



Injury is a Leading Cause of Morbidity and Mortality in Children

Injuries were the leading cause of death for children ages 1-5 in Coconino County for the 5-year period 2010-2014. For each death, there were 15 hospitalizations and 366 emergency department visits. Not included in this report are children who received treatment in physician offices or at home.

- ❖ 53% of injury-related deaths, 89% of hospitalizations, and 98% of emergency department visits children ages 0-5 were unintentional.
- ❖ 6 (32%) injury-related deaths occurred in infants, and 13 (68%) occurred in children between the ages of 1 and 5.
- ❖ 191 (29%) hospitalizations were among infants under 1 year of age, and 277 (71%) were among children ages 1-5.
- ❖ 896 (12%) infants under 1 year of age and 6299 (88%) children aged 1 to 5 years were seen in the emergency department due to injuries.
- ❖ Overall, this amounted to annual rates of 38.2 deaths, 525.6 hospitalizations, and 13,261 ED visits per 100,000 residents under age 6.

Figure 1: Injuries among Children Ages 0-5 Years, Coconino County, 2010-2014

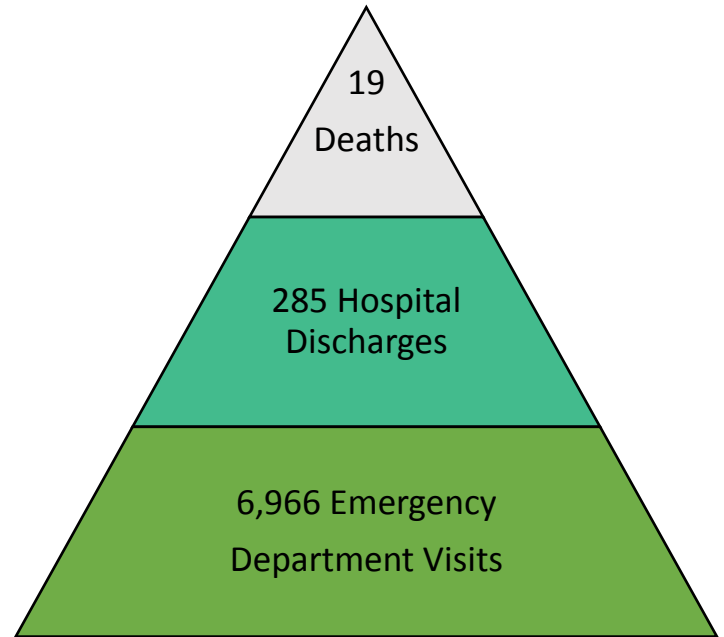
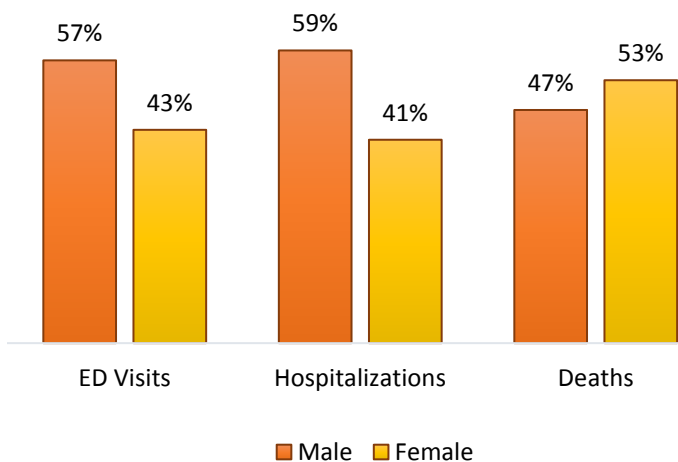


Figure 2: Percent of Injury Deaths, Emergency Department Visits, and Hospitalizations among Children Ages 0-5 Years, by Gender, Coconino County, 2010-2014



