The Burden of Falls in Vermont

November 21, 2017
Tanya Wells
Fall Injury Facts:

- Vermont is ranked 41st in the nation for its high rate of preventable falls among those over age 65.
- Falls are the number one call to EMS providers and account for 43% or (nearly half) of all unintentional injury deaths in Vermont.
- Falls are the leading cause of injury death in Vermont at 31%, whereas poisonings (including drug overdose) account for 19% of all injury deaths.
Falls compared to Opiate Deaths

Unintentional Fall and Opiate Poisoning Deaths by Cause
Vermont Residents, 2010-2014

- Opioid Poisoning, 19%
- Fall, 81%
Fall Injury Facts:

- 90% of those who fall are age 65 or older.
- According to the CDC, an average hospital cost for a fall injury is $30,000.
- In 2013, falls among older adults cost the U.S. health care system $34 billion in direct medical costs.
- There is currently no dedicated funding in Vermont to work on falls prevention.
What is a Burden Document?

Contents:
- Summarizes the most current available information and data
- Highlights specific groups of high risk
- Identify where gaps in data exist
- Guide efforts in prevention

Goals of Injury Burden Document:
- To better understand the scope and extent of injury in Vermont and inform the State Health Assessment
- To set data driven injury prevention priorities
- To appropriately allocate resources
Data Sources

- Vermont Vital Statistics
- Vermont Uniform Hospital Discharge Dataset
- The Statewide Incident Reporting Network (SIREN)
- The Behavioral Risk Factor Surveillance System (BRFSS)
<table>
<thead>
<tr>
<th>Rank</th>
<th>0-14</th>
<th>15-24</th>
<th>25-44</th>
<th>45-64</th>
<th>65+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Suffocation 15</td>
<td>Motor Vehicle Traffic 73</td>
<td>Poisoning 134</td>
<td>Firearm 115</td>
<td>Falls 615</td>
<td>Falls 687</td>
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<td>2</td>
<td>Motor Vehicle Traffic 8</td>
<td>Firearm 34</td>
<td>Motor Vehicle Traffic 76</td>
<td>Poisoning 111</td>
<td>Firearm 77</td>
<td>Motor Vehicle Traffic 317</td>
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<tr>
<td>3</td>
<td>Drowning 6</td>
<td>Suffocation 24</td>
<td>Firearm 72</td>
<td>Motor Vehicle Traffic 86</td>
<td>Motor Vehicle Traffic 74</td>
<td>Firearm 303</td>
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<tr>
<td>4</td>
<td>Six Tied -</td>
<td>Poisoning 23</td>
<td>Suffocation 35</td>
<td>Falls 63</td>
<td>Suffocation 39</td>
<td>Poisoning 285</td>
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<tr>
<td>5</td>
<td>Five Tied -</td>
<td>Drowning 7</td>
<td>Poisoning 29</td>
<td>Poisoning 57</td>
<td>Poisoning 17</td>
<td>Suffocation 102</td>
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</tbody>
</table>

**Data Source:** Vermont Vital Statistics
Counts less than 6 are suppressed.
White cells indicate deaths due to unintentional injuries; Green coloring indicates deaths by suicide
## Leading Causes of Injury-Related Hospitalization, by Age Group and Count, 2010-2014

<table>
<thead>
<tr>
<th>Rank</th>
<th>0-14</th>
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<th>45-64</th>
<th>65+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Falls 159</td>
<td>Poisoning 284</td>
<td>Poisoning 623</td>
<td>Falls 1,719</td>
<td>Falls 7,229</td>
<td>Falls 9,669</td>
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<tr>
<td>2</td>
<td>Poisoning 63</td>
<td>Motor Vehicle Traffic 224</td>
<td>Falls 399*</td>
<td>Poisoning 478*</td>
<td>Poisoning 284*</td>
<td>Poisoning 1,486*</td>
</tr>
<tr>
<td>4</td>
<td>Struck by/against 33</td>
<td>Motor Vehicle, Other 82*</td>
<td>Poisoning 194</td>
<td>Motor Vehicle Traffic 299</td>
<td>Struck by/against 129</td>
<td>Poisoning 923</td>
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<tr>
<td>5</td>
<td>2 Tied** 22</td>
<td>Poisoning 76</td>
<td>Motor Vehicle, Other 123</td>
<td>Motor Vehicle, Other 182</td>
<td>Overexertion 116</td>
<td>Motor Vehicle, Other 528</td>
</tr>
</tbody>
</table>

