Unintentional injuries and violence are the leading causes of death, hospitalization, and disability for children ages 1-18. This fact sheet provides a state snapshot of data on the injury-related Maternal and Child Health Block Grant National Performance Measures and Health Status Indicators, with a special focus on disparities based on race, gender, and rural/urban residence. The fact sheet is intended to be a helpful and easy-to-use tool for needs assessments, planning, program development, and presentations.

The Children’s Safety Network (CSN) National Injury and Violence Prevention Resource Center, funded by the Maternal and Child Health (MCH) Bureau, works with states to utilize a science-based, public health approach for injury and violence prevention (IVP). CSN is available to provide information and technical assistance on injury surveillance and data; needs assessments; best practices; and the design, implementation, and evaluation of programs to prevent child and adolescent injuries.

### Major Causes of Injury Death

Understanding injury rankings among other causes of death is important in determining their physical and economic role in each state. Knowing what types of injuries cause the majority of deaths and hospitalizations can inform program planning and development efforts. Table 1 shows the top 5 causes of death by age group in the state. Unintentional and intentional injury deaths are highlighted. Table 2 shows the top 5 causes of injury death by age group in the state. Intentional injury deaths are highlighted.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Age Group</th>
<th>Death Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt;1</td>
<td>Congenital Anomalies 765, Unintentional Injury 229, Unintentional Injury 132, Unintentional Injury 152, Unintentional Injury 826, Unintentional Injury 1,082</td>
</tr>
<tr>
<td>2</td>
<td>1 - 4</td>
<td>Congenital Anomalies 74, Malignant Neoplasms 50, Homicide 315, Homicide 482</td>
</tr>
<tr>
<td>3</td>
<td>5 - 9</td>
<td>Homicide 45, Congenital Anomalies 20, Suicide 37, Suicide 269, Suicide 432</td>
</tr>
<tr>
<td>4</td>
<td>10 - 14</td>
<td>Malignant Neoplasms 43, Homicide 14, Homicide 28, Malignant Neoplasms 84, Malignant Neoplasms 93</td>
</tr>
<tr>
<td>5</td>
<td>15-19</td>
<td>Influenza &amp; Pneumonia 23, Cerebrovascular ****, Congenital Anomalies 16, Heart Disease 30, Heart Disease 58</td>
</tr>
<tr>
<td>6</td>
<td>20-24</td>
<td></td>
</tr>
</tbody>
</table>
Childhood injury is also a leading cause of morbidity. Table 3 provides information from the state’s hospital discharge data on the leading causes and incidence of hospital admissions by age group.

Table 2: Leading Causes and Total 5-Year Incidence of Injury Deaths by Age Group, Arizona, 2004-2008

<table>
<thead>
<tr>
<th>Rank</th>
<th>&lt;1</th>
<th>1 - 4</th>
<th>5 - 9</th>
<th>10 - 14</th>
<th>15 - 19</th>
<th>20 - 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Suffocation 76</td>
<td>Drowning 89</td>
<td>MV Traffic 72</td>
<td>MV Traffic 95</td>
<td>MV Traffic 587</td>
<td>MV Traffic 675</td>
</tr>
<tr>
<td>2</td>
<td>Homicide 48</td>
<td>MV Traffic 55</td>
<td>Drowning 17</td>
<td>Suicide 37</td>
<td>Homicide 315</td>
<td>Homicide 482</td>
</tr>
<tr>
<td>3</td>
<td>MV Traffic 17</td>
<td>Homicide 45</td>
<td>Homicide 14</td>
<td>Homicide 28</td>
<td>Suicide 269</td>
<td>Suicide 432</td>
</tr>
<tr>
<td>4</td>
<td>Drowning ****</td>
<td>Pedestrian Other 32</td>
<td>Fire/Burn 10</td>
<td>Other Land Transport 13</td>
<td>Poisoning 117</td>
<td>Poisoning 218</td>
</tr>
<tr>
<td>5</td>
<td>Natural/Environmental ****</td>
<td>Suffocation 12</td>
<td>Other Land Transport ****</td>
<td>Suffocation ****</td>
<td>Other Land Transport 33</td>
<td>Drowning 49</td>
</tr>
</tbody>
</table>

Note: All mechanisms of suicide and homicide were combined according to intent. Each listed mechanism is unintentional except those otherwise noted. **** = indicates that the cell values range from 1-10 and are suppressed for data confidentiality purposes.