Childhood Injury by Gender

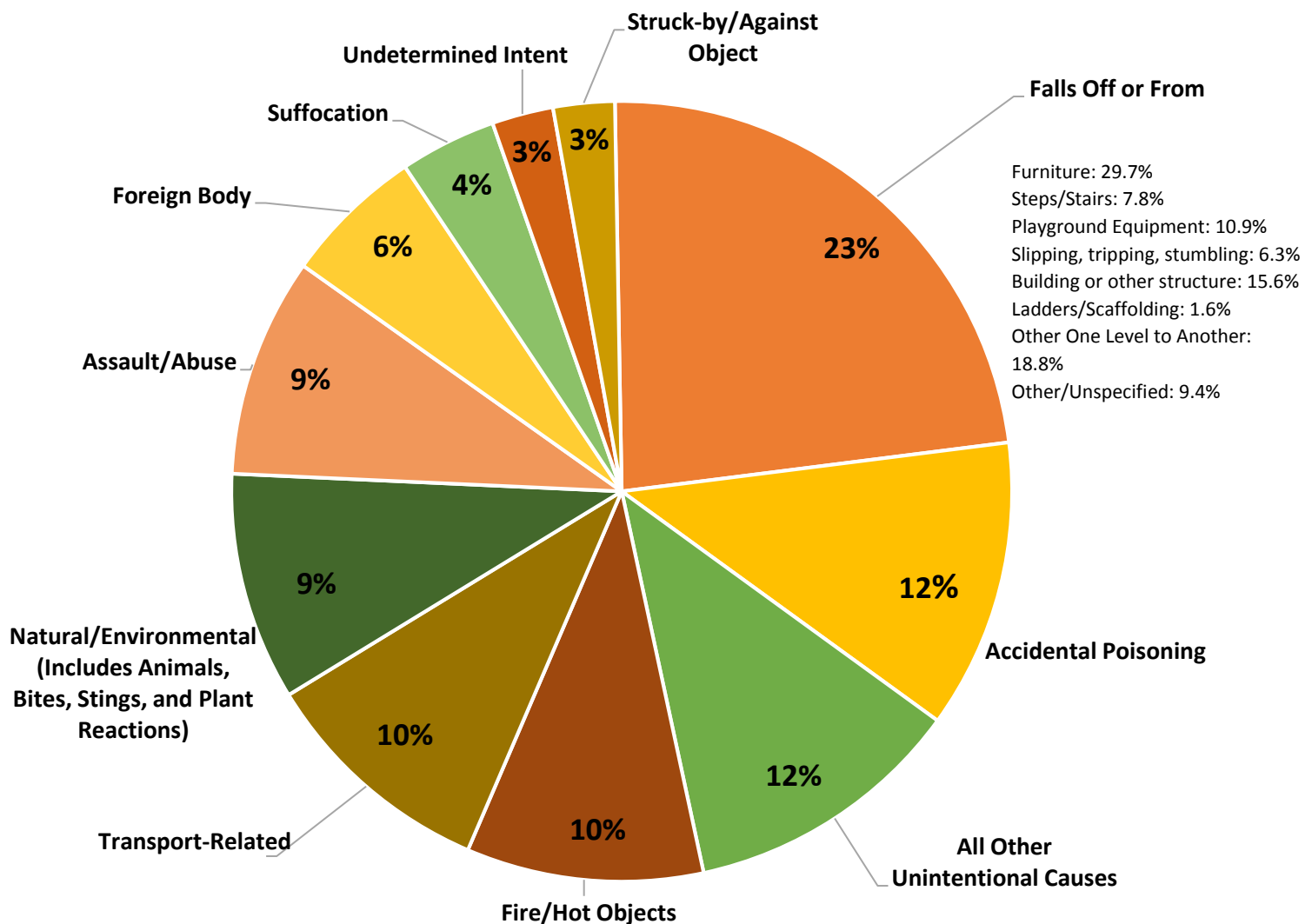
- ❖ Males ages 1-5 were overrepresented in all categories at all included ages.
- ❖ Injuries among infants <1 year were roughly equivalent for both ED visits and hospitalizations, and slightly lower for males than females for injury-related deaths of known cause.

*Does not include injuries resulting from surgical or medical care, regardless of misadventure, or adverse reactions to drugs or medical or biological substances in therapeutic use.



Injury-Related Hospitalizations

Figure 3: Injury-Related Hospitalizations Among Children Ages 0-5 Years, Coconino County, 2010-2014



