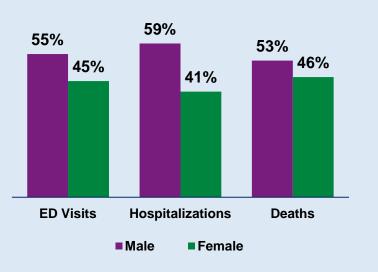


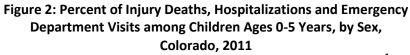
**Colorado** Special Emphasis Report: Infant and Early Childhood Injury, Released 2012

# Injury is a Leading Cause of Death in Children

Injuries are a major public health problem, and Colorado's youngest residents have not escaped it. There were 54 children ages 5 years old and younger who died from an injury in 2011. Injury deaths<sup>1</sup> represented 12.5 percent of all deaths among this age group. Children ages 5 years old and younger accounted for 648 hospital discharges<sup>2</sup> and 23,604 emergency department visits<sup>3</sup> in Colorado during 2011. For every child that died from an injury in 2011, 12 children were hospitalized with an injury, and 437 were treated and released from an emergency department. These numbers do not include children who received treatment in physician offices or at home.

 ICD-10 codes: V01–Y36, Y85–Y87, Y89, \*U01–\*U03
Hospital discharges at non-federal acute care hospitals in Colorado with an ICD-9-CM code for injury in any of the first six discharge diagnoses, excluding inpatient deaths and rehabilitation discharges.
Emergency department visits in Colorado with an ICD-9-CM code for injury in any of the first six discharge diagnoses, excluding deaths. It is estimated that the number of visits for anv reason was 91-95%





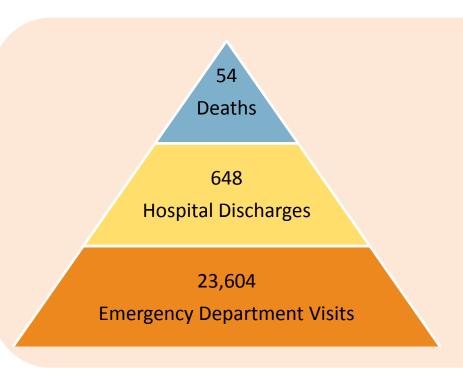


Figure 1: Annual Injuries among Children Ages 0-5 Years, Colorado, 2011

## **Childhood Injury by Sex**

Males ages 0-5 years old accounted for more than half of the injury-related visits to the emergency department, hospitalizations, and deaths in Colorado (Figure 2). The magnitude of this difference between males and females was greatest for children discharged from a non-federal, acute care hospital. Specifically, 59 percent of the injuryrelated hospitalizations among children ages 0-5 years old were among males.



This document was produced in conjunction with CDC's Core Violence and Injury Prevention Program under Cooperative Agreement 11-1101. Thank you to Kirk Bol in the Health Statistics Section for producing the data results.



## **Injury Deaths in Infants**

Suffocation,<sup>4</sup> including accidental strangulation, was the leading type of fatal injury among Colorado infants younger than 1 year old during 2011. Of the 25 injury deaths<sup>1</sup> among infants, 60 percent were due to suffocation or other threats to breathing. Suffocation in bed can be from linens, pillows, or from another body in bed. Other threats to breathing include accidental hanging or strangulation; inhalation and ingestion of food, regurgitated food, or objects; and confined or trapped in a low-oxygen environment, such as a refrigerator. The second leading cause of injury death among infants was assault and/or abuse (28 percent).

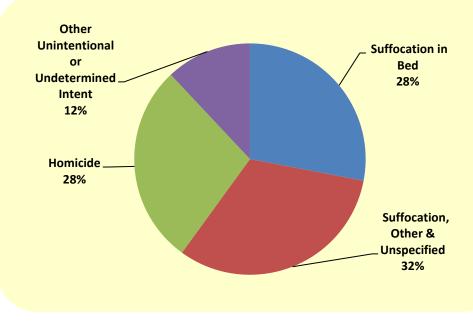
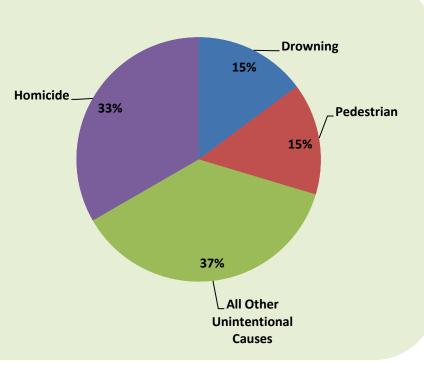


Figure 3: Injury Deaths among Infants Less than 1 Year, Colorado, 2011



#### Figure 4: Injury Deaths in Children Ages 1 – 5 Years, Colorado, 2011

## Injury Deaths in Young Children

Homicide<sup>4</sup> or abuse accounted for 33 percent of injury death among children ages 1 to 5 years old in Colorado during 2011, making it the leading cause of injury death among this age group. Another 21 percent of the injury deaths were transportation related, especially pedestrians hit by a vehicle. Fifteen percent of the injury deaths among children ages 1 to 5 years old were drowning or submersion.

