Missouri 2012 State Fact Sheet

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 1: Leading Causes and Total 5-Year Incidence of Deaths by Age Group, Missouri, 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>Congenital Anomalies 628</td>
<td>Unintentional Injury 171</td>
<td>Unintentional Injury 117</td>
<td>Unintentional Injury 148</td>
<td>Unintentional Injury 942</td>
<td>Unintentional Injury 1,100</td>
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<td>2</td>
<td>Short Gestation 611</td>
<td>Homicide 55</td>
<td>Malignant Neoplasms 57</td>
<td>Malignant Neoplasms 39</td>
<td>Homicide 251</td>
<td>Homicide 345</td>
</tr>
<tr>
<td>3</td>
<td>Unintentional Injury 243</td>
<td>Congenital Anomalies 43</td>
<td>Congenital Anomalies 17</td>
<td>Suicide 39</td>
<td>Suicide 188</td>
<td>Suicide 308</td>
</tr>
<tr>
<td>4</td>
<td>SIDS 224</td>
<td>Malignant Neoplasms 34</td>
<td>Homicide 16</td>
<td>Homicide 25</td>
<td>Malignant Neoplasms 75</td>
<td>Malignant Neoplasms 100</td>
</tr>
<tr>
<td>5</td>
<td>Maternal Pregnancy Comp. 151</td>
<td>Heart Disease 21</td>
<td>Heart Disease 12</td>
<td>Heart Disease 18</td>
<td>Heart Disease 49</td>
<td>Heart Disease 67</td>
</tr>
</tbody>
</table>

Note. **** = indicates that the cell values range from 1-9 and are suppressed for data confidentiality purposes.

Table 1 Source: WISQARS Leading Causes of Death Reports, 2004-2008.
Table 2. Leading Causes and Total 5-Year Incidence of Injury Deaths by Age Group, Missouri, 2004-2008

<table>
<thead>
<tr>
<th>Rank</th>
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<th>20 - 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Suffocation 211</td>
<td>Homicide 55</td>
<td>MV Traffic 55</td>
<td>MV Traffic 83</td>
<td>MV Traffic 736</td>
<td>MV Traffic 711</td>
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<tr>
<td>2</td>
<td>Homicide 44</td>
<td>MV Traffic 48</td>
<td>Fire/Burn 19</td>
<td>Suicide 39</td>
<td>Homicide 251</td>
<td>Homicide 345</td>
</tr>
<tr>
<td>3</td>
<td>Undetermined Suffocation 14</td>
<td>Fire/Burn 41</td>
<td>Homicide 16</td>
<td>Homicide 25</td>
<td>Suicide 188</td>
<td>Suicide 308</td>
</tr>
<tr>
<td>4</td>
<td>MV Traffic 10</td>
<td>Drowning 32</td>
<td>Drowning 11</td>
<td>Fire/Burn 14</td>
<td>Poisoning 88</td>
<td>Poisoning 251</td>
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<tr>
<td>5</td>
<td>Drowning ****</td>
<td>Suffocation 17</td>
<td>Other Land Transport ****</td>
<td>Drowning 12</td>
<td>Drowning 41</td>
<td>Drowning 30</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 2 Source: National Center for Health Statistics, Multiple Cause of Death Data, 2004-2008.

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

<table>
<thead>
<tr>
<th>Rank</th>
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<th>20 - 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unintentional Other Specified, NEC 82</td>
<td>Unintentional Fall 154</td>
<td>Unintentional Fall 176</td>
<td>Unintentional Fall 214</td>
<td>Self-inflicted 765</td>
<td>Self-inflicted 759</td>
</tr>
<tr>
<td>2</td>
<td>Assault 74</td>
<td>Unintentional Poisoning 110</td>
<td>Unintentional MVT 77</td>
<td>Self-inflicted 165</td>
<td>Unintentional MVT 633</td>
<td>Unintentional MVT 682</td>
</tr>
<tr>
<td>3</td>
<td>Unintentional Fall 57</td>
<td>Unintentional Fire/Burn 102</td>
<td>Unintentional Other Specified, NEC 70</td>
<td>Unintentional MVT 177</td>
<td>Assault 265</td>
<td>Assault 295</td>
</tr>
<tr>
<td>4</td>
<td>Unintentional Fire/Burn 23</td>
<td>Unintentional Bites &amp; Stings 65</td>
<td>Unintentional Bites &amp; Stings 68</td>
<td>Unintentional Struck By/Against 112</td>
<td>Unintentional Fall 222</td>
<td>Unintentional Fall 229</td>
</tr>
<tr>
<td>5</td>
<td>Unintentional Other N/E 18</td>
<td>Unintentional Other Specified, NEC 57</td>
<td>Unintentional Struck By/Against 44</td>
<td>Unintentional Other Specified, NEC 105</td>
<td>Unintentional Other Specified, NEC 183</td>
<td>Unintentional Other Specified, NEC 175</td>
</tr>
</tbody>
</table>

Note: MVT = Motor Vehicle Traffic. NEC = Not Elsewhere Classifiable. N/E = Natural/Environmental. Source: Children’s Safety Network Economics and Data Analysis Resource Center (CSN EDARC), et Pacific Institute for Research and Evaluation (PIRE), Calverton, MD, January 2012. Incidence based on 2009 data from the state and obtained from the Missouri 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 patients’ 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, Missouri and US, 2004-2008](image)

*Figure 1 Source: WISQARS Fatal Injury Reports, 2004-2008 and WISQARS Injury Mortality Reports, 2003-2007*
59% 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 and pedal cyclist fatalities were collapsed into this category because incidence were fewer than 10 and data were from years 2004-2008.
Figure 4: Motor Vehicle Traffic Fatality Rates by Gender among Children and Youths Aged 10-24 for Missouri, 2004-2008

In the state of Missouri from 2004 to 2008, the rate of motor vehicle crash involved fatalities for males age 15-19 was 81 percent higher than for females age 15-19.

Figure 5: Motor Vehicle Traffic Fatality Rates by Urbanicity among Children and Youths Aged 0-24 for Missouri, 2004-2008

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 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: The Rate (per 100,000) of Suicide Deaths among Youths Aged 15 to 19, Missouri and US, 2004-2008

Figure 6 Source: WISQARS Fatal Injury Reports, 2004-2008 and WISQARS Injury Mortality Reports, 2003-2007
48% 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. Self-inflicted Poisonings that were fewer than 10 and from years 2004-2008 were collapsed into this category.


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, Missouri, 2003-2007

![Graph showing suicide rates by race and age group.](image)

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

Figure 10 Source: **WISQARS Injury Mortality Reports, 2003-2007**

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

![Graph showing suicide rates by gender and age group.](image)

In the state of Missouri 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 11 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, Missouri, 2003-2007

![Graph showing suicide rates by urbanicity and age group.](image)

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.

Figures 13 & 14 Source: HRSA, Title V Information System Multi-Year Report
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:
Missouri has the following injury-related State Performance Measure:
• To reduce the percentage of women with a recent live birth who reported frequent postpartum depressive symptoms.

Priority Needs:
Missouri has the following injury-related priority needs:
• Improve the mental health status of MCH populations.
• Reduce intentional and unintentional injuries among women, children, and adolescents.

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.

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CDR Coordinator: Maurine Hill, maurine.r.hill@dss.mo.gov

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CSN on Twitter: http://www.twitter.com/childrenssafety
Register for the CSN newsletter: http://go.edc.org/csn-newsletter
Need TA? Have Questions? E-mail: csninfo@edc.org

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