

# State Special Emphasis Report

Instructions for Infant and  
Early Childhood Injury Data



National Center for Injury Prevention and Control  
Division of Analysis, Research, and Practice Integration





# **State Special Emphasis Report:** Instructions for Preparing Infant and Early Childhood Injury Data

## **U.S. Department of Health and Human Services**

Centers for Disease Control and Prevention  
National Center for Injury Prevention and Control  
Division of Analysis, Research, and Practice Integration

Atlanta, Georgia  
May 2014

*State Injury Special Emphasis Report: Instructions for Preparing Infant and Early Childhood Injury Data* is a publication of the National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

## **Centers for Disease Control and Prevention**

**Thomas R. Frieden, MD, MPH**

Director

## **National Center for Injury Prevention and Control**

**Daniel M. Sosin, MD, MPH, FACP**

Acting Director

## **Division of Analysis, Research, and Practice Integration**

**Rod McClure, MBBS, BA, PhD, FAFPHM, FAICD**

Director

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention (CDC).

### **Suggested citation:**

Gabella BA, Proescholdbell SK, Hume B, Hedin R, Johnson RL, Thomas KE. State Special Emphasis Report: Instructions for Preparing Infant and Early Childhood Injury Data. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2012.

## **Editors**

**Barbara A. Gabella, MSPH**

Colorado Department of Public Health and Environment

**Scott K. Proescholdbell, MPH**

North Carolina Division of Public Health

**Beth Hume, MPH**

Massachusetts Department of Public Health

**Riley Hedin**

Utah Department of Health

**Renee L. Johnson, RPT, MSPH**

Division of Analysis, Research, and Practice Integration  
National Center for Injury Prevention and Control

**Karen E. Thomas, MPH**

Division of Analysis, Research, and Practice Integration  
National Center for Injury Prevention and Control

## **Acknowledgements**

The editors thank the Core Violence and Injury Prevention Programs in Colorado, North Carolina, Massachusetts, and Utah for their support during the development of this guidance. A special thank you to Michelle Brown and Paige Cucchi, both from the National Center for Injury Prevention and Control, for their revision support of the report template and the template instructions.

## FOREWARD

The National Center for Injury Prevention and Control at the Centers for Disease Control and Prevention (CDC) is pleased to provide this document to guide states in preparing an injury special emphasis report that will be useful to the maternal, infant, and early childhood home visiting programs in states. Under CDC Program Announcement CE11–1101 (Core VIPP), 28 states have been funded to create and submit a state special emphasis report on infant and early childhood injuries for the home visiting programs in their states.

Four of the 28 states funded under the Base Integration Component were additionally funded to conduct injury surveillance quality improvement activities: Colorado, Massachusetts, North Carolina, and Utah. These four states collaborated on this guidance document. Specifically, they took the lead in developing potential injury analyses among infants and young children and in writing this guidance document.

In general, the purpose of the Surveillance Quality Improvement (SQI) component of the Core VIPP is to conduct injury data investigations supportive of promoting and advancing uniform injury case definitions, improving data quality and advancing methodology. This work is to advance the consensus process for developing and implementing injury surveillance activities and to develop and/or improve standardized procedures for specific causes of injury. Given that these four states have an ability to develop standardized procedures, they were well suited to develop the injury analyses for infant and early childhood injury and translate them into this guidance document for a broader audience to use.

Since December 2011, the four states have met specifically to develop this guidance—to take an idea and make it a reality in a short period of time. The states contacted their state home visiting programs to learn more. The federal Affordable Care Act funded the Maternal, Infant, and Early Childhood Home Visiting Programs (MIECHV) to provide comprehensive evidence-based home visiting services to improve outcomes for families with expectant mothers and young children who reside in at-risk communities. Based on previous research, these evidence-based home visiting programs will improve maternal and prenatal health, infant health, and child health and development, including increasing a child's school readiness, reducing child maltreatment and domestic violence, and improving parenting skills. The four states learned about which home visiting models were being funded under this program and the specific locations of the at-risk communities served in the state, as well as the expected ages of the participants in the program. Using this information, the four states ran preliminary data analyses for the age groups using the three data sets required in order to apply for the Core VIPP funding: deaths, hospitalizations, and emergency department visits. These preliminary analyses highlighted the need to balance useful, specific results with protecting confidentiality, thereby limiting the options for the infant and early childhood injury report. Since February, the core writers met weekly to make decisions about the details, to apply these decisions to the data, to revise the analyses and the figures, and to write the methods. Once a month, the full SQI team met to review progress and offer suggestions to the writing team.

The infant and early childhood injury report that results from following this guidance describes the fatal and non-fatal injuries and their causes among the target age group of the home visiting program. This injury information complements the client or participant-specific data that the home visiting program collects.\* The MIECHV program will collect data about clients related to injury for the following constructs (or measurement concepts) under benchmark area II (“Child injuries, child abuse, neglect or maltreatment, and emergency department visits”):

- Child visits to the emergency department
- Child injuries requiring medical treatment
- Reported suspected maltreatment for children in the program
- Participants receiving information and training on injury prevention

This guidance uses the three required data sets: deaths, hospitalizations, and emergency department visits. States will also need to be familiar with the State Injury Indicators: Instructions for Preparing 2012 Data<sup>1</sup> and refer to it as necessary to supplement this document.

\*Legislatively mandated reporting requirements for the MIECHV cut across six “benchmark areas” which encompass the broad goals of the program.<sup>2</sup> The benchmark areas range from improving maternal and child health status to improving service coordination and referrals. The home visiting grantees have developed state-specific measurement plans that define performance indicators under each benchmark area for federal reporting and continuous quality improvement purposes.

## ABBREVIATIONS

<b>CDC</b>	Centers for Disease Control and Prevention
<b>Core VIPP</b>	Core Violence and Injury Prevention Programs funded under CE11–1101
<b>ED</b>	Emergency Department
<b>HRSA</b>	Health Resources and Services Administration
<b>ICD-10</b>	International Classification of Diseases – Tenth Revision
<b>ICD-9-CM</b>	International Classification of Diseases – Ninth Revision – Clinical Modification
<b>MIECHV</b>	Maternal, Infant, and Early Childhood Home Visiting
<b>NCIPC</b>	National Center for Injury Prevention and Control
<b>SQI</b>	Surveillance Quality Improvement component of CDC-funded activities under CE11–1101
<b>SUID</b>	Sudden Unexpected Infant Death



# CONTENTS

**FOREWARD . . . . .iv**

**ABBREVIATIONS . . . . .vi**

**BACKGROUND AND PURPOSE . . . . .1**

**METHODS . . . . .2**

**OPTIONAL DATA SOURCES . . . . .5**

    APPENDIX A: ICD-10 codes for grouping causes/intent . . . . .7

    APPENDIX B: ICD-9-CM codes for grouping causes/intent . . . . .8

    APPENDIX C: *Special Emphasis Report: Infant and Early Childhood Injury* template . . . . .9

    APPENDIX D: Instructions for using the *Special Emphasis Report: Infant and Early Childhood Injury* template . . . . .15

    APPENDIX E: Example of additional data— Colorado sleep-related infant death report . . . . .22

**REFERENCES . . . . .23**



## What is an Injury Special Emphasis Report?

*Injury Special Emphasis Reports will be developed and used by state health department injury and violence prevention programs and their partners to move injury data into action. They are intended to focus on subsets of a state's injury data in order to highlight the prevention needs related to specific causes or population subgroups. The reports provide detailed information for the focus area. The unified content and design of the reports result in the recognition and use of injury data.*

## BACKGROUND AND PURPOSE

The purpose of this guidance document is to walk each state through the process of creating a brief, meaningful infant and early childhood injury data report for professionals working on the MIECHV that complements the client-level data and/or the indicators that the program is measuring and tracking. This guidance document includes specific steps to become familiar with the injury data for children ages 0–5 years old and the limitations of the data, to learn about the state's home visiting program, and how to collaborate with this program to create and disseminate the resulting injury report. This guidance document also provides an easy-to-use report template. Entering the state's data and editing the narrative text boxes into this template produces a report quickly. The director of the home visiting program in the state can provide relevant and specific information about the program in the state on the last page of the report template. This special emphasis report on infant and early childhood injury will describe injury-related emergency department visits, hospitalizations, and deaths among children in the population and will complement the client-level data that the professionals in the MEICHV use for the program's measurement plan.

