



North Carolina Office of the Chief Medical Examiner
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Chief Medical Examiner and Chair, NC CFPT

Office of the Chief Medical Examiner
NC Child Fatality Prevention Team Annual Summary
2017 Child Deaths in NC (ages 0-17 years)

Report prepared by:

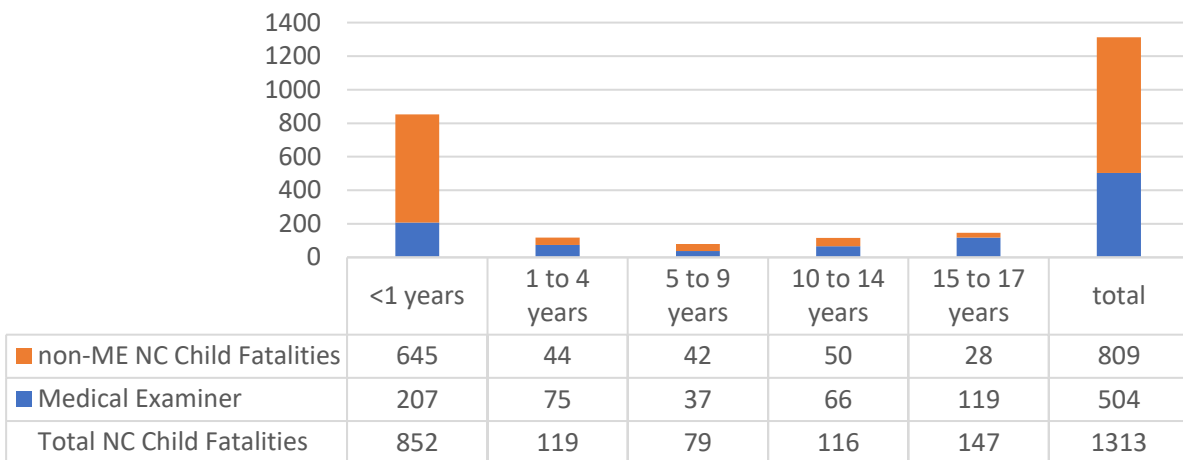
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TOTAL NUMBER OF DEATHS 2017 North Carolina under the Age of 18 Years

Throughout the 2017 calendar year, the State Center for Health Statistics (SCHS) reported **1,313** children died in North Carolina. Many of these deaths were expected and included children who died from a known natural disease or illness. Of the child fatalities under the Medical Examiner Jurisdiction, the Office of the Chief Medical Examiner (OCME) investigated the cause and manner of death for **504** children.

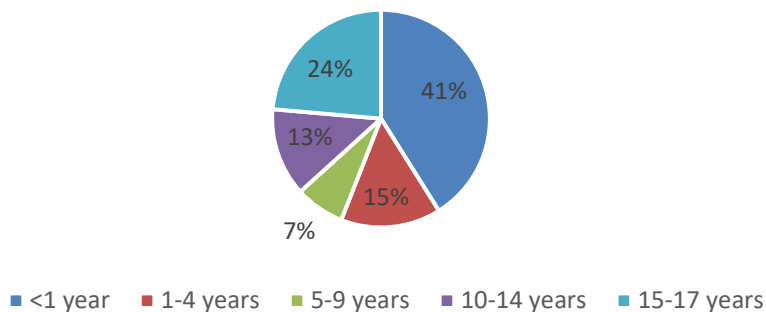
Manners assigned include Accident, Homicide, Suicide, Undetermined, and Natural. The cases investigated by the Medical Examiner System are also assigned a means of death which refers to how the death occurred. Means included unknown, motor vehicle, natural, asphyxia, firearms, drowning, blunt, toxin, SIDS, other, fall, exposure, fire sharp, medical, animal-related injuries, electrocution, environmental, falling object.

