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, Montana, 2004-2008

<table>
<thead>
<tr>
<th>Rank</th>
<th>Cause</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</td>
<td>96</td>
<td>Unintentional Injury</td>
<td>32</td>
<td>Unintentional Injury</td>
<td>19</td>
<td>Unintentional Injury</td>
</tr>
<tr>
<td>2</td>
<td>SIDS</td>
<td>52</td>
<td>Malignant Neoplasms</td>
<td>****</td>
<td>Malignant Neoplasms</td>
<td>****</td>
<td>Suicide</td>
</tr>
<tr>
<td>3</td>
<td>Short Gestation</td>
<td>27</td>
<td>Congenital Anomalies</td>
<td>****</td>
<td>Congenital Anomalies</td>
<td>****</td>
<td>Malignant Neoplasms</td>
</tr>
<tr>
<td>4</td>
<td>Maternal Pregnancy Comp.</td>
<td>20</td>
<td>Homicide</td>
<td>****</td>
<td>Homicide</td>
<td>****</td>
<td>Heart Disease</td>
</tr>
<tr>
<td>5</td>
<td>Placenta Cord Membranes</td>
<td>15</td>
<td>Heart Disease</td>
<td>****</td>
<td>*Four Tied</td>
<td>****</td>
<td>Congenital Anomalies</td>
</tr>
</tbody>
</table>

Note. **** = indicates that the cell values range from 1-9 and are suppressed for data confidentiality purposes. For ages 5-9, four mechanisms were tied for the fifth through eighth ranking including Benign Neoplasms, Chronic Lower Respiratory Disease, Influenza & Pneumonia, and Pneumonitis. Each of these mechanisms had fewer than 10 deaths.

Table 1 Source: WISQARS Leading Causes of Death Reports, 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 2. Leading Causes and Total 5-Year Incidence of Injury Deaths by Age Group, Montana, 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</td>
<td>Drowning</td>
<td>MV Traffic</td>
<td>MV Traffic</td>
<td>MV Traffic</td>
<td>MV Traffic</td>
</tr>
<tr>
<td>2</td>
<td>MV Traffic</td>
<td>MV Traffic</td>
<td>Other land transport</td>
<td>Suicide</td>
<td>Suicide</td>
<td>Suicide</td>
</tr>
<tr>
<td>3</td>
<td>Homicide</td>
<td>Drowning</td>
<td>Pedestrian Other</td>
<td>Homicide</td>
<td>Fire/Burn</td>
<td>Poisoning</td>
</tr>
<tr>
<td>4</td>
<td>Undet. Poisoning</td>
<td>Fall</td>
<td>Other Transport</td>
<td>Homicide</td>
<td>Drowning</td>
<td>Homicide</td>
</tr>
<tr>
<td>5</td>
<td>Undetermined</td>
<td>Natural/Environmental</td>
<td>Other spec &amp; clasifiable</td>
<td>Firearm</td>
<td>Other spec &amp; clasifiable</td>
<td>Drowning</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.

### Table 3. Leading Causes and Annual Incidence of Hospital-Admitted Injuries by Age Group, Montana 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</td>
<td>Unintentional Fall</td>
<td>Unintentional Fall</td>
<td>Self-Inflicted</td>
<td>Self-Inflicted</td>
<td>Self-Inflicted</td>
</tr>
<tr>
<td>2</td>
<td>Unintentional Other Specified, NEC</td>
<td>Unintentional Poisoning</td>
<td>Unintentional MVT</td>
<td>Unintentional Fall</td>
<td>Unintentional MVT</td>
<td>Unintentional MVT</td>
</tr>
<tr>
<td>3</td>
<td>Assault *</td>
<td>Unspecified</td>
<td>Unintentional Struck By/Against *</td>
<td>Unintentional Transport, Other</td>
<td>Unintentional Fall</td>
<td>Unintentional Fall</td>
</tr>
<tr>
<td>4</td>
<td>Unspecified *</td>
<td>Unintentional Fire/Burn *</td>
<td>Unintentional Pedal Cyclist, Other *</td>
<td>Unspecified</td>
<td>Unintentional Transport, Other</td>
<td>Assault</td>
</tr>
<tr>
<td>5</td>
<td>Unintentional Poisoning *</td>
<td>Unintentional Bites &amp; Stings</td>
<td>Unintentional Bites &amp; Stings</td>
<td>Unintentional MVT</td>
<td>Unspecified</td>
<td>Unspecified</td>
</tr>
</tbody>
</table>

Note: MVT = Motor Vehicle Traffic. NEC = Not Elsewhere Classifiable. * = indicates that the cell value ranges from 1-10 and is suppressed for data confidentiality purposes. 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 Montana 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, Montana and US, 2003-2007](source)

Figure 1 Source: WISQARS Fatal Injury Reports, 2004-2008 and WISQARS Injury Mortality Reports, 2003-2007
73% 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 the state of Montana from 2004 to 2008, the rate of motor vehicle crash involved fatalities for males age 15-19 was 69 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.

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
66% of youth ages 15-19 completed suicide by using a firearm.
Figure 10: The Rate (per 100,000) of Completed Suicides By Race among Youths Aged 15-24, Montana, 2003-2007

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, Montana, 2004-2008

In the state of Montana 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, Montana, 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 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, Montana 2005-2010

- Injuries 0-14 years
- Motor Vehicle Crashes 0-14 years
- Motor Vehicle Crashes 15-24 years

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

- Injuries 0-14 years
- Motor Vehicle Crashes 0-14 years
- Motor Vehicle Crashes 15-24 years

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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:
Montana has the following injury-related State Performance Measure:
• To reduce the rate of death to children 0 through 17 years of age caused by unintentional injuries.

Priority Needs:
Montana has the following injury-related priority need:
• Reduce the deaths caused by unintentional injuries.

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: Ann Marie Buss, abuss@mt.gov
IVP Director: Bobbi Perkins, bperkins@mt.gov
EMSC Contact: Joseph D. Hansen, jhansen3@mt.gov
CDR Coordinator: Caitlin Jenson, cjensen@mt.gov

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