The main target audiences for this guidance document are the injury epidemiologists in the states funded by CDC to conduct the activities outlined for the Base Integration Component of a state injury program, including the injury special emphasis reports. In addition, the epidemiologist or data analyst will want to work with the injury prevention director and the director of the state's home visiting program.

The injury program and home visiting program will gain mutual benefits from producing this special emphasis report on infant and early childhood injury. This report and its dissemination promote the use of injury data within the state. Dissemination of population-based injury data using this mechanism will demonstrate its value to the home visiting director, by providing more information on the causes of child injuries leading to deaths, hospitalizations, and emergency department visits. This information complements the MIECHV's performance indicator that measures child visits to the emergency department for all causes. Together, injury and home visiting staff will gain a mutual understanding of the importance of injury prevention in early childhood and how the home visiting program contributes to reducing injuries. Another benefit is a new or strengthened collaborative working relationship between the injury program and the home visiting program. This collaboration may lead to continued cross-dissemination or joint dissemination of information. It may also result in more in-depth analyses of injury data in the state and joint work on policy changes.

## METHODS

Each state is unique, and so is their data. Therefore, it is necessary to understand the state injury data for children ages 0–5 years old in order to provide useful information to the state’s home visiting professionals. Though the resulting report will be brief (a minimum of six pages) and in a standard report template, there are still decisions and data interpretations left for each state to make. Therefore, it is helpful to read through the methods section while looking at the report template for a better understanding up front of the kind of state-specific details to address.

### **Aim 1: Understand the state injury data and their limitations.**

End product of Aim 1 will likely be a prepared injury data file ready for additional analyses and a summary printout of frequency counts of injury causes by single year of age (0, 1, 2, 3, 4, 5) for recent data year or years from the initial analysis. Use this information to determine if categories of injury causes and age groups are more similar to a large state or a small state for each of the three data sets (ED visits, hospitalizations, and deaths).

Ultimately, decisions on how to organize the state injury data to balance protecting confidentiality while providing useful details relates to the following:

- Number of years of data to include (for each: ED visits, hospitalizations, deaths)
- Age groups
- Use of subcategories within broad cause of injury categories

**Step 1:** Select current injury records from each data source using the same criteria from the Injury Indicators Instructions.<sup>1</sup> These criteria are consistent with the recommendations from the Injury Surveillance Workgroup<sup>5</sup> and based upon the Barell Matrix.<sup>4</sup>

- Select deaths where the underlying cause of death is an external cause of injury code (ICD-10<sup>5</sup> codes V01–Y36, Y85–Y87, Y89, U01–U03).
- Select hospitalizations where the primary diagnosis is a nature of injury code (ICD-9-CM<sup>6</sup> codes 800–909.2, 909.4, 909.9, 910–994.9, 995.5–995.59, 995.80–995.85)
- Select ED visits with either a primary diagnosis of injury or OR an external cause-of-injury (e-code) ICD-9-CM code
  - The primary diagnosis is one of the following ICD-9-CM codes: 800–909.2, 909.4, 909.9, 910–994.9, 995.5–995.59, 995.80–995.85 OR
  - The record contains one of the following external cause of injury codes: E800–E869, E880–E929, or E950–E999.
- Select the most recent year of data available for each source. (Alternatively, if one data source is available sooner, decide whether or not to use the same data year for all sources.)

**Step 2:** Select residents.

- Select data on fatal and non-fatal injuries occurring in-state to state residents.

**Step 3:** For the ED data, exclude infants and children who were admitted, if necessary.

- For most states, records for infants and children admitted to the hospital from the ED are included with the hospitalization data.

**Step 4:** Select ages to 0 to 5 years old.

**Step 5:** Run a frequency of cause categories for single ages 0, 1, 2, 3, 4, 5 years old for deaths, hospitalizations, and ED visits separately, using the most recent year of injury data.

- For deaths, see ICD-10 codes in Appendix A to categorize cause of injury. These categories are based upon the ICD-10 external cause of injury matrix.<sup>7</sup>
- If the state can easily and accurately distinguish Sudden Unexpected Infant Deaths (ICD-10 R95 and some R99), the state can mention the number of these deaths as a bullet point in the report template.
- For hospitalizations, see Appendix B to categorize cause of injury using ICD-9-CM codes. These categories are based upon the ICD-9-CM external cause of injury matrix.<sup>8</sup>
  - If there are multiple valid external cause of injury codes on a hospitalization record, use the first one.
- For ED visits, see Appendix B to categorize cause of injury using ICD-9-CM codes. These categories are based upon the ICD-9-CM external cause of injury matrix.<sup>8</sup>
  - If there are multiple valid external cause of injury codes on an ED visit record, use the first one.
- Include a cause category labeled as “missing cause” for each data source and include those records in the resulting frequency of causes if these records represent more than 5% of the total injury records.

If the state uses an online query system to produce the injury data results, the state may need to look more closely at the cause groupings in this guidance and used by the online query system. Such states may need to keep the cause categories broad and/or handle late effects of injuries differently than suggested in this guidance. States using an online system may need to combine the steps to efficiently and appropriately get the desired results.

Completing Aim 1 will suggest answers about which age groups and cause subcategories may be used in the final analysis and report. This will also show whether using data from a single year is possible or if multiple data years are needed to protect confidentiality. Determine if suppression of select results is an alternative way to provide more detailed causes or smaller age ranges, while still protecting confidentiality. There are two common reasons to suppress data: 1) to prevent the identification of an individual, often referred to as protecting confidentiality or privacy, and 2) to present only results that are statistically reliable. Data suppression rules vary by state and can be determined by state statute, by state rule, by the owner of the data source, by the data steward of the data source, or a combination. Some suppression rules are based on the numerator or an absolute number in a cell (less than 3, 5, or 10) without consideration of the denominator. This guidance cannot cover full discussion of data suppression for each state. Each state should follow their state statutes, rules, and data owner requirements, often explained in the data use agreement or a data re-release policy provided when the data are provided. See the reference section for a few papers on this topic.<sup>9-13</sup>

- From a practical perspective of acting on data results, it may not be meaningful to present results for counts less than 5 or for percentages lower than 5%. However, states should follow their state guidance, especially if it is more restrictive.

## **Aim 2: Learn about the state maternal, infant, and early childhood home visiting program.**

**Step 1:** Contact the state maternal, infant, and early childhood home visiting program director or their data professional.

Each state's governor has appointed a "state lead" agency to oversee the maternal, infant, and early childhood home visiting program. Contact the program director or data professional within the lead agency who can best provide information regarding the state's early childhood home visiting program. The following information about the state home visiting program can inform the data analysis in Step 2:

- The specific home visiting models implemented in the state
- Age range of participants in each program and/or location
- Geographic locations for each program site
- Injury-related indicators that the state is measuring under benchmark area II<sup>2</sup>

Age is the most relevant of these factors.

**Step 2:** Create a draft summary of causes of deaths, hospitalizations, and ED visits, based on the information from the initial analysis and from the maternal, infant, and early childhood home visiting program.

