WISQARS Cost of Injury Reports with New Enhancements

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Office of Statistics and Programming
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

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- Jennifer Forberg
Outline

• Data Sources
• Components of the Cost module
• Example Scenario using Unintentional Motor Vehicle - Traffic Deaths In Mississippi.
Fatal and Nonfatal Injuries in the United States

http://www.cdc.gov/injury/wisqars

WISQARS-Cost of Injury Reports

Available to the public
February 24, 2011
Enhancements: April 25, 2012
Data Sources

- Deaths - NCHS’ National Vital Statistics System
  - Underlying Cause data for Intent X Mechanism
  - Multiple Cause data for Body Region X Diagnosis
- Nonfatal Injuries – National Electronic Injury Surveillance System – All Injury Program
- Unit lifetime medical and work loss cost estimates produced by Dr. Ted Miller and colleagues at the Pacific Institute for Research and Evaluation (PIRE), Calverton, MD
Overview of Cost Module

Measures of Cost

• 2005 Lifetime Medical Costs (treatment & rehab)
• 2005 Lifetime Work Loss Costs (lost wages, fringe benefits, and lost household work)
• 2005 Lifetime Combined (Medical + Work Loss) Costs

(NOTE: Cost estimates do not include property damage, pain/suffering, loss quality of life, litigation, and other costs. For injury-related deaths, lifetime medical costs refer to the medical costs associated with the fatal injury event.)
Overview of Cost Module
Injury Outcomes

- Deaths
- Nonfatal Hospitalizations
- Nonfatal Emergency Department Visits – Treated and Released

(Note: For nonfatal hospitalizations, cost estimates are limited to injured persons initially treated in the ED.)
Overview of Cost Module
Injury/Demographic Reporting Options

- Intent X Mechanism of Injury (E-code matrix)
- Body Region X Nature of Injury (Diagnosis/Barell matrix)
- Geographic location
  - U.S., Region, State for injury deaths
  - U.S. only for nonfatal injury hospitalizations/ED visits T & R
- Sex
- All Ages, 5-year Age Groups, Custom Age Range

(Note: Race/Ethnicity is not offered as an option in the module.)
Overview of Cost Module – Part I

Cost Statistics

• Total Costs for 2005 in year 2005 prices for all injuries covered in the report
• Average Costs per injury for 2005 in year 2005 prices

(Note: we plan to update the module with more current data and pricing in the future.)
Overview of Cost Module – Part I
Pricing

• 2005 U.S. Prices (Deaths/Hospitalizations/ED-T&R)
• 2005 Regional Prices (Deaths only)
• 2005 State Prices (Deaths only)

(Note: Medical price adjusters (indices) were derived from the ACCRA 2007 Cost of Living Index (Council for Community and Economic Research) and population statistics from the U.S. Census Bureau; wage adjusters were computed using wage information from the U.S. Bureau of Economic Analysis, Survey of Current Business, 2008.)
Overview of Cost Module – Part I

Cost of Injury Computations

• Each injury death, hospitalization, ED visit (T&R) was assigned a unit medical cost and a unit work loss cost
• Total costs = \( \sum \) unit costs of selected incidents
• Average costs = Total costs \( \div \) total # of selected incidents (i.e., average costs per injury death or per nonfatal injury case).
• Table provides # of incidents, average costs, total costs.

(Note: Some factors considered in assigning unit costs: mechanism, intent, nature of injury, body region, place of death, sex and age. (See help file/methods report for details)
Overview of Cost Module – Part II

Customized Cost Statistics

• Enters your own case counts (e.g. county-level injury death counts by year)

• Total cost estimate = case counts X average costs per person from national data sources – based on 2005 data in year 2005 prices from the Cost module Part I)

• Index costs to same or a different year (up to 2010) – based on CPI for medical care (medical costs) and the Total Compensation Index (work loss costs)

• Automatic statistical checks for instability of system-generated average cost estimates (↑ coefficient of variation; ↓ case count)
Medical and Work Loss Cost Estimation Methods for the WISQARS Cost of Injury Module

