

Michigan Data: Using Quality Data to Tell the Story

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Mission

MDHHS provides services and administers programs to improve the health, safety, and prosperity of the residents of the state of Michigan.

New Year, New Data Dictionary



www.michigan.gov/mdhhs/doing-business/trauma/registry

ENGLISH

CY 2026 Michigan
Trauma Registry

DATA DICTIONARY

Significance of the Data Dictionary



STANDARDIZES
DATA
COLLECTION IN
TRAUMA CARE



MAINTAINS
UNIFORMITY
ACROSS
DIFFERENT
INSTITUTIONS



IMPROVES DATA
QUALITY AND
RELIABILITY



ENHANCES THE
ABILITY TO
CONDUCT
MEANINGFUL
RESEARCH AND
ANALYSIS



ENSURES
COMPLIANCE
WITH
REGULATORY
REQUIREMENTS

Consequences of Not Following the Data Dictionary



Inconsistencies and errors in reporting



Impact on patient care, research and funding



Inaccurate measures of performance of Trauma Programs



Inability to identify Performance activities



Errors in Benchmark Reporting

Post Data
Submission
analysis

Hospital Length of Stay –
Calendar Days
(until DC orders written)

Facility

-85	A
-26	B
99	C
733	D

Sequencing of ICD-10 Injury Codes



ICD-10 PRIMARY EXTERNAL CAUSE CODE

DESCRIPTION

External cause code used to describe the mechanism (external factor) that caused the injury event.

ELEMENT VALUES

- Relevant ICD-10-CM CA code value for injury event

LIST THE LEADING REASON FOR THEIR ADMISSION FIRST

ICD-10 Injury Codes Additional Information

Multiple Cause Coding Hierarchy

2 or more events cause separate injuries,
an external cause code should be assigned
for each cause.



The first-listed external cause code should correspond to the cause of the most serious diagnosis due to an assault, accident, or self-harm, following this hierarchy.

Reporting Discrepancies

ICD-10 Diagnosis Code	ICD-10 Diagnosis Description	AIS Code	ISS Region
S06.5	Traumatic subdural hemorrhage		
S72.0	Fracture of head and neck of femur		

ISS Region Calculated	Head	Face	Chest	Abdomen	Extremity	External	ISS
	0	0	0	0	0	0	0

Validating Data

ICD-10 Diagnosis Code	ICD-10 Diagnosis Description	AIS Code	ISS Region
S06.5X0A	Traumatic subdural hemorrhage without LOC, initial encounter	140651.3	Head
S72.015A	Unspecified fracture of head of right femur, initial encounter for closed fracture	853171.3	Extremity
S70.01XA	Contusion, right hip, initial encounter	810402.1	External

ISS Region Calculated	Head	Face	Chest	Abdomen	Extremity	External	ISS
	3	0	0	0	3	1	19

What story does your data tell?



**1 Follow the
Data Dictionary**



**2 Prepare and follow
your Data Quality Plan**



**3 Review and
Validate your data**



**4 Fill out mock PRQ data sections to
assess your survey preparedness**

Data Dashboards

Data Dashboards

- What is a data dashboard?
 - Visual display of information
 - Tracks performance and trends
- How can a data dashboard be useful?
 - May be useful to program staff, facilities, and regions for reporting
 - Grant proposals
 - Decision making and resource allocation
 - Overall surveillance
- Will one data dashboard answer all questions?
 - Probably not
 - Dashboards can be a jumping off point (help to refine a question/project)
 - Facilities may use their own dataset to supplement
 - Regional inventories
 - Additional data sources can help to provide more information

Michigan Trauma Registry Dashboard



- 2017-2024
- NTDB inclusion criteria
- Over 450,000 records included in the dashboard
- Region and year filters
- Data points include
 - Injury categories
 - Age group
 - Sex
 - ED disposition
 - Injury severity score

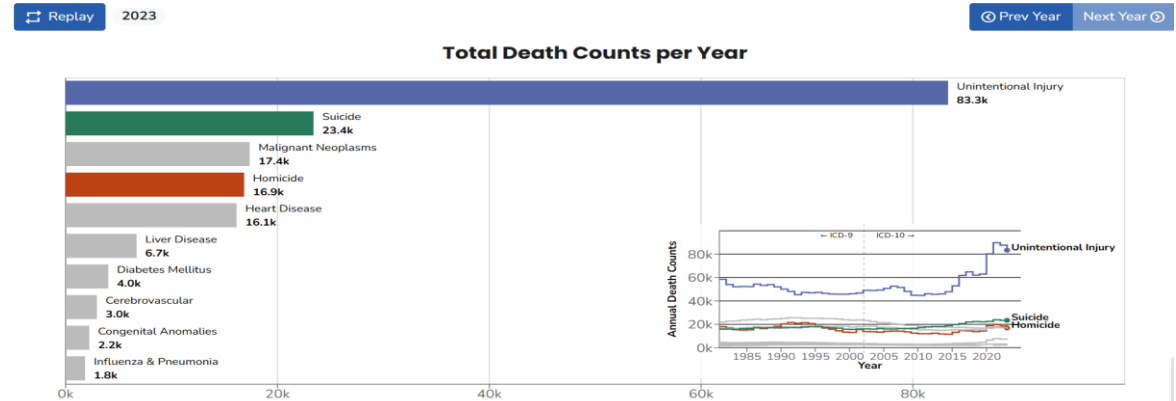
Demonstration

Additional Injury Data Sources

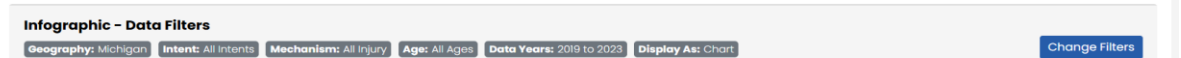
- MDHHS-Injury and Violence Data (<https://www.michigan.gov/mdhhs/safety-injury-prev/environmental-health/injury-and-violence-data>)
- CDC-WISQARS (<https://wisqars.cdc.gov/>)

Top Ten Leading Causes of Death in the U.S. for Ages 1-44 from 1981-2023

How to use: Click play to start. When animation completes, click repeat to start over again.



All Intents Deaths due to All Injury among Persons Aged All Ages Years, 2019 to 2023, Michigan



Number of Deaths

43,872

Population

50,164,081

Fatal Injury Rate (per 100,000)

83.44

Fatal Injury Cost in 2020:

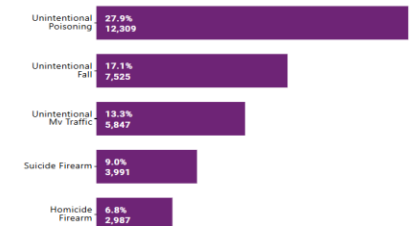
\$83.12 B



Years of Potential Life Lost before Age 65:

767,144 Years

Top 5 Causes of Injury Death in this Age Group:



Thank You