North Carolina Child Fatalities, 2017



Note: Total NC Death numbers retrieved from 2017 Child Death Fact Sheet
(https://schs.dph.ncdhhs.gov/data/vital/cd/2017/CFinNC2017_v3.pdf)

Medical Examiner 2017 Child Fatalities



The Child Fatality Prevention Team (CFPT) staff reviews child fatalities that are investigated by the Medical Examiner System. With a total of 1,313 North Carolina child deaths, approximately 38% of all child deaths that occurred in North Carolina were reviewed by the Medical Examiner CFPT. Represented below are child fatality reviews, excluding pending cases, which totals 504 children. Due to pending cases, numbers are subject to change. Of note:

- 31 fatalities occurred in NC to non NC resident children
- 7 children listed under infants are fetal deaths

2017 OCME Child Fatalities		
Manner	Means	Number of Children
Accident (187)	Asphyxia	26
	Blunt	1
	Drowning	26
	Exposure	3
	Fall	5
	Fire	3
	Gun	1
	Medical Treatment	1
	Motor Vehicle	109
Toxin	12	
Homicide (57)	Asphyxia	5
	Blunt	17
	Drowning	1
	Gun	26
	Sharp	3
	Other	4
	Toxin	1
Natural (63)	Natural	55
	SIDS	8
Suicide (46)	Asphyxia	24
	Fall/Jump	1
	Gun	18
	Motor Vehicle	1
	Toxin	2
Undetermined (142)	Asphyxia	3
	Blunt	1
	Drowning	1
	Motor Vehicle	1
	Toxin	3
	Unknown	131
	Other	2
Fetal		7
	Pending	2

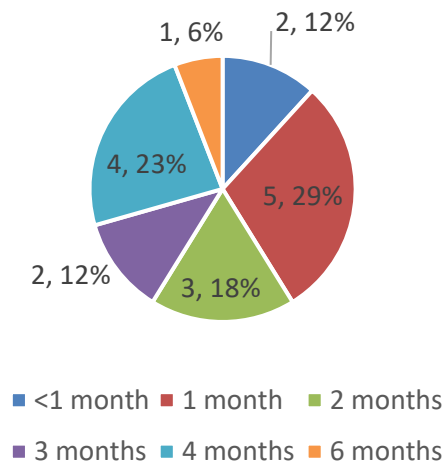
ACCIDENTS

Each year, accidental deaths comprise the largest number of non-natural deaths of children in North Carolina. In 2017, there were 187 deaths investigated by the NC Medical Examiner System certified as accident in manner. Accidental manner deaths are given varying means of death based upon circumstances.

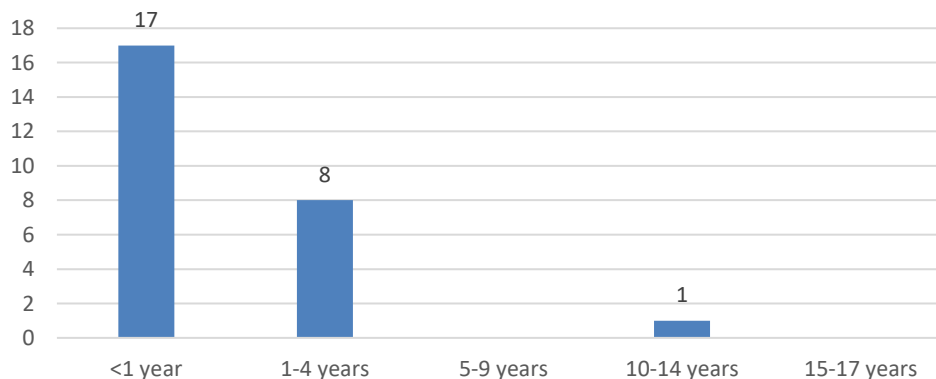
Asphyxia

Accidental asphyxiation caused the deaths of 26 children in 2017. Infants constituted the majority, 17, 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, misuse of support pillow). Nine accidental asphyxiation deaths of children between the ages of 1 and 14 years included 4 deaths due to choking, 4 deaths related to sleep environments, and one self-inflicted asphyxiation.

