



North Carolina Office of the Chief Medical Examiner
Deborah L. Radisch, MD, MPH
Chief Medical Examiner and Chair, NC CFPT

NC Child Fatality Prevention Team Annual Summary
2016 Child Deaths in NC

Report prepared by:

Kerry Robbins, MS

Research Assistant/Child Fatality Reviewer, NC CFPT

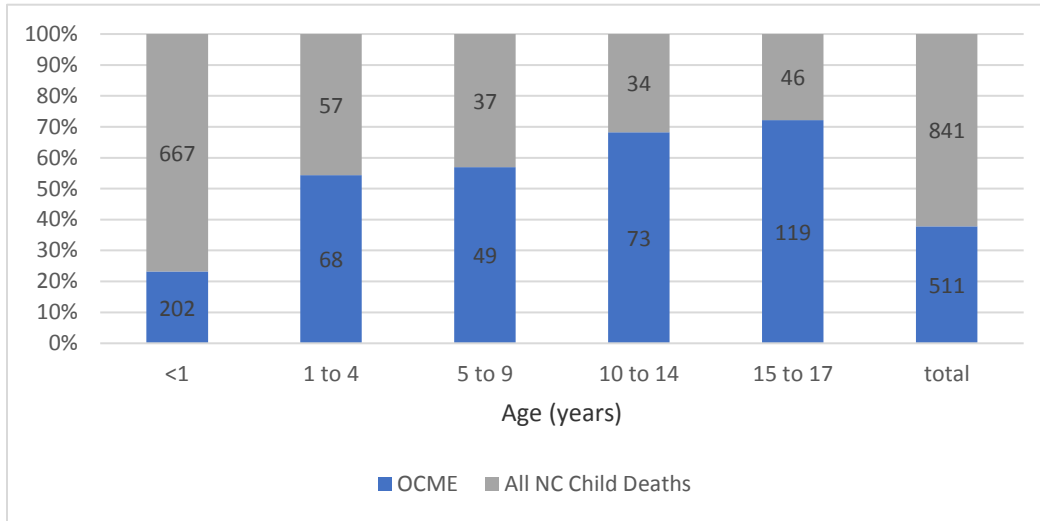
Phone: 919.743.9058

Fax: 919.743.9099

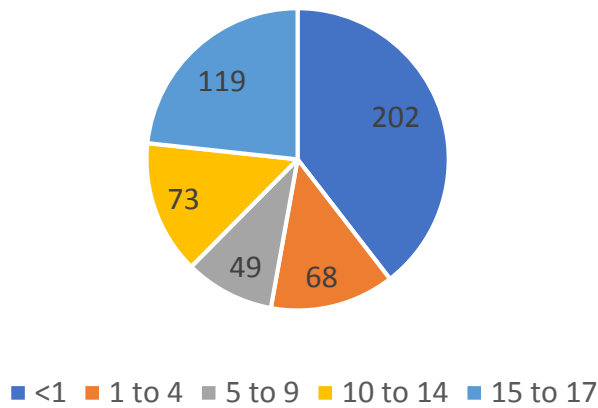
E-mail: kerry.robbs@dhhs.nc.gov

TOTAL NUMBER OF DEATHS 2016
North Carolina Residents under the Age of 18 Years

The State Center for Health Statistics (SCHS) reported that in 2016, **1,360** children died in North Carolina. Many of these deaths were expected and included children who died from a known natural disease or illness. The Office of the Chief Medical Examiner investigated the cause and manner of death for **511** of the child fatalities. The cases investigated by the Medical Examiner System included a number of natural deaths, as well as accidental deaths, homicides, suicides, and deaths for which no cause and/or manner of death could be determined.



Medical examiner Child Fatalities



Age	Medical Examiner	Other	Total North Carolina Child Fatalities
<1	202	667	873
1 to 4	68	57	126
5 to 9	49	37	87
10 to 14	73	34	107
15 to 17	119	46	167
total	511	841	1360

The CFPT reviews only child fatalities that are investigated by the OCME. With a total of 511 deaths investigated by the Medical Examiner System and 841 child deaths of all North Carolina child deaths,

approximately 38% of all child deaths that occurred in North Carolina were reviewed by the CFPT. These deaths are categorized as follows:

HOMICIDES

There were 52 children who died at the hands of another in 2016. The CFPT separates homicides into 2 categories; homicides that occur at the hands of a parent or caregiver and homicides that do not.