4. For details on the specific cause categories, see Appendix A and B of Gabella BA, Proescholdbell SK, Hume B, Groseclose C, 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.



## **Injury-Related Hospitalizations**

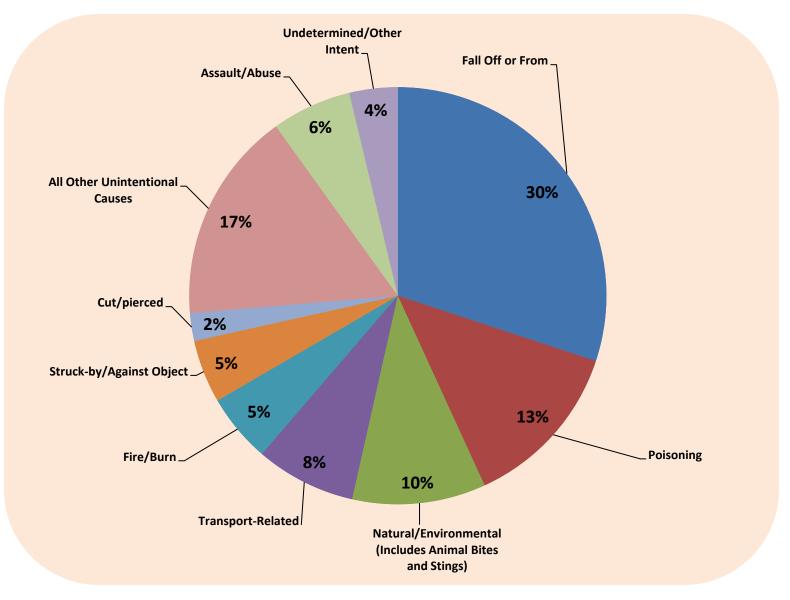


Figure 5: Injury-Related Hospital Discharges among Children Ages 0 – 5 Years, Colorado, 2011

The top three specific causes<sup>4</sup> of injury hospitalizations were: falls (30 percent), poisoning (13 percent), and natural and environmental causes (10 percent), such as excessive heat or causes involving animals and insects. Transportation-related causes (8 percent) involved motor vehicles and other vehicles, including infant and young children being occupants in a car during a crash, children riding bicycles, and children crossing streets. The type of fall (from furniture, stairs, playground equipment, etc.) was other or unspecified for 42 percent of injury hospitalizations due to falls, so details cannot be provided.

4. For details on the specific cause categories, see Appendix A and B of Gabella BA, Proescholdbell SK, Hume B, Groseclose C, 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.



#### **Injury-Related Emergency Department Visits**

The leading of causes<sup>4</sup> of injury-related emergency department visits were: falls (45 percent of the injury visits), being struck unintentionally by or against an object or person (13 percent), and natural and environmental causes (10 percent), such as excessive heat or causes involving animals and insects.

4. For more details on the specific cause categories, see Appendix A and B of Gabella BA, Proescholdbell SK, Hume B, Groseclose C, 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.

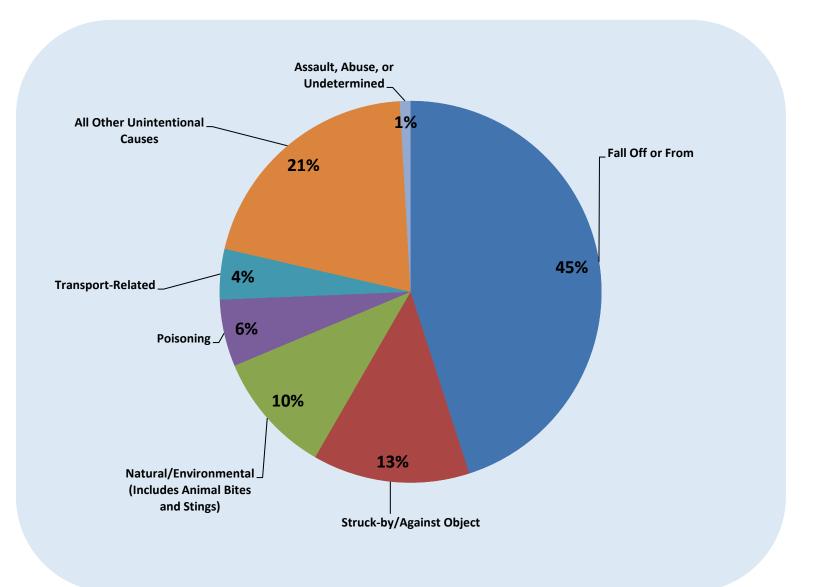


Figure 6: Injury-Related Emergency Department Visits among Children Ages 0 – 5 Years, Colorado, 2011