2017 Infant Accidental Asphyxia
Death by Month Age



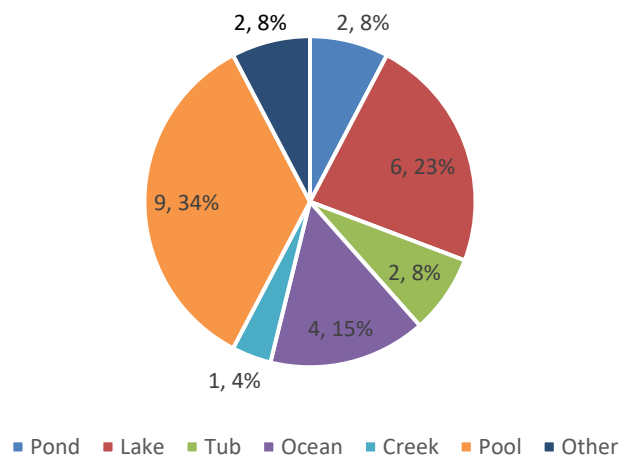
2017 Asphyxia Death by Age



Drowning

Drowning resulted in the deaths of 26 children in 2017. Nine drownings occurred in a pool, 6 in a lake or river, 4 in the ocean, 2 in a pond, 2 in a bathtub, and 1 each in a bucket, creek and ditch. Of the drowning deaths, 1 child was under 1 year of age, 11 were ages 1 to 4 years, 3 were ages 5 to 9 years, 2 were ages 10 to 14 years, and 9 were between 15 and 17 years old.

2017 Accidental Drowning by Location



Vehicle-related

In 2017, there were 109 vehicle related deaths. Majority of these deaths, 78, were passengers, while 13 children were drivers, and 18 children were outside of a vehicles/pedestrian.

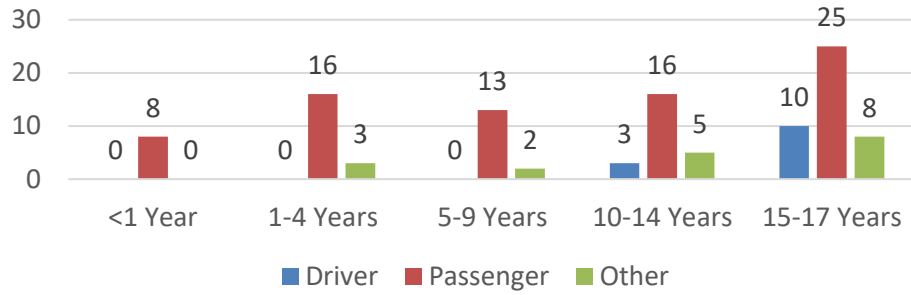
Types of vehicles involved among the vehicle related deaths included 43 passenger cars, 15 sport utility vehicles, 10 pickup trucks, 8 vans, and 1 tractor trailer. In addition to motor vehicles, other modes of transportation involved in collisions included 5 all-terrain vehicles, 3 bicycles, 1 motorcycle and 8 unknown vehicles.

Five passengers or pedestrians were hit by drivers under the influence of drugs or alcohol.

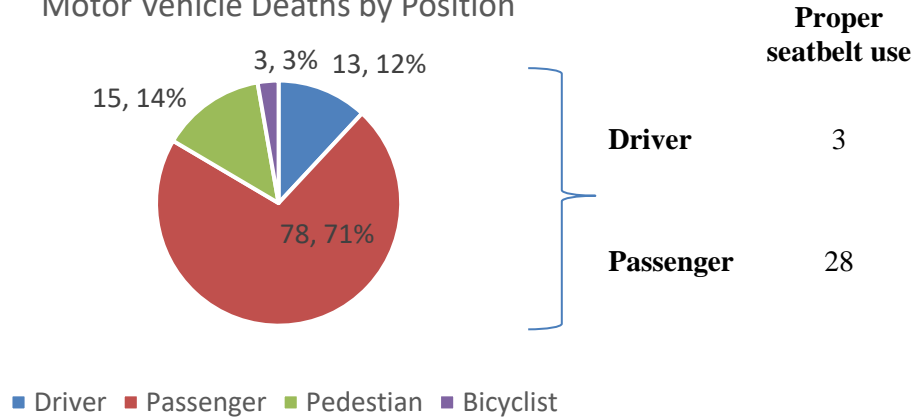
Of the 13 drivers, 3 children were 17-years-old, 6 were 16-years-old, and 4 were 15 years or younger.

Of all the children involved in vehicle-related accidents, 28 children were either not wearing seat belts or were not properly restrained. In regard to seat restraint use, of the 13 drivers, 3 were properly restrained; and of the 78 passengers, 28 were properly restrained.