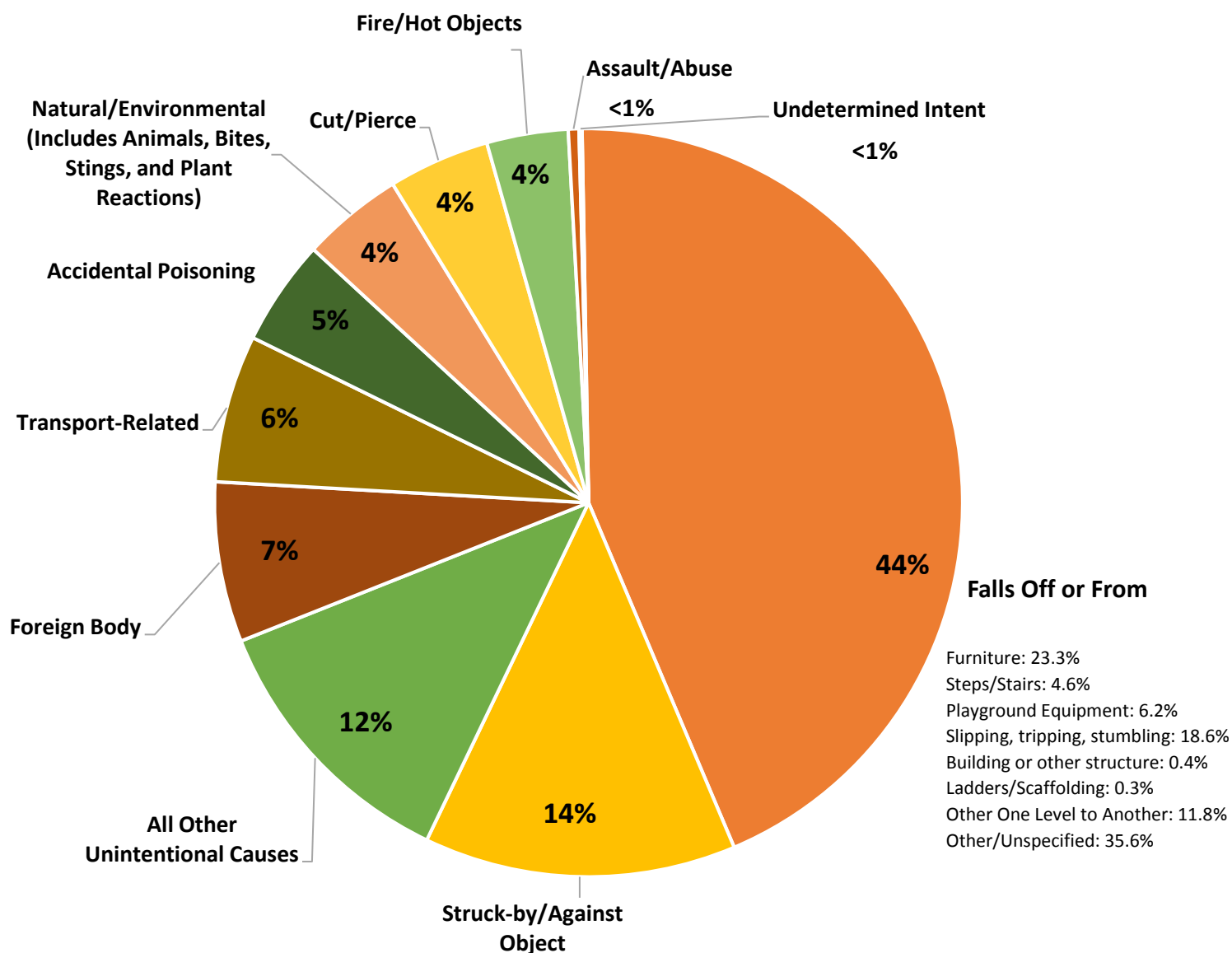
- ❖ There were 83 injury-related hospitalizations among infants <1 year (944.3 per 100,000 residents <1 year of age) and 202 among children ages 1-5 (464 per 100,000 residents between 1 and 5 years of age).
- ❖ In the period of 2010-2014, unintentional falls were the leading cause of injury-related hospitalizations (n=64). The most common identified types of falls were from furniture such as beds, chairs, or sofas, followed by buildings or other structures, playground equipment, and steps/stairs.

NOTE: Does not include injuries resulting from surgical or medical care or adverse reactions to therapeutically-administered substances



Injury-Related Emergency Department Visits

Figure 4: Injury-Related Emergency Department Visits among Children Ages 0-5 Years, Coconino County, 2010-2014



- ❖ There were 820 injury-related hospitalizations among infants <1 year (9,328 per 100,000 residents <1 year of age) and 6146 among children ages 1-5 (14,110 per 100,000 residents between 1 and 5 years of age).
- ❖ In the period of 2010-2014, unintentional falls were the leading cause of injury-related ED visits (n=3045).