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Eduard Zaloscinia, Ph.D.
Paul Jones, Ph.D.
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Pacific Institute for Research & Evaluation

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Agency for Healthcare Research and Quality

December 19, 2011
Cost of Injury Reports, Part I

Total Combined Lifetime Medical and Work Loss Costs of Unintentional Fatal and Nonfatal Injuries for All Ages by Sex, United States, 2005*

* Unintentional includes motor vehicle, fall, cut/pierce, fire/burn, struck by/against, poisoning, drowning, and other mechanisms.
Cost of Injury Reports, Part I

Total Combined Lifetime Medical and Work Loss Costs of Violence-Related Fatal and Nonfatal Injuries for All Ages by Sex, United States, 2005*

* Violence-related includes homicide/assault, suicide/self-harm, and legal intervention injuries
Example Scenario – Mississippi

Facts:

- Highest age-adjusted Unintentional MV-traffic death rate in the U.S. in 2009 (rate: 24.2 per 100,000 vs 11.1 (U.S.))
- Persons ages 15-24 years have highest rate (39.0)
- Number of Unintentional MV-traffic deaths dropped 18.4% among 15-24 years from 2005 to 2009.

What is the difference in estimated total lifetime medical care costs in 2009 compared to 2005 associated with deaths in this age group?
Welcome to WISQARS™

WISQARS™ (Web-based Injury Statistics Query and Reporting System) is an interactive database system that provides customized reports of injury-related data. Learn more about WISQARS™ >>

NOTE TO USERS: The Nonfatal Injury Reports module has been updated with new national-level population estimates based on recently released bridged-race intercensal estimates of the July 1, 2001-July 1, 2009 and April 1, 2010 resident population of the United States. See U.S. Census Populations With Bridged Race Categories. However, population estimates for the Fatal Injury Reports and Violent Death (NVDRS) Reports will not be updated until March or April of 2012 when state level bridged-race intercensal population estimates will be made available.

Fatal Injury Data
Death certificate data from the National Vital Statistics System — deaths, death rates, and years of potential life lost (a measure of premature death) by specific causes of injury mortality and common causes of death. Learn More and Query Fatal Data >>

Nonfatal Injury Data
National estimates of injuries treated in U.S. hospital emergency departments from the National Electronic Injury Surveillance System - All Injury Program (NEISS-AIP) — nonfatal injuries and nonfatal injury rates. Learn More and Query Nonfatal Data >>

Violent Deaths (NVDRS)
Data from the National Violent Death Reporting System (NVDRS) — violent incidents and deaths, death rates, and causes of injury mortality. Data provided for 16 states and are not nationally representative. Learn More and Query NVDRS >>

New! Cost of Injury Reports
WISQARS™ provides cost estimates for injury deaths (including violent deaths) and nonfatal injuries where the patient was treated and released from a hospital or ED. Cost of Injury Reports >>

Motor Vehicle Traffic Deaths and Estimated Lifetime Medical Costs, by Sex, 2005

Contact Us:
Centers for Disease Control and Prevention
National Center for Injury Prevention and Control (NCIPC)
4770 Buford Hwy, NE
MS F-63
Atlanta, GA 30341-3717
800-CDC-INFO
(800-232-4536)
TTY: (888) 232-6348
New Hours of Operation:
8am-8pm ET/ Monday-Friday
Fatal Injury Data

Reports, Charts, and Maps

- Cost of Injury Reports 2005
- Fatal Injury Maps 2000-2006
- Fatal Injury Reports
- Leading Causes of Death
- Years of Potential Life Lost (YPLL)

Note: The coding of mortality data changed significantly in 1999, so you may not be able to compare number of deaths and death rates from 1998 and before with data from 1999 and after. Also, cause-of-injury groupings were updated in 2003, which may affect some WISQARS mortality reports. Learn more >>

*New Restrictions for Reporting State-level Death Counts and Death Rates for 2008 and Later

The National Center for Health Statistics (NCHS) in an agreement with the National Association of Public Health Statistics and Information Systems (NAPHSIS) has implemented a new, more restrictive rule for reporting National Vital Statistics System (NVSS) state- and county-level death data for years 2008 and later, in order to avoid inadvertent disclosure of cases. Therefore, the Office of Statistics and Programming, NCIIPC has modified WISQARS to accommodate the new data suppression rule; i.e., no figure, including totals, should be less than 10 in tabulations for sub-national geographic areas, regardless of the number of years combined with the data from 2008 and later. Tabulations, charts, and maps produced by WISQARS using only NVSS death data for years prior to 2008 are not affected by this new rule.