The end product of Step 2 will be a first draft of pages 1, 2, and 5 in the report template, specifically:

- Counts of injury deaths, hospitalizations, and ED visits among children ages 0–5 years
- The percent of injury deaths, hospitalizations, and ED visits among males and females
- The causes of death summarized as pie chart(s) on page 2 of the report template
- The causes of hospitalizations and ED visits in the table on page 5 of the report template. See the report template (Appendix C) and its instructions (Appendix D).

The analysis should match the home visiting program ages, unless presentation of the injury data results for each program's age range would violate the state's suppression rules to protect confidentiality. Home visiting professionals may prefer a particular year of data if they have selected it as a baseline for evaluation or improvement. Also, the state's specific injury-related indicators should guide the selection of subcategories under the broader injury causes. States with larger populations may be able to use the geographic locations of the model programs as a way to provide helpful sub-state results.

The report template is a formatted tool to help states quickly publish and disseminate state-specific infant and early childhood injury data to support program initiatives. It is designed as a collaborative publication between state injury prevention and home visiting programs to reflect the work across agencies to prevent infant and early childhood injury. It also ensures a consistent design. The template was created in Microsoft Word to ensure access and compatibility across user systems. A preview of the template is included in Appendix C. Detailed instructions are also provided for the template in Appendix D.

## **Aim 3: Work with the state maternal, infant, and early childhood home visiting contact to refine the product and develop a dissemination plan.**

The end product of Aim 3 will be the final report and a dissemination plan.

When you meet with the state maternal, infant, and early childhood home visiting program contact:

- Confirm the information about the maternal, infant, and early childhood home visiting program learned in Aim 2.
- Review with them the preliminary results on the age groups, causes, and data year(s) (pages 1, 2, and 5 of the report template).
- Show the contact examples of the last page of the report and ask them to complete the last page with their own program-specific information.
- Come to a mutual agreement as to the best presentation of the information based on data limitations and program needs, including how long the report should be to meet the needs of home visiting professionals. Decide with the contact who will disseminate the report, how it will be disseminated, and who will write up a brief dissemination plan, if helpful.
- **Create the final report.**
  - Finalize the analysis to meet data limitations and program needs.
  - Enter data into the figures in the report template, write and enter text of data interpretation in the report template.
  - Make all figures able to stand alone with complete labels and footnotes of the state, data years, number of cases, percent missing, data sources and/or definitions.
  - Coordinate with the home visiting contact to complete the last page.

The report template provides six pages, the minimum length of the report. The intent of the report is to be brief. If states have additional data sources on injury, such as the ones described in the optional data sources, states can expand the template to include additional pages. States can copy the template page that best represents how the data will be summarized and displayed. Copying pages should preserve the main style of colors and fonts, but the type of figures can be altered if desired.

## OPTIONAL DATA SOURCES

This guidance has focused on injury data from deaths, hospitalizations, and ED visits. These three sources can provide an enormous amount of reliable and credible data to help the home visiting professionals and their partners understand the magnitude and range of childhood injuries in the state. Many states have additional data sources that can be valuable in understanding the infant and early childhood injury problem. Below is a short, but not exhaustive, list of data sources that may be available and useful in the state. Check with the injury prevention program, health data agency or other health data experts to find the best additional sources in the state. Access to these data sources, the specific data items, and the completeness and quality of these data will vary by state and may be available through an online query system. The data stewards of these sources may have produced data results in the form of fact sheets or brief reports that can be cited in the injury report or provided to the home visiting director.

**Child Fatality Review:** Most states review child deaths using a multi-disciplinary team to identify systemic changes to prevent child death. Currently, more than 35 states are utilizing a common Child Fatality data system, customized at the local/state level. [See Appendix E as an example of a fact sheet on sleep-related infants deaths in Colorado.]

**Child Abuse/Neglect Maltreatment/Sudden Unexpected Infant Death Registry (SUID):** Some states have child abuse registries or child protective services data that may be available for state agencies trying to understand and address childhood injuries. Some states have been examining Sudden Unexpected Infant Deaths (SUID).

**Child Health Survey Data:** Some states conduct annual or periodic surveys to assess child health indicators. In some states, there may be the potential to add specific questions on child injury or maltreatment and/or injury prevention.

**EMS Data:** Most states have Emergency Medical Service (EMS or EMT) data on each 911 call or medical transport.

**Poison Control Center Data:** Each state has access to a Poison Control Center that fields thousands of calls every year regarding potential poison exposures. The Poison Control Center may have data or reports that can be utilized to understand the scope and nature of these calls for children in the state.

**Pregnancy Risk Assessment and Monitoring System (PRAMS):** PRAMS is a CDC initiative to reduce infant mortality and low birth weight. PRAMS collects data on maternal attitudes and experiences prior to, during, and immediately after pregnancy for a sample of women in many states. Many states have data query systems and annual reports.

**Medicaid:** Data on enrolled Medicaid populations may be a rich source of data on childhood injury. Data availability for these types of purposes varies among states.

**Women, Infants and Children (WIC):** Every state has a WIC system. Many state public health programs utilize data from these systems for a variety of indicators. Depending on state policies and laws, accessing data from these systems for public health purposes may be allowed and perhaps already established. The extent to which data about injuries are collected is unknown but likely low.

**National Violent Death Reporting System (NVDRS):** 18 states are funded by the CDC to abstract information from various data sources on homicides, suicides and other violent deaths. Some states have and utilize a child death module that would provide additional information if such data are available.

There are countless ways in which these and other data sources could provide meaningful and useful programmatic data to home visiting programs or infant and early childhood injury reports. An example has been included in the appendix to provide programs with ideas. Contact the Injury Prevention Program, Health Statistics or other childhood health expert in the state. Collaborating together, these programs can help target, address and prevent future injuries.



## APPENDIX A: ICD-10 codes for grouping causes/intent

<b>UNINTENTIONAL INJURIES</b>	<b>V01–X59, Y85–86</b>
Drowning/submersion	W65–W74
Falls	W00–W19
Fire/Burn	X00–X19
Poisoning	X40–X49
Suffocation	W75–W84
Unintentional Suffocation in Bed	W75
Unintentional Suffocation (Other/ Unspecified)	W76–W84
Transport-related	V01–V99
Motor Vehicle (MV)-occupant	[V30–V79](.4–.9), [V83–V86](.0–.3)
Bicycle/tricycle (MV & non-MV)	[V12–V14](.3–.9), V19(.4–.6), V10–V11, [V12–V14](.0–.2), V15–V18, V19(.0–.3,.8,.9)
Pedestrian (MV & non-MV)	[V02–V04](.1,.9), V09.2, V01, [V02–V04](.0), V05, V06, V09(.0–.1,.3,.9)
All other unintentional causes	All remaining unintentional codes
<b>ASSAULT/ABUSE</b>	<b>X85–Y09, Y87.1, *U01–*U02</b>
<b>UNDETERMINED/OTHER INTENT</b>	<b>X60–X84, Y87.0, *U03, Y10–Y34, Y87.2, Y89.9, Y35–Y36, Y89(.0, .1)</b>
<b>TOTAL INJURIES</b>	<b>V01–Y36, Y85–Y87, Y89, *U01–*U03</b>

