutional care, etc).

Disposition to any other non-medical facility should be coded as “HOME”.

Disposition to any other medical facility should be coded as “REHAB” or “SWING”.

Data Source Hierarchy:
1. Hospital Discharge Summary Sheet
2. Nurses Notes
3. Case Manager / Social Services Notes

EDITS: UT.0249; UT.0249S; UT.0249SV; CDM_0249; CDM_0249.NV; CDM_0249.N

UTAH EXPORT: DC_DISPOSITION_CODE_SRC

NTDS EXPORT: DC_DISPOSITION_CODE_NTDS

NTDS Field Name: HospitalDischargeDisposition

NTDS Field Number: O_05

E.18 Hospital Discharge Destination Hospital

Definition: The receiving hospital if the patient was transferred out of your hospital to another hospital (**Hospital Discharge Disposition** = 'HOSP').

Software Field Name: DC_DESTINATION_CODE

Data Type: Integer (Single entry allowed)

Values: Hospital codes are assigned by the Utah Department of Health. The list of codes can be found in ***Appendix A.***

Codes under 100 (non-hospital codes) are not valid.

NA	Not applicable, patient not transferred to another hospital (**Hospital Discharge Disposition** does not = 'HOSP').
NOT	Not Documented Recorded/Not Known

Discussion/Uses: This field is conditional. Complete only if the patient was transferred from your hospital to another hospital (DC_DISPOSITION_CODE = 'HOSP').

EDITS: UT.0014; UT.E0014S; UT.0014SV

UTAH EXPORT: DC_DESTINATION_CODE_SRC

E.19 DC Transferring EMS Agency

Definition: The EMS Agency that transferred the patient out of your Inpatient Unit, if patient was discharged to another hospital (**Hospital Discharge Disposition** = 'HOSP').

Software Field Name: DC_TRANSFER_MODE

Data Type: Character (Single entry allowed)

Values: Range: 0101L-3011L

*Each **EMS Agency** in the state of Utah is assigned a code by the Utah Department of Health.

See Appendix B for the list of Licensed Utah EMS Agency codes.

OTHER	Other
NA	Not applicable, patient not transferred to another hospital (**Hospital Discharge Disposition** does not = 'HOSP').
NOT	Not Recorded/Not Known

Discussion/Uses: Added in 2004 to clarify Transfers.

This field is conditional. Complete only if the patient was transferred from your hospital to another hospital (**Hospital Discharge Disposition** = 'HOSP').

EDITS: CDM_0698

UTAH EXPORT: DC_TRANSFER_MODE_SRC

E.20 Outcome

Definition: The patient's survival status at your hospital.

Software Field Name: OUTCOME

Data Type: Character (Single entry allowed)

Values:

A	Alive
D	Dead
NA	Not Applicable
NOT	Not Recorded/Not Known

Discussion/Uses: This field applies to all patients regardless of admit status.

EDITS: UT.0013 (if outcome id D, make sure destination is 85 or 55)

UTAH EXPORT: OUTCOME

NTDS Field Name: **Signs of Life**

NTDS Field Number: **ED_20**

E.21 Initial ED / Hospital Pulse Rate

(National Element)

Definition: First recorded pulse in the ED/hospital (palpated or auscultated), within 30 minutes or less of ED/Hospital arrival.

Software Field Name: P2

Data Type: Integer (Single entry allowed)

Values: Range: 0-400

NA	Not applicable, not an ED/inpatient at your hospital
NOT	Not assessed per documentation

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in your hospital (ED or inpatient admit). If it is not done in this time period, record NOT.

Please note that the first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses Notes

EDITS: UT.0055.L2

UTAH EXPORT: PULSE

NTDS EXPORT: P2

NTDS Field Name: PulseRate

NTDS Field Number: ED_04

E.22 Initial ED / Hospital Respiratory Rate

(National Element)

Definition: First recorded respiratory rate in the ED/Hospital within 30 minutes or less of ED/Hospital arrival.

Software Field Name: RR2

Data Type: Integer (Single entry allowed)

Values: Range: 0-100

*If patient is apneic prior to intervention, record as 0.

NA	Not applicable, not an ED/inpatient at your hospital
NOT	Not assessed (reason other than ASSIST) per documentation

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in your hospital (ED or inpatient admit). If it is not done in this time period, record NOT.

Please note that the first recorded/hospital vitals do not need to be from the same assessment.

Record the actual respiratory rate, whether spontaneous or assisted. If the patient is receiving respiratory assistance upon arrival, record rate as 0.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***
If available, complete additional field: “Initial ED/Hospital Respiratory Assistance.”

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses Notes

EDITS: UT.0053.L2

UTAH EXPORT: RESP_RATE

NTDS EXPORT: RR2

NTDS Field Name: RespiratoryRate

NTDS Field Number: ED_06

E.23 Initial ED / Hospital Respiratory Assistance

(National Element)

Definition: Determination of respiratory assistance associated with the initial ED/hospital respiratory rate within 30 minutes or less of ED/Hospital arrival.

Software Field Name: ASSISTING

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
N	1	Unassisted Respiratory Rate
Y	2	Assisted Respiratory Rate
NA	NA	Not Applicable
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: Provides documentation of assessment and care.

Used in quality management for the evaluation of care and EMS Agency Performance.

Only completed if a value is provided for “Initial ED/Hospital Respiratory Rate”.

Please note that the first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses Notes

EDITS: UT.0064.L2; CDM_0064; CDM_0064.NV; CDM_0064.N

UTAH EXPORT: ASSIST2

NTDS EXPORT: ASSIST2_NTDS

NTDS Field Name: RespiratoryAssistance

NTDS Field Number: ED_07

E.24 Initial ED / Hospital Systolic Blood Pressure

(National Element)

Definition: First recorded systolic blood pressure in the ED/hospital, within 30 minutes or less of Ed/Hospital arrival

Software Field Name: SBP2

Data Type: Integer (Single entry allowed)

Values: Range: 0-300

NA	Not applicable, not an ED/inpatient at your hospital
NOT	Not assessed per documentation

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in your hospital (ED or inpatient admit). If it is not done in this time period, record NOT.

Please note that first recorded/hospital vitals do not need to be from the same assessment.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses Notes

EDITS: UT.0056.L2

UTAH EXPORT: SYS_BP

NTDS EXPORT: SBP2

NTDS Field Name: Sbp

NTDS Field Number: ED_03

E.25 Initial ED / Hospital Temperature

(National Element)

Definition: First recorded temperature in the ED/Hospital (palpated or auscultated) within 30 minutes or less of ED/Hospital arrival.

Software Field Name: TEMPS

Data Type: Integer (Single entry allowed)

Values: Range: 20-40C

NA	Not applicable, not an ED/inpatient at your hospital
NOT	Not assessed per documentation

Discussion/Uses: Provides documentation of assessment and care.

Please note that first recorded/hospital vitals do not need to be from the same assessment.

Used in quality management for the evaluation of care and EMS Agency Performance.

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses Notes

EDITS: UT.0068.L2; CDM_0068

UTAH EXPORT: TEMPS2

NTDS EXPORT: TEMPS2

NTDS Field Name: Temperature

NTDS Field Number: ED_05

E.26 Initial ED / Hospital Oxygen Saturation

(National Element)

Definition: First recorded oxygen saturation in the ED/hospital Within 30 minutes or less of ED/Hospital arrival.

Software Field Name: VS_PA02

Data Type: Integer (Single entry allowed)

Values: Range: 0-100

NA	Not applicable, not an ED/inpatient at your hospital
NOT	Not assessed per documentation

Discussion/Uses: If you enter an ED value, you will also need to answer whether **Supplemental Oxygen** was being administered at the time of the Pulse Oximetry.

Please note that the first recorded/hospital vitals do not need to be from the same assessment.

If available, complete additional field: “Initial ED/Hospital Supplemental Oxygen”.

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses Notes

EDITS: UT.0872.L2; CDM_0872

UTAH EXPORT: OXIMETRY

NTDS EXPORT: OX2

NTDS Field Name: PulseOximetry

NTDS Field Number: ED_08

E.27 Initial ED / Hospital Supplemental Oxygen

(National Element)

Definition: Determination of the presence of supplemental oxygen during assessment of initial ED/hospital oxygen saturation level within 30 minutes or less of ED/hospital arrival.

Software Field Name: VS_02

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
N	1	No supplemental oxygen
Y	2	Supplemental oxygen
NA	NA	Not applicable
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: This is a state field ONLY for the first set of ED vitals.

Only completed if a value is provided for “Initial ED/Hospital Oxygen Saturation”.

Please note that the first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses Notes

EDITS: UT.0974.L2; CDM_0974; CDM_0974.NV; CDM_0974.N

UTAH EXPORT: VS_02

NTDS EXPORT: VS_02_NTDS

NTDS Field Name: SupplementalOxygen

NTDS Field Number: ED_09

E.28 Initial ED / Hospital GCS – Eye

(National Element)

Definition: First recorded Glasgow Coma Score (Eye) in the ED/hospital.

Software Field Name: EY0221

Data Type: Character (Single entry allowed)

Values: Range: 1-4

1	No eye movement when assessed
2	Opens eyes in response to painful stimulation
3	Opens eyes in response to verbal stimulation
4	Opens eyes spontaneously

NA	Not Applicable
NOT	Not Recorded/Not Known

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in your hospital (ED or inpatient admit). If it is not done in this time period, record NOT.

Please note that the first recorded/hospital vitals do not need to be from the same assessment.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses Notes

EDITS: UT.0059.L2

UTAH EXPORT: EYE_OPENING

NTDS EXPORT: EY0221

NTDS Field Name: GcsEye

NTDS Field Number: ED_10

E.29 Initial ED / Hospital GCS – Verbal

(National Element)

Definition: First recorded Glasgow Coma Score (Verbal) in the ED/hospital.