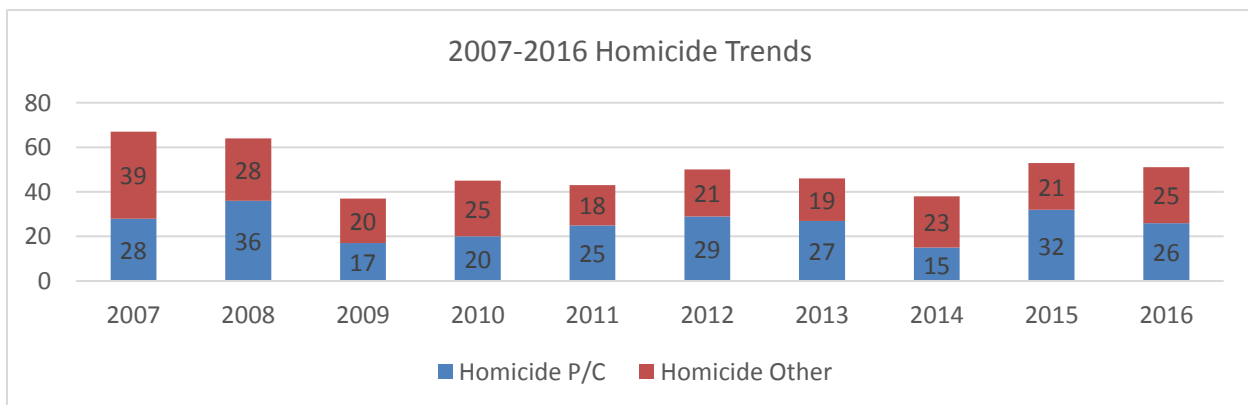
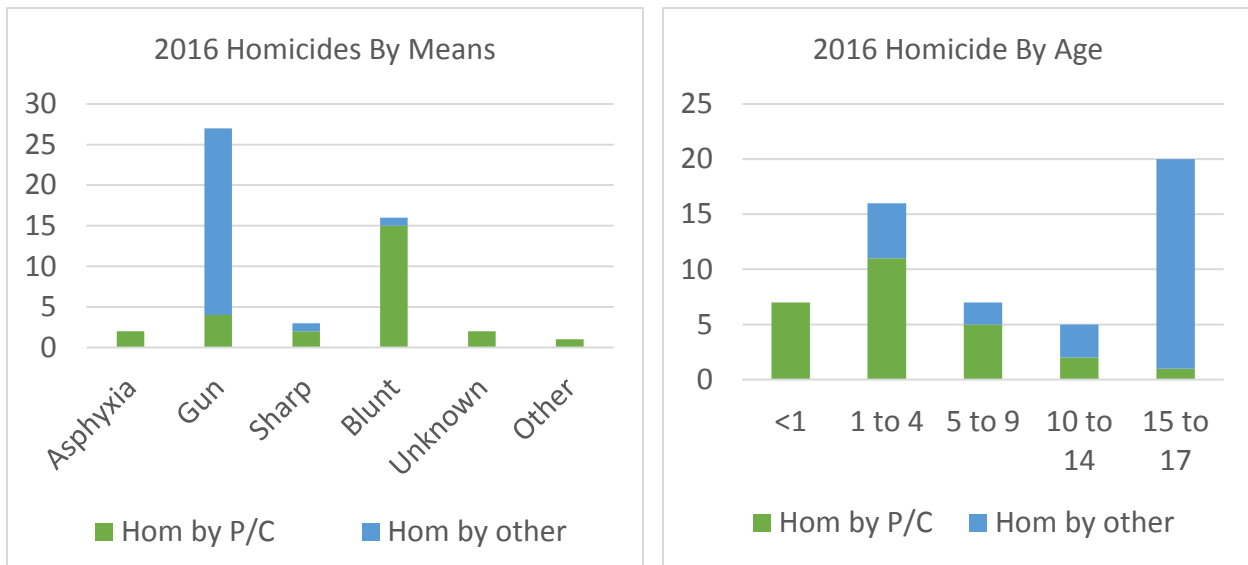
Homicide by Parent or Caregiver

Homicide by Parent or Caretaker deaths accounted for 27 of the 52 total child homicides in 2016. Infants accounted for 7 deaths, and toddlers, ages 1-4 years, accounted for 12 deaths. There were 8 deaths between the ages of 5-17 years: ages 5-9 accounted for 5 deaths, ages 10-14 for 2, and 15-17 for 1 deaths. Blunt force trauma caused 16 deaths, guns 4, asphyxia and sharp each 2 deaths, unknown 2, and other 1 (metabolic derangement).

