Unintentional injuries and violence are the leading causes of death, hospitalization, and disability for children ages 1-18. This fact sheet provides a 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.

This 2014 state fact sheet includes data that was available as of May 2014. The fact sheet will be updated as new data is made available at the federal level.

**Major Causes of Injury Death**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Age Group</th>
<th>Unintentional Injury</th>
<th>Malignant Neoplasms</th>
<th>Congenital Anomalies</th>
<th>Congenital Cord Membranes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt;1</td>
<td>669</td>
<td>182</td>
<td>96</td>
<td>104</td>
</tr>
<tr>
<td>2</td>
<td>1 - 4</td>
<td>Short Gestation 613</td>
<td>Congenital Anomalies 57</td>
<td>Malignant Neoplasms 46</td>
<td>Homicide 231</td>
</tr>
<tr>
<td>3</td>
<td>5 - 9</td>
<td>SIDS 256</td>
<td>Homicide 49</td>
<td>Congenital Anomalies 21</td>
<td>Suicide 23</td>
</tr>
<tr>
<td>4</td>
<td>10 - 14</td>
<td>Unintentional Injury 215</td>
<td>Malignant Neoplasms 40</td>
<td>Congenital Anomalies 21</td>
<td>Heart Disease 102</td>
</tr>
<tr>
<td>5</td>
<td>15-19</td>
<td>Unintentional Injury 1,091</td>
<td>Chronic Lower Respiratory Disease 46</td>
<td>Homicide 19</td>
<td>Malignant Neoplasms 63</td>
</tr>
<tr>
<td></td>
<td>20-24</td>
<td>Unintentional Injury 1,091</td>
<td>Heart Disease 42</td>
<td>Malignant Neoplasms 84</td>
<td></td>
</tr>
</tbody>
</table>

Note. **** = indicates that the cell values range from 1-9 and are suppressed for data confidentiality purposes.
### Table 2. Leading Causes and Total 5-Year Incidence of Injury Deaths by Age Group, Tennessee, 2006-2010

<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></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Suffocation 180</td>
<td>MV Traffic 49</td>
<td>Homicide 49</td>
<td>MV Traffic 50</td>
<td>MV Traffic 83</td>
<td>MV Traffic 678</td>
</tr>
<tr>
<td>2</td>
<td>Homicide 41</td>
<td>Drowning 48</td>
<td>Fire/Burn 15</td>
<td>Suicide 23</td>
<td>Suicide 23</td>
<td>Homicide 369</td>
</tr>
<tr>
<td>3</td>
<td>MV Traffic 16</td>
<td>Fire/Burn 25</td>
<td>Drowning 12</td>
<td>Homicide 19</td>
<td>Homicide 19</td>
<td>Suicide 333</td>
</tr>
<tr>
<td>4</td>
<td>Undetermined Suffocation 10</td>
<td>Suffocation 15</td>
<td>Homicide <strong>1</strong></td>
<td>Drowning <strong>1</strong></td>
<td>Other land transport <strong>1</strong></td>
<td>Poisoning 270</td>
</tr>
<tr>
<td>5</td>
<td>Fall <strong>1</strong></td>
<td>Pedestrian, other 13</td>
<td>Suffocation <strong>1</strong></td>
<td>*Three Tied <strong>1</strong></td>
<td>Other land transport <strong>1</strong></td>
<td>Undetermined Poisoning 45</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. **1** = indicates that the cell values range from 1-9 and are suppressed for data confidentiality purposes. *For ages 10-14, three mechanisms were tied for the fifth ranking including Fire/Burn, Firearm, and Poisoning. Each of these mechanisms had fewer than 10 deaths.

### Major Causes of Hospital-Admitted Injuries

These results are preliminary.

### Table 3: Leading Causes and Annual Incidence of Hospital-Admitted Injuries by Age Group, Tennessee Residents, 2011

<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></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Other Specified, NEC 84</td>
<td>Fall 106</td>
<td>Fall 115</td>
<td>Fall 123</td>
<td>MVT 418</td>
<td>MVT 550</td>
</tr>
<tr>
<td>2</td>
<td>Fall 52</td>
<td>Poisoning 73</td>
<td>MVT 81</td>
<td>MVT 78</td>
<td>Self-Inflicted 244</td>
<td>Self-Inflicted 295</td>
</tr>
<tr>
<td>3</td>
<td>Assault 46</td>
<td>Other Specified, NEC 63</td>
<td>Other Specified, NEC 39</td>
<td>Transport, Other 57</td>
<td>Fall 132</td>
<td>Assault 190</td>
</tr>
<tr>
<td>4</td>
<td>Other Natural/Environmental 19</td>
<td>MVT 57</td>
<td>Bites &amp; Stings 33</td>
<td>Struck By/Against 52</td>
<td>Assault 115</td>
<td>Fall 178</td>
</tr>
<tr>
<td>5</td>
<td>Other Specified, NEC 18</td>
<td>Bites &amp; Stings 55</td>
<td>Pedal Cyclist, Other 24</td>
<td>Self-Inflicted 49</td>
<td>Poisoning 74</td>
<td>Poisoning 161</td>
</tr>
</tbody>
</table>