Motor Vehicle Deaths by Age Categories

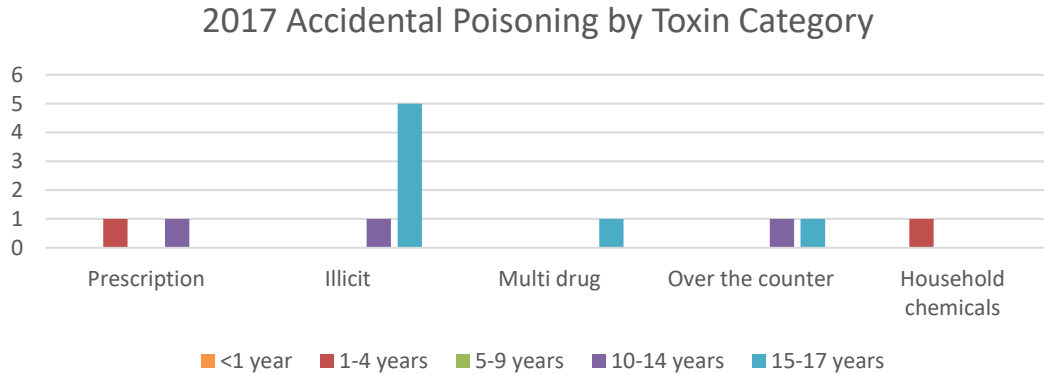


Motor Vehicle Deaths by Position



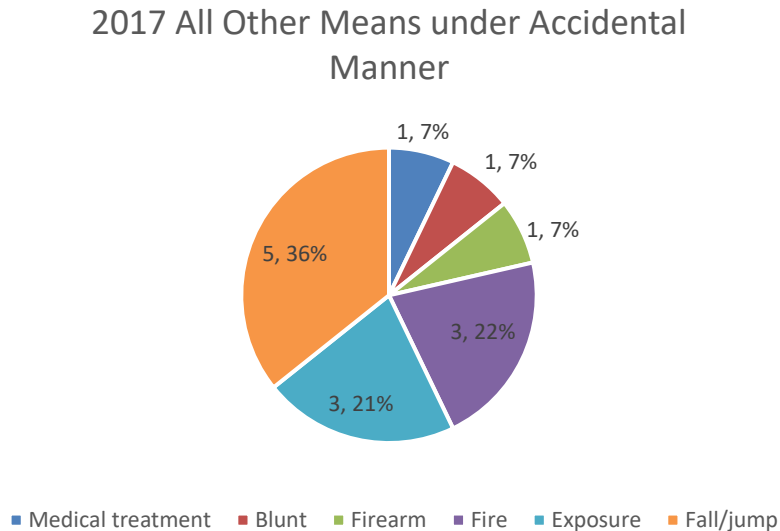
Toxins

There were 12 deaths from toxic substances (i.e. poisoning). Seven of these children were 15-17 years old, 3 were between ages 10 to 14 years, and 2 were between 1 and 4 years old. Seven of the toxins were illicit drugs, 2 prescription drugs, 2 over the counter medication, and 1 household chemical.



Other

Other deaths with an accidental manner, totaling 14 deaths, included 1 blunt, 1 medical treatment, 1 firearm, 3 fire, 3 exposure, and 5 fall/jump.



HOMICIDES

There were 57 children who died at the hands of another in 2017. After the cases are assigned a manner and means of death, the CFPT staff 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 57 total child homicides in 2017. Infants, children under 1 year of age, accounted for 13 deaths, and toddlers, ages 1-4 years, accounted for 9 deaths. There were 5 deaths between the ages of 5-17 years:

- Two deaths among child ages 5-9 years
- Three deaths among children ages 10-14 years

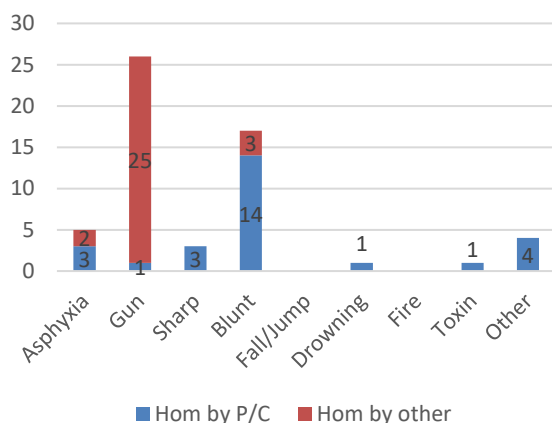
Regarding means, blunt force trauma was the means for 14 deaths, asphyxia and each sharp was the means for 3 deaths, drowning, toxin, and guns each were the means for 1 death, and 4 deaths were assigned an other means.