Other Homicides

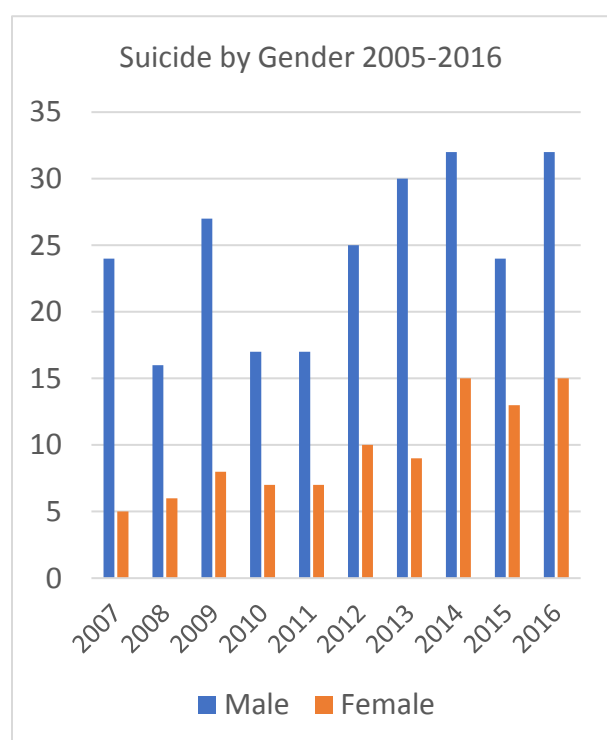
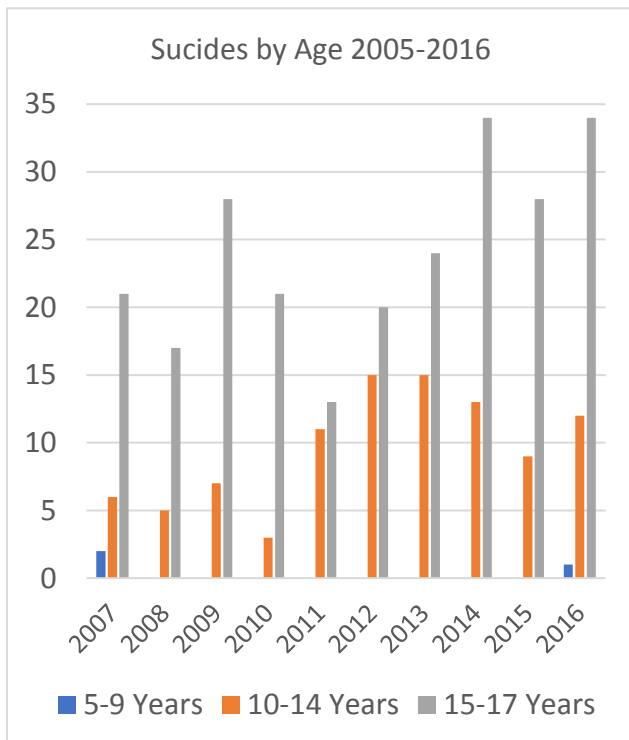
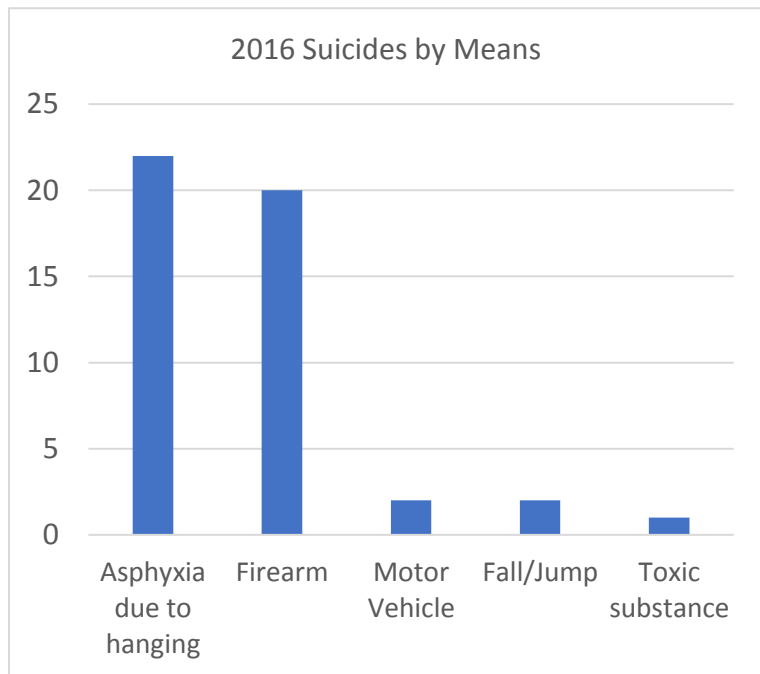
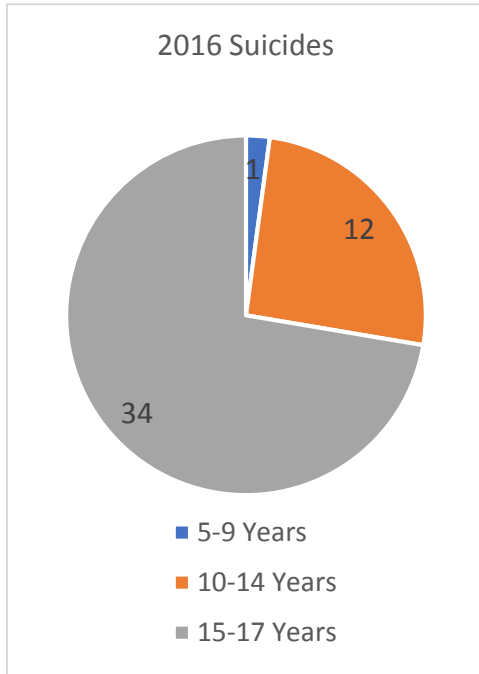
Other homicides, in which the parent or caregiver was not a suspect or perpetrator, comprised 25 of the 52 total 2016 child homicides. Teenagers between the ages of 15 and 17 years accounted for 19 of the homicides. This age group included 18 gun related deaths and 1 blunt trauma death. Among ages 0-14 years, 5 deaths were firearm-related, and 1 was caused by sharp trauma.

