



Idaho
Trauma Registry

Trauma in Idaho

2014

Facts and Figures
At-a-Glance



IDAHO DEPARTMENT OF
HEALTH & WELFARE

FACTS AND FIGURES

INCIDENCE OF TRAUMA

- Twenty-seven percent (27%) of injuries among males were among those ages 65 or older.
- Forty-eight percent (48%) of injuries among females were among those aged 65+.
- Most injuries occurred at home (39%) followed by streets and highways (26%).

Cause of Injury and Severity

Injury Severity Scoring (ISS) is based on expected mortality, the need for hospitalization and intensive care, length of hospital stay, cost and treatment complexity, disability, and quality of life. ISS in this report ranges from 1 (minor) to 25+ (very severe to virtually un-survivable).¹

- Injury severity was known for all cases reported to ITR.
- All injury severities were minor and/or moderate (84%).
- Falls (44%) were the leading cause of injury followed by motor vehicle collisions (25%).

Fall Injuries

- The 65+ age group sustained 60% of reported falls.
- About half (51%) of all fall injuries were to the head and lower extremity.
- Individuals aged 64 years or less were about 2.5 times (2.6) to be discharged home as those aged 65 years and older.

- Individuals aged 65+ years are almost 6 times (5.8) as likely to be discharged to a Skilled Nursing Facility as those 64 years and younger.
- For patients under the age of 65 years males are almost twice (1.8) as likely to be injured by a fall as females.

Motor Vehicle Collision Injuries

In this report, Motor Vehicle Collisions (MVC) refers to collisions occurring on interstate highways, state highways or public local roads. In 2014, there were 22,134 motor vehicle collisions in Idaho resulting in 11,768 injuries, of which 1,273 were serious and 186 were fatalities.⁵

While the effectiveness of safety restraint use among MVC occupants injured in Idaho may not always be apparent from the analyses presented in this report, research reveals there is a significant reduction in injury severity among users of safety restraints. Safety restraint use among MVC occupants decreases the severity of injuries sustained by users; possibly excluding them from the analyses in this report which contains the most serious injuries meeting the ITR inclusion criteria. MVC occupants who die at the scene are also excluded from analyses based on ITR inclusion criteria.

In 2012, the national Fatal Accident Reporting System (FARS) data revealed 55% of ALL persons fatally injured in motor vehicle crashes died at the scene.⁶ Therefore, it should be expected that a large percentage of MVC fatalities in Idaho would not meet ITR inclusion criteria and would not be included in these analyses. In Idaho during 2014, there were 6,908 single-vehicle crashes leading to 106 deaths. Almost two thirds (65%) of fatal single vehicle crashes were rollovers. Just 23% of those killed in single vehicle rollovers were restrained. Eighty-seven percent (87%) of those not restrained, and fatally injured in single vehicle rollovers, were either totally or partially ejected

from the vehicle.⁵ It has been estimated that 3-point safety restraints are 74% effective in preventing deaths in rollovers of passenger cars and 80% effective in preventing deaths in light passenger trucks.⁶

Impaired driving crashes are identified by information provided on the crash report. A law enforcement officer determines whether the driver was alcohol or drug impaired or whether alcohol or drugs contributed to the crash, regardless of whether a Blood Alcohol Content (BAC) test was given or not. Crashes where a sober driver collided with an impaired pedestrian or bicyclist are also included.⁵

Distracted driving crashes are those where the investigating law enforcement officer indicates either inattention or a distraction in or on the vehicle was a contributing factor in the crash. Distraction is defined by the Office of Highway Safety as a specific type of inattention that occurs when drivers divert their attention away from the task of driving to focus on another activity. Distraction is categorized into the three following types: visual (taking your eyes off the road), manual (taking your hands off the wheel), and cognitive (taking your mind off the road).⁵

Aggressive driving behaviors include: failure to yield right of way, fail to obey stop sign, exceeded posted speed, driving too fast for conditions, following too close, and fail to obey signal. Aggressive driving is not to be confused with road rage, which is a deliberate and violent act against another driver or individual and is a criminal offense.⁵

- Males were about 1.6 times more likely to be injured in motor vehicle collisions than females.
- Motor vehicle collision injuries peaked at 21% for individuals 15-24 years of age and continue to decline until 65+ years of age.