NOTE: Does not include injuries resulting from surgical or medical care or adverse reactions to therapeutically-administered substances



Severe Injuries: Injury Deaths and Injuries Meeting State Trauma Criteria*

Figure 5: Injury- Related Deaths among Children Ages 0-5, Coconino County, 2010-2014

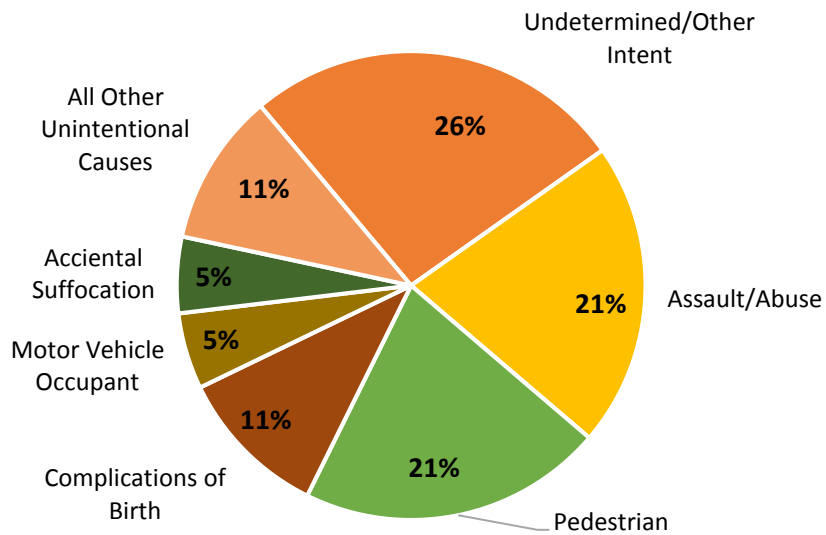
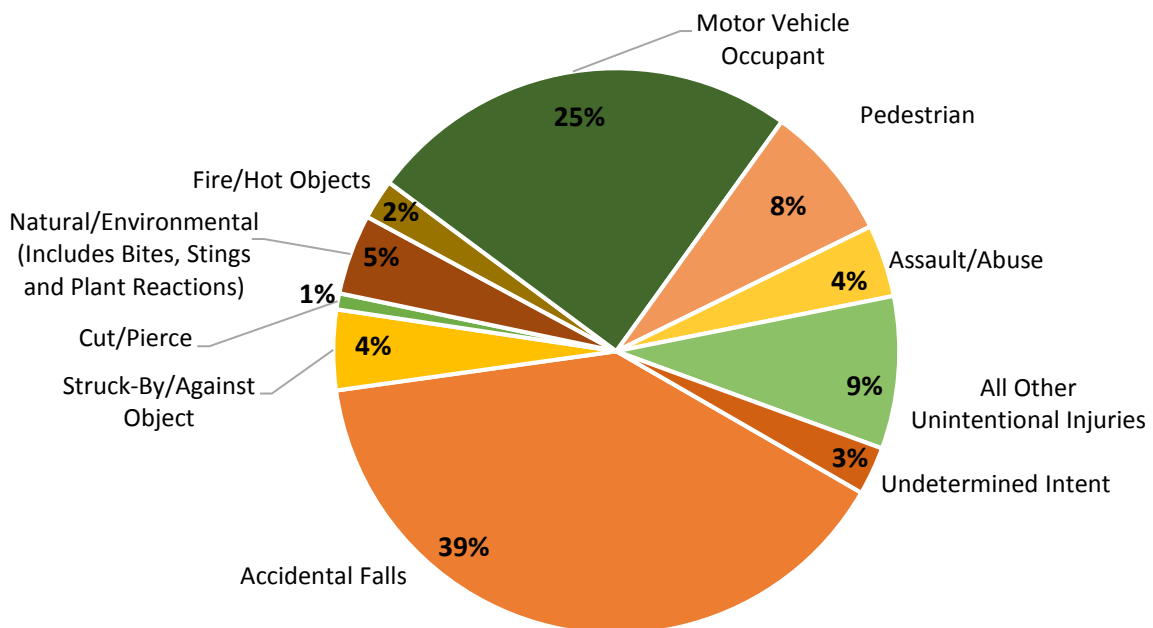


Figure 6: Injuries Meeting State Trauma Criteria* among Children Ages 0-5, Coconino County, 2010-2014



*Includes patients where trauma protocol was activated either at the scene or at the responding trauma center, or where the patient was admitted or died as a result of the injury. Excludes superficial injuries and contusions, isolated distal fractures and burns, and deaths at incident scene without trauma center transfer.