Software Field Name: VERBAL2

Data Type: Character (Single entry allowed)

Values: Range: 1-5

Pediatric (< 2 years):

1	No vocal response
2	Inconsolable, agitated
3	Inconsistently consolable, moaning
4	Cries but is consolable, inappropriate interactions
5	Smiles, oriented to sounds, follows objects, interacts

Adult:

1	No verbal response
2	Incomprehensible sounds
3	Inappropriate words
4	Confused
5	Oriented

NA	Not Applicable
NOT	Not Recorded/Not Known

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in your hospital (ED or inpatient admit). If it is not done in this time period, record NOT.

If patient is intubated then the GCS Verbal score is equal to 1.

Please note that the first recorded/hospital vitals do not need to be from the same assessment.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses Notes

EDITS: UT.0061.L2

UTAH EXPORT: VERBAL_RESPONSE

NTDS EXPORT: VERBAL2

NTDS Field Name: GcsVerbal

NTDS Field Number: ED_11

E.30 Initial ED / Hospital GCS – Motor

(National Element)

Definition: First recorded Glasgow Coma Score (Motor) in the ED/hospital.

Software Field Name: MOTOR2

Data Type: Character (Single entry allowed)

Values: Range: 1-6

Pediatric (≤ 2 years):

1	No motor response
2	Extension to pain
3	Flexion to pain
4	Withdrawal from pain
5	Localizing pain
6	Appropriate response to stimulation

Adult:

1	No motor response
2	Extension to pain
3	Flexion to pain
4	Withdrawal from pain
5	Localizing pain
6	Obeys commands

NA	Not Applicable
NOT	Not Recorded

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in your hospital (ED or inpatient admit). If it is not done in this time period, record NOT.

Please note that the first recorded/hospital vitals do not need to be from the same assessment.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses Notes

EDITS: UT.0062.L2

UTAH EXPORT: MOTOR_RESPONSE

NTDS EXPORT: MOTOR2

NTDS Field Name: GcsMotor

NTDS Field Number: ED_12

E.31 Initial ED / Hospital GCS Assessment Qualifiers

(National Element)

Definition: Documentation of factors potentially affecting the first assessment of GCS within 30 minutes or less of Ed/hospital arrival.

Software Field Name: PARALYTICS2

Data Type: Character (Single entry allowed)

Values:

Utah Choices	*NTDS Choices*	*Description*
I	3	Patient intubated
IO	3, 2	Patient intubated and obstruction to eye
O	2	Obstruction to the patient's eye
S	1	Patient chemically sedated
SI	1, 3	Patient chemically sedated and intubated
SIO	1, 3, 2	Patient chemically sedated, intubated, and obstruction to eye
SO	1, 2	Patient chemically sedated and obstruction to eye
NA	NA	Not Applicable
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: Provides documentation of assessment and care.

Used in quality management for the evaluation of care and EMS Agency performance.

Identifies treatments given to the patient that may affect the first assessment of GCS. This field does not apply to self-medications the patient may administer (i.e., ETOH, prescriptions, etc.).

If patient was not chemically sedated, not intubated, and did not have eye obstruction then code is "Not Applicable".

If an intubated patient has recently received an agent that results in neuromuscular blockade such that a motor or eye response is not possible, then the patient should be considered to have an exam that is not reflective of their neurologic status and the chemical sedation modifier should be selected. Neuromuscular blockade is typically

induced following the administration of agent like succinylcholine, mivacurium, rocuronium, (cis)atracurium, vecuronium, or pancuronium. While these are the most common agents, please review what might be typically used in your center so it can be identified in the medical record. Each of these agents has a slightly different duration of action, so their effect on the GCS depends on when they were given. For example, succinylcholine's effects last for only 5-10 minutes.

Please note that the first recorded/hospital vitals do not need to be from the same assessment.

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses Notes

EDITS: UT.0521.L2; CDM_0521; CDM_0521.NV; CDM_0521.N

UTAH EXPORT: PARALYTICS

NTDS EXPORT: PARALYTICS2_NTDS

NTDS Field Name: GCSQualifier

NTDS Field Number: ED_14

E.32 Initial ED / Hospital GCS – Total

(National Element)

Definition: First recorded Glasgow Coma Score (total) in the ED/hospital.

Software Field Name: GCS2

Data Type: Character (Single entry allowed)

Values: Range: 3-15

If "A & O X 3" OR "A & O X 4" is documented in medical chart, record GCS as 15.

NA Not applicable, not an ED/inpatient at your hospital

NOT Not Recorded/Not Known

Discussion/Uses: This measure should be in the first set of vital signs recorded within fifteen minutes of each other upon arrival in your hospital (ED or inpatient admit). If it is not done in this time period, record NOT.

If a patient does not have a numeric GCS recorded, but there is documentation related to their level of consciousness such as "AAOx3," "awake, alert, and oriented," or "patient with normal mental status," interpret this as GCS of 15, IF there is not contradicting documentation.

Please note that the first recorded/hospital vitals do not need to be from the same assessment.

The trauma registry software uses values entered in this field to calculate the Revised Trauma Score. ***See Appendix G.***

Use only if total score is available without component of scores.

Data Source Hierarchy:

1. Triage Form / Trauma Flow Sheet
2. ED Record
3. Nurses Notes

EDITS: UT.0521.L2 (Only trips if GCS can't be calculated from entered values)

UTAH EXPORT: GLASCOW

NTDS EXPORT: GLASGOW2

NTDS Field Name: GcsTotal

NTDS Field Number: ED_13

E.33 Alcohol Use Indicator

(National Element)

Definition: Use of alcohol by the patient.

Software Field Name: EV

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
N	1	No (not tested)
NC	2	No (confirmed by test)
YC	4	Yes (confirmed by test [beyond legal limit])
YT	3	Yes (confirmed by test [trace levels])
NA	NA	Not Applicable
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: Blood alcohol concentration (BAC) may be documented at any facility (or setting) treating this patient event.

"Trace levels" is defined as any alcohol level below the legal limit, but not zero.

"Beyond legal limit" is defined as a blood alcohol concentration above the legal limit for the state in which the treating institution is located. Above any legal limit, BUI, DWU, or DWAI, would apply here.

If alcohol use is suspected, but not confirmed by test, record null value "Not Known/Not Recorded".

Data Source Hierarchy:
1. Lab Results
2. ED Physician Notes

EDITS: UT.0067.L2; CDM_0067; CDM_0067.NV; CDM_0067.N

UTAH EXPORT: EV

NTDS EXPORT: EV_NTDS

NTDS Field Name: AlcoholUseIndicators

NTDS Field Number: ED_15

E.34 Drug Use Indicator

(National Element)

Definition: Use of drugs by the patient.

Software Field Name: TOX_TEST

Data Type: Character (Single entry allowed)

Values:

Utah Values	*NTDS Values*	*Description*
N	1	No (not tested)
NC	2	No (confirmed by test)
YI	4	Yes (confirmed by test [Illegal Drug Use])
YP	3	Yes (confirmed by test [Prescription Drugs])
NA	NA	Not Applicable
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: Drug use may be documented at any facility (or setting) treating this patient event.

"Illegal use drug" includes illegal use of prescription drugs.

If drug use is suspected, but not confirmed by test, record null value "Not Known/Not Recorded".

This data element refers to drug use by the patient and does not include medical treatment.

Data Source Hierarchy:

1. Lab Results
2. ED Physician Notes
3. Autopsy Report

EDITS: UT.0896; UT.0896.S; UT.0896.SV; CDM_0896; CDM_0896.NV; CDM_0896.N

UTAH EXPORT: TOX_TEST

NTDS EXPORT: TOX_TEST_NTDS

NTDS Field Name: DrugUseIndicators

NTDS Field Number: ED_16

E.35 Inpatient Length of Stay

Definition: The total number of patient days for an inpatient episode, calculated by subtracting the date of discharge from the date of admission.

Software Field Name: LOS

Data Type: Integer (Single entry allowed)

Values: Range: 0-600

0	ED/transfer patients only. Not admitted as an inpatient.
NA	Not Applicable
NOT	Not Recorded/Not Known

Discussion/Uses: If a patient is admitted as an inpatient and discharged on the same day, the LOS is 1 day. Patients only seen in the ED or transferred out should have a length of stay recorded as 0.

EDITS: UT.-119; UT.0119V (checks for negative LOS)

UTAH EXPORT: LOS

E.36 Total ICU Length of Stay

(National Element)

Definition: The cumulative amount of time spent in the ICU. Each partial or full day should be measured as one calendar day.

Software Field Name: TOTAL_DAYS_ICU

Data Type: Integer (Single entry allowed)

Values: Range: 0-300

0 Not admitted as an ICU inpatient.

NA Not Applicable
NOT Not Recorded/Not Known

Discussion/Uses: Recorded in full day increments with any partial day listed as a full day.

Filed allows for multiple admission and discharge dates and auto fills with total ICU LOS. If a patient is admitted and discharged on the same date, the LOS is one day.

The calculation assumes that the date and time of starting and stopping an ICU episode are recorded in the patient's chart. If any dates are missing, then a LOS cannot be calculated. If patient has multiple ICU episodes on the same calendar day, count that as one calendar day. At no time should the ICU LOS exceed the Hospital LOS. If the patient had no ICU days according to the above definition, code as "Not Applicable."

Data Source Hierarchy:

1. ICU Nursing Flow Sheet
2. Calculate Based on Admission Form and Discharge Sheet
3. Nursing Progress Notes

EDITS: UT.0155; CDM_0155

UTAH EXPORT: TOTAL_DAYS_ICU

NTDS EXPORT: TOTAL_DAYS_ICU

NTDS Field Name: TotalIcuDays

NTDS Field Number: O_01

E.37 Total Ventilator Days

(National Element)

Definition: The cumulative amount of time spent on the ventilator. Each partial or full day should be measured as one calendar day.

Software Field Name: VENTDAYS

Data Type: Integer (Single entry allowed)

Values: Range: 0-400

NA Not Applicable
NOT Not Recorded/Not Known

Discussion/Uses: Recorded in full day increments with any partial day listed as a full day.

If a patient begins and ends mechanical ventilation on the same date, the total ventilator days is one day.

Excludes mechanical ventilation time associated with OR procedures.

