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>&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>402</td>
<td>Unintentional Injury 145</td>
<td>Unintentional Injury 86</td>
<td>Unintentional Injury 136</td>
<td>Unintentional Injury 678</td>
<td>Unintentional Injury 912</td>
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<td>SIDS</td>
<td>Congenital Anomalies 35</td>
<td>Malignant Neoplasms 29</td>
<td>Malignant Neoplasms 32</td>
<td>Suicide 138</td>
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<td>3</td>
<td>236</td>
<td>Short Gestation</td>
<td>Malignant Neoplasms 33</td>
<td>Congenital Anomalies 14</td>
<td>Heart Disease 15</td>
<td>Homicide 90</td>
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<td>4</td>
<td>108</td>
<td>Unintentional Injury</td>
<td>Homicide 31</td>
<td>Homicide 14</td>
<td>Congenital Anomalies 12</td>
<td>Malignant Neoplasms 36</td>
</tr>
<tr>
<td>5</td>
<td>103</td>
<td>Maternal Pregnancy Comp.</td>
<td>Heart Disease 11</td>
<td>Heart Disease 10</td>
<td>Homicide 11</td>
<td>Heart Disease 27</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, Kentucky, 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 79</td>
<td>MV Traffic 44</td>
<td>MV Traffic 44</td>
<td>MV Traffic 71</td>
<td>MV Traffic 471</td>
<td>MV Traffic 537</td>
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<tr>
<td>2</td>
<td>Homicide 30</td>
<td>Drowning 39</td>
<td>Homicide 14</td>
<td>Other Land Transport 14</td>
<td>Suicide 138</td>
<td>Poisoning 252</td>
</tr>
<tr>
<td>3</td>
<td>MV Traffic 9</td>
<td>Fire/Burn 34</td>
<td>Fire/Burn 13</td>
<td>Fire/Burn 12</td>
<td>Homicide 90</td>
<td>Suicide 199</td>
</tr>
<tr>
<td>4</td>
<td>Fire/Burn ****</td>
<td>Homicide 31</td>
<td>Drowning ****</td>
<td>Homicide 11</td>
<td>Poisoning 77</td>
<td>Homicide 138</td>
</tr>
<tr>
<td>5</td>
<td>Drowning ****</td>
<td>Suffocation ****</td>
<td>Other Land Transport ****</td>
<td>Drowning 10</td>
<td>Drowning 38</td>
<td>Other Land Transport 23</td>
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</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 states 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, Kentucky Residents, 2009

<table>
<thead>
<tr>
<th>Rank</th>
<th>&lt;1</th>
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<th>15-19</th>
<th>20-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unspecified 44</td>
<td>Unintentional Fall 90</td>
<td>Unspecified 86</td>
<td>Unspecified 114</td>
<td>Unintentional MVT 367</td>
<td>Unintentional MVT 399</td>
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<tr>
<td>2</td>
<td>Unintentional Other Specified, NEC 41</td>
<td>Unspecified 88</td>
<td>Unintentional Fall 56</td>
<td>Unintentional MVT 80</td>
<td>Self-Inflicted 282</td>
<td>Self-Inflicted 341</td>
</tr>
<tr>
<td>3</td>
<td>Unintentional Fall 32</td>
<td>Unintentional Bites &amp; Stings 45</td>
<td>Unintentional MVT 53</td>
<td>Unintentional Fall 74</td>
<td>Unspecified 191</td>
<td>Unspecified 145</td>
</tr>
<tr>
<td>4</td>
<td>Assault 31</td>
<td>Unintentional Poisoning 41</td>
<td>Unintentional Bites &amp; Stings 35</td>
<td>Unintentional Transport, Other 58</td>
<td>Unintentional Fall 123</td>
<td>Unintentional Fall 137</td>
</tr>
<tr>
<td>5</td>
<td>Unintentional Poisoning 10</td>
<td>Unintentional MVT 35</td>
<td>Unintentional Other Specified, NEC 27</td>
<td>Self-Inflicted 46</td>
<td>Unintentional Transport, Other 80</td>
<td>Assault 111</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 Kentucky 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, Kentucky and US, 2004-2008

Figure 1 Source: WISQARS Fatal Injury Reports, 2004-2008 and WISQARS Injury Mortality Reports, 2003-2007
35% 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, pedal cyclist fatalities were collapsed into this category because incidence were fewer than 10 and data were from years 2004-2008.
In the state of Kentucky from 2004 to 2008, the rate of motor vehicle crash involved fatalities for males age 15-19 was 64 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.

NPM 16: Reducing Suicide Deaths Among Teens Ages 15-19:
59% 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, Kentucky, 2003-2007

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

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

In the state of Kentucky from 2004 to 2008, the rate of suicide deaths for males age 15-19 is 3.1 times higher than for females age 15-19.

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

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 10 Source: WISQARS Injury Mortality Reports, 2003-2007

Figure 11 Source: WISQARS Fatal Injury Reports, 2004-2008 and WISQARS Injury Mortality Reports, 2003-2007

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: Nonfatal Injury Health Status Indicators, Kentucky 2005-2010
Figures 13 & 14: Fatal Injury Health Status Indicators, Kentucky 2005-2010

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:
Kentucky has the following injury-related State Performance Measure:
• To reduce the proportion of Kentucky children birth to 5 years of age who die from child abuse.

Priority Needs:
Kentucky has the following injury-related priority need:
• Reduce the number of Kentucky children dying from child abuse or maltreatment.

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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EMSC Contact: Morgan Scaggs, morgan.scaggs@kctcs.edu
CDR Coordinator: Teddy Slone, teddy.slone@ky.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

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