**Data Source:** Vermont Uniform Hospital Discharge Dataset

* where “other” would have replaced this cause

** Motor Vehicle Traffic, Intentional Poisoning

White cells indicate unintentional injuries; Green coloring indicates intentional injuries (including self-inflicted)
# Leading Causes of Injury-Related Emergency Department Visits, 2010-2014

<table>
<thead>
<tr>
<th>Rank</th>
<th>0-14</th>
<th>15-24</th>
<th>25-44</th>
<th>45-64</th>
<th>65+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Falls 20,783</td>
<td>Falls 13,560</td>
<td>Falls 19,547</td>
<td>Falls 21,474</td>
<td>Falls 24,925</td>
<td>Falls 100,299</td>
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<tr>
<td>2</td>
<td>Struck by/against 11,734</td>
<td>Struck by/against 11,144</td>
<td>Overexertion 13,366</td>
<td>Overexertion 7,896</td>
<td>Overexertion 2,525*</td>
<td>Struck by/against 39,348</td>
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<td>3</td>
<td>Overexertion 4,303*</td>
<td>Overexertion 7,965</td>
<td>Cut/Pierce 9,918</td>
<td>Cut/Pierce 7,229</td>
<td>Cut/Pierce 2,259</td>
<td>Overexertion 36,056</td>
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<tr>
<td>4</td>
<td>Cut/Pierce 4,143</td>
<td>Cut/Pierce 6,507</td>
<td>Struck by/against 9,344</td>
<td>Struck by/against 5,080*</td>
<td>Bites/Stings 2,117</td>
<td>Cut/Pierce 30,053</td>
</tr>
<tr>
<td>5</td>
<td>Bites/Stings 3,657</td>
<td>Motor Vehicle Traffic 6,457</td>
<td>Motor Vehicle Traffic 6,863*</td>
<td>Bites/Stings 4,010</td>
<td>Struck by/against 2,046</td>
<td>Motor Vehicle Traffic 20,443*</td>
</tr>
</tbody>
</table>

**Data Source:** Vermont Uniform Hospital Discharge Dataset

All leading causes by age group are of unintentional intent

* where “other” would have replaced this cause
Unintentional Falls

Unintentional Fall-related Death and Hospitalization/ED Visit Rates per 100,000, 2010-2014

Data Source: Vermont Vital Statistics, Vermont Uniform Hospital Discharge Dataset
Deaths are among Vermont residents, hospitalizations are among Vermont residents at Vermont hospitals
Unintentional Fall-Related Death Rate per 100,000 by Gender and Age, 2010-2014

Data Source: Vermont Vital Statistics

Vermont Department of Health
Unintentional Falls

Unintentional Fall-Related Hospitalization/ED Visit Rate per 100,000 by Gender and Age, 2010-2014

Data Source: Vermont Uniform Hospital Discharge Dataset
Unintentional Falls

- **SIREN Data, 2015-2016**
  - 1,497 EMS calls for lift assists
  - 79% for individuals ages 65 and older

- **BRFSS Data, 2016**
  - 35% of Vermonters ages 45 and older said they fell at least once in the past 12 months
  - 36% of adults 45 and older who fell at least once were injured as a result
Health Disparity

Injury Death Rates by Race and Ethnicity per 100,000, 2012-2014

Data Source: Vermont Vital Statistics
WNH: White, non-Hispanic; REM: Racial Ethnic Minority
Female Injury Death Rate per 100,000 by Race and Ethnicity and Age, 2012-2014

Data Source: Vermont Vital Statistics
WNH: White, non-Hispanic; REM: Racial Ethnic Minority
Male Injury Death Rate per 100,000 by Race and Ethnicity and Age, 2012-2014

Data Source: Vermont Vital Statistics
WNH: White, non-Hispanic; REM: Racial Ethnic Minority
Questions or comments?

Thank you!