Of all the homicides, Black non-Hispanic children comprised the majority of homicides, 31 deaths; 18 deaths were White non-Hispanic children, 1 was White Hispanic, 1 was unspecified Hispanic, and 1 unspecified non-Hispanic race.



SUICIDES

Suicide was the manner of death of 47 children in 2016. Most children that committed suicide were between the ages of 15 and 17 years, accounting for 28 deaths (60%). There were 18 children between the ages of 10 and 14 years and 1 between the ages of 5 and 9 years. Males accounted for 32 deaths, females for 15 deaths. The means of death in suicides included asphyxia due to hanging in 22 of the deaths, use of a firearm in 20 of the deaths, 2 due to motor vehicle crashes, 2 due to fall/jump, and 1 from toxic substance.



ACCIDENTS

Each year, accidental deaths comprise the largest number of non-natural deaths of children in North Carolina. In 2016, there were 204 deaths investigated by the NC Medical Examiner System certified as manner “accident.” The CFPT utilizes multiple categories to better analyze the circumstances of these deaths.

Vehicle-related

In 2016, there were 115 deaths involving vehicles. In a majority of these deaths, 59, were passengers, while 27 of these deaths were drivers, and 29 were outside of vehicles or in other-vehicle related crashes, or pedestrians.

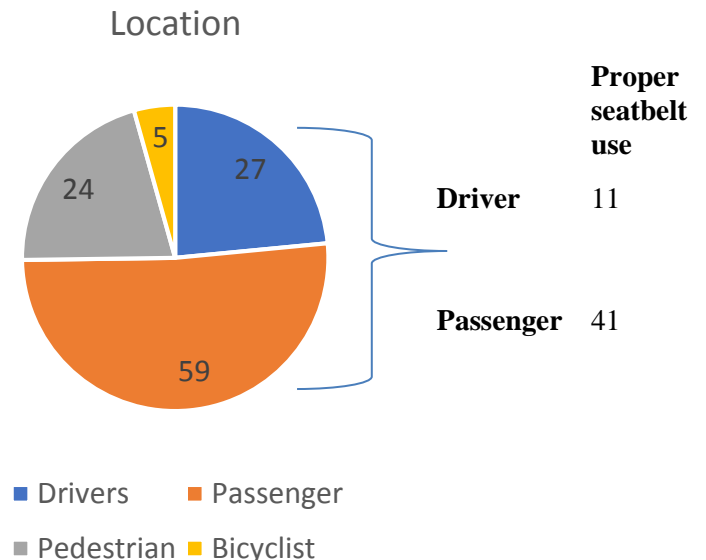
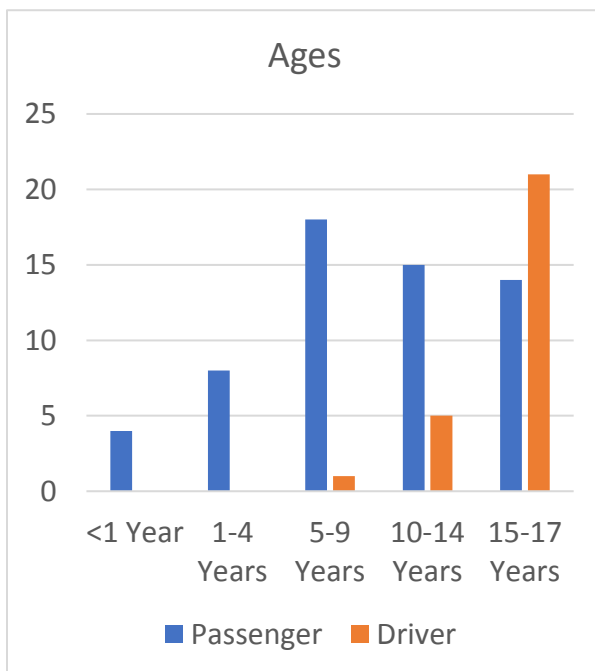
In addition to motor vehicles, other vehicles involved in collisions included: 1 go-kart, 1 off-road motorcycle, 1 jet ski, 1 moped, 2 dirt bikes, 3 ATVs.