Help, Tutorial, FAQs, and More

- Help
- Coding of Data
- Tutorial
- Availability of New Data
Cost Module User Interface
Welcome to the Cost of Injury Reports application! Here you will find cost of injury estimates for fatal or nonfatal injuries classified either by intent and mechanism or by body region and nature of injury. Learn more >>

Important Updates: In addition to allowing user-provided data to be integrated into the cost estimation process, this new version of Cost of Injury Reports incorporates three basic changes, effective 04/25/2012:

- **Updated unit (per person) work loss cost estimates:** These updated unit work loss cost estimates affect total and average work loss cost estimates for both fatal and nonfatal injuries. For further details regarding this update, click here.

- **Corrected unit medical cost estimates:** These corrected unit medical cost estimates affect total and average medical cost estimates for nonfatal emergency department treated-and-released injuries. Cost estimates for fatal injuries and for nonfatal hospitalized injuries are not affected by this correction. For further details regarding this update, click here.

- **Average costs:** For reports involving injury deaths classified by body region and/or nature of injury, average costs are now expressed per person (similar to the averages for all other types of injury outcomes and classification schemes). Such averages were previously expressed in terms of apportioned cases. For further details regarding this update, click here.

Select from the report options provided below and on the next two screens. Click on the blue title at the top of each section for details. Reports will be generated and returned to you on the screen. You will also have the option to save the data in a spreadsheet or print the results.
Intent X Mechanism: Unintentional Motor Vehicle Traffic Deaths
Intent X Mechanism: Unintentional Motor Vehicle Traffic Deaths

Data & Statistics (WISQARS™): Cost of Injury Reports

Report Options:
- Generate a report with national data
- Generate a report with your own case counts by year

Geographic / Base Year Options:
- Census Region / State: Mississippi
- Base Year: 2005

Demographic Options:
- Sex: Both Sexes
- All Ages (includes unknown age)
- Age Groups: 15-19 → 20-24
- Custom Age Range: <1 → <1

Statistical Options:
- Type of Lifetime Cost (select one or more boxes):
  - Medical
  - Work Loss
  - Combined
- Cost Measure (select one or both boxes):
  - Total
  - Average
- Express Costs in (select only one radio button):
  - U.S. Prices
  - Regional Prices
  - State Prices

Output Group / Report Layout Options:
- Down / Row:
  - Sex
  - None
- Across / Column:
  - Intent
  - None
## Unintentional Motor Vehicle Traffic Deaths

**Fatal Injuries, Both Sexes, Ages 15 to 24, Mississippi, 2005**

**Intent:** Unintentional

**Mechanism:** Motor Vehicle-Traffic

### Number of Deaths and Estimated Average and Total Lifetime Costs

**Classified by Sex and Intent**

**Costs Expressed in 2005 State Prices**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Deaths</th>
<th>Medical Cost</th>
<th>Work Loss Cost</th>
<th>Combined Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>Average</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>Male</td>
<td>151</td>
<td>$5,651</td>
<td>$1,213,580</td>
<td>$1,319,230</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$853,000</td>
<td>$198,351,000</td>
<td>$199,204,000</td>
</tr>
<tr>
<td>Female</td>
<td>61</td>
<td>$4,143*</td>
<td>$1,000,104</td>
<td>$1,004,247</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$253,000*</td>
<td>$61,006,000</td>
<td>$61,259,000</td>
</tr>
<tr>
<td>Total</td>
<td>212</td>
<td>$5,217</td>
<td>$1,223,536</td>
<td>$1,228,253</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$1,106,000</td>
<td>$259,347,000</td>
<td>$260,453,000</td>
</tr>
</tbody>
</table>

*Cost estimates based on 20 or fewer deaths are considered unstable. Estimates based on more than 20 deaths may also be unstable due to high relative variability of case-level costs. Interpret unstable estimates with caution.*

**Note:** For injury-related deaths, lifetime medical costs refer to the medical costs associated with the fatal injury event.