Table 1: Number of Injury-Related Hospital Discharges and Emergency Department (ED) Visits among ChildrenAges 0 -5 Years, by Age Group, Colorado, 2011

	Infants less than 1 Year	
	Hospital Discharges	ED Visits
Unintentional Injuries	143	2800
Cut/pierce	*	47
Drowning/submersion	*	3
Falls (off/from):	40	1608
Furniture	14	730
Steps/stairs	5	168
With strike against object	6	125
Slipping/tripping/stumbling	*	90
Playground equipment	*	5
Building	*	*
Other fall from one level to another	9	359
Other/unspecified	13	503
Fire/Burn	8	135
Foreign Body	*	10
Natural and Environmental	11	134
Excessive heat	*	*
Dog bites	*	18
Other bites/stings/animal injury	3	108
All other natural/environmental	7	6
Poisoning	13	140
Struck-by/against object	6	302
Suffocation	*	*
Transport-related	*	66
Motor vehicle (MV)-occupant	*	52
Bicycle/tricycle (MV & non-MV)	*	*
Pedestrian (MV & non-MV)	*	4
Other transport	*	9
All other unintentional causes	60	372
Assault/Abuse	30	17
Undetermined/Other Intent	17	17
Total Injury-Related Cases	158	2811

Children Ages 1-5 Years		
Hospital Discharges	ED Visits	
485	20,739	
13	596	
5	31	
169	9138	
29	2020	
11	837	
14	1165	
12	1623	
31	744	
15	46	
30	1170	
75	2829	
29	687	
5	108	
61	2335	
	9	
33	381	
23	1933	
5	12	
78	1214	
28	2872	
3	4	
54	955	
24	458	
7	225	
13	42	
10	230	
54	3048	
13	78	
9	104	
490	490 20,793	

\*Only causes with three or more events are included in this table.



# **Colorado Child Injury Prevention**

The Injury, Suicide and Violence Prevention Branch uses funds from the Community-Based Grants for the Prevention of Child Abuse and Neglect to prevent child maltreatment and runs the child fatality prevention system.

**The Colorado Children's Trust Fund** funds 20 grantees to increase the prevention of child maltreatment in local communities by serving 700 children and 450 parents each year with research-proven curricula.

**The Family Resource Centers** program funds 24 centers to conduct primary and secondary prevention of child maltreatment by serving and referring 3600 individuals each year based on each family's strengths and resources.

**The Colorado Child Fatality Prevention System** identifies preventable childhood deaths and promotes best practice strategies to reduce the incidence of child morbidity and mortality in Colorado.



## **Colorado Home Visitation Programs**

The Nurse Home Visitor Program is funded by State Master Tobacco Settlement dollars to support 19 Nurse Family Partnership sites statewide. These sites provide comprehensive evidence-based home visiting services to improve outcomes for families. In 12 years, the Nurse Home Visitor Program has served 15,047 first-time mothers.

The Maternal, Infant and Early Childhood Home Visiting (MIECHV) program funds expansion of Nurse Home Visitor, and other evidence-based home visitation programs. MIECHV funds are intended to improve coordination of services and strengthen activities carried out under the federal Title V Maternal and Child Health Program, and to ensure that health is a fundamental element of all early childhood systems in Colorado.

The program director is Lucia Waterman. lucia.waterman@state.co.us

## **Evidence-based Programs in Colorado**

- Nurse Family Partnership, serving children ages birth to 2 years
- Parents as Teachers (PAT), serving children up to age 5 years
- Home Instruction for Parents of Preschool Youngster (HIPPY), serving children ages 3 to 5 years
- Healthy Steps for Young Children, serving children up to age 5 years

#### **Benchmark Data on Clients Related to Injury Outcomes**

- 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

Data sources: Death certificates from the Health Statistics Section of CDPHE and hospital discharge and emergency department data from the Colorado Hospital Association 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.

#### **Colorado Department of Public Health and Environment (CDPHE)**

Injury, Suicide, and Violence Prevention Branch

http://www.colorado.gov/cdphe or contact Lindsey Myers at 303-692-2589