Homicides by Other

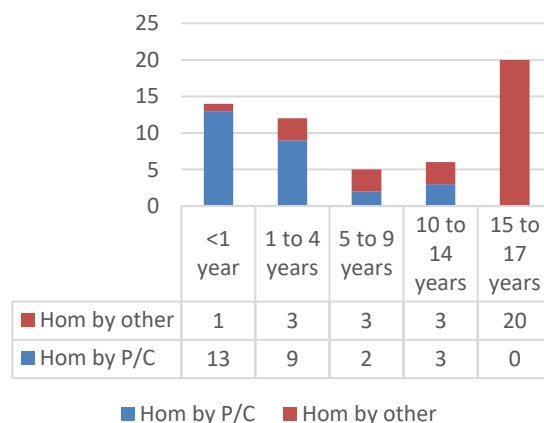
Other homicides, in which the parent or caregiver was not a suspect or perpetrator, comprised 30 of the 57 total 2017 child homicides. Teenagers between the ages of 15 and 17 years accounted for 20 of the homicides. Ages 0 to 4 years accounted for 4 death, ages 5 to 9 years for 3 and 10 to 14 years for 3. Twenty-five of the 30 deaths not by parent or caregiver were due to firearms, 3 due to blunt trauma, and 2 with a means of asphyxiation.

Of all the homicides, Black non-Hispanic children comprised the majority of homicides, 29 deaths; 19 deaths were White non-Hispanic children, 4 were Black unknown Hispanic, 2 were White unknown Hispanic, 1 was white Hispanic, and 2 were unspecified.