Nine of the 59 passenger deaths were being driven by drivers under the influence of drugs or alcohol.

Of the 27 drivers, 12 children were 17-years-old, 8 were 16-years-old, and 7 were 15 years or younger.

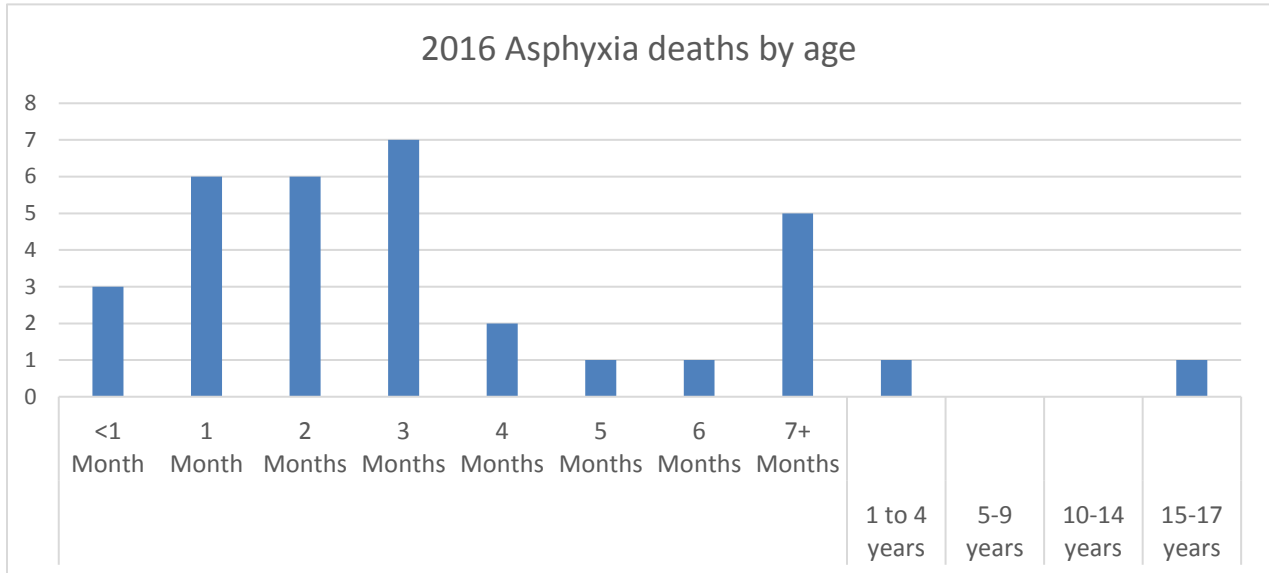
Of all the children involved in vehicle-related accidents, thirty-four children were either not wearing seat belts or were not properly restrained. For drivers specifically, 11 were wearing seat restraints.

Additional vehicle-related injuries included 1 train incident, 5 bicycles, 3 children who ran into the road, 2 who were in their yard or driveway at the time of collision, 2 unspecified, 1 in which no-one was operating the vehicle, 1 crushed while working on car maintenance, and 14 pedestrians on foot. Those involved in additional vehicle-related accidents included a total of 29 children: 2 children under 1 year of age, 5 children ages 1-4 years, 6 children ages 5-9 years, 7 children ages 10-14, and 9 children ages 15-17 years.



Asphyxia

Accidental asphyxiation caused the deaths of 33 children in 2016. Infants constituted the majority, 29, of deaths due to accidental asphyxiation in a sleep environment, either during co-sleeping or by being placed in an unsafe sleep environment (i.e., loose bedding, stuffed animals). Two other infant deaths, one due to being sat on by an older sibling and another for oxygen exclusion due to kerosene heating source. Two accidental asphyxia deaths of children between the ages of 1 year and 15 years included deaths from choking due to a food bolus and complications of an unsafe sleep environment.

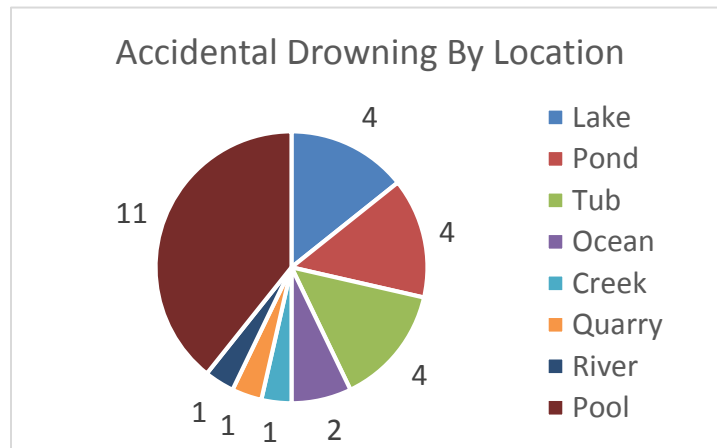


Fire/Burns/Carbon Monoxide

Four fires resulted in 4 child fatalities from thermal burns and/or carbon monoxide inhalation toxicity. All fatal fires were residential.