## APPENDIX B: ICD-9-CM codes for grouping causes/intent

UNINTENTIONAL INJURIES	E800–E869, E880–E929
Cut/pierce	E920.0–.9
Drowning/submersion	E830.0–.9, E832.0–.9, E910.0–.9
Falls (off/from):	E880.0–E886.9, E888
Furniture	E884.2, E884.4, E884.5
Steps/stairs	E880.0, .1, .9
With strike against object	E888.0, E888.1
Slipping/tripping/stumbling <sup>1</sup>	E885.0, E885.1, E885.2, E885.3, E885.4, E885.9
Playground equipment	E884.0
Building	E882
Other fall from one level to another <sup>2</sup>	E884.1, E884.3, E884.6, E884.9
Other/unspecified	E881.0, E881.1, E883.0, E883.1, E883.2, E883.9, E886.0, E886.9, E888.8, E888.9
Fire/Burn	E890.0–E899, E924.0–.9
Foreign Body	E914–E915
Natural and Environmental <sup>3</sup>	E900.0–E909, E928.0–.2
Excessive heat	E900.0–E900.9
Dog bites	E906.0
Other bites/stings/animal injury	E905.0–E905.9, E906.1–E906.9
All other natural/environmental	E901–E904.9, E907–E909.9, E928.0–E928.2
Poisoning	E850.0–E869.9
Struck-by/against object	E916–E917.9
Suffocation	E911–E913.9
Transport-related	E800.0–E845.9
Motor Vehicle (MV)-occupant	E810–E819 (.0,.1)
Bicycle/tricycle (MV & non-MV)	E810–E819 (.6), E800–E807 (.3), E820–E825 (.6), E826.1,.9, E827–E829 (.1)
Pedestrian (MV & non-MV)	E810–E819 (.7), E800–E807 (.2), E820–E825 (.7), E826–E829 (.0)
Other transport	E810–E819 (.2–.5, .8, .9), E800–E807 (.0,.1,.8,.9), E820–E825 (.0–.5,.8,.9), E826.2–.8, E827–E829 (.2–.9), E831.0–.9, E833.0–E845.9
All other unintentional causes	All remaining unintentional codes
ASSAULT/ABUSE	E960–E969, E979, E999.1
UNDETERMINED/OTHER INTENT	E950–E959, E970–E978, E980–E989, E990–E999.0
<b>Total Injury-Related Cases</b>	<b>E800–E869, E880–E929, E950–E959, E960–E969, E970–E978, E979, E980–E989, E990–E999.0, E999.1</b>

1. Includes fall from skateboard, ski, snowboard, etc.


2. Fall from one level to another not already included in a fall category.

For example, fall from furniture is a fall from one level to another but is included in a separate category.

3. This category includes Natural and Environmental causes (e.g., dog bites, insect stings, exposure to cold, tornado, etc.).

# APPENDIX C: Special Emphasis Report: Infant and Early Childhood Injury template

This is a screenshot of the report template to be customized by individual states. The actual template is found in an accompanying file.



**<STATE NAME>**

**Special Emphasis Report: Infant and Early Childhood Injury, <DATA YEAR(S)>**

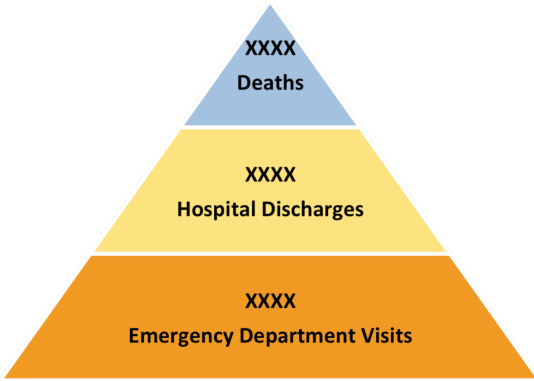
## Injury is a Leading Cause of Death in Children

STATE-specific text such as:

- magnitude – overall
- counts and perhaps broken out by age groups (<1, 1-5).

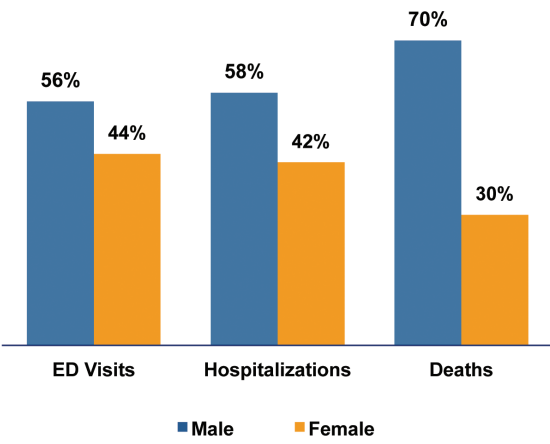
**Example:**  
For every child that died, xx children were hospitalized and xxx were treated and released from an emergency department. Not included were children who received treatment in physician offices or at home.

**Figure 1: Annual Injuries among Children Ages 0-5 Years, <State>, <Data Year(s)>**



**Figure 2: Percent of Injury Deaths, Hospitalizations and Emergency Department Visits among Children Ages 0-5 Years, by Sex, <State>, <Data Year(s)>**



Category	Male	Female
ED Visits	56%	44%
Hospitalizations	58%	42%
Deaths	70%	30%

**Childhood Injury by Sex**

STATE-specific text

- Sex differences for each data source.
- May include counts, percents, even rates if states want to calculate.
- Could also be broken down by <1 year olds and 1-5 year olds: counts, percents, rates.

State Health  
Department  
LOGO

Home Visitation  
LOGO

This document was produced in conjunction with CDC's Core Violence and Injury Prevention Program under Cooperative Agreement 11-1101.



<STATE NAME>

Special Emphasis Report: Infant and Early Childhood Injury, <DATA YEAR(S)>

### Injury Deaths in Infants

STATE-specific details and/or footnote

Figure 3: Injury Deaths among Infants Less than 1 Year, <State>, <Data Year(s)>

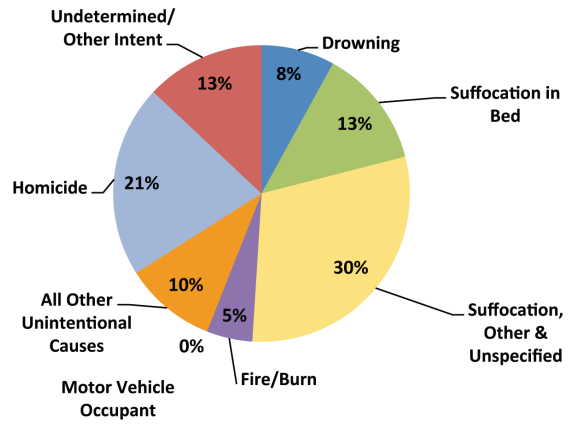
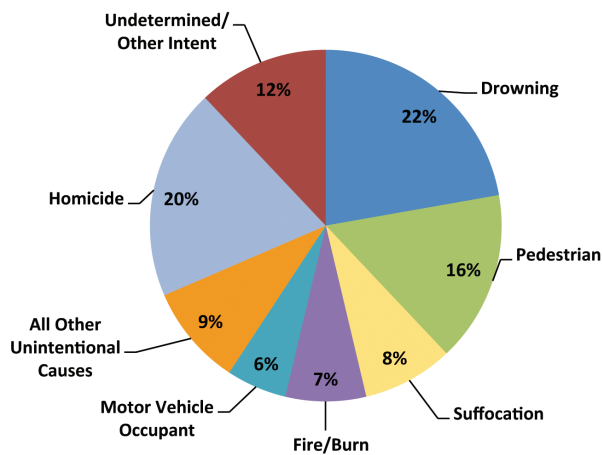