Note: MVT = Motor Vehicle Traffic. NEC = Not Elsewhere Classifiable. Each listed mechanism is unintentional except those otherwise noted. Source: Children's Safety Network Economics and Data Analysis Resource Center (CSN EDARC), at Pacific Institute for Research and Evaluation (PIRE), Calverton, MD, January 2014. Incidence based on 2011 data from the state and obtained from the Tennessee State Inpatient Databases (SID), Healthcare Cost and Utilization Project (HCUP), Agency for Healthcare Research and Quality (AHRQ), and the Tennessee Hospital Association (Brentwood, TN). 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.
Reducing unintentional motor vehicle deaths to children ages 0-14 is a Maternal and Child Health Block Grant National Performance Measure (Number 10). Motor vehicle-related deaths remain a major cause of death for this age group. Figure 1 shows the change in the rate of state motor vehicle-related deaths compared to the US rate from 2006-2010. Overall, the rate of death per 100,000 population declined steadily across the US during this period. Figure 2 provides a breakout of the fatalities by type distinguishing motor vehicle occupant deaths (of any vehicle type) from pedestrian and pedal cyclist fatalities. This information allows states to understand which types are responsible for most of the fatalities.

Figure 3 breaks out the fatalities by race and age group. There are considerable differences between races suggesting variations in social norms, safety practices, and the presence of risk factors, including child restraint system (CRS) or safety belt usage, alcohol involved crashes, and the use of helmets.

Many factors may affect this variation. Figure 4 provides a breakdown of fatalities by gender and, although there is little variability between males and females for the 10-14 age group, there is an increasing difference in the 15-24 age group. Figure 4 suggests that the female rate decreased for 20-24 year olds compared with the 15-19 year olds while male fatalities increased for 20-24 year olds.

50% of children ages 0 through 14 involved in a motor vehicle fatality were occupants of the vehicle.
One way of understanding disparities is to look at the rate of injuries by place of occurrence. To show this, CSN has provided the rates for the 0–14, 15-19 and 20-24 age groups using the urban-rural classification system developed by the National Center for Health Statistics (NCHS). To show how injury rates vary by level of urbanization, a table based on the classification system can be found here and defines six levels of urbanization: large central metro, large fringe metro, medium metro, small metro, micropolitan, and noncore. Figure 5 shows how the rate varies by age group by place of occurrence/urban-rural setting. This information allows the state to better understand any disparity that may occur between the different settings. Data are provided only for those areas in which 20 or more deaths occurred.

Many of these motor vehicle related deaths can be prevented through the implementation of a broad range of evidence-informed interventions and programs. These data are intended to provide a broad overview of the magnitude of the problem and to highlight possible disparities which may exist by race, gender, and urbanicity.
Reducing suicide deaths in youth 15 to 19 years of age is a Maternal and Child Health National Performance Measure (Number 16). Suicide is the 4th leading cause of death and the 3rd leading cause of injury-related death among US youth 10-24 years of age. According to the 2011 Youth Risk Behavior Surveillance Survey (YRBSS), 15.8% of students seriously considered attempting suicide and 7.8% of students attempted suicide one or more times in the 12 months prior to the survey. Although progress has been made over the past decade in reducing the rate of completed suicides nationally, this reduction has leveled off in the last few years. The following figures provide state-specific data related to suicide. Figure 6 shows the state rate from 2006-2010 for 15-19 year olds in comparison to the US rate for the same age group and time period. Figure 7 provides information on the means used by the 15-19 year olds for completed suicides. It is important to note that the actual number of suicides is often quite small thus resulting in considerable variation when looking at year to year rates.

53% of youth ages 15 through 19 completed suicide by using a firearm.
The YRBSS provides information about behaviors that contribute to unintentional and intentional violence among youth. Figures 8 and 9 provide information on the percentage of high school students with suicide ideation and the percentage who reported being medically treated for a suicide attempt from 2003-2011, respectively. This information and other information available in the YRBSS can help states understand how behaviors are changing within this age group.

Figure 10 shows how the rate differs by race for 15-19 and 20-24 year olds from 2006-2010. Figure 11 shows the difference by gender for the same age group and time period with the male rate for both age groups exceeding the female rate. Figure 12 looks at the variation in rate by urbanicity for 15-24 year olds with the rate increasing as rurality increases (see definition of urbanicity in Motor Vehicle section). This information provides a better understanding of the magnitude of the problem in different parts of the state, helping the state to identify environmental risk factors and facilitate decision making on where to target its suicide prevention efforts.

