Traumatic Brain Injury Data

Arizona 2013

Jennifer Dudek MPH
Traumatic Brain Injuries, Arizona 2013

- 1,326 Deaths
- 6,260 Inpatient Hospitalizations
- 50,807 Emergency Department Visits
- ??? Untreated Injuries, or those treated in other outpatient facilities
5 Year Trends
Age-Adjusted TBI Mortality Rates by Sex per 100,000 Residents, Arizona, 2009-2013
Age-Adjusted TBI Mortality Rates per 100,000 Residents by Manner of Death, Arizona, 2009-2013

- Unintentional
- Suicide
- Homicide
Age-Adjusted TBI Mortality Rates Per 100,000 Residents By Mechanism, Arizona, 2009-2013
Age-Adjusted Non-Fatal TBI-Related Inpatient Hospitalization Rates by Sex, Arizona, 2009-2013
Age-Adjusted Non-Fatal TBI-Related Inpatient Hospitalization Rates Per 100,000 Residents By Manner Of Injury, Arizona, 2009-2013
Age-Adjusted Non-Fatal TBI Inpatient Hospitalization Rates per 100,000 Residents by Mechanism and Sex, Arizona, 2009-2013
Age-Adjusted Non-Fatal TBI-Related Emergency Department Visit Rates by Sex, Arizona, 2009-2013
Age-Adjusted Non-Fatal TBI-Related Emergency Department Visit Rates per 100,000 Residents by Manner of Injury, Arizona, 2009-2013
Age-Adjusted Non-Fatal TBI-Related Emergency Department Visit Rates Per 100,000 Residents By Selected Cause Of Injury, Arizona, 2009-2013
Mortality, 2013
Age-Specific TBI-Related Mortality Rates per 100,000 Residents by Sex, Arizona, 2013 (n=1,326)
Age-Adjusted TBI-Related Mortality Rates per 100,000 Residents by Race/Ethnicity, Arizona, 2013 (n=1,326)
Age-Adjusted TBI-Related Mortality Rates per 100,000 Residents by County, Arizona, 2013 (n=1,326)*

*Only Counties with 20 or more records were included in graph
# TBI Deaths by Cause, Arizona 2013

<table>
<thead>
<tr>
<th>Cause</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearm</td>
<td>646</td>
<td>49%</td>
</tr>
<tr>
<td>Fall</td>
<td>325</td>
<td>25%</td>
</tr>
<tr>
<td>Motor vehicle traffic</td>
<td>159</td>
<td>12%</td>
</tr>
<tr>
<td>Other/unspecified/unknown</td>
<td>157</td>
<td>12%</td>
</tr>
<tr>
<td>Other land transport</td>
<td>16</td>
<td>1%</td>
</tr>
<tr>
<td>Other pedestrian/bicycle</td>
<td>10</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Poisoning</td>
<td>13</td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1326</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Age-Adjusted TBI Mortality Rate Due To Firearm Suicides
By Sex And Year, Arizona, 2009-2013

![Graph showing the age-adjusted TBI mortality rate due to firearm suicides by sex and year in Arizona from 2009 to 2013. The graph indicates a general increase in the rate for males over the years, while the rate for females remains relatively stable. The total rate shows a slight increase as well.](image-url)
Fall-Related TBI Mortality Rates per 100,000 Residents by Age and Sex, Arizona, 2013 (n=325)

- Males (n=182)
- Females (n=143)
- Total (n=325)
Inpatient Hospitalizations, 2013
TBI-Related Non-Fatal Inpatient Hospitalization Rates per 100,000 Residents
By Age Group and Sex, Arizona, 2013

- <1yr
- 1-4yr
- 5-14yr
- 15-24yr
- 25-34
- 35-44
- 45-54
- 55-64
- 65-74
- 75-84
- 85+

Males (n=3,815) vs. Females (n=2,443)
Age-Adjusted TBI-Related Non-Fatal Inpatient Hospitalization Rates per 100,000 Residents, by Race/Ethnicity, Arizona, 2013 (n=6,260)

American Indian (n=604)
White, non-Hispanic (n=3,985)
Black, non-Hispanic (n=196)
Hispanic (n=1,258)
Asian/Pacific Islander (n=103)
Age-Adjusted TBI-Related Non-Fatal Inpatient Hospitalization Rates per 100,000 Residents, by County, Arizona, 2013 (n=6,260)
<table>
<thead>
<tr>
<th>Cause</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>2,966</td>
<td>47%</td>
</tr>
<tr>
<td>Motor vehicle traffic</td>
<td>1,749</td>
<td>28%</td>
</tr>
<tr>
<td>Struck by/against</td>
<td>606</td>
<td>10%</td>
</tr>
<tr>
<td>Other/unspecified</td>
<td>483</td>
<td>8%</td>
</tr>
<tr>
<td>Transport</td>
<td>247</td>
<td>4%</td>
</tr>
<tr>
<td>Other pedal cycle</td>
<td>125</td>
<td>2%</td>
</tr>
<tr>
<td>Firearm</td>
<td>53</td>
<td>1%</td>
</tr>
<tr>
<td>Cut/pierce</td>
<td>31</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Total</td>
<td>6,260</td>
<td>100%</td>
</tr>
</tbody>
</table>
Elder Fall-Related Non-Fatal TBI Inpatient Hospitalization Rates per 100,000 Residents 75 years of age and older, by Race/Ethnicity, Arizona, 2013

- American Indian (n=40)
- Asian/Pacific Islander (n=27)
- White, non-Hispanic (n=1,098)
- Hispanic (n=122)
- Black, non-Hispanic (n=15*)
Emergency Department Visits, 2013
Age-Specific TBI Emergency Department Visit Rates per 100,000 Residents, by Sex, Arizona, 2013 (n=50,807)

- Males (n=26,064)
- Females (n=24,743)
Age-Adjusted TBI-Related Non-Fatal Emergency Department Rates per 100,000 Residents, by Race/Ethnicity, Arizona, 2013 (n=50,807)

- Black/African American (n=2,601)
- White, non-Hispanic (n=31,229)
- American Indian (n=2,235)
- Hispanic (n=13,276)
- Asian (n=753)
Age-Adjusted TBI-Related Non-Fatal Emergency Department Rates per 100,000 Residents, by County, Arizona, 2013 (n=50,807)
### TBI Emergency Department Visits by Cause, Arizona 2013

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<thead>
<tr>
<th>Cause</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>26,679</td>
<td>53%</td>
</tr>
<tr>
<td>Struck by/against</td>
<td>11,591</td>
<td>23%</td>
</tr>
<tr>
<td>Motor vehicle traffic</td>
<td>7,083</td>
<td>14%</td>
</tr>
<tr>
<td>Other/unspecified</td>
<td>3,167</td>
<td>6%</td>
</tr>
<tr>
<td>Other pedal cycle</td>
<td>1,161</td>
<td>2%</td>
</tr>
<tr>
<td>Transport</td>
<td>1,126</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>50,807</td>
<td>100%</td>
</tr>
</tbody>
</table>
Pedestrian and Bicycle Injury Data in Children 0-19 Years Old

Arizona, 2009-2013

Jennifer Dudek MPH
Mortality Rates for Pedestrian and Bicycle Injuries in Children 0-19 Years of Age per 100,000 Children Arizona 2009-2013
Inpatient Hospitalization Rates for Pedestrian and Bicycle Injuries in Children 0-19 Years of Age per 100,000 Children Arizona 2009-2013
Emergency Department Rates for Pedestrian and Bicycle Injuries in Children 0-19 Years of Age per 100,000 Children Arizona 2009-2013