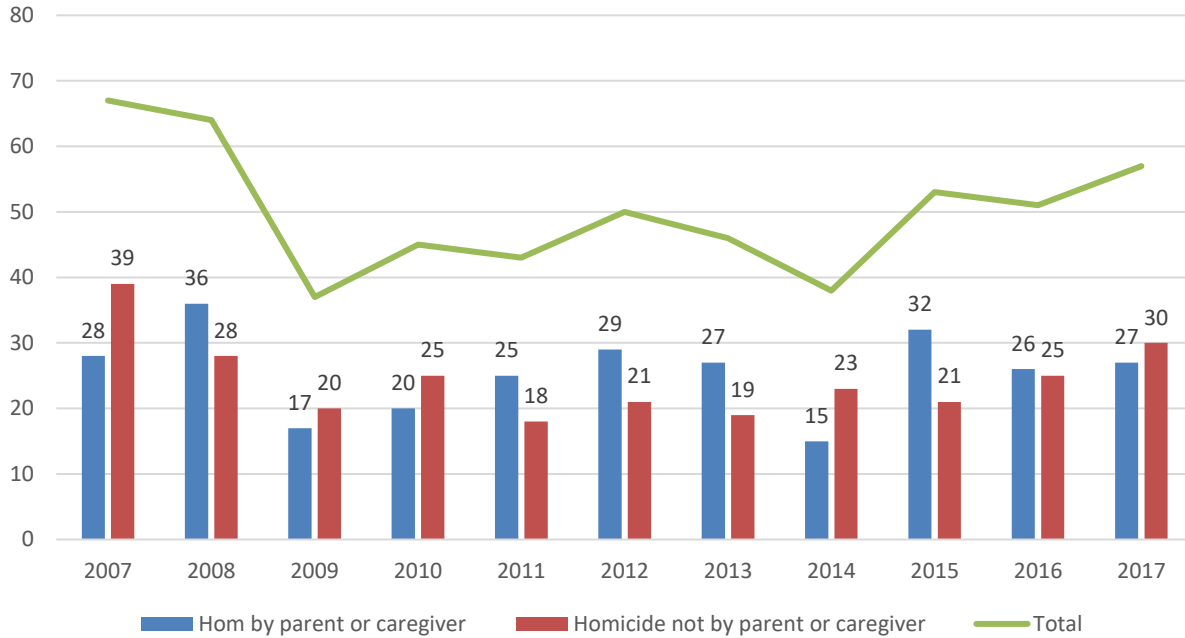
2017 Homicide by Means



2017 Homicide by Age



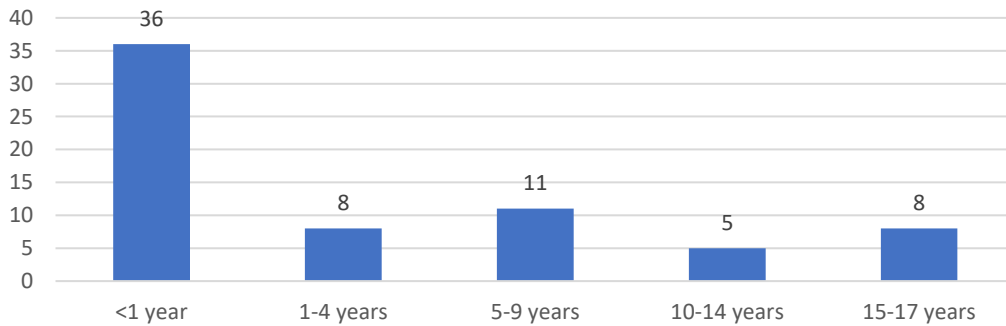
2007-2017 Homicide Trends



NATURAL

Sixty-three deaths were determined to be natural in manner. Of these, 8 were given a classification of Sudden Infant Death Syndrome (SIDS) and 55 were other natural causes. The top 5 causes of death with a natural manner in 2017 were: SIDS, pneumonia, myocarditis, seizure, congenital heart defect.

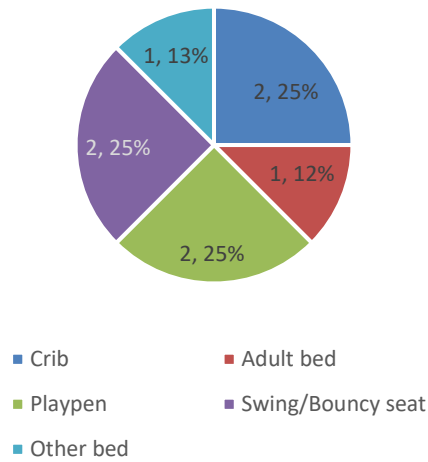
2017 Natural Manner by Age



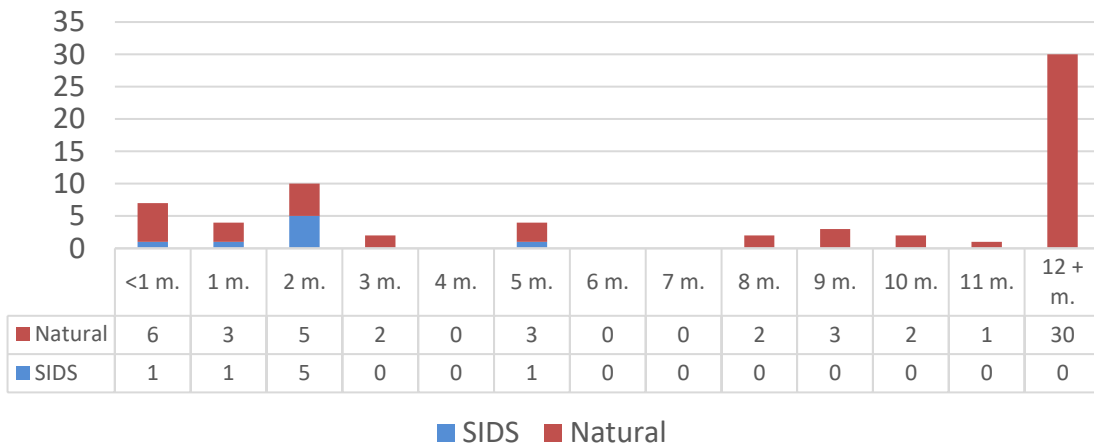
Sudden Infant Death Syndrome

Sudden Infant Death Syndrome (SIDS) means falls under the Natural manner of death. There were 8 infants who died from SIDS in 2017. The majority of infants, 6, were White, and 2 Black. Two deaths occurred in cribs, 2 in a swing/bouncy seat, 2 in playpens, 1 alone in an adult bed, and 1 in a basket bed. Five infants were placed to sleep on their backs, 2 on their sides, and 1 in an unspecified position.