Data Source Hierarchy:

1. ICU Respiratory Therapy Flow Sheet
2. ICU Nursing Flow Sheet
3. Physician's Daily Progress Notes
4. Calculate Based on Admission Form and Discharge Sheet

EDITS: UT.0687**;** CDM_0687

UTAH EXPORT: VENTDAYS

NTDS EXPORT: VENTDAYS

NTDS Field Name: TotalVentDays

NTDS Field Number: O_02

E.38 Primary Method of Payment

(National Element)

Definition: Indicates sources of payment to this hospital for the visit.

Software Field Name: PAYMENT_SOURCE

Data Type: Character (Multiple values allowed)

Values:

Utah Values	*NTDS Values*	*Description*
BCBS	9	**Blue Cross/Blue Shield**- Includes state or regional Blue Cross, Blue Shield, or Blue Cross/Blue Shield (BCBS) indemnity plans. These can fall under the guise of a state medical society, a prominent institution or a large regional employer and, as such, the BCBS indemnity plan may assume a hybrid title with the sponsoring institution.
CHIP	7	**CHIP** The State Children's Health Insurance Program was initiated for children in families who make too much to qualify for Medicaid, but who cannot afford to purchase health insurance on their own.
COM	4	**Commercial Insurance**-**Other commercial plans-** Includes any commercial health insurance plan that does not enroll physicians as part of a network or require that its physicians obtain authorization prior to hospitalization of non-emergent patients. Such plans include fee-for-service coverage and managed indemnity organizations (these organizations may require that their physicians obtain authorization prior to hospitalization of non-emergent patients, although they are not classified as managed care organizations because they do not enroll physicians as part of a network).
GOVT	7	**Other Government-subsidized programs**
HMO	4	**Health Maintenance Organization HMO / PPO/ POS** Commercial health indemnity plans whose physicians are part of an integrated network and must obtain authorization prior to hospitalization of non-emergency organizations, point-of-service organizations, independent practice organizations, and exclusive provider organizations patients. Such plans include health maintenance organizations, preferred provider
Utah Values	*NTDS Values*	*Description*
IHS	7	**Indian Health Service**

LAW	7	**Law Enforcement-** Includes patients in custody of public safety agency.
NOBILL	2	**Not Billed** (For any reason)
OTHER	10	**Other**-Includes any other payment source not previously classified (Example: Shriners, Victims of Crime, Med Utah, etc.)
MCAID	1	**Medicaid-**Includes any trauma patient receiving federal/state funding of their inpatient medical bills under Title XIX of the Social Security Act. This will generally involve patients who are recipients of Aid to Families with Dependent Children or Social Security Income, pregnant women and children below the Federal poverty level (FPL), as will as certain aged, blind, disabled, and institutionalized persons below the FPL, and other medically needy persons. Dual eligible, that are those patients who receive both Medicare and Medicaid support should be coded as Medicare since Medicaid contributions to the hospital bill for dual eligible are most often supplementary to the primary payer, Medicare. Individuals covered under Medicaid 1115 or similar plans whose hospital care is paid for via public Medicaid funds yet overseen by a commercial managed care organization, should be coded as Medicaid and not managed care organization patients.
MCARE	6	**Medicare-**Includes any trauma patient receiving federal funding of their inpatient medical bills under Title XVIII of the Social Security Act. This will generally involve patients 65 or more years of age, patients entitled to disability benefits for 24 months or more, end-stage renal disease patients, and certain otherwise non-covered persons who elect to buy into the program. Dual eligible, which are those patients who receive both Medicare and Medicaid support, should be coded as Medicare since Medicaid contributions to the hospital bill for dual eligible are most often supplementary to the primary payer, Medicare. Individuals covered under Medicare coordinated plans whose hospital care is paid for via public Medicare funds yet overseen by a commercial managed care organization should be coded as Medicare and not managed care organization patients.
Utah Values	***NTDS Values***	***Description***
NF	5	**No Fault Automobile Insurance-**Includes any reimbursement of hospital medical bills by a commercial automobile insurance program resulting from injuries suffered during a motor vehicle crash.

SELF	3	**Self-pay** Includes cases where the patient is listed as the primary source of payment for their own medical care. This classification applies whether or not payment was actually obtained by the billing institution or clinician.
WORK	8	**Workers Compensation**-Includes any primary source of hospital payment via a worker's compensation program for individuals suffering on-the-job injuries.
NOT	NOT	Not Recorded/Not Known

Discussion/Uses: List as many payment sources as apply sequentially from primary payment source to secondary payment source, etc. The order that payment sources are entered will determine whether it is the primary, secondary, etc. payment source.

Used for reimbursement evaluation, health care administration, finance, research.

Data Source Hierarchy:
1. Billing Sheet / Medical Records Coding Summary Sheet
2. Hospital Admission Form

EDITS: UT.0138; UT.0138S; UT.0138SV; UT.0138.L1; CDM_0138; CDM_0138.NV; CDM_0138.N

UTAH EXPORT: PAYMENT_SOURCE_SRC

NTDS EXPORT: PAYMENT_SOURCE_NTDS

NTDS Field Name: PrimaryMethodPayment

NTDS Field Number: F_01

E.39 Hospital Complications

(National Element)

Definition: Any medical complication that occurred during the patient's stay at your hospital.

Software Field Name: COMP_TYPE

Data Type: **Character (Multiple values allowed)**

Values:

Utah Values	*NTDS Values*	*Description*
NA	NA	No medical complications
OTHER	1	Other non-listed medical complication
ARF	4	Acute kidney injury
ARDS	5	Acute lung injury/Acute Respiratory Distress Syndrome
CPR	8	Cardiac arrest with resuscitative efforts by healthcare provider.
DECUB	11	Decubitus ulcer
DEEPINF	12	Deep surgical site infection
DRUG	13	Drug or alcohol withdrawal syndrome
DVT	14	Deep vein thrombosis (DVT) / thrombophlebitis
ECS	15	Extremity compartment syndrome
FAIL	16	Graft/prosthesis/flap failure
INTUB	25	Unplanned intubation

Utah Values	*NTDS Values*	*Description*
MI	18	Myocardial infarction
ORGINF	19	Organ/space surgical site infection
PNEU	20	Pneumonia
PE	21	Pulmonary embolism
STROKE	22	Stroke/CVA
SUPINF	23	Superficial surgical site infection

UTI	27	Urinary Tract Infection
CATH	28	Catheter-Related Blood Stream Infection
OSTEO	29	Osteomyelitis
OR	30	Unplanned return to the OR
ICU	31	Unplanned return to the ICU
SEVSEP	32	Severe Sepsis
NOT	NOT	Not Recorded/Not Known

Discussion/Uses:

Complications are more-or-less unintended situations. These may or may not have been recorded as DIAGNOSES.

The field value “OTHER” (1) “Other non-listed medical complication” would be chosen if none of the hospital complications listed above are present in the patient. This particular field value is available since individual state or hospital registries may track additional hospital complications not listed here.

The value "NA" should be used for patients with no known co-morbid conditions coded by your registry or defined in the NTDS Data Dictionary.

Data Source Hierarchy:

1. Discharge Sheet
2. History and Physical
3. Billing Sheet

EDITS: UT.0074; UT.0074.S; UT.0074.SV; CDM_0074; CDM_0074.NV; CDM_0074.N

UTAH EXPORT: COMP_TYPE_SRC

NTDS EXPORT: COMP_TYPE_NTDS

NTDS Field Name: HospitalComplications

NTDS Field Number: Q_01

F. Hospital Procedure Information

F.01 ICD-9 Hospital Procedures

(National Element)

Definition: Operative or essential procedures conducted during hospital stay.

Software Field Name: PROCEDURE_ICD9

Data Type: **Integer (Multiple values allowed)**

Values:

Discussion/Uses: Operative and/or essential procedures is defined as procedures performed in the Operating Room, Emergency Department, or Intensive Care Unit that were essential to the diagnoses, stabilization, or treatment of the patient's specific injuries.

Repeated diagnostic procedures (e.g., repeated CT scan) should not be recorded (record only the first procedure).

Transfusion: For pediatric patients (age 14 and under) assign 99.01 ICD-9 procedure code on patients that receive 40cc/kg of blood products over the first 24 hours following hospital arrival.

Include only procedures performed at your institution.

Data Source Hierarchy:

1. Operative Reports
2. ER and ICU Records
3. Trauma Flow Sheet
4. Anesthesia Record
5. Billing Sheet / Medical Records Coding Summary Sheet
6. Hospital Discharge Summary

EDITS: UT.0212.L1; CDM_0212

UTAH EXPORT: PROCEDURE_ICD9

NTDS EXPORT: PROCEDURE_ICD9

NTDS Field Name: HospitalProcedures

NTDS Field Number: HP_01

F.02 Hospital Procedure Start Time

(National Element)

Definition: The time operative and essential procedures were performed.

Software Field Name: PROCEDURE_START_TIME

Data Type: **Military Time – hh:mm (Multiple values allowed)**

Values:

Discussion/Uses: Can be defined as the time the incision was made (or the procedure started).

This data can be found throughout the medical record, in association with the given hospital procedure.

Data Source Hierarchy:

1. OR Nurses Notes
2. Operative Reports
3. Anesthesia Record

EDITS: UT.0131; CDM_0131

UTAH EXPORT: PROCEDURE_START_TIME

NTDS EXPORT: PROCEDURE_START_TIME

NTDS Field Name: ProcedureTime

NTDS Field Number: HP_03

F.03 Hospital Procedure Start Date

(National Element)

Definition: The date operative and essential procedures were performed.

Software Field Name: PROCEDURE_START_DATE

Data Type: Date – mmddyyyy (Multiple values allowed)

Valid date ("/"s and "-"s not needed in data entry)

Enter the month, day and year of the referring hospital arrival date.

Values:

Month:

01	January	07	July
02	February	08	August
03	March	09	September
04	April	10	October
05	May	11	November
06	June	12	December

Day: 01-31

Year: The year must be 4-digits, i.e.: 2001

NA Not applicable, no referring hospital (Trauma registry software will auto fill this field if **Hospital Transfer** = 'N')

NOT Not Recorded/Not Known

Discussion/Uses: This data can be found throughout the medical record, in association with the given hospital procedure.