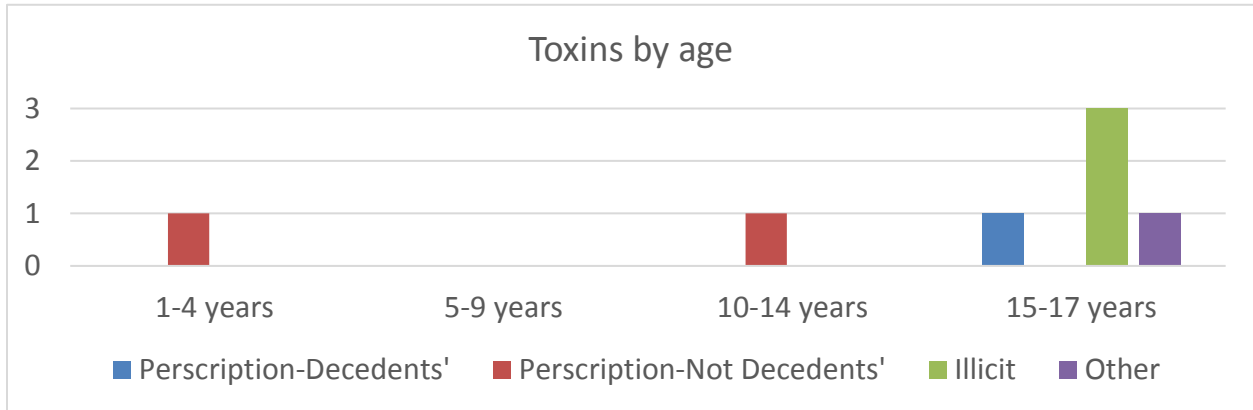
Drowning

Drowning resulted in the deaths of 28 children in 2016. Four drowning deaths occurred in each a lake, pond, and tub (12); 2 occurred in an ocean, and 1 each in a creek, quarry, and river (3). Eleven deaths occurred in a pool location. Deaths were evenly split, 14 each, occurring while the child was alone or unsupervised; versus being engaged in a water activity with others.



Toxins

There were 7 deaths from toxic substances (i.e. poisoning). Five of these children were 15-17 years old, 1 13-year-old, and 1 4-year-old. Three overdosed on illicit drugs, 2 from prescription drugs not prescribed to them, and 1 from a prescription prescribed to the decedent. One other child died from carbon monoxide exposure on the back of a boat.

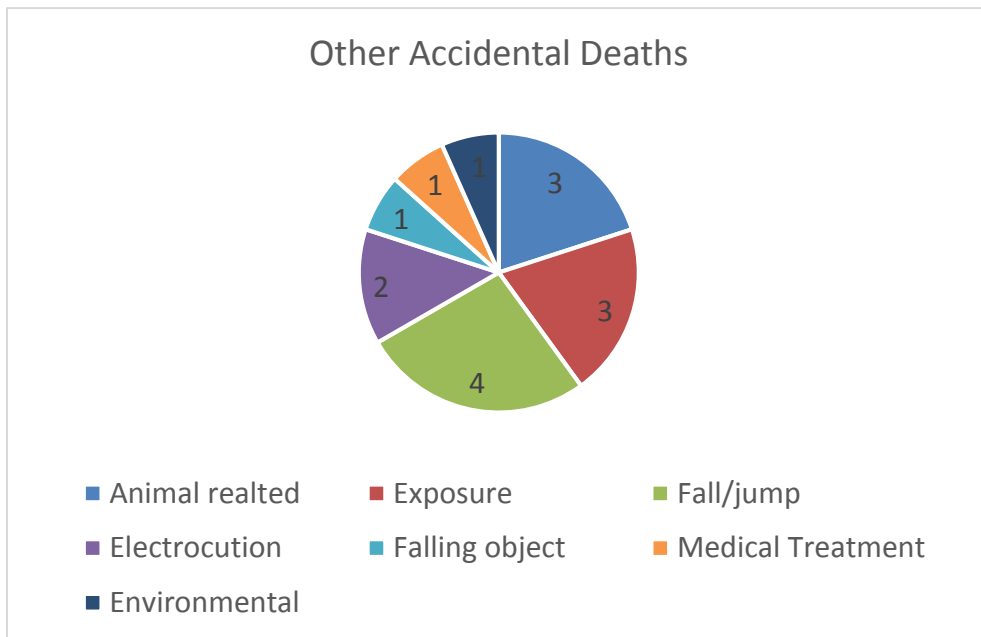


Firearms

There were 2 firearm injury deaths that were determined to be accidental in manner. In one, a 16-year-old was showing a gun to a friend when it discharged, killing that teenager, and in the other, the child found a parent's gun and it discharged, killing the 3-year-old child.