Figure 4: Injury Deaths in Children Ages 1 – 5 Years, <State>, <Data Year(s)>

### Injury Deaths in Young Children

STATE-specific details and/or footnote



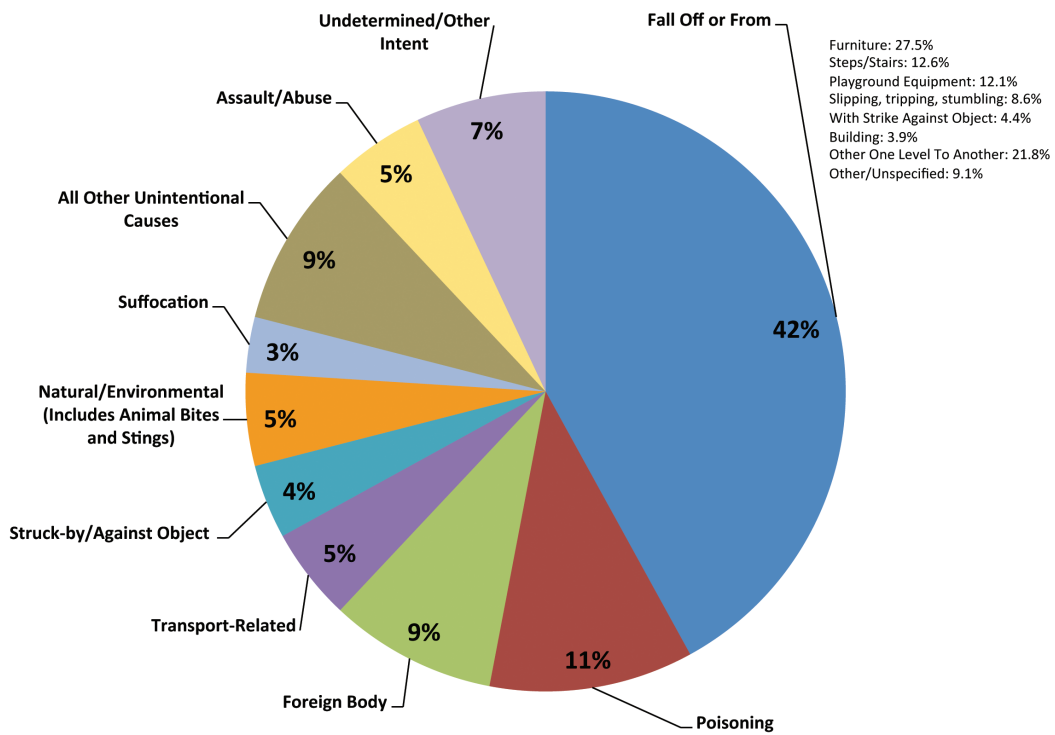


<STATE NAME>

Special Emphasis Report: Infant and Early Childhood Injury, <DATA YEAR(S)>

### Injury-Related Hospitalizations

Figure 5: Injury-Related Hospital Discharges among Children Ages 0 – 5 Years, <State>, <Data Year(s)>



STATE-specific details and/or footnote  
Footnote – Nonfatal

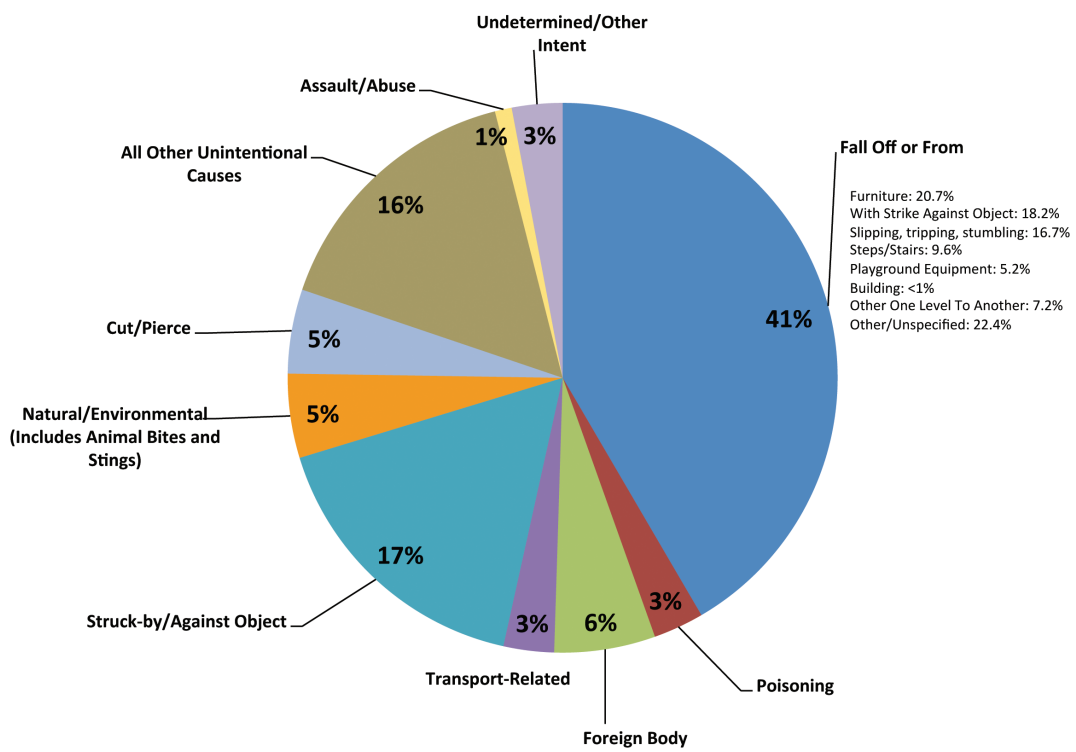


<STATE NAME>

Special Emphasis Report: Infant and Early Childhood Injury, <DATA YEAR(S)>

### Injury-Related Emergency Department Visits

Figure 6: Injury-Related Emergency Department Visits among Children Ages 0 – 5 Years, <State>, <Data Year(s)>



STATE-specific details and/or footnote

- Leading Causes, leading caused by age group and/or gender

Footnote – Nonfatal



<STATE NAME>

Special Emphasis Report: Infant and Early Childhood Injury, <DATA YEAR(S)>

Table 1: Injury-Related Hospital Discharges and Emergency Department (ED) Visits among Children Ages 0 -5 Years, by Age Group, <State>, <Data Year(s)>

	Infants less than 1 Year		Children Ages 1-5 Years	
	Hospital Discharges	ED Visits	Hospital Discharges	ED Visits
<b>Unintentional Injuries</b>				
Cut/pierce				
Drowning/submersion				
Falls (off/from):				
Furniture				
Steps/stairs				
With strike against object				
Slipping/tripping/stumbling				
Playground equipment				
Building				
Other fall from one level to another				
Other/unspecified				
Fire/Burn				
Foreign Body				
Natural and Environmental				
Excessive heat				
Dog bites				
Other bites/stings/animal injury				
All other natural/environmental				
Poisoning				
Struck-by/against object				
Suffocation				
Transport-related				
Motor vehicle (MV)-occupant				
Bicycle/tricycle (MV & non-MV)				
Pedestrian (MV & non-MV)				
Other transport				
All other unintentional causes				
<b>Assault/Abuse</b>				
<b>Undetermined/Other Intent</b>				
<b>Total Injury-Related Cases</b>				



<STATE NAME>

Special Emphasis Report: Infant and Early Childhood Injury, <DATA YEAR(S)>

## <STATE> Child Injury Prevention Activities

- Prevention
- Surveillance
- Partnerships
- Accomplishments/Successes



### <State> Home Visiting Program (name)

Collaborate with State maternal, infant, and early childhood home visiting program staff to draft:

- Description of home visiting program
- Benchmarks
- Outreach programs
- Selected communities, etc.

### <State> Essentials for Childhood Activities

- Description of Essentials for Childhood program if present in the state
- Description of non-traditional and diversified partnerships
- Description of specific child maltreatment collaborations and activities

Notes: Data sources

All injuries are considered unintentional unless specified otherwise. Reference to any commercial entity or product or service on this page should not be construed as an endorsement by the Government of the company or its products or services.

