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, Massachusetts, 2004-2008](image)

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, Massachusetts, 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>Sufcoc</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>Homicide</td>
<td>Homicide</td>
<td>Homicide</td>
<td>Homicide</td>
<td>Homicide</td>
<td>Homicide</td>
</tr>
<tr>
<td>3</td>
<td>Drowning</td>
<td>MV Traffic</td>
<td>Drowning</td>
<td>Suicide</td>
<td>Suicide</td>
<td>Poisoning</td>
</tr>
<tr>
<td>4</td>
<td>Struck by/against</td>
<td>Suffocation</td>
<td>Fire/Burn</td>
<td>Drowning</td>
<td>Poisoning</td>
<td>Suicide</td>
</tr>
<tr>
<td>5</td>
<td>Fall</td>
<td>Fire/Burn</td>
<td>Fall</td>
<td>Suffocation</td>
<td>Suffocation</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 3: Leading Causes and Annual Incidence of Hospital-Admitted Injuries by Age Group, Massachusetts 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 Other Specified, NEC</td>
<td>Unintentional Fall</td>
<td>Unintentional Fall</td>
<td>Unintentional Fall</td>
<td>Self-Inflicted</td>
<td>Self-Inflicted</td>
</tr>
<tr>
<td>2</td>
<td>Unintentional Fall</td>
<td>Unintentional Other Specified, NEC</td>
<td>Unintentional Struck By/Against</td>
<td>Unintentional MVT</td>
<td>Unintentional</td>
<td>Unintentional</td>
</tr>
<tr>
<td>3</td>
<td>Assault</td>
<td>Unintentional Poisoning</td>
<td>Unintentional Struck By/Against</td>
<td>Unintentional MVT</td>
<td>Unintentional Fall</td>
<td>Assault</td>
</tr>
<tr>
<td>4</td>
<td>Unintentional Suffocation</td>
<td>Unintentional Bites &amp; Stings</td>
<td>Unintentional MVT</td>
<td>Unintentional Other Specified, NEC</td>
<td>Unintentional</td>
<td>Unintentional</td>
</tr>
<tr>
<td>5</td>
<td>Undetermined Other Specified, NEC</td>
<td>Unintentional Struck By/Against</td>
<td>Self-Inflicted</td>
<td>Unintentional Struck By/Against</td>
<td>Unintentional</td>
<td>Unintentional</td>
</tr>
</tbody>
</table>

Note: MVT = Motor Vehicle Traffic. NEC = Not Elsewhere Classifiable. * = indicates that the cell value ranges from 1-10. 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 Massachusetts 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, Massachusetts and US, 2004-2008]

Figure 1 Source: WISQARS Fatal Injury Reports, 2004-2008 and WISQARS Injury Mortality Reports, 2003-2007
32% of children ages 0-14 involved in a motor vehicle fatality were pedestrians.

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 Massachusetts from 2004 to 2008, the rate of motor vehicle crash involved fatalities for males age 15-19 was 71 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.

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
63% of youth ages 15-19 completed suicide by using suffocation.

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.
In the state of Massachusetts from 2004 to 2008, the rate of suicide deaths for males age 15-19 is 2.4 times 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.
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:
Massachusetts has the following injury-related State Performance Measures:
• To increase the percentage of School Based Health Center clients for whom an assessment for intimate partner/teen dating/sexual violence was done.
• To reduce the rate (per 100,000) of motor vehicle deaths among youth aged 15-24 years.
• To reduce the percentage of high school students having missed a school day due to feeling unsafe at or on the way to school.

Priority Needs:
Massachusetts has the following injury-related priority needs:
• Enhance screening for and prevention of violence and bullying.
• Reduce unintentional injury and promote health behavior choices for 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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Register for the CSN newsletter: http://go.edc.org/csn-newsletter
Need TA? Have Questions? E-mail: csninfo@edc.org

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