If distinct procedures with the same procedure code are performed, their start times must be different.

Data Source Hierarchy:

1. OR Nurses Notes
2. Operative Reports
3. Anesthesia Record

EDITS: UT.0130; CDM_0130

UTAH EXPORT: PROCEDURE_START_DATE

NTDS EXPORT: PROCEDURE_START_DATE

NTDS Field Name: ProcedureDate

NTDS Field Number: HP_02

G. Diagnosis Data

G.01 Co-Morbid Conditions

(National Element)

Definition: Pre-existing co-morbid factors present before patient arrival at the ED/hospital.

Software Field Name: RISK_TYPE

Data Type: **Character (Multiple values allowed)**

Values:

Utah Values	*NTDS Values*	*Description*
NA	NA	No CoMorbidities
OTHER	1	Other non-listed Comorbidity
ANGINA	16	History of angina within 30 days
ASCITES	3	Ascites within 30 days
BLEED	4	Bleeding disorder
CANCER	12	Disseminated cancer
CHEMO	5	Currently receiving chemotherapy for Cancer
CHF	7	Congestive heart failure
CONGENITAL	6	Congenital anomalies
CVA	10	CVA with residual neurological deficit
DEMENT	26	Dementia
DIABETES	11	Diabetes mellitus
DIALYSIS	9	Chronic renal failure
DNR	13	Advanced Directive Limiting Care
DRUG_ABUSE	28	Drug Abuse or dependence
ESOPHVAR	14	Esophageal varices
ETOH	2	Alcoholism
HEALTH	15	Functionally dependent health status
HTN	19	Hypertension requiring medication
MAJ_PSYCH	27	Major psychiatric illness
MI	17	History of myocardial infarction

OBESE	22	Obesity
PRE_ARREST	29	Pre-hospital cardiac arrest with CPR
PREMATURE	21	Prematurity
PVD	18	History of PVD
RESPDISEASE	23	Respiratory disease
RESUC	8	Cardiac Arrest with resuscitative efforts by healthcare provider.
STEROIDS	24	Steroid use
CIRRHOSIS	25	Cirrhosis
NOT	NOT	Not documented

Discussion/Uses: The field value “OTHER” (1) “Other co-morbidities not listed” would be chosen if none of the pre-existing co-morbid factors listed above are present in the patient. This particular field value is available since individual state or hospital registries may track additional co-morbid factors not listed here.

The value "NA" should be used for patients with no known co-morbid conditions coded by your registry or defined in the NTDS Data Dictionary.

Data Source Hierarchy:

1. History and Physical
2. Discharge Summary
3. Billing Sheet

EDITS: UT.0072; UT.0072.S; UT.0072.SV; CDM_0072; CDM_0072.NV; CDM_0072.N

UTAH EXPORT: RISK_TYPE_SRC

NTDS EXPORT: RISK_TYPE_NTDS

NTDS Field Name: ComorbidConditions

NTDS Field Number: DG_01

G.02 ICD-9-CM Diagnosis Codes

(National Element)

Definition: The 15 most severe ICD-9-CM diagnosis codes for each major diagnosis of the trauma patient. Please include all injury diagnosis codes, then major medical diagnosis codes and pre-existing condition diagnosis codes.

Software Field Name: ICD9_1 – ICD9_10 (Injury codes); ICD9_N1- ICD9_N5 (Non-injury codes)

Data Type: Integer (Multiple values allowed)

Values: Utah Trauma Registry ICD-9-CM Injury Diagnosis Code Range:

800.0-959.9, 995.50, 995.53, 995.54, 995.55, 995.59, 760.5, 641.8, 518.5

Example of Major Medical and Pre-Existing Condition ICD-9-CM Codes:

Myocardial Infarction	410
Hypertension	401-405
COPD	490-496
Stroke	436
Diabetes	250
Liver Disease	571
Pneumonia	480
Obesity	278

See diagnostic codes found in the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) for available value codes.

Discussion/Uses: **ICD-9-CM codes should be listed starting with the most to least significant injury. The primary injury resulting in the hospitalization should be listed first. The "significance" of other injuries should be based upon severity and location.**

This field cannot be left blank. If a medical chart lists diagnosis codes, record the codes starting with the most severe injury diagnoses. If no diagnosis codes are found in medical chart or coding is incomplete, code using software code-finder lookup.

Key the ICD-9-CM code in and hit enter. This will add to the list of codes. Or you may also select the code-finder method of finding ICD-9-CM codes from options in Trauma Registry software.

Data Source Hierarchy:

1. Hospital Discharge Summary
2. Billing Sheet / Medical Records Coding Summary Sheet
3. Trauma Flow Sheet

4. ER and ICU Records

EDITS: UT.0095; CDM_0095

UTAH EXPORT: ICD9

NTDS EXPORT: ICD9_NTDS

NTDS Field Name: InjuryDiagnosis

NTDS Field Number: DG_0

H. Injury Severity Information

H.01 Abbreviated Injury Scale (AIS) Score

(Optional Element)

Definition: The **Abbreviated Injury Scale (AIS) Score** is a numeric classification of the severity of the patient's injuries listed from ICD-9-CM diagnosis codes. The **AIS Score** recorded here is defined as value to the right of the decimal in the full 7-digit AIS Code.

Software Field Name: AIS1— AIS10

Data Type: Character (Single entry allowed)

Values: Manual entry is not required. The trauma registry software will default to a **AIS Score** based on the **ICD-9-CM Diagnosis Codes** entered.

AIS Score assigned only for ICD-9-CM injury diagnosis codes: 800 -- 959.9, 760.5, 641.8, and 518.5.

Range: 1—6

9 Unknown or Not applicable

Discussion/Uses: The **AIS Score** should not be assigned on a subjective basis, but as the result of coding the full 7-digit **AIS Score** through the current AIS Coding book. In the trauma registry software, the value options intentionally do not contain descriptions for numbers 2, 3, 4, and 5 for this reason.

The trauma registry software uses the **Region** and its associated **AIS Score** in calculating the **Injury Severity Score (ISS)**. ***See Appendix G.*** The field value (9) "Not Possible to Assign" would be chosen if it is not possible to assign a severity to an injury.

This variable is considered optional an is not required as part of the NTDS datashet.

EDITS: UT.0093; CDM_0093 (TraumaBase hospitals only)

UTAH EXPORT: AIS

NTDS EXPORT: AIS_NTDS

NTDS Field Name: AisSeverity

NTDS Field Number: IS_02

H.02 AIS Predot Code

(Optional Element)

Definition:	The Abbreviated Injury Scale (AIS) predot codes that reflect the patient's injuries.
Software Field Name:	AIS_CODE
Data Type:	Numeric
Values:	Valid AIS05 Codes
Discussion/Uses:	Allows data to be used to characterize patients and hospital outcomes based upon the presence, severity and type of injury. This variable is considered optional and is not required as part of the NTDS dataset.
EDITS:	UT.0306; CDM_0306
UTAH EXPORT:	AIS_CODE
NTDS EXPORT:	AIS_CODE_NTDS
NTDS Field Name:	IS_01
NTDS Field Number:	AisPredot

H.03 ISS Body Region

(Optional Element)

Definition: The Injury Severity Score (ISS) body region codes that reflect the patient's injuries.

Software Field Name: REGION

Data Type: AlphaNumeric

Values:

Code	Description
ABD	Abdomen/Pelvic Contents
ARM	Upper Extremities
CHEST	Thorax
CS	Cervical Spine
EXT	External
FACE	Face
HEAD	Head
LEG	Lower Extremities
LS	Lumbar Spine
NA	Not Applicable
NECK	Neck
NOT	Not Documented
SPINE	Spine Unspecified
TS	Thoracic Spine
UNK	Unknown
UNSPEC	Unspecified

Discussion/Uses: Head or neck injuries include injury to the brain or cervical spine, skull or cervical spine fractures.

Facial injuries include those involving mouth, ears, nose and facial bones.

Chest injuries include all lesions to internal organs. Chest injuries also include those to the diaphragm, rib cage, and thoracic spine.

Abdominal or pelvic contents injuries include all lesions to internal organs. Lumbar spine lesions are included in the abdominal or pelvic region.

Injuries to the extremities or to the pelvic or shoulder girdle include sprains, fractures, dislocations, and amputations, except for the spinal column, skull and rib cage.

External injuries include lacerations, contusions, abrasions, and burns, independent of their location on the body surface.

This variable is considered optional and is not required as part of the NTDS datasheet.

EDITS: UT.0094; CDM_0094; CDM_0094.NV; CDM_0094.N

UTAH EXPORT: REGION

NTDS EXPORT: REGION_NTDS

NTDS Field Name: BodyRegion

NTDS Field Number; IS_03

H.04 AIS Version

(Optionall Element)

Definition: The software (and version) used to calculate Abbreviated Injury Scale (AIS) severity codes.

Software Field Name: SEVERITY_METHOD

Data Type:

Values:

AIS05	AIS 2005
AIS98	AIS 98

Discussion/Uses: Allows data to be used to characterize patients and hospital outcomes based upon the presence, severity and type of injury.

This variable is considered optional and is not required as part of the NTDS datasheet.

EDITS: CDM_0520; CDM_0520.NV; CDM_0520.N

UTAH EXPORT: SEVERITY_METHOD

NTDS EXPORT: SEVERITY_METHOD_NTDS

NTDS Field Name: AisVersion

NTDS Field Number: IS_04

H.05 Locally Calculated ISS

(Optional Element)

Definition: The **Injury Severity Score (ISS)** calculated from multiple values for the **AIS Score**. The **ISS** is the sum of squares of the three highest values for the **AIS Score** from the three most severely injured body **Regions**. ***See Appendix E.***

Software Field Name: ISS

Data Type: Integer (Multiple values allowed)

Values: Manual entry is not required. The trauma registry software will internally calculate **ISS** based on **AIS Scores** for the three most severely injured body **Regions**.