**STATE DEPARTMENT OF HEALTH**  
**State DPH Injury Prevention Program Website**

Released <Month, year>



## **APPENDIX D: Instructions for using the *Special Emphasis Report: Infant and Early Childhood Injury* template**

The template is a formatted tool to help states quickly publish and disseminate state-specific child injury data to support program initiatives. It is designed as a collaborative publication between to reflect the work across agencies to prevent child injury. State injury and violence prevention programs may work with state maternal, infant, and early childhood home visiting programs to jointly produce the report, and consider adding appropriate logos, websites and clearance. State Specific revisions for additions and deletions for state specific purposes are encouraged.

### **Technical Requirements**

The template is provided in both Microsoft Word 2003 and 2010 to ensure access and compatibility across user systems. For those using Microsoft Word 2007, you may wish to use the MS Word 2003 template, or download a free Microsoft Office Compatibility Pack to exchange files between previous releases of MS Word (2007 and 2003). <http://office.microsoft.com/en-us/products/microsoft-office-compatibility-pack-for-word-Excel-and-powerpoint-HA010168676.aspx>.

The template can be used with previous versions of MS Word, but may need adjustments in formatting or saved as compatible file type (.doc). Save the completed document as a PDF for easier printing and electronic distribution. Please follow the guidelines below for easy use and to ensure consistent design.

### **Entering Data for Charts/Graphs in Microsoft Word 2010**

To enter data into the template pie charts and graphs:

- Click once onto the chart and the *Chart Tools* menu will appear on your toolbar.
- Right click on the chart and choose *Edit Data* from the menu.
- Enter data into the Excel sheet that opens.
- When complete, click **X** on the top right corner and the data will be automatically updated and saved.
- For the pie charts, identical data must be entered into two columns so that the percentage can be displayed on the interior of the chart and the category label displayed on the outside.

### **Entering Data for Charts/Graphs in Microsoft Word 2003**

To enter data into the template pie charts and graphs:

- Click once onto the chart.
- Right click on the chart and choose *Chart Object* from the menu.
- Click on *Edit*
- The *Chart Tools* will open on the top toolbar, and the chart will be displayed as one page in an Excel Workbook.
- Click on the next worksheet to view or edit the data.
- When complete, click **X** on the top right corner and the data will be automatically updated and saved.

- For the pie charts, identical data must be entered into two columns so that the percentage can be displayed on the interior of the chart and the category label displayed on the outside.

### **Editing the Header**

- To access the header in Word 2010, choose *Insert*, then *Header*, then *Edit Header*.
- In header, insert your state name in ALL CAPS, as indicated.
- Enter relevant information in <highlighted> sections and then remove highlighting and “< >” characters.
- Try to keep the font and formatting the same to avoid major shifts in spacing and layout.
- To ensure consistent design, keep only the 2 lines of text in the header. Use data year in the header, not the year the data is released.

### **Adding Pages**

- If you are including additional data points in your report, add extra pages to the template by inserting a new page. The new page will include the header.
- You may choose to add page numbers for additional pages.

### **Design Layout, Colors and Images**

- To ensure consistent overall design layout across all reports, please keep the original color palette, font, text and graphic placement.
- Please keep color of the header unchanged.
- Images in the document are from NCIPC’s library of licensed images. If you would like to add additional images (ex: to fill blank spaces if less text) or replace existing images, only use those licensed by CDC. You can download for FREE at CDC’s Public Health Image Library at <http://phil.cdc.gov/phil/home.asp>.

### **Clearance**

- The template has been cleared by CDC.
- Before distribution or posting on websites, be sure to obtain appropriate clearance from your state health department and injury prevention program. This includes applicable clearance of content and use of logos.

### **Section 508 Implementation and Compliance**

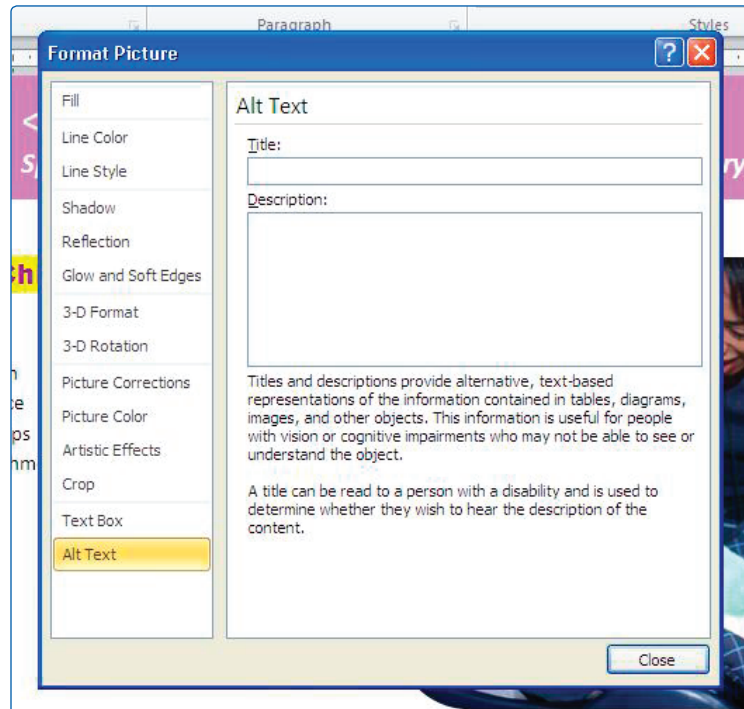
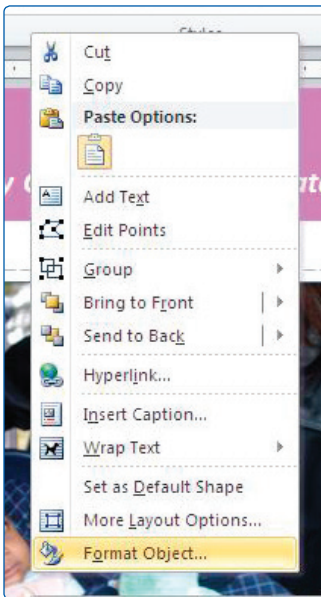
Section 508 requires that Federal agencies’ electronic and information technology is accessible to people with disabilities. This information must be accessible in a variety of ways, which are specific to each disability. To learn more about Section 508 guidance, visit [www.section508.gov](http://www.section508.gov).

Images, data tables, charts and graphs must contain titles and descriptions, **Alt Text**, to provide alternative, text-based representations of the information contained within. The Alt Text is accessed and read through the use of electronic screen readers.

The *Special Emphasis Report: Infant and Early Childhood Injury Data* from each state must be fully compliant with Section 508 before electronic distribution. Instructions to add Alt Text in Microsoft Word are below.

