



# **Injury Severity Score (ISS) Data Entry for State Registry**

# ISS History and Definition

- Dates back to the 1970s
- Indicates overall severity of traumatic injuries
- Global scoring system
- Calculated by assigning Abbreviated Injury Scores (AIS) and taking the three highest body region scores and squaring them

(Association for the Advancement of Automotive Medicine, 2008)

# National and State Requirements

- The American College of Surgeons (ACS, 2021) requires the entry and submission of AIS Scores
- The State of Texas Trauma Registry follows the National Trauma Data Standard Data Dictionary for data entry and submission

- National Trauma Data Standards taken from the 2022 Dictionary (ACS, 2021):

AIS CODE		
<b>DESCRIPTION</b> The Abbreviated Injury Scale (AIS) code(s) that reflect the patient's injuries.		
<b>ELEMENT VALUES</b> <ul style="list-style-type: none"><li>• The code is the 8-digit AIS code.</li></ul>		
<b>ADDITIONAL INFORMATION</b> None		
<b>DATA SOURCE HIERARCHY GUIDE</b> <ol style="list-style-type: none"><li>1. AIS Coding Manual</li></ol>		
<b>ASSOCIATED EDIT CHECKS</b>		
Rule ID	Level	Message
21001	1	Invalid value
21004	2	AIS codes submitted are not valid AIS 05, Update 08, or AIS 2015 codes
21007	2	Element cannot be blank
21008	2	Element cannot be "Not Applicable"
21009	2	Element cannot be "Not Known/Not Recorded" along with any other value
21050	1	Multiple Entry Max exceeded

# Problem

- The State of Texas Trauma Registry is receiving files via file submission and via direct Maven data entry without AIS scores.
- The AIS score is not a required data entry field for direct Maven submission.
- Without AIS scores, the ISS is missing and cannot be calculated.

# Data Submission: How does your center submit?

Statistics as of September 2022:

- 183 - Level III and Level IV trauma centers submitted data in 2022
- 75 - Web-data Entry (MAVEN)
  - 1 Level III (2.4%)
  - 74 Level IV (52.5%)
- 108 - File Upload
  - 41 Level III (97.6%)
  - 67 Level IV (47.5%)

# Solution

## For file submission:

- Run a report out of your facility's trauma registry prior to submission
- Validate that a correct and accurate ISS score is present for each patient record

## For direct-web entry via Maven:

- Follow the steps on the next slides.

# MAVEN - Injury Severity Information Question Package

Injury Severity Information - a a - Patient Record - Hospital

AIS Predot Code	<input type="text"/>
AIS Predot Code (Null Values)	<input type="text"/>
AIS Version	<input type="text"/>
AIS Body Region (Null Values)	<input type="text"/>
Locally Calculated ISS	<input type="text"/>
<b>ISS score must be between</b>	<input type="text"/>
Mechanism of injury	<input type="text"/>
Injury type	<input type="text"/>

Save Cancel Help

Select applicable AIS version:

- AIS 05
- Update 08
- AIS 15

# MAVEN - Injury Severity Information - AIS

Injury Severity Information - a a - Patient Record - Hospital

AIS Version	AIS 05, Update 08
AIS Code - Direct Entry	<input type="text"/>
AIS Body Region	<input type="text"/>
Locally Calculated ISS	<input type="text"/>
ISS score must be between	<input type="text"/> k your value.
Mechanism of injury	<input type="text"/>
Injury type	<input type="text"/>

Save Cancel Help

- Head
- Face
- Neck
- Thorax
- Abdomen
- Spine
- Upper Extremity
- Lower Extremity
- External and Other

Select applicable AIS body region.

# MAVEN - Injury Severity Information - Structure

## Injury Severity Information - a a - Patient Record - Hospital

AIS Version	AIS 05, Update 08	▼
AIS Code - Direct Entry	<input type="text"/>	 
AIS Body Region	Head	▼ <a href="#">Add New</a>
AIS Specific Structure	<input type="text"/>	▼
AIS Code	<input type="text"/>	 
Locally Calculated ISS	<input type="text"/>	
ISS score must be between	<input type="text"/>	
Mechanism of injury	<input type="text"/>	▼
Injury type	<input type="text"/>	

10 - Head, Whole Area

11 - Head, Whole Area

12 - Head, Vessels

13 - Head, Nerves

14 - Head, Internal Organs

15 - Head, Skeletal

16 - Head, Concussive Injury

1. Select applicable AIS specific structure.
2. Click magnifying glass next to AIS code.
3. Click search after pop-up screen populates.
4. Select AIS code from drop down menu.

# MAVEN - Injury Severity Information - Injury

Search Reference Code - Google Chrome  
https://injury.dshs.texas.gov/injury/searchReferenceCode.do

### Search Reference Code

AIS Code  
Search term(s):   
Match Type:  ▼

#### Search Results

110600.1 - Scalp, laceration NFS
110602.1 - Scalp, laceration, minor; superficial
110604.2 - Scalp, laceration, major; >10cm long and into subcutaneous tissue
110606.3 - Scalp, laceration, blood loss >20% by volume

Showing 1 to 4 of 4 entries

First Previous  Next Last

Option 2:

1. Click magnifying glass next to AIS Code.
2. Type in injury description in pop-up screen.
3. Select applicable AIS code from drop down list.

# MAVEN - Injury Severity Score Information (ISS)

## Injury Severity Information - a a - Patient Record - Hospital

AIS Version	AIS 05, Update 08	▼
AIS Code - Direct Entry		 
AIS Body Region 	Head	▼ <a href="#">Add New</a>
AIS Specific Structure	11 - Head, Whole Area	▼
AIS Code	110602.1 - Scalp, laceration, minor; superficial	 
Locally Calculated ISS	1	
Mechanism of injury		▼
Injury type		▼

If locally calculated ISS score does not populate or displays "0".

1. Exit injury severity information question package.
2. Re-enter injury information question package and the locally calculated ISS score will be displayed.

# References

American College of Surgeons. (2021). *National trauma data standard: Data dictionary 2022*.  
<https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb/ntds/data-dictionary>

Association for the Advancement of Automotive Medicine. (2008). *Abbreviated Injury Scale 2005: Update 2008*.