**Produced by:** Office of Statistics and Programming, National Center for Injury Prevention and Control, CDC

**Data Source:** NCHS Vital Statistics System for numbers of deaths. NCES All Injury Program operated by the U.S. Consumer Product Safety Commission (CPSC) for numbers of nonfatal injuries. Pacific Institute for Research and Evaluation (PIRE), Colverton, MD for unit cost estimates.
Intent X Mechanism: Unintentional Motor Vehicle Traffic Deaths

Data & Statistics (WISQARS™): Cost of Injury Reports

- Report Options:
  - Generate a report with national data
  - Generate a report with your own case counts by year
    - Start Year: 2009
    - End Year: 2009
    - Index Costs to: 2010

- Geographic / Base Year Options:
  - Census Region / State: Mississippi
  - Base Year: 2005

- Demographic Options:
  - Sex: Both Sexes
  - All Ages (includes unknown age)
    - Age Groups: 15-19, To 20-24
    - Custom Age Ranges: <1, To <1

- Statistical Options:
  - Type of Lifetime Cost (select one or more boxes):
    - Medical
    - Work Loss
    - Combined
  - Cost Measure:
    - Total
    - Express Costs in (select only one radio button):
      - U.S. Prices
      - Regional Prices
      - State Prices
      - To U.S. Total
      - Within Selected State/Region
  - Estimates are Additive (select only one radio button):
    - To U.S. Total
    - Within Selected State/Region

- Output Group / Report Layout Options:
  - Down / Row:
    - Year
    - Sex
    - None
  - Across / Column:
    - Intent
    - None

- Enter Case Counts

#### 2009, Mississippi

**Unintentional MV Traffic Deaths and Rates per 100,000**

All Races, Both Sexes, Ages 15 to 24

ICD-10 Codes: V30-V39 (.4-.9), V40-V49 (.4-.9), V50-V59 (.4-.9), V60-V69 (.4-.9), V70-V79 (.4-.9), V81.1 V82.1,V83-V86 (.0-.3), V20-V28 (.3-.9), V29 (.4-.9),V12-V14 (.3-.9),V19 (.4-.6), V02-V04 (.1-.9),V09.2,V80 (.3-.5),V87(0-.8),V92

#### 2005, Mississippi

**Unintentional MV Traffic Deaths and Rates per 100,000**

All Races, Both Sexes, Ages 15 to 24

ICD-10 Codes: V30-V39 (.4-.9), V40-V49 (.4-.9), V50-V59 (.4-.9), V60-V69 (.4-.9), V70-V79 (.4-.9), V81.1 V82.1,V83-V86 (.0-.3), V20-V28 (.3-.9), V29 (.4-.9),V12-V14 (.3-.9),V19 (.4-.6), V02-V04 (.1-.9),V09.2,V80 (.3-.5),V87(0-.8),V92

<table>
<thead>
<tr>
<th>Sex</th>
<th>Number of Deaths</th>
<th>Population</th>
<th>Crude Rate</th>
<th>Age-Adjusted Rate**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>151</td>
<td>229,910</td>
<td>65.00</td>
<td>65.00</td>
</tr>
<tr>
<td>Females</td>
<td>61</td>
<td>220,296</td>
<td>27.69</td>
<td>28.17</td>
</tr>
<tr>
<td>Total</td>
<td>212</td>
<td>450,214</td>
<td>47.09</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Number of Deaths</th>
<th>Population</th>
<th>Crude Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>118</td>
<td>227,868</td>
<td>51.78</td>
</tr>
<tr>
<td>Females</td>
<td>55</td>
<td>216,018</td>
<td>25.46</td>
</tr>
<tr>
<td>Total</td>
<td>173</td>
<td>443,886</td>
<td>38.97</td>
</tr>
</tbody>
</table>
Unintentional Motor Vehicle Traffic Deaths, Ages 15-24 Years, Mississippi, 2005