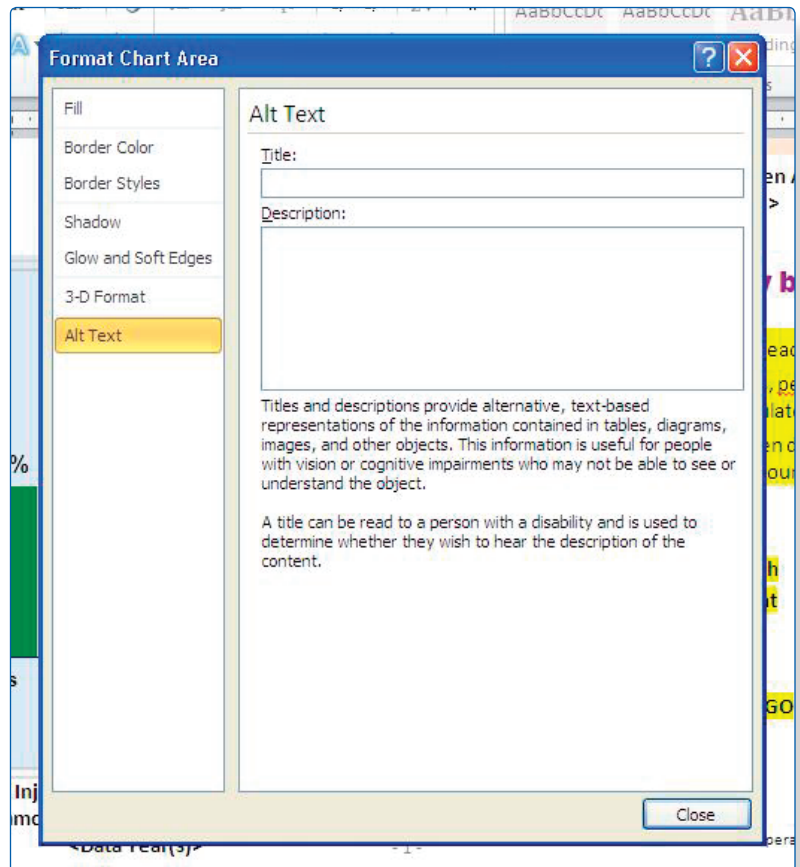
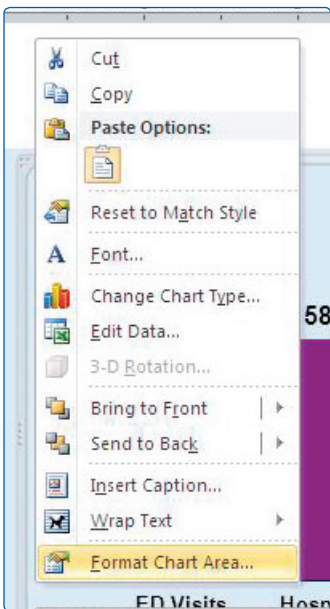
## Adding Alt Text to Images and Pictures in Microsoft Word 2010

- Right click on the image or picture.
- Choose *Format Object* from the menu.
- Next, choose *Alt Text* from the menu.
- Enter the title and a brief description of the image in the fields provided.
  - Ex: Mother placing infant seat in car



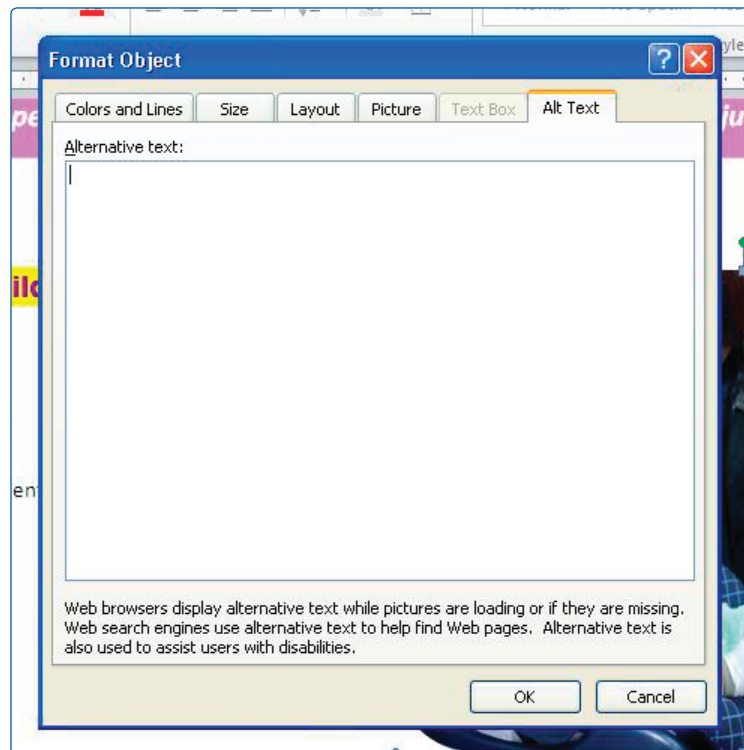
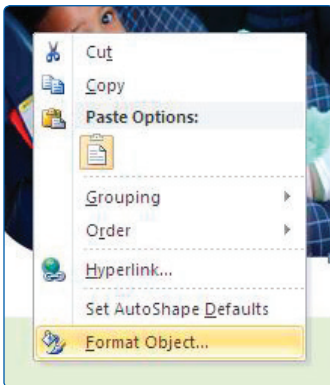
## Adding Alt Text to Charts, Graphs or Data Tables in Microsoft Word 2010

- Right click on the chart, graph or data table.
- Choose *Format Chart Area* from the menu.
- Next, choose *Alt Text* from the menu.
- Enter the title and a brief description of the image in the fields provided. For data graphics, simply copy and paste the summary next to each graph/chart.
  - Ex: Boys accounted for XX% of injury deaths, and had an injury death rate twice that of girls. The proportion between boys and girls for hospitalizations and emergency department visits was less dramatic, with boys accounting for XX% of hospitalizations and XX% of ED visits.



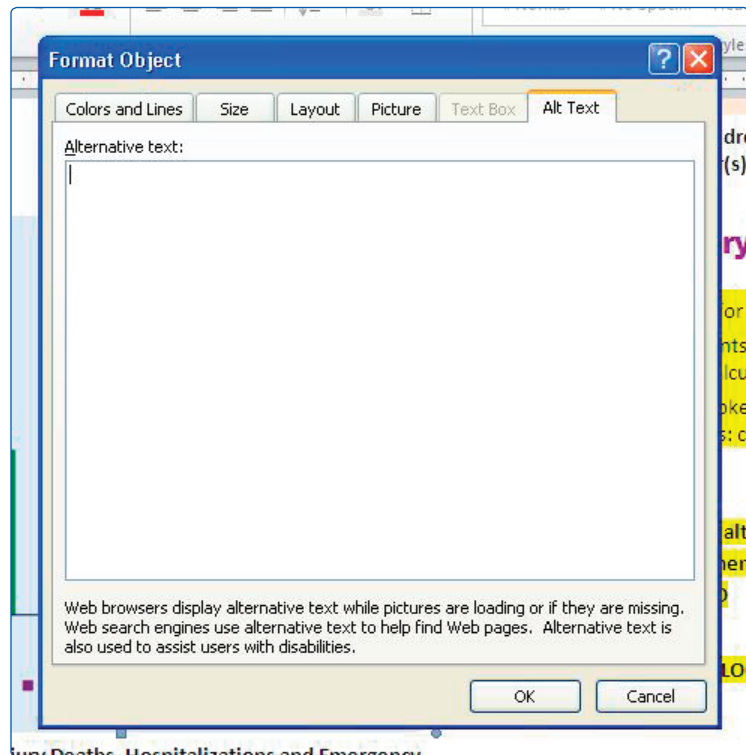
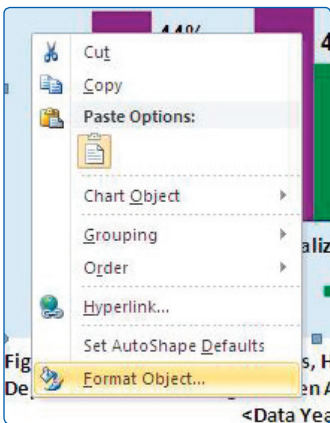
## Adding Alt Text to Images and Pictures in Microsoft Word 2003

- Right click on the image or picture.
- Choose *Format Object* from the menu.
- Next, choose *Alt Text* from the menu.
- Enter the title and a brief description of the image in the fields provided.
  - Ex: Mother placing infant seat in car



## Adding Alt Text to Charts, Graphs or Data Tables in Microsoft Word 2003

- Right click on the chart, graph or data table.
- Choose *Format Object* from the menu.
- Next, choose *Alt Text* from the menu.
- Enter the title and a brief description of the image in the fields provided. For data graphics, simply copy and paste the summary next to each graph/chart.
  - Ex: Boys accounted for XX% of injury deaths, and had an injury death rate twice that of girls. The proportion between boys and girls for hospitalizations and emergency department visits was less dramatic, with boys accounting for XX% of hospitalizations and XX% of ED visits.