**Unintentional and Undetermined Drug Poisoning Deaths for Youths 15 -24 Years of Age**

Poisoning is the 3rd leading cause of injury-related death among US youth ages 20-24 and the 5th leading cause of injury-related death among US youth ages 15-19. Drug overdose death rates among all ages in the US have more than tripled since 1990 and have never been higher. (1) Poisoning can be intentional or unintentional; poisoning cases reported here include prescription medications, illicit drugs and other, unspecified drugs. According to the national survey Monitoring the Future, in 2013 15 percent of high school seniors used a prescription drug non-medically in the past year. (2) Every day in the US, an average of 2,000 teenagers use prescription drugs for the first time without a doctor’s guidance. Youth who abuse prescription medications are also more likely to report use of other drugs. (3) Many teens falsely believe that because prescription medicines are prescribed by a physician, are inexpensive, and are widely available they are safer than illicit drugs.

Figure 15 provides state-specific fatality rates for motor vehicle traffic, suicide, and drug poisoning for youth aged 15 through 24 for the period 2006-2010. Overall in the US, the rate of motor vehicle-related fatalities for this age group has decreased significantly from 2006 to 2010. However, the rate of fatalities for both suicide and drug poisoning has remained stable with a slight increase from 2009 to 2010. Figure 16 provides data on the rate of unintentional and undetermined drug overdoses in the state compared to the national rate. Figure 17 shows the percentage distribution of fatal unintentional and undetermined drug poisoning by drug type for the period 2006-2010.
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, 2013.
State Specific Performance Measures and Priority Needs

Each state develops up to 10 State Performance Measures and Priority Needs. The following provides information about the states’ selected 2014 injury-related Performance Measures and Priority Needs.

Tennessee has the following injury-related State Performance Measures:

- Reduce the rate of sleep-related infant deaths (per 1,000 live births).
- Reduce the rate of unintentional injury death in children and young people ages 0-24 (per 100,000).

Tennessee has the following injury-related Priority Need:

- Reduce unintentional injury deaths in children and young people ages 0-24.

Citations and Sources


Table 1 Source: WISQARS Leading Causes of Death Reports, 2006-2010
Table 2 Source: National Center for Health Statistics, Multiple Cause of Death Data, 2006-2010
Table 3 Source: Children’s Safety Network Economics and Data Analysis Resource Center (CSN EDARC), at Pacific Institute for Research and Evaluation (PIRE), Calverton, MD, January 2013.
Table 4 Source: Children’s Safety Network Economics and Data Analysis Resource Center (CSN EDARC), at Pacific Institute for Research and Evaluation (PIRE), Calverton, MD, January 2013.
Figure 1 Source: WISQARS Fatal Injury Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007
Figure 2 Source: WISQARS Fatal Injury Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007
Figure 3 Source: WISQARS Injury Mortality Reports, 2006-2010
Figure 4 Source: WISQARS Fatal Injury Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007
Figure 5 Source: CDC WONDER Multiple Cause of Death data, 2006-2010 and Urban-Rural Definition Classification System
The classification scheme can be found at: http://wonder.cdc.gov/wonder/help/CMF/Urbanization-Methodology.html. 2006
NCHS Urban-Rural Classification Scheme for Counties, by Deborah D. Ingram and Sheila Franco.
Figure 6 Source: WISQARS Fatal Injury Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007
Figure 7 Source: WISQARS Fatal Injury Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007
Figures 8 & 9 Source: Youth Online: High School Youth Risk Behavior Survey (YRBS), 2003-2011
Figure 10 Source: WISQARS Injury Mortality Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007
Figure 11 Source: WISQARS Fatal Injury Reports, 2006-2010 and WISQARS Injury Mortality Reports, 2003-2007
Figure 12 Source: CDC WONDER Multiple Cause of Death data, 2006-2010 and Urban-Rural Definition Classification System
Figures 13 & 14 Source: HRSA, Title V Information System Multi-Year Report. Some states may have changed their method of calculation.

Figure 17 Source: National Center for Health Statistics, Multiple Cause-of-Death Data, 2006-2010.

Figure 12 Source: CDC WONDER Multiple Cause of Death data, 2006-2010 and Urban-Rural Definition Classification System
Figures 13 & 14 Source: HRSA, Title V Information System Multi-Year Report. Some states may have changed their method of calculation.


Figure 17 Source: National Center for Health Statistics, Multiple Cause-of-Death Data, 2006-2010.
About Children's Safety Network

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In this fact sheet CSN provides 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.

Connect with the Children’s Safety Network
43 Foundry Avenue Waltham, MA 02453-8313

CSN’s website: http://www.ChildrensSafetyNetwork.org
CSN on Facebook: http://www.facebook.com/childrenssafetynetwork
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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