Range: 1—75

NOT Not Recorded/Not Known or Not Applicable

Discussion/Uses: If any of the three values for **AIS Score** is 9 (meaning Not Recorded/Not Known or Not applicable), an **ISS** cannot be calculated and the trauma registry software will generate an NOT value.

EDITS: UT.0051.L1; CDM_0051 (TraumaBase hospitals only)

UTAH EXPORT: ISS

NTDS EXPORT: ISS

NTDS Field Name: IssLocal

NTDS Field Number: IS_05

Appendix A: Utah Facility Codes

Other Facilities:

Code	*Description/Hospital*
010	Transporting Unit
025	Doctor's Office
030	Free Standing Clinic
035	Stand Alone Emergency Department
040	Home
042	Rehab/TCU at your facility
043	Rehab/TCU at another facility
045	Long Term Facility/Nursing Home
046	End of Life Care / Hospice at Your Facility
047	End of Life Care / Hospice at Another Facility or Home
050	Mental Health Facility
055	Mortuary Facility
060	Other Non-Hospital Facility
070	Police/Jail Facility
075	Airport
080	Diagnostic Facility
085	State Medical Examiner
090	Surgical Center

Hospitals:

Code	*Description/Hospital*
135	BEAR RIVER VALLEY HOSPITAL- Tremonton
140	BRIGHAM CITY COMMUNITY HOSPITAL- Brigham City
145	DAVIS HOSPITAL & MEDICAL CENTER- Layton
150	LAKEVIEW HOSPITAL- Bountiful
155	LOGAN REGIONAL HOSPITAL- Logan
160	MCKAY DEE HOSPITAL- Ogden
165	OGDEN REGIONAL MEDICAL CENTER- Ogden
170	MOUNTAIN WEST MEDICAL CENTER-Toole
180	CACHE VALLEY SPECIALTY HOSPITAL-North Logan
220	ALTA VIEW HOSPITAL- Sandy
230	SALT LAKE REGIONAL MEDICAL CENTER- Salt Lake City
235	JORDAN VALLEY HOSPITAL- West Jordan
240	LDS HOSPITAL- Salt Lake City
245	PIONEER VALLEY HOSPITAL- West Valley
250	PRIMARY CHILDREN'S MEDICAL CENTER- Salt Lake City
260	ST. MARK'S HOSPITAL-Salt Lake City
260.A	Lone Peak Emergency Center, Draper (St.Marks)
265	U OF U MEDICAL CENTER- Salt Lake City
265.A	South Jordan Health Center, South Jordan (University of Utah)
270	VETERANS ADMINISTRATION MEDICAL CENTER- SLC
275	THE ORTHOPEDIC SPECIALTY HOSPITAL- Murray
290	INTERMOUNTAIN MEDICAL CENTER- Salt Lake City
295	RIVERTON HOSPITAL- Riverton (2009)
330	AMERICAN FORK HOSPITAL-American Fork
335	ASHLEY VALLEY MEDICAL CENTER- Vernal
340	CASTLEVIEW HOSPITAL- Price
345	UINTAH BASIN MEDICAL CENTER- Roosevelt

350	MOUNTAIN VIEW HOSPITAL-Payson
355	OREM COMMUNITY HOSPITAL- Orem
360	UTAH VALLEY HOSPITAL- Provo
365	HEBER VALLEY MEDICAL CENTER- Heber City
370	TIMPANOGOS REGIONAL MEDICAL CENTER-Orem
375	PARK CITY MEDICAL CENTER – Park City (2009)
440	FILLMORE COMMUNITY MEDICAL CENTER- Fillmore
445	GUNNISION VALLEY HOSPITAL- Gunnison
450	CENTRAL VALLEY MEDICAL CENTER- Nephi
455	SANPETE VALLEY HOSPITAL-Mt. Pleasant
460	SEVIER VALLEY HOSPITAL-Richfield
465	DELTA COMMUNITY MEDICAL CENTER- Delta
530	ALLEN MEMORIAL HOSPITAL-Moab
535	BEAVER VALLEY HOSPITAL- Beaver
540	DIXIE REGIONAL MEDICAL CENTER- St. George
545	GARFIELD MEMORIAL HOSPITAL-Panguitch
550	KANE COUNTY HOSPITAL-Kanab
555	MILFORD VALLEY MEMORIAL-Milford
565	SAN JUAN HOSPITAL-Monticello
570	VALLEY VIEW MEDICAL CENTER- Cedar City
575	BLUE MOUNTAIN MEDICAL CENTER- Blanding
600	Wyoming hospital
610	Idaho hospital
620	Colorado hospital
630	Nevada hospital
640	Arizona hospital
650	New Mexico hospital
660	Montana hospital
699	Other out of state hospital

Obsolete Hospital Codes:

Code	*Description/Hospital*
065	OTHER OUT OF STATE HOSPITAL
175	HILL AIR FORCE BASE
225	COTTONWOOD HOSPITAL-Murray
280	ROCKY MOUNTAIN MEDICAL CENTER- Salt Lake City
560	MONUMENT VALLEY HOSPITAL

Appendix B: EMS Agency Codes

DEFINITIONS OF SERVICE LEVELS

AMB_B	Ground Ambulance Basic Level
AMB_I	Ground Ambulance Intermediate Level
AMB_IA	Ground Ambulance Intermediate Advanced Level
AMB_P	Ground Ambulance Paramedic Level
AIR	Air Ambulance, either Fixed Wing or Rotary
RESCUE	Paramedic Rescue Non-Transporting Unit
QRU_B	Quick Response Unit (First Responder) Basic Level
QRU_I	Quick Response Unit (First Responder) Intermediate Level

CODE	AGENCY NAME	COUNTY	ACTIVE
0101	Beaver Ambulance Service	BEAVER	Y
0102	Milford Valley Ambulance Service	BEAVER	Y
0201	Brigham City Ambulance	BOX_ELDER	Y
0202	Tremonton Fire Department & Ambulance	BOX_ELDER	Y
0203	Box Elder County Ambulance	BOX_ELDER	Y
0205	Plymouth Fire Department	BOX_ELDER	Y
0210	ATK Launch Systems	BOX_ELDER	Y
0214	Willard First Responders	BOX_ELDER	Y
0216	Box Elder Central Fire District	BOX_ELDER	Y
0222	Curlew Ambulance Service	BOX_ELDER	Y
0223	Fielding Fire Department	BOX_ELDER	Y
0224	Thatcher-Penrose Fire Department	BOX_ELDER	Y
0302	Hyrum First Responders	CACHE	Y
0303	Lewiston First Responders	CACHE	Y
0304	Newton First Responders	CACHE	Y
0305	Paradise First Responders	CACHE	Y
0306	Wellsville First Responders	CACHE	Y
0307	Smithfield Fire and Rescue	CACHE	Y
0313	Mendon Fire Department	CACHE	Y
0316	Richmond Fire Department	CACHE	Y
0315	Cache County Sheriff's Office	CACHE	Y
0317	North Logan Fire and Rescue	CACHE	Y
0320	Millville & Nibley First Responders	CACHE	Y
0321	Trenton Town Fire & Rescue	CACHE	Y
0325	Clarkston Fire & Rescue Department	CACHE	Y
0332	Cache County EMS Authority	CACHE	Y
0401	Sunnyside Ambulance Service	CARBON	Y
0402	Carbon County Ambulance	CARBON	Y
0406	Helper Fire Department	CARBON	Y
0501	Daggett County Ambulance	DAGGETT	Y
0502	Daggett County Sheriff's Office	DAGGETT	Y
0603	Davis County Sheriff's Office	DAVIS	Y
0606	Kaysville City Fire Department	DAVIS	Y
0607	Layton City Fire Department	DAVIS	Y
0612	Clinton City Fire Department	DAVIS	Y

CODE	AGENCY NAME	COUNTY	ACTIVE
0617	Syracuse City Fire Department	DAVIS	Y
0620	North Davis Fire District	DAVIS	Y
0628	Sunset City Fire Department	DAVIS	Y
0630	Farmington City Fire Department	DAVIS	Y
0634	South Davis Metro Fire Agency	DAVIS	Y
0701	Uintah Basin Medical Center	DUCHESNE	Y
0801	Emery County Ambulance	EMERY	Y
0901	Garfield County Ambulance	GARFIELD	Y
1001	Grand County Emergency Medical Services	GRAND	Y
1101	Iron County Ambulance Service	IRON	Y
1201	Juab County Emergency Medical Services	JUAB	Y
1203	Rocky Ridge EMS	JUAB	Y
1204	Levan Town Ambulance	JUAB	Y
1301	Kane County Ambulance	KANE	Y
1401	Millard County Ambulance	MILLARD	Y
1403	Scipio Ambulance	MILLARD	Y
1501	Morgan County Ambulance	MORGAN	Y
1601	Piute County Ambulance	PIUTE	Y
1701	Rich County Ambulance	RICH	Y
1802	Unified Fire Authority	SALT_LAKE	Y
1803	Gold Cross Ambulance	SALT_LAKE	Y
1804	Salt Lake City Fire Department	SALT_LAKE	Y
1809	Sandy City Fire Department	SALT_LAKE	Y
1815	Salt Lake County Sheriff's Search & Rescue Service	SALT_LAKE	Y
1821	South Salt Lake Fire Department	SALT_LAKE	Y
1823	West Valley City Fire Department	SALT_LAKE	Y
1826	Utah Air National Guard Fire Department	SALT_LAKE	Y
1827	Murray City Fire Department	SALT_LAKE	Y
1830	Midvale City Fire Department	SALT_LAKE	Y
1831	South Jordan Fire Department	SALT_LAKE	Y
1842	West Jordan Fire Department	SALT_LAKE	Y
1850	Utah State Prison	SALT_LAKE	Y
1869	Bluffdale Fire Department	SALT_LAKE	Y
1904	San Juan County EMS	SAN_JUAN	Y
1911	San Juan County Search & Rescue	SAN_JUAN	Y
2001	Gunnison Valley Hospital Ambulance	SANPETE	Y
2002	North Sanpete Ambulance	SANPETE	Y
2007	Ephraim Ambulance Association	SANPETE	Y
2008	Manti Ambulance Association	SANPETE	Y
2101	Sevier County Ambulance	SEVIER	Y
2104	Canyon Fuel Company, LLC (Sufco Mine)	SEVIER	Y
2202	South Summit Ambulance Service	SUMMIT	Y
2203	Park City Fire District/Summit Co.	SUMMIT	Y
2301	Wendover Ambulance	TOOELE	Y
2302	Ambulance Services of Tooele, LLC	TOOELE	Y
2306	Grantsville Volunteer Fire Department	TOOELE	Y