Fatal Injuries, Both Sexes, Ages 15 to 24, Mississippi, 2005
Intent: Unintentional
Mechanism: Motor Vehicle-Traffic
Classified by Sex and Intent
Data Entry Table (User-Specified Incidence Counts)
(Average Costs are Expressed in State-Specific Prices for the Year 2010)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sex</th>
<th>Intent</th>
<th>Number of Deaths</th>
<th>Average</th>
<th>Average</th>
<th>Death Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Medical Costs</td>
<td>Work Loss Costs</td>
<td>Used for Averages</td>
</tr>
<tr>
<td>2005</td>
<td>Male</td>
<td>Unintentional</td>
<td>151</td>
<td>$6,791</td>
<td>$1,477,777</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>Unintentional</td>
<td>61</td>
<td>$4,979*</td>
<td>$1,125,118</td>
<td>61</td>
</tr>
</tbody>
</table>

Base year for average costs is 2005. Base year costs are then indexed to 2010 prices.
Total cost estimates have been adjusted so that the sum across all states will equal the U.S. total.
Note that some requested categories may be missing from this intermediate table because no relevant deaths occurred during the base year; therefore, no system-generated average cost estimate is available.

* This system-generated average cost estimate is statistically unstable.
Note that the total cost estimates in the final report, which will be produced by combining system-generated average cost estimates with user-entered case counts in this intermediate table, will not be evaluated for statistical stability.
### Unintentional Motor Vehicle Traffic Deaths, Ages 15-24 Years, Mississippi, 2005

**Fatal Injuries, Both Sexes, Ages 15 to 24, Mississippi, 2005**
**Intent: Unintentional**
**Mechanism: Motor Vehicle-Traffic**

**Number of Deaths and Estimated Total Lifetime Costs**
**Classified by Sex and Intent**
**Costs Expressed in 2010 State Prices**

<table>
<thead>
<tr>
<th>Year</th>
<th>Sex</th>
<th>Deaths and Type of Cost</th>
<th>Intent</th>
<th>Unintentional</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Male</td>
<td>Deaths</td>
<td>--</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medical Cost</td>
<td>Total</td>
<td>$1,025,000</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>Deaths</td>
<td>--</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medical Cost</td>
<td>Total</td>
<td>$304,000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Deaths</td>
<td>--</td>
<td>212</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medical Cost</td>
<td>Total</td>
<td>$1,329,000</td>
</tr>
</tbody>
</table>

Injury Classification Scheme: Mechanism by Intent of Injury.
Reports for All Ages include those of unknown age.
Base year for average costs is 2005. Base year costs are then indexed to 2010 prices.
Note: For injury-related deaths, lifetime medical costs refer to the medical costs associated with the fatal injury event.
Note that the total cost estimates in this report, produced by combining system-generated average cost estimates with user-entered case counts from the intermediate data entry table, were not evaluated for statistical stability.
Produced by: Office of Statistics and Programming, National Center for Injury Prevention and Control, CDC
Data Source: NCHS Vital Statistics System for numbers of deaths. NEISS All Injury Program operated by the U.S. Consumer Product Safety Commission (CPSC) for numbers of nonfatal injuries. Pacific Institute for Research and Evaluation (PIRE), Calverton, MD for unit cost estimates.
### Data & Statistics (WISQARS™): Cost of Injury Reports