Table 3: Leading Causes and Annual Incidence of Hospital-Admitted Injuries by Age Group, Arizona Residents, 2009

<table>
<thead>
<tr>
<th>Rank</th>
<th>&lt;1</th>
<th>1 - 4</th>
<th>5 - 9</th>
<th>10 - 14</th>
<th>15 - 19</th>
<th>20 - 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unintentional Fall 135</td>
<td>Unintentional Fall 322</td>
<td>Unintentional Fall 283</td>
<td>Unintentional Fall 205</td>
<td>Unintentional MVT 565</td>
<td>Unintentional MVT 741</td>
</tr>
<tr>
<td>2</td>
<td>Unintentional Other Specified, NEC 131</td>
<td>Unintentional Fire/Burn 117</td>
<td>Unintentional MVT 125</td>
<td>Unintentional MVT 155</td>
<td>Self-Inflicted 335</td>
<td>Self-Inflicted 474</td>
</tr>
<tr>
<td>3</td>
<td>Assault 44</td>
<td>Unintentional Bites &amp; Stings 109</td>
<td>Unintentional Bites &amp; Stings 71</td>
<td>Unintentional Transport, Other 113</td>
<td>Assault 285</td>
<td>Assault 442</td>
</tr>
<tr>
<td>4</td>
<td>Unintentional Suffocation 38</td>
<td>Unintentional Other Specified, NEC 102</td>
<td>Unintentional Other Specified, NEC 48</td>
<td>Unintentional Struck By/Against 95</td>
<td>Unintentional Fall 267</td>
<td>Unintentional Fall 315</td>
</tr>
<tr>
<td>5</td>
<td>Undetermined Poisoning 24</td>
<td>Unintentional Poisoning 100</td>
<td>Unintentional Pedal Cyclist, Other 42</td>
<td>Unintentional Pedal Cyclist, Other 59</td>
<td>Unintentional Transport, Other 164</td>
<td>Unintentional Poisoning 174</td>
</tr>
</tbody>
</table>

Note: MVT = Motor Vehicle Traffic. NEC = Not Elsewhere Classifiable. Source: Children’s Safety Network Economics and Data Analysis Resource Center (CSN EDARC), at Pacific Institute for Research and Evaluation (PIRE). Calverton, MD, January 2012. Incidence based on 2009 data from the state and obtained from the Arizona State Inpatient Databases (SID), Healthcare Cost and Utilization Project (HCUP), Agency for Healthcare Research and Quality (AHRQ). These injuries exclude patients who were dead at the time of discharge, readmission cases, transfers (e.g., from another short or long-term care facility, different acute care hospital), medical misadventures, and/or who suffered non-acute injuries. All counts were based on the patient’s state of residence.
National Performance Measures

The Federal Maternal and Child Health Bureau Block Grant program requires State MCH programs to report on 18 National Performance Measures (NPM), two of which directly address injuries. NPM #10 addresses the rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children. NPM #16 addresses the rate of suicide deaths among youths aged 15-19.

The following figures provide information related to NPMs #10 and #16.

NPM 10: Reducing Unintentional Motor Vehicle Deaths to Children Ages 0-14:

Figure 1: The Rate of Deaths to Children Aged 14 Years and Younger Caused by Motor Vehicle Crashes per 100,000 Children, Arizona and US, 2004-2008

Figure 1 Source: WISQARS Fatal Injury Reports, 2004-2008 and WISQARS Injury Mortality Reports, 2003-2007
16% of children ages 0-14 involved in a motor vehicle fatality were occupants.

Note: Unspecified/Other primarily includes cases where a child fatality was coded as an unspecified motor-vehicle accident or a collision between specified motor vehicles, among others. In addition, motorcyclist fatalities were collapsed into this category because incidence were fewer than 10 and data were from years 2004-2008.

Figure 2 Source: WISQARS Fatal Injury Reports, 2004-2008 and WISQARS Injury Mortality Reports, 2003-2007

Figure 3 Source: WISQARS Injury Mortality Reports, 2003-2007
In the state of Arizona from 2004 to 2008, the rate of motor vehicle crash involved fatalities for males age 15-19 was 66 percent higher than for females age 15-19.

Data are only reported for urban areas that exist within the state. In addition, data for some age groups and areas are not reported due to few or no deaths, as indicated by a dotted line.