## CHECKLIST

Be sure the following steps are completed before considering this document final for distribution:

- Header complete with necessary information.
- Clearance:
  - State health department clearance complete
  - If partnering, home visiting program clearance complete
- 508 Compliance
  - All pictures have Alt Text
  - All graphs and charts have Alt Text
- Design/Formatting
  - All colors unchanged.
  - All images and layout remain unchanged

## APPENDIX E: Example of additional data— Colorado sleep-related infant death report

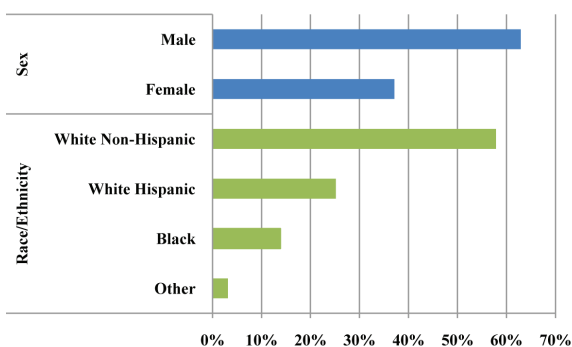
### SLEEP-RELATED INFANT DEATHS

#### Case Review Characteristics

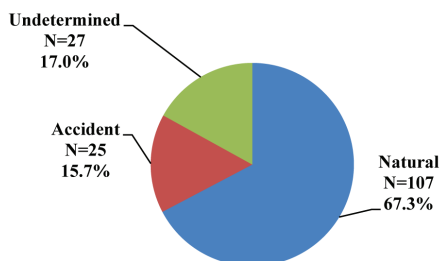
During clinical case reviews, the State Review Team identified 159 cases that occurred between 2004 and 2006 where an infant died in a sleep environment. Sleep-related deaths can be difficult to classify. Some are diagnosed as sudden infant death syndrome (SIDS), while others are diagnosed as accidental suffocation, positional asphyxia, overlay, or undetermined. Figure 15 shows the demographic characteristics of the reviewed sleep-related infant deaths.

- More male infants died in sleep-environments (100) than females (59).
- Among Colorado residents, a higher percentage of black infants died in sleep-environments (14.1 percent) than their representation in the general infant population (5.2 percent)

**Figure 15. 2004-2006 Infant Sleep-Related Deaths Reviewed by Sex and Race/Ethnicity (N=159)**



**Figure 16. 2004-2006 Sleep-Related Infant Deaths by Manner (N=159)**



**Table 8. 2004-2006 Infant Deaths Involving Bed-Sharing (N=73)**

Infant Bed-Sharing	Number	Percent
With One Adult	37	50.7
With One Adult and Another Child	12	16.4
With Two Adults	17	23.3
With Two Adults and Another Child	3	4.1
With Another Child	4	5.5

#### Key Review Findings (2004-2006)

- As shown in Figure 16, coroners classified 67.3 percent (107/159) of the sleep-related infant deaths as natural manner due to SIDS. Sixteen percent (25/159) of sleep-related infant deaths were classified as accidental and 17.0 percent (27/159) were ruled undetermined manner.
- Thirty percent (48/159) of the infant sleep-related deaths occurred in cribs or bassinets.
- Fifty-five percent (87/159) of the infant sleep-related deaths occurred in locations considered to be unsafe sleep environments (adult bed, couch, or futon).
- Death scene investigators found an unused crib in 41.4 percent (46/111) of the cases where an infant was placed to sleep in an environment other than a crib or bassinet.
- Bed-sharing was a significant factor identified in 45.9 percent (73/159) of the infant deaths. Table 8 identifies who was sharing a bed with the infant at the time of the incident leading to the infant's death.
- Seventy-one percent (52/73) of the infants that were bed-sharing were sleeping in an adult bed, while 20.6 percent (15/73) were sleeping on a couch with an adult.
- Fifty-five percent (40/73) of the cases that involved bed-sharing were classified as SIDS by the coroner, 23.3 percent (17/73) were classified as accidental asphyxia, and 20.6 percent (15/73) were ruled undetermined manner.
- The percentage of black infants bed-sharing with an adult at the time of their death was disproportionately higher than their representation in the general population (17.8 percent compared to 5.2 percent).
- In 12.3 percent (9/73) of the cases bed-sharing cases, the infant was sleeping in a bed with an adult that was drug and/or alcohol impaired.



## REFERENCES

1. Thomas KE, Johnson RL. State injury indicators report: instructions for preparing 2012 data. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2014.
2. Department of Health and Human Services. Evidence-Based Model Crosswalk to Benchmarks: Model Alignment with Benchmark, 6/1/2011. Updated 2/8/2012. DOHVE TA ([http://www.mdrc.org/dohve/MIECHV\\_EB\\_Models\\_Crosswalk\\_to\\_Benchmarks.pdf](http://www.mdrc.org/dohve/MIECHV_EB_Models_Crosswalk_to_Benchmarks.pdf)).
3. Injury Surveillance Workgroup 5. Consensus recommendations for injury surveillance in state health departments. State and Territorial Injury Prevention Directors Association: Atlanta (GA); 2007.
4. Centers for Disease Control and Prevention. What is the Barell Matrix (ICD–9–CM)? [cited 2011 Dec 2]. Available from URL: [http://www.cdc.gov/nchs/injury/injury\\_matrices.htm#barell](http://www.cdc.gov/nchs/injury/injury_matrices.htm#barell).
5. International Classification of Diseases 10th Revision [online]. [cited 2012 Jan 27]. Available from URL: <http://www.who.int/classifications/icd/en/>.
6. International Classification of Diseases 9th Revision Clinical Modification [online]. [cited 2012 Jan 27]. Available from URL: [www.cdc.gov/nchs/icd/icd9cm.htm](http://www.cdc.gov/nchs/icd/icd9cm.htm).
7. NCHS. ICD–10: External cause of injury mortality matrix [online]. Available from: [http://www.cdc.gov/nchs/injury/injury\\_matrices.htm](http://www.cdc.gov/nchs/injury/injury_matrices.htm).
8. Centers for Disease Control and Prevention. Matrix of E-code groupings. [cited 2012 Apr 23 Dec 2]. Available from URL: [http://www.cdc.gov/injury/wisqars/ecode\\_matrix.html](http://www.cdc.gov/injury/wisqars/ecode_matrix.html).
9. CDC-CSTE Intergovernmental Data Release Guidelines Working Group. CDC-ATSDR Data Release Guidelines and Procedures for Re-release of State-Provided Data. 2005 Available from URL: <http://www.cste.org/pdffiles/2005/drgwgreport.pdf>.
10. Federal Committee on Statistical Methodology (FCSM). Statistical Policy Working Paper 22 – Report on Statistical Disclosure Limitation Methodology. 2005. Available from URL: <http://www.fcsm.gov/working-papers/spwp22.html>.
11. Federal Committee on Statistical Methodology, Confidentiality and Data Access Committee. Resources available from URL: <http://www.fcsm.gov/committees/cdac/index.html>.
12. Centers for Disease Control and Prevention. National Center for Health Statistics. NCHS staff manual on confidentiality. Available from URL: <http://www.cdc.gov/nchs/data/misc/staffmanual2004.pdf>.
13. Washington State. Washington State Health Data Guidelines. Document on small numbers. Available from URL: <http://www.doh.wa.gov/DataandStatisticalReports/DataGuidelines.aspx>.



**U.S. Department of Health and Human Services**  
Centers for Disease Control and Prevention  
National Center for Injury Prevention and Control

[www.cdc.gov/injury](http://www.cdc.gov/injury)