CODE	AGENCY NAME	COUNTY	ACTIVE
2310	Stockton Fire Department	TOOELE	Y
2315	North Tooele County Fire Service District	TOOELE	Y
2318	Wendover First Responders	TOOELE	Y
2402	Deseret Generation & Transmission	UINTAH	Y
2403	Ute Tribe Ambulance Service	UINTAH	Y
2404	Gold Cross Services, Inc. Eastern Division	UINTAH	Y
2411	Uintah Fire Suppression Special Service District	UINTAH	Y
2501	American Fork City	UTAH	Y
2502	Lehi Fire/Emergency Medical Services	UTAH	Y
2503	Payson City Ambulance	UTAH	Y
2504	Pleasant Grove Fire Department	UTAH	Y
2505	Provo City Fire Department	UTAH	Y
2506	Orem Department of Public Safety	UTAH	Y
2508	Springville City Ambulance	UTAH	Y
2509	Spanish Fork Ambulance	UTAH	Y
2512	Santaquin City Ambulance	UTAH	Y
2517	Salem Emergency Medical Association	UTAH	Y
2518	Mapleton Ambulance	UTAH	Y
2519	Lone Peak Public Safety District	UTAH	Y
2520	North Fork Fire Department	UTAH	Y
2522	Eagle Mountain Fire Department	UTAH	Y
2526	Utah County Sheriff Search & Rescue Service	UTAH	Y
2531	Elk Ridge City Fire Department	UTAH	Y
2532	Brigham Young University	UTAH	Y
2539	Saratoga Springs Fire and Ambulance	UTAH	Y
2601	Wasatch County Emergency Medical Services	WASATCH	Y
2701	Enterprise Ambulance Service	WASHINGTON	Y
2703	Hurricane Valley Fire Special Services District	WASHINGTON	Y
2711	Santa Clara Fire Department	WASHINGTON	Y
2712	Dixie Regional Medical Center	WASHINGTON	Y
2713	Dammeron Valley Fire & Rescue	WASHINGTON	Y
2720	Hildale Fire Department	WASHINGTON	Y
2721	Dixie Ambulance Service	WASHINGTON	Y
2725	St. George City Fire Department	WASHINGTON	Y
2729	Leeds Area Special Service District	WASHINGTON	Y
2731	Rockville/Springdale Fire Protection District	WASHINGTON	Y
2733	Ivins City Public Safety	WASHINGTON	Y
2734	Washington DPS Fire Division	WASHINGTON	Y
2801	Wayne County EMS	WAYNE	Y
2902	Roy City Fire and Rescue Department	WEBER	Y
2903	Ogden City Ambulance	WEBER	Y
2907	Washington Terrace Fire Department	WEBER	Y
2919	North View Fire District	WEBER	Y
2921	Plain City Fire Department	WEBER	Y
2925	Weber Fire District	WEBER	Y
2930	South Ogden City Public Safety Fire Department	WEBER	Y

CODE	AGENCY NAME	COUNTY	ACTIVE
2931	Riverdale Fire Services	WEBER	Y
2932	Weber County Sheriff	WEBER	Y
3001	Airmed/University of Utah Medical Center	SALT_LAKE	Y
3002	Intermountain Life Flight	SALT_LAKE	Y
3003	Classic Air Care Inc. DBA Classic Life Guard	DAVIS	Y
3004	Eagle Air Med Corporation	SAN_JUAN	Y
3005	St. Mary's Careflight	CO	Y
3006	Life Guard International, Inc.	NV	Y
3007	Air Ambulance Specialists, Inc.	CO	Y
3009	San Juan Regional Medical Center/Air Care	NM	Y
3010	Air Methods/Mercy Air Service, Inc.	NV	Y
3011	Tristate Care Flight, LLC	AZ	Y
3012	Coast to Coast Air Ambulance, LLC	IRON	Y
3013	Flight for Life Colorado	CO	Y
3999	Obsolete or Changed EMS Agency		Y
3000	Unspecified Utah EMS Agency	UT	Y
NA	NOT APPLICABLE	NA	Y
NOT	Not Recorded/Not Known		Y
OTHER	Other - Out of State EMS Agency	OTHER	Y

Appendix C: Country Codes

Code	Country
US	United States
MX	Mexico
CA	Canada
AF	Afghanistan
AL	Albania
AG	Algeria
AN	Andorra
AO	Angola
AC	Antigua and Barbuda
AR	Argentina
AM	Armenia
AS	Australia
AU	Austria
AJ	Azerbaijan
BF	Bahamas
BA	Bahrain
BG	Bangladesh
BB	Barbados
BO	Belarus
BE	Belgium
BH	Belize
BN	Benin
BT	Bhutan
BL	Bolivia
BK	Bosnia and Herzegovina
BC	Botswana
BR	Brazil
BX	Brunei
BU	Bulgaria
UV	Burkina Faso
BM	Burma
BY	Burundi
CB	Cambodia
CM	Cameroon
CV	Cape Verde
CT	Central African Republic
CD	Chad
CI	Chile
CH	China
CO	Colombia
CN	Comoros
CF	Congo (Brazzaville)
CG	Congo (Kinshasa)
CS	Costa Rica
IV	Cote d'Ivoire
KZ	Kazakhstan
KE	Kenya
KR	Kiribati
KN	Korea, North
KS	Korea, South
KU	Kuwait
KG	Kyrgyzstan

Code	Country
HR	Croatia
CU	Cuba
CY	Cyprus
EZ	Czech Republic
DA	Denmark
DJ	Djibouti
DO	Dominica
DR	Dominican Republic
TT	East Timor
EC	Ecuador
EG	Egypt
ES	El Salvador
EK	Equatorial Guinea
ER	Eritrea
EN	Estonia
ET	Ethiopia
FJ	Fiji
FI	Finland
FR	France
GB	Gabon
GA	Gambia, The
GG	Georgia
GM	Germany
GH	Ghana
GR	Greece
GJ	Grenada
GT	Guatemala
GV	Guinea
PU	Guinea-Bissau
GY	Guyana
HA	Haiti
VT	Holy See
HO	Honduras
HU	Hungary
IC	Iceland
IN	India
ID	Indonesia
IR	Iran
IZ	Iraq
EI	Ireland
IS	Israel
IT	Italy
JM	Jamaica
JA	Japan
JO	Jordan
PM	Panama
PP	Papua New Guinea
PA	Paraguay
PE	Peru
RP	Philippines
PL	Poland
PO	Portugal

Code	Country
LA	Laos
LG	Latvia
LE	Lebanon
LT	Lesotho
LI	Liberia
LY	Libya
LS	Liechtenstein
LH	Lithuania
LU	Luxembourg
MK	Macedonia
MA	Madagascar
MI	Malawi
MY	Malaysia
MV	Maldives
ML	Mali
MT	Malta
RM	Marshall Islands
MR	Mauritania
MP	Mauritius
FM	Micronesia
MD	Moldova
MN	Monaco
MG	Mongolia
MJ	Montenegro
MO	Morocco
MZ	Mozambique
WA	Namibia
NR	Nauru
NP	Nepal
NL	Netherlands
NZ	New Zealand
NU	Nicaragua
NG	Niger
NI	Nigeria
NO	Norway
MU	Oman
PK	Pakistan
PS	Palau
UG	Uganda
UP	Ukraine
AE	United Arab Emirates
UK	United Kingdom
UY	Uruguay
UZ	Uzbekistan
NH	Vanuatu
VE	Venezuela
QA	Qatar
RO	Romania
RS	Russia
RW	Rwanda
SC	Saint Kitts and Nevis
ST	Saint Lucia
VC	Saint Vincent and the Grenadines
WS	Samoa
SM	San Marino
TP	São Tomé and Príncipe
SA	Saudi Arabia
RB	Serbia
SE	Seychelles
SL	Sierra Leone
SN	Singapore
LO	Slovakia
SI	Slovenia
BP	Solomon Islands
SO	Somalia
SF	South Africa
SP	Spain
CE	Sri Lanka
SU	Sudan
NS	Suriname
WZ	Swaziland
SW	Sweden
SZ	Switzerland
SY	Syria
TI	Tajikistan
TW	Taiwan
TZ	Tanzania
TH	Thailand
TO	Togo
TN	Tonga
TS	Tunisia
TU	Turkey
TX	Turkmenistan
TV	Tuvalu
VM	Vietnam
YM	Yemen
ZA	Zambia
ZI	Zimbabwe
NA	Not Applicable
NOT	Not Recorded/Not Known

Appendix D: Utah Counties, Cities and Zip Codes

County Code	*Description / (FIPS)*	*Cities*	*Zip Code*
BEAVER	Beaver (49001)	Adamsville	84713
		Beaver	84713
		Burbank	84751
		Cove Fort	84713
		Greenville	84731
		Manderfield	84713
		Milford	84751
		Minersville	84752
		North Creek	84713
BOX_ELDER	Box Elder (49003)	Axtell	84621
		Bear River City	84301
		Beaverdam	84306
		Beeton	84309
		Bothwell	84337
		Brigham City	84302
		Bushnell	84302
		Collinstonn	84306
		Corinne	84307
		Crystal Springs	84314
		Deweyville	84309
		Elwood	84337
		Etna	84313
		Fielding	84311
		Garland	84312
		Grouse Creek	84313
		Honeyville	84314
		Howell	84316
		Madsen	84314
		Mantua	84324
		Park Valley	84329
		Penrose	84337
		Perry	84302
		Plymouth	84330
		Portage	84331
		Promontory	84307
		Riverside	84334
		Rosette	84329
		Snowville	84336
		Thatcher	84337
		Tremonton	84337
		Willard	84340
CACHE	Cache (49007)	Amalga	84335
		Avon	84319
		Benson	84335
		Brigham City	84304
		Cache Junction	84304
		Clarkston	84305
		College Ward	84321
		Cornish	84308
		Cove	84320
		Hyde Park	84318
		Hyrum	84319

