2021 Arizona Trauma System Snapshot



Trauma Incidents Reported

65,396

Total Trauma Incidents Reported in Arizona State Trauma Registry* 474,239

Number of Injury-Related Discharges in Hospital Discharge Database*

Trauma Centers - 47 Total

13

Level I Trauma Centers Level I Pediatric Trauma Center 6 Level III Trauma Centers

Level IV
Trauma Centers

Mortality

1,716

Total Deaths Reported in Arizona State Trauma Registry* (2.62% of total trauma incidents)

Deaths by Mechanism of Injury

Fall - 611 Deaths

Firearm - 327 Deaths

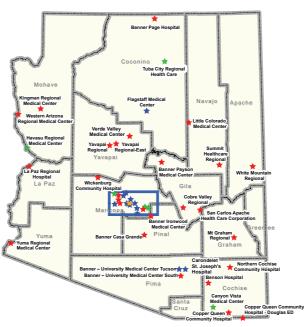
MVT - Occupant - 304 Deaths

MVT - Pedestrian - 137 Deaths

MVT - Motorcyclist - 95 Deaths

Of the top 6
Mechanisms
of Injury, Firearms
had the highest
mortality proportion
(15.53%), followed
by Motor Vehicle
Trauma Occupant (2.48%).

Arizona Trauma Centers



13 Arizona
Counties
have at least
1 Trauma Center

Median Injury to Emergency Department Arrival Time

> **Urban** 47 Minutes

Rural 90 Minutes

Top 6 Mechanisms of Injury

- **1** Fall 30,788 (47.07%)
- Motor Vehicle Trauma Occupant 12,247 (18.72%)
- **3** Struck By/Against 3,942 (6.02%)
- 4 Motor Vehicle Non-Traffic 2,897 (4.42%)
- **5** Cut/Pierce 2,198 (3.36%)
- **6** Firearm 2,105 (3.21%)



Nearly 1 in 10 Injuries were due to Assault or Self-Harm

Pediatrics (0-17)

7,069

78

Pediatric Trauma Pediatric Patients Deaths



Firearms accounted for **nearly 1/3 of**Pediatric Deaths



MVT-Occupantaccounted for over1/4 of Pediatric Deaths

Top 6 Mechanisms of Injury

- 1 Fall 2,130 (30.13%)
- **2) MVT Occupant** 1,558 (22.04%)
- **3** MV Non-Traffic 602 (8.52%)
- **4** Struck By/Against 537 (7.60%)
- **5 Child Abuse** 277 (3.92%)
- **6** Bites/stings, non-venomous 234 (3.31%)

Risk and Protective Factors - Opportunities for Injury Prevention

29.67%

of motor vehicle occupants were NOT using a passenger restraint

Passengers were

more likely to die in a car accident if not wearing a seatbelt

57.2% of motorcyclists
36.5% of pedalcyclists
Less than 1/3 of off-

wore helmets

road vehicle occupants

Motorcyclists without helmets were:

2x more likely to die

more likely to suffer a Traumatic Brain Injury

25%

of trauma patients were suspected or confirmed of being under the influence of drugs or alcohol

Males had a mortality rate over **2x** higher than females

Adults 65 years and older had the **highest trauma rate** compared to all other age groups

The most significant risk factor associated with traumatic injuries is **drug and alcohol use**

*The data included in this report includes incidents of traumatic injury with an Emergency Department Hospital Arrival Date between January 1, 2021 and December 31, 2021 reported from facilities participating in the Arizona State Trauma Registry (ASTR) only. Trauma injury and mortality reported in ASTR are compared to the Hospital Discharge Database (HDD) and Vital Statistics Information Management System's Database Applications for Vital Events (DAVE) to demonstrate the total impact of trauma injuries and deaths that occurred outside of designated trauma centers.