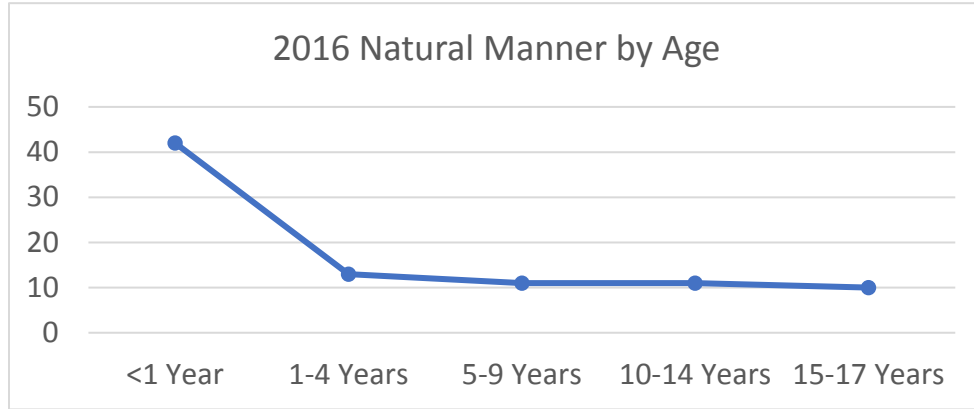
Other

Other deaths with an accidental manner, totaling 15 deaths, included 3 animal-related, 3 exposure, 4 fall/jump, 2 electrocution, 1 each for falling object, medical treatment, and environmental.



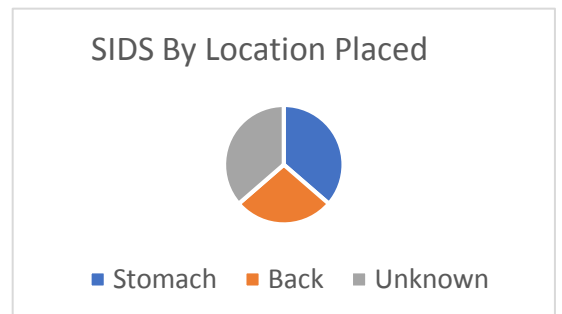
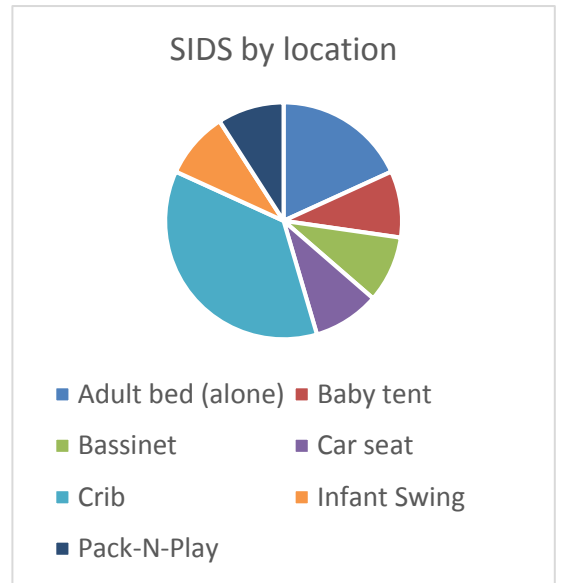
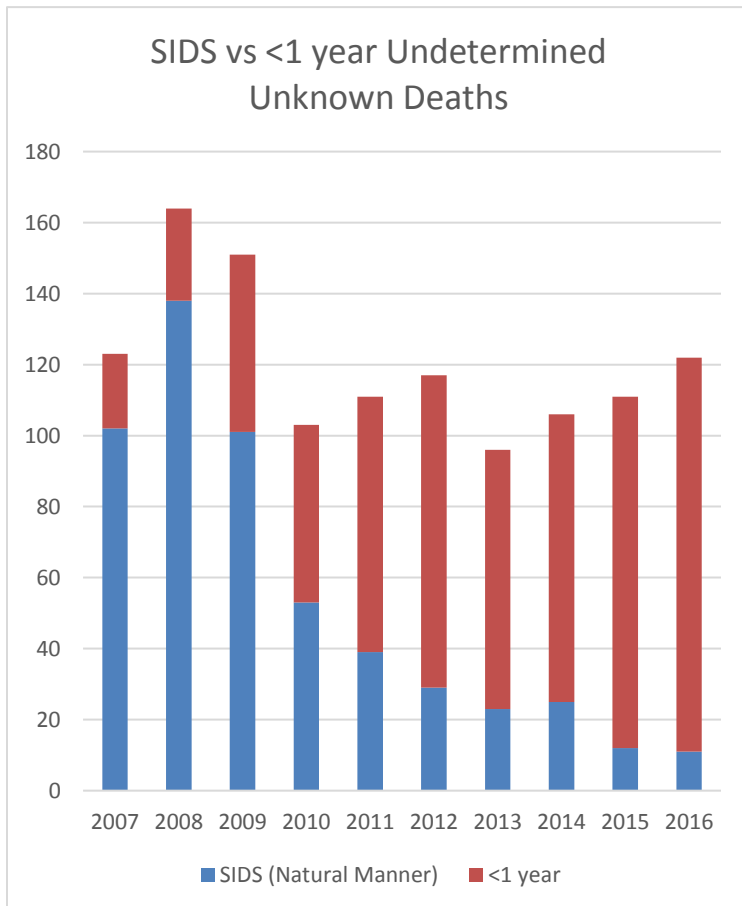
NATURAL