County Code	Description / (FIPS)	Cities	Zip Code
		Lewiston	84320
		Logan	84321
		Mendon	84325
		Millville	84326
		Newton	84327
		NIbley	84321
		North Logan	84321
		Paradise	84328
		Petersboro	84325
		Providence	84332
		Richmond	84333
		River Heights	84321
		Smithfield	84335
		Trenton	84338
		Utah State University	84322
		Wellsville	84339
CARBON	Carbon (49007)	Carbonville	84501
		Castle Gate	84526
		Columbia	84501
		East Carbon	84520
		East Wellington	84542
		Helper	84526
		Hiawatha	84527
		Kenilworth	84529
		Martin	84526
		Price	84501
		Scofield	84501
		Spring Glen	84526
		Standardville	84526
		Sunnyside	84539
		Wellington	84542
		Woodside	84501
DAGGETT	Daggett (49009)	Dutch John	84023
		Green Lake	84046
		Greendale	84023
		Manila	84046
DAVIS	Davis (49011)	Anchorage	84015
		Arsenal	84015
		Bountiful	84087, 84010, 84011
		Centerville	84014
		Clearfield	84015
		Clinton	84015
		East Layton	84040
		Farmington	84025
		Fruit Heights	84037
		Hill A.F.B.	84056
		Kaysville	84037
		Layton	84040, 84075, 84041
		North Salt Lake	84054
		Sunset	84015
		Syracuse	84075
		Val Verda	84010

County Code	*Description / (FIPS)*	*Cities*	*Zip Code*
DAVIS	Davis (49011)	West Kaysville	84037
		West Layton	84041
		West Point	84015
		Woods Cross	84087
DUCHESNE	Duchesne (49013)	Arcadia	84012
		Altamont	84001, 84002
		Bluebell	84007
		Boneta	84001
		Bridgeland	84012
		Cedarview	84066
		Defas Park	84031
		Duchesne	84021
		Fruitland	84027
		Hanna	84031
		Ioka	84066
		Leeton	84066
		Monarch	84066
		Mountain Home	84051
		Myton	84052
		Neola	84053
		Roosevelt	84066
		Tabiona	84072
		Talmage	84073
		Upalco	84007
EMERY	Emery (49015)	Castle Dale	84513
		Clawson	84516
		Cleveland	84518
		Elmo	84521
		Emery	84522
		Ferron	84523
		Green River	84525
		Huntington	84528
		Lawrence	84528
		Molen	84523
		Moore	84523
		Orangeville	84537
GARFIELD	Garfield (49017)	Angle	84712
		Antimony	84712
		Boulder	84716
		Bryce	84764
		Bryce Canyon	84761
		Cannonville	84718
		Escalante	84726
		Henrieville	84736
		Panguitch	84759
		Spry	84759
		Tropic	84716
GRAND	Grand (49019)	Arches	84532
		Canyonlands	84532
		Castleton	84532
		Cisco	84515
		Moab	84532

County Code	*Description / (FIPS)*	*Cities*	*Zip Code*
GRAND	Grand (49019)	Natural Bridges	84532
		Thompson	84540
IRON	Iron (49021)	Beryl	84714
		Beryl Junction	84714
		Brian Head	84719
		Cedar Breaks	84720
		Cedar City	84720
		Enoch	84720
		Kanarraville	84742
		Lund	84720
		Modena	84753
		Newcastle	84756
		Paragonah	84760
		Parowan	84761
		Pinto	84756
		Summit	84772
		Uvada	84753
JUAB	Juab (49023)	Eureka	84628
		Levan	84639
		Mona	84645
		Nephi	84648
		Starr	84645
KANE	Kane (49025)	Alton	84710
		Big Water	84741
		Duck Creek Village	84762
		Glen Canyon	84741
		Glendale	84729
		Hatch	84735
		Kanab	84741
		Mount Carmel	84755
		Orderville	84758
MILLARD	Millard (49027)	Abraham	84635
		Delta	84624
		Deseret	84624
		Eskdale	84728
		Fillmore	84631
		Flowell	84631
		Garrison	84728
		Hinckley	84635
		Holden	84636
		Lanosh	84637
		Leamington	84638
		Lynndyl	84640
		Meadow	84644
		Oak City	84649
		Oasis	84650
		Scipio	84656
		Sugarville	84624
		Sutherland	84624
		Woodrow	84624
MORGAN	Morgan (49029)	Como Springs	84050
		Croydon	84018

County Code	Description / (FIPS)	Cities	Zip Code
MORGAN	Morgan (49029)	Devils Slide	84050
		Enterprise	84050
		Littleton	84050
		Milton	84050
		Morgan	84050
		Mountain Green	84050
		Peterson	84050
		Porterville	84050
		Richville	84050
		Stoddard	84050
PIUTE	Piute (49031)	Circleville	84723
		Greenwich	84732
		Junction	84740
		Kingston	84743
		Marysvale	84750
		Richfield	84732
RICH	Rich (49033)	Garden City	84028
		Laketown	84038
		Meadowville	84038
		Pickleville	84028
		Randolph	84064
		Round Valley	84038
		Swan Creek	84028
		Woodruff	84086
SALT_LAKE	Salt Lake (49035)	Alta	84092
		Atwood	84107
		Belmont Heights	84070, 84092
		Bennion	84118
		Bingham Canyon	84006
		Bluffdale	84065
		Brighton	84121
		Burton	84115
		Butlerville	84121
		Camp Williams	84065
		Cooperton	84006
SALT_LAKE	Salt Lake (49035)	Cottonwood	84121
		Cottonwood Heights	84117
		Cottonwood Meadows	84117
		Crescent	84092, 84070
		Cushing	84047
		Draper	84020
		Eastwood Hills	84106
		Emigration Canyon	84108
		Fairgrounds	84116
		Foothill	84108
		Fort Douglas	84113
		Granger	84119
		Granger Hunter	84119
		Granite	84070, 84092
		Granite Park	84106
		Greenfield Village	84117
		Herriman	84096

County Code	Description / (FIPS)	Cities	Zip Code
SALT_LAKE	Salt Lake (49035)	Holladay	84124, 84117
		Hunter	84120
		Kearns	84118
		Key Bank	84189
		Knudsen Corner	84121
		Magna	84044
		Midvale	84047
		Millcreek	84109
		Mount Olympus	84117
		Murray	84107, 84123
		Northwest	84116
		Pallas	84107
		Park Terrace	84106
		Pioneer	84111
		Pleasant Green	84044
		Redwood	84119
		Riverton	84065
		Roper	84115
		Rose Park	84116
		Salt Lake City	84100, 84101, 84102, 84103, 84104, 84105, 84106, 84107, 84108, 84109, 84111, 84112, 84113, 84114, 84115, 84116, 84117, 84118, 84119, 84120, 84121, 84123, 84124, 84133, 84138, 84144, 84180
		Salt Lake Community College	84190
		Sandy	84092, 84093, 84070, 84094
		Sherwood Park	84092, 84070
		Silver Fork	84121
		Snowbird	84092
		South Jordan	84095
		South Salt Lake	84115
		Sugarhouse	84105, 84106
		Taylorsville	84119, 84123
		Union	84047
		University Medical Center	84132
		West Jordan	84088, 84084, 84081
		West Valley	84199, 84120
		White City	84092, 84070
SANPETE	Sanpete (49037)	Birdseye	84629
		Centerfield	84622
		Chester	84623
		Ephraim	84627
		Fairview	84629
		Fayette	84630
		Fountain Green	84632
		Gunnison	84634
		Indianola	84629

County Code	Description / (FIPS)	Cities	Zip Code
SANPETE	Sanpete (49037)	Manti	84642
		Mayfield	84643
		Milburn	84629
		Moroni	84646
		Mount Pleasant	84647
		Oak Creek	84629
		Spring City	84662
		Sterling	84665
		Thistle	84629
		Wales	84667
SAN_JUAN	San Juan (49039)	Aneth	84510
		Blanding	84511
		Bluff	84512
		Bullfrog	84533
		Eastland Township	84535
		Halls Crossing	84533
		Hite	84533
		La Sal	84530
		Lake Powell	84533
		Mexican Hat	84531
		Montezuma Creek	84534
		Monticello	84535
		Monument Valley	84536
		Ticaboo	84533
SEVIER	Sevier (49041)	Annabelle	84711
		Aurora	84620
		Austin	84754
		Bowery Haven	84701
		Central Valley	84754
		Burrville	84701
		Elsinore	84724
		Fish Lake	84701
		Gooseberry	84654
		Joseph	84739
		Koosharem	84744
		Monroe	84754
		Redmond	84652
		Richfield	84701
		Salina	84654
		Sevier	84766
		Sigurd	84657
		Venice	84701
SUMMIT	Summit (49043)	Coalville	84017
		Echo	84024
		Francis	84036
		Henefer	84033
		Hoytsville	84017
		Jeremy Ranch	84098
		Kamas	84036
		Kimball Junction	84098
		Marion	84036
		Oakley	84055

County Code	*Description / (FIPS)*	*Cities*	*Zip Code*
SUMMIT	Summit (49043)	Park City	84060, 84068, 84098
		Peoa	84061
		Pine Cliff	84017
		Pinebrook	84098
		Snyderville	84098
		Summit Park	84098
		Upton	84017
		Wanship	84017
		Woodland	84036
TOOELE	Tooele (49045)	Bauer	84071
		Burmester	84029
		Clover	84069
		Dugway	84022
		Erda	84074
		Faust	84080
		Grantsville	84029
		Ibapah	84034
		Lake Point	84074
		Lincoln	84074
		Marblehead	84029
		Ophir	84071
		Partoun	84083
		Rowley	84029
		Rush Valley	84069
		Saint John	84069
		Skull Valley	84029
		Stansbury Park	84074
		Stockton	84071
		Terra	84022
		Tooele	84074
		Tooele Army Depot	84074
		Trout Creek	84083
		Vernon	84080
		Wendover	84083
UINTAH	Uintah (49047)	Bonanza	84008
		Bottle Hollow	84026
		Dry Fork	84078
		Fort Duchesne	84026
		Gusher	84030
		Jensen	84035
		Lapoint	84039
		Maeser	84078
		Naples	84078
		Ouray	84026
		Randlett	84063
		Tridell	84076
		Vernal	84008, 84078
		Whiterocks	84085
UTAH	Utah County (49049)	Alpine	84004
		American Fork	84003
		Benjamin	84660
		Bonnie	84057, 84058