Other Transport Injuries

Other Transport Injuries include injuries sustained from off-road vehicles used for recreational or sporting activities (not on state roads or highways), bicycles (other than collisions with motor vehicles), animals being ridden, and water and air transport.

- Almost three-quarters (73%) of all Other Transport injuries were sustained by males.
- Thirty-one percent (31%) of all body region injuries were to the thorax, upper and lower extremities followed by the head and face (25%).

Firearm Injuries

- Forty-one percent (41%) of firearm injuries occurred among individuals aged 15-34 years.
- Almost three-quarters (74%) of firearm injuries were sustained to the head, abdomen, upper and lower extremities.
- Thirty-nine percent (39%) of firearm injuries were unintentional.
- There were 4 injuries among children aged 4 and younger.

All Other Injuries

The All Other Injuries category includes all reported injuries not categorized as motor vehicle collision, other types of transport, falls, and firearms. Examples of other types of injuries are burns, drowning, assaults, being struck by or striking an object, and being injured by machinery.

- Males were more than three times (79%) as likely to sustain all other injuries as females.
 - All other injuries peaked at 15-34 years of age among males (37%).
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- Sixty-seven percent (67%) of all other injuries were sustained to the head, face and both extremities.

Pediatric Injuries

For this report, patients aged 0-17 years are considered to be pediatric.

- Falls account for 32% of pediatric injuries.
- Home is the highest injury location for pediatric injury at 34%.
- Seventeen individuals under the age of 18 were injured by firearms.

Head Injuries

Head Injuries include injury to the Head (Cranium and Brain) as classified by Abbreviated Injury Scale © 2005 – Update 2008.⁵ Patients with multiple head injuries are only counted once.

- Sixty-four percent (64%) of all head injuries were among males.
- Among females, 46% of all head injuries were in the 65+ age group.
- Falls were the leading cause of head injuries at 45% followed by motor vehicle crashes at 32%.
- Forty-nine percent (49%) of all patients with head injuries were discharged home or to self-care.

Cost of Injury

Calculating the ‘cost’ of hospital care of trauma patients is complex because ‘cost’ might reflect the true cost of services, charges for services or reimbursement, and do not reflect contractual costs. Additionally, hospital ‘costs’ do not include physician and other service providers, rehabilitation, or other needs outside of the hospital setting.

There are many ways to calculate the value of a life including medical costs and what an individual would pay for a year of life. In 2010, the National Highway Safety Administration calculated the lifetime economic cost to society for each motor vehicle fatality.⁶ In 2014 costs were adjusted for inflation using the Gross Domestic Product Implicit Price Deflator. The cost of traffic crashes in 2014 amounts to \$1,504 for every person in Idaho.⁵

In 2014, 748 Idahoans lost their lives to unintentional injury and 320 to intentional injury¹.

- Payer information was available for 99% of hospital discharges. Of those, 39% were covered by commercial insurance, 41% were covered by Medicare and/or Medicaid, and 8% were self pay or uncompensated care.

Outcomes of Trauma

There were 5,238 cases reported to the ITR that met the inclusion criteria for patients injured during the year of 2014. An additional 615 Death Certificate Only (DCO) cases were included in the Trauma/Mortality/Survival data table¹ (not reported by a hospital).

- Fifty percent (50%) of all trauma patients were discharged home with no additional services.

EMS Systems

The availability of services provided by local EMS may mean the difference between life and death. Improved post-crash victim care works to reduce the severity of trauma incurred by crash victims. This care is especially critical in rural areas because of the time needed to transport a victim to a trauma hospital.

- Patients who are transported by EMS are 2.9 times more likely to have severe or very severe injuries.

References

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