Eighty-seven deaths were determined to be natural in manner. Of these, 11 were SIDS cases and 76 were other natural causes. The top 5 causes of death with a natural manner in 2016 were: SIDS, pneumonia, seizure, complications of a disease, and cardiac arrhythmia.



Sudden Infant Death Syndrome

There were 11 infants who died from Sudden Infant Death Syndrome (SIDS) in 2016. The majority of infants, 8, were white, 2 black, and 1 unknown. Four deaths occurred in cribs, followed by two alone in adult beds, and one infant in each of the following: Pack-N-Play, car seat, bassinet, infant swing, baby tent. Three infants were placed to sleep on their backs, four on their fronts, and 4 in unspecified positions.

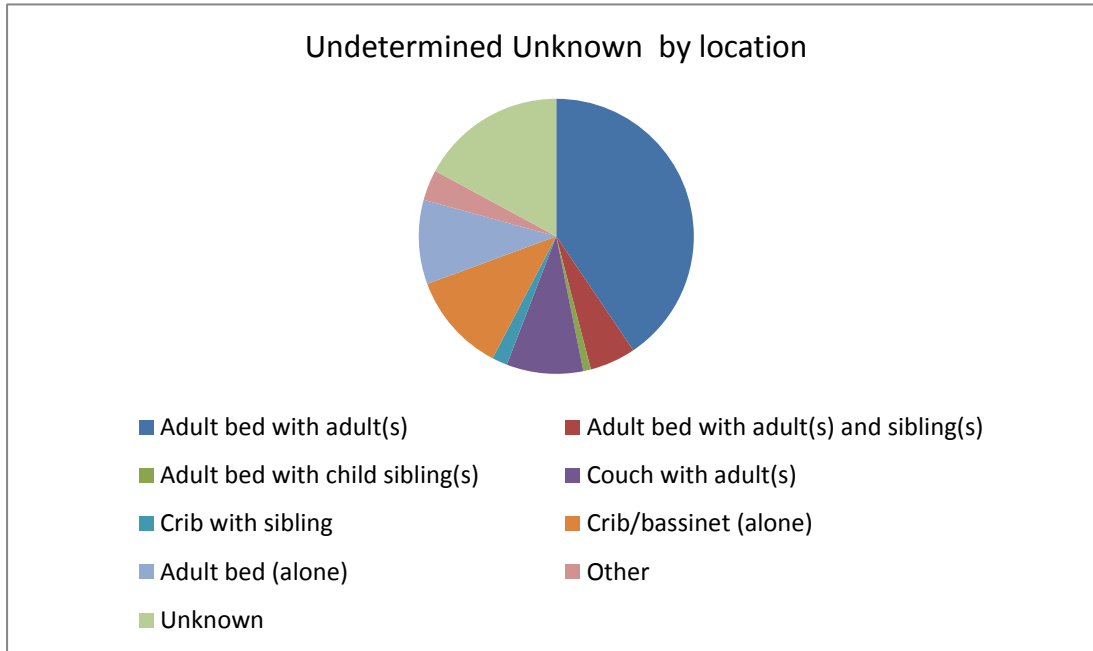


UNDETERMINED

There were 121 deaths that were certified as undetermined manner. Of those, 117 stated unknown means, 2 were related to toxins, 1 to blunt trauma, and another to a firearm.

Of the undetermined means, 111 children, 95%, were under 1 year of age, 4 children were ages 1-4 years, 1 child age 10-14 years, and 1 child age 15-17 years.

As is the case for most of the 111 infants, children under one year of age, when a known risky or unsafe sleeping situation is noted, the possibility of asphyxiation as a result of suffocation cannot be entirely excluded which leads to the certification of an unknown means of death.



Years	Means			
	Unknown	Toxin	Blunt	Firearm
<1	111	1	1	
1 to 4	4	1		
5 to 9	0			
10 to 14	1			
15 to 17	1			1

	Means			
	Unknown	Toxin	Blunt	Firearm
<1 year	111	1	1	
1-4 years	4	1		
5-9 years				
10-14 years	1			
15-17 years	1			1