County Code	*Description / (FIPS)*	*Cities*	*Zip Code*
UTAH	Utah County (49049)	Brigham Young University	84602
		Bunker	84057, 84058
		Cedar Hills	84062
		Cedar Valley	84013
		Clyde	84057
		Colton	84601
		Covered Bridge	84660
		Eagle Mountain	84005, 84043
		Edgemont	84601
		Elberta	84626
		Elk Ridge	84651
		Fairfield	84013
		Genola	84655
		Gilluly	84601
		Goshen	84633
		Hardy Beet Spur	84062
		Highland	84003
		Lake Shore	84660
		Lakeview	84601
		Lehi	84043
		Leland	84660
		Lindon	84042
		Mapleton	84662
		Olmstead	84601
		Orem	84057, 84058, 84097
		Palmyra	84660
		Payson	84651
		Pleasant Grove	84062
		Provo	84601, 84602, 84604, 84606
		Provo Canyon	84604
		Provo Junction	84601
		Salem	84653
		Salem Hills	84660
		Santaquin	84655
		Saratoga Springs	84043, 84045
		Smoot	84601
		Soldier Summit	84601
		Spanish Fork	84660
		Spring Lake	84651
		Springdell	84601
		Springville	84663
		Sundance	84604
		Timpanogos	84003
		University	84601
		Vineyard	84058, 84604
		Vivian Park	84601
		Wicks	84601
		Wildwood	84601
		Woodland Hills	84653
WASATCH	Wasatch (49051)	Center Creek	84032
		Charleston	84032

County Code	Description / (FIPS)	Cities	Zip Code
WASATCH	Wasatch (49051)	Daniels	84032
		Heber	84032
		Mayflower	84032
		Midway	84049
		Wallsburg	84082
WASHINGTON	Washington (49053)	Apple Valley	84737
		Big Valley	84741
		Brookside	84782
		Cedar City	84782, 84783, 84722
		Central	84722
		Dammeron	84783
		Enterprise	84725
		Gunlock	84733
		Harrisburg Junction	84770
		Hildale	84784
		Hurricane	84737
		Ivins	84738
		La Verkin	84745
		Leeds	84746
		Middleton	84770
		New Harmony	84757
		Pine Valley	84722
		Pintura	84720
		Rockville	84763
		Santa Clara	84765
		Springdale	84767
		St. George	84770
		Toquerville	84774
		Veyo	84782
		Virgin	84779
		Washington	84780
		Zion National Park	84767
WAYNE	Wayne (49055)	Bicknell	84715
		Caineville	84775
		Capitol Reef	84775
		Fremont	84747
		Fruita	84775
		Grover	84773
		Hanksville	84734
		Loa	84747
		Lyman	84749
		Teasdale	84773
WAYNE	Wayne (49055)	Torrey	84775
WEBER	Weber (49057)	Ben Lomond	84404
		Defense Depot	84407
		Eden	84310
		Farr West	84404
		Gorder	84403
		Harrisville	84404
		Harrisville Heights	84401
		Hermitage	84404

County Code	*Description / (FIPS)*	*Cities*	*Zip Code*
WEBER	Weber (49057)	Hooper	84315
		Hot Springs	84404
		Huntsville	84317
		Kannesville	84315
		Liberty	84310
		Marriott	84404
		North Ogden	84404
		Ogden	84403, 84405, 84414, 84409, 84400, 84401, 84000
		Plain City	84404
		Pleasant View	84404
		Riverdale	84405
		Roy	84067
		Slaterville	84404
		South Ogden	84403
		South Weber	84403
		Taylor	84401
		Uintah	84403
		Warren	84404
		Washington Terrace	84405, 84403
		Weber State College	84408
		West Warren	84404
		West Weber	84401
		Wilson	84401

Other State/County Codes

State Code	*Description / (FIPS)*
AZ	Arizona
CO	Colorado
ID	Idaho
MT	Montana
NM	New Mexico
NV	Nevada
WY	Wyoming

Appendix E: Injury Severity Scale Scoring

Injury Severity Scale Scoring

The Injury Severity Score (ISS) is an anatomical scoring system that provides an overall score for patients with multiple injuries. Each injury is assigned an Abbreviated Injury Score (AIS) and is allocated to one of six body regions (Head, Face, Chest, Abdomen, Extremities, or External). Only the highest AIS scores in each body region are used. The 3 most severely injured body regions have their AIS score squared and added together to produce the ISS score.

An example of the ISS calculation is shown below:

Region	Injury Description	AIS	Square Top Three
Head & Neck	Cerebral Contusion	3	9
Face	No Injury	0	
Chest	Flail Chest	4	16
Abdomen	Minor Contusion of Liver	2	
	Complex Rupture Spleen	5	25
Extremities	Fractured femur	3	
External	No Injury	0	
		Injury Severity Score:	**50**

The ISS score takes values from 0 to 75. If an injury is assigned an AIS of 6 (maximal injury), the ISS score is automatically assigned to 75. The ISS score is virtually the only anatomical scoring system in use and correlates linearly with mortality, morbidity, hospital stay and other measures of severity.

Calculating Trauma Injury Severity Score

The Trauma Injury Severity Score (TRISS) determines the probability of survival (Ps) of a patient from the ISS and RTS using the following formula:

$$Ps = 1 / (1 + e^{-b})$$

Where 'b' is calculated from:

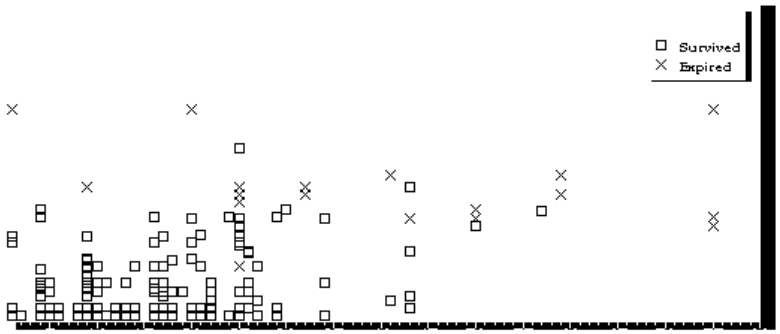
$$b = b0 + b1(RTS) + b2(ISS) + b3(AgeIndex)$$

The coefficients b0 - b3 are derived from multiple regression analysis of the Major Trauma Outcome Study (MTOS) database. Age Index is 0 if the patient is below 54 years of age or 1 if 55 years and over. b0 to b3 are coefficients which are different for blunt and penetrating trauma. If the patient is less than 15, the blunt index for b3 (Age) is used regardless of mechanism.

Coefficient	Blunt	Penetrating
b0	-0.4499	-2.5355
b1	0.8085	0.9934
b2	-0.0835	-0.0651
b3	-1.7430	-1.1360

Sample TRISS Graph without Isobars from CDM Traumabase®

Boyd CR, Tolson MA, Copes WS: "Evaluating Trauma Care: The TRISS Method", J Trauma 27:370-378;1987



Appendix F: Abbreviated Injury Scale Scoring

Calculating Abbreviated Injury Scale Score

The Abbreviated Injury Scale (AIS) is an anatomical scoring system first introduced in 1969 for use by crash investigators in assessing impact injury. Since this time it has been revised and updated against survival so that it now provides a reasonably accurate way of ranking the severity of injury. The latest incarnation of the AIS is the 2005 revision. A scaling committee of the Association for the Advancement of Automotive Medicine monitors and provides a manual to be consulted when scoring the AIS.

Injuries are scored 1 to 6, with 1 being minor and 6 being a maximal injury. This represents the 'threat to life' associated with an injury and is not meant to represent a comprehensive measure of severity. The AIS is not an interval scale, in that the difference between AIS1 and AIS2 is not the same as that between AIS4 and AIS5.

AIS	Injury Severity
1	Minor injury
2	Moderate injury
3	Serious injury, not life threatening
4	Severe injury, life threatening, but survival probable
5	Critical injury, survival uncertain
6	Maximum injury, untreatable and virtually not survivable

Appendix G: Revised Trauma Score

Calculating Revised Trauma Score

The Revised Trauma Score (RTS) is a physiological scoring system, with high inter-rater reliability and demonstrated accuracy in predicting death. It is scored from the first set of data obtained on the patient, and consists of the Glasgow Coma Score, Systolic Blood Pressure, and Respiratory Rate.

Respiratory Rate (RR)	Systolic Blood Pressure (SBP)	Glasgow Coma Score (GCS)	Score
10-29/Minute	>89 mmHg	13-15	4
>29/Minute	76-89 mmHg	9-12	3
6-9/Minute	50-75 mmHg	6-8	2
1-5/Minute	1-49 mmHg	4-5	1
0	No Pulse	3	0

RTS = 0.9368 GCS + 0.7326 SBP + 0.2908 RR

Values for the RTS are in the range 0 to 7.8408. The RTS is heavily weighted towards the Glasgow Coma Score to compensate for major head injury without multi-system injury or major physiological changes.

Appendix H: Data Dictionary Revision History

Data Dictionary Revision History

This dictionary is an evolutionary document. As national and state data collection needs are refined, new elements are created, obsolete elements and/or values are retired and coding guidelines are clarified.

Since its inception in 2001, over 500 such changes have been made. The complete revision history can be viewed at http://www.utahtrauma.org/publicResources/documents/UTRChangeLog_013113.pdf