**Fatal Injuries, Both Sexes, Ages 15 to 24, Mississippi, 2009**

**Intent:** Unintentional  
**Mechanism:** Motor Vehicle-Traffic  
**Classified by Sex and Intent**

#### Data Entry Table (User-Specified Incidence Counts)
(Average Costs are Expressed in State-Specific Prices for the Year 2010)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sex</th>
<th>Intent</th>
<th>Enter</th>
<th>Number of Deaths</th>
<th>Average</th>
<th>Average</th>
<th>Death Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Medical Costs</td>
<td>Work Loss Costs</td>
<td>Used for Averages</td>
</tr>
<tr>
<td>2009</td>
<td>Male</td>
<td>Unintentional</td>
<td>118</td>
<td></td>
<td>$6,791</td>
<td>$1,477,777</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>Unintentional</td>
<td>55</td>
<td></td>
<td>$4,979*</td>
<td>$1,125,118</td>
<td>61</td>
</tr>
</tbody>
</table>

Base year for average costs is 2005. Base year costs are then indexed to 2010 prices.

Total cost estimates have been adjusted so that the sum across all states will equal the U.S. total.

Note that some requested categories may be missing from this intermediate table because no relevant deaths occurred during the base year; therefore, no system-generated average cost estimate is available.

* This system-generated average cost estimate is statistically unstable.

Note that the total cost estimates in the final report, which will be produced by combining system-generated average cost estimates with user-entered case counts in this intermediate table, will not be evaluated for statistical stability.
Unintentional Motor Vehicle Traffic Deaths, Ages 15-24 Years, Mississippi, 2009

Data & Statistics (WISQARS™): Cost of Injury Reports

Fatal Injuries, Both Sexes, Ages 15 to 24, Mississippi, 2009
Intent: Unintentional
Mechanism: Motor Vehicle-Traffic
Number of Deaths and Estimated Total Lifetime Costs
Classified by Sex and Intent
Costs Expressed in 2010 State Prices

<table>
<thead>
<tr>
<th>Year</th>
<th>Sex</th>
<th>Deaths</th>
<th>Medical Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Male</td>
<td>--</td>
<td>--</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Medical Cost</td>
<td>Total $801,000</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>--</td>
<td>--</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
<td>Medical Cost</td>
<td>Total $274,000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>--</td>
<td>--</td>
<td>173</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Medical Cost</td>
<td>Total $1,075,000</td>
</tr>
</tbody>
</table>

Injury Classification Scheme: Mechanism by Intent of Injury.
Notes lower age estimates to ages of unknown age.
Base year for average costs is 2005. Base year costs are then indexed to 2010 prices.
Note: For injury-related deaths, lifetime medical costs refer to the medical costs associated with the fatal injury event.
Note that the total cost estimates in this report, produced by combining system-generated average cost estimates with user-entered case counts from the intermediate data entry table, were not evaluated for statistical stability.
Produced by: Office of Statistics and Programming, National Center for Injury Prevention and Control, CDC
Data Source: NCHS Vital Statistics System for numbers of deaths. NEISS All Injury Program operated by the U.S. Consumer Product Safety Commission (CPSC) for numbers of nonfatal injuries. Pacific Institute for Research and Evaluation (PIRE), Calverton, MD for unit cost estimates.

<table>
<thead>
<tr>
<th>Year and Sex</th>
<th>No of Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>151</td>
</tr>
<tr>
<td>Females</td>
<td>61</td>
</tr>
<tr>
<td>Both Sexes</td>
<td>212</td>
</tr>
<tr>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>118</td>
</tr>
<tr>
<td>Females</td>
<td>55</td>
</tr>
<tr>
<td>Both Sexes</td>
<td>173</td>
</tr>
</tbody>
</table>

Reduction in Number of Deaths = \((1 - (173/212)) \times 100 = 18.4\%\)

Total Lifetime Medical Costs Savings (based on 2010 prices) = \((1,329,000 (2005) - 1,075,000 (2009)) = 254,000\)
Summary

- WISQARS Cost of Injury Reports module enhancements can be useful for computing:
  - Total lifetime medical and work loss costs:
    - Using national data provided by WISQARS
    - Using user-provided counts of injury death or nonfatal injury cases multiplied times average costs from national data sources.
  - Cost savings of total lifetime medical and work loss costs for State and local subpopulations of interest
Thank you!

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