Coconino County Public Health Services District

Special Report: Infant and Early Childhood Injury, 2010-2014



Table 1: Injury-Related Hospitalizations and Emergency Department (ED) Visits among Children Ages 0-5 Years, by Age Group, Coconino County, 2010-2014

	Infants <1 year		Children Ages 1-5 Years	
	Hospital Discharges	ED Visits	Hospitals Discharges	ED Visits
Unintentional Injuries	57	807	187	6,090
Cut/Pierce	2	15	2	293
Drowning/Submersion	0	0	1	10
Falls (<i>off/from</i>)	10	411	59	2641
Furniture	4	186	15	525
Steps/stairs	2	14	3	97
Slipping/tripping/stumbling	0	29	5	540
Playground equipment	0	4	12	219
Other/unspecified	4	178	24	1260
Fire/Burn/Hot Objects	4	34	23	212
Foreign Body	8	73	8	408
Natural and Environmental	8	20	20	286
Dog Bite	0	8	5	112
Spider Bite	0	9	2	73
Other injury caused by plants, insects, or animals	1	0	12	89
Poisoning	8	29	26	288
Struck-by/against object	0	78	7	861
Suffocation/Choking	5	2	6	11
Transport-related	1	61	26	382
Motor Vehicle (MV)-Occupant	1	61	10	262
Pedestrian (MV & non-MV)	0	0	10	20
Bicycle/tricycle (MV & non-MV)	0	0	2	85
Other transport	0	0	4	15
All other unintentional causes	11	85	14	715
Assault/Abuse	21	9	4	23
Undetermined/Other Intent	3	2	4	10
Total Injury-Related Cases	81	819	200	6140

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Where do early childhood injuries stand within all childhood injuries?

Early childhood injuries (ages 0-5) accounted for nearly 40% of all emergency department visits and hospitalizations among all children ages 0-17 in Coconino County from 2010-2014. The most common age of injury varies greatly by injury type, however; children under 6 were responsible for the greatest portions of fall-related injuries and accidental poisonings.

Table 2: Distribution by Age Group of Inpatient Hospitalizations and Emergency Department Visits Among Children Ages 0-17, Coconino County, 2010-2014

Injury Classification	Infants <1 	1-5 	6-10 	11-14 	15-17 
All Injury Types	5%	32%	21%	21%	20%
Accidental Falls	6%	40%	25%	18%	11%
Motor Vehicle-Related	4%	20%	20%	22%	35%
Accidental Poisoning	8%	66%	8%	8%	10%
Self-Inflicted	0%	0%	1%	38%	62%
Intentional	6%	6%	7%	26%	55%

...within injury-related deaths?

Table 3: Percent of All Injury-Related Deaths Among Children Ages 0-17, by Age Group, Coconino County, 2010-2014

Infants <1	1-5	6-10	11-14	15-17
15%	21%	13%	19%	31%

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In summary...

Early childhood injuries are a major cause of morbidity and mortality in children, and may impact health and development throughout a child's life. It is important to monitor and evaluate injury in young children to ensure that all children have a healthy start. Fortunately, many types of injury are also preventable through the actions of families, communities, and governing agencies.

What is the Health District doing to address childhood injuries?

Coconino County Injury Prevention works to identify and target areas of injury in children. However, with recent Arizona Department of Health Services funding reductions services to prevent childhood injuries have been reduced.

Activities to reduce childhood injury at the county health district include:

- ❖ Safe Kids Coconino County
 - Motor vehicle safety programs, including distracted driving and car seat classes
 - Bicycle and pedestrian safety
- ❖ Education to reduce sleep-related infant death and Cribs for Kids program
- ❖ Outdoor safety with Coconino Search and Rescue
- ❖ Poison prevention
- ❖ The Pediatric Injury Prevention Group (PIG)
 - A county-wide coalition that meets to understand and address local causes of pediatric injury through collaboration, data-gathering, and evidence-informed interventions.
- ❖ Child Fatality Review
 - An ongoing panel review of child deaths to assess preventability and assure improvement.



The Health District also works with community partners, including:

- ❖ Tribal and Native American-focused agencies
- ❖ Safe Child Center at Flagstaff Medical Center
- ❖ Health Choice Integrated Care
- ❖ Local hospitals and clinics
- ❖ Local law enforcement
- ❖ Local school districts

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Access additional information at <http://www.coconino.az.gov/index.aspx?NID=249>.