Figure 4 Source: WISQARS Fatal Injury Reports, 2004-2008 and WISQARS Injury Mortality Reports, 2003-2007

Figure 5 Source: CDC WONDER Multiple Cause of Death data, 2003-2007 and Urban-Rural Definition Classification System

NPM 16: Reducing Suicide Deaths Among Teens Ages 15-19:

Figure 6 Source: WISQARS Fatal Injury Reports, 2004-2008 and WISQARS Injury Mortality Reports, 2003-2007
47% of youth ages 15-19 completed suicide by using a firearm.

Note: Unspecified/Other includes all self-inflicted fatal injuries in which the mechanism was not identified or the coded mechanism was other than those named in the pie chart.

Figure 7 Source: WISQARS Fatal Injury Reports, 2004-2008 and WISQARS Injury Mortality Reports, 2003-2007

Figures 8 & 9 Source: Youth Online: High School Youth Risk Behavior Survey (YRBS), 2003-2009
Figure 10: The Rate (per 100,000) of Completed Suicides by Race among Youths Aged 15-24, Arizona, 2003-2007

Rate per 100,000 population

15-19

20-24

White

Black

Asian or Pacific Islander

American Indian

Note: Rates based on two or fewer deaths were excluded.

Figure 11 Source: WISQARS Injury Mortality Reports, 2003-2007

Figure 11: The Rate (per 100,000) of Completed Suicides by Gender among Youths Aged 15-24, Arizona, 2004-2008

Rate per 100,000 population

15-19

20-24

F

M

In the state of Arizona from 2004 to 2008, the rate of suicide deaths for males age 15-19 is 2.3 times higher than for females age 15-19.

Figure 12 Source: WISQARS Fatal Injury Reports, 2004-2008 and WISQARS Injury Mortality Reports, 2003-2007

Figure 12: The Rate (per 100,000) of Completed Suicides by Urbanicity Among Youths Aged 15-24, Arizona, 2003-2007

Rate per 100,000 population

Large Central Metro

Large Fringe Metro

Medium Metro

Small Metro

Metropolitan

Nonmetro

15-19

20-24

Data are only reported for urban areas that exist within the state. In addition, data for some age groups and areas are not reported due to few or no deaths.

Figure 12 Source: CDC WONDER Multiple Cause of Death data, 2003-2007 and Urban-Rural Definition Classification System
**IVP Health Status Indicators**

The Maternal and Child Health Bureau requires every state to report on 12 Health Status Indicators. Six of the indicators are related to IVP. The two figures below reflect the data reported for the IVP Health Status Indicators by the state in their Maternal and Child Health Block Grant Application Form 17, 2011.

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**Figure 13: Nonfatal Injury Health Status Indicators, Arizona 2005-2010**

- Rate per 100,000 population

**Figure 14: Fatal Injury Health Status Indicators, Arizona 2005-2010**

- Rate per 100,000 population

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Figures 13 & 14 Source: [HRSA Title V Information System Multi-Year Report](https://www.hrsa.gov/)

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![Image of children wearing helmets]
State Specific Performance Measures and Priority Needs
Each state develops up to 7 – 10 State Performance Measures and priority needs. The following provides information about the states’ selected 2012 injury-related performance measures and priority needs.

State Performance Measures:
Arizona has the following injury-related State Performance Measures:
• To reduce the percent of high school students who report having experienced physical violence by a dating partner during the past 12 months.
• Reduce the percent of preventable fetal and infant deaths out of all fetal and infant deaths.
• Reduce emergency department visits for unintentional injuries per 100,000 children age 1-14.

Priority Needs:
Arizona has the following injury-related priority need:
• Reduce the rate of injuries, both intentional and unintentional, among Arizonans.

This fact sheet presents a cursory review of the injury morbidity and mortality data available for the state. The figures and tables in this fact sheet can help you understand the state’s progress in addressing motor vehicle traffic injuries and suicide. To target and address these and other injury issues, it is critical to understand this data. CSN can assist you in conducting detailed data analyses, utilizing surveillance systems, and undertaking needs assessments. For assistance, contact the Children’s Safety Network at csninfo@edc.org.

State Contact Information
MCH Director: Shiela Sjolander, sjolans@azdhs.gov
IVP Director/EMSC Contact: Tomi St. Mars, stmarst@azdhs.gov
CDR Coordinator: Marla Herrick, marla.herrick@azdhs.gov

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Register for the CSN newsletter: http://go.edc.org/csn-newsletter
Need TA? Have Questions? E-mail: csninfo@edc.org

CSN is funded by the Health Resources and Services Administration’s Maternal and Child Health Bureau (U.S. Department of Health and Human Services). A project of the Education Development Center, Inc.

January 2012