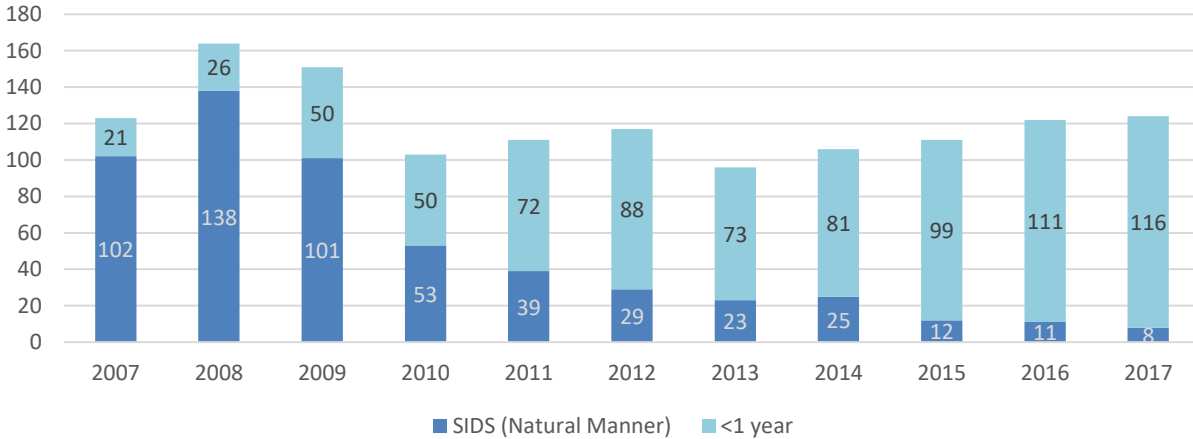
SIDS by Location



Natural SIDS and Natural Means by Ages In Months



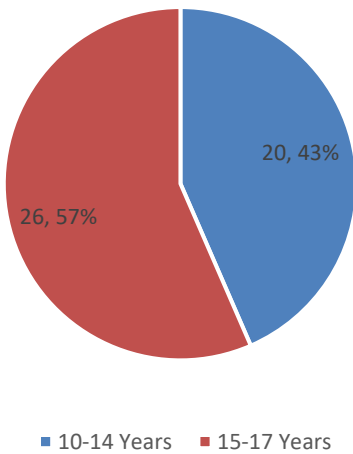
2007-2017 Infant Deaths SIDS vs <1 Year Undetermined Unsafe Sleep Environment



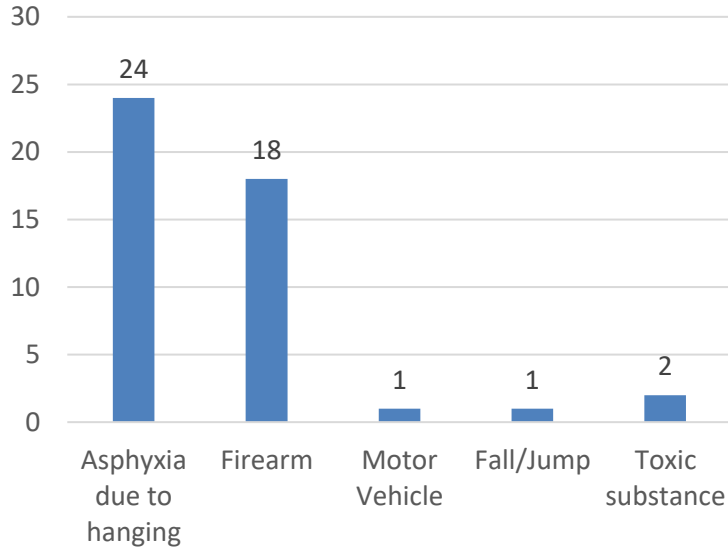
SUICIDES

Suicide was the manner of death of 46 children in 2017. Most suicide completions were of children ages 15 to 17 years accounting for 26 deaths (57%) and 20 deaths were of children between the ages of 10 to 14 years. Males accounted for 35 deaths, females for 11. The means of death in suicides included asphyxia due to hanging in 24 of the deaths, use of a firearm in 18, 2 from toxic substance, 1 due to motor vehicle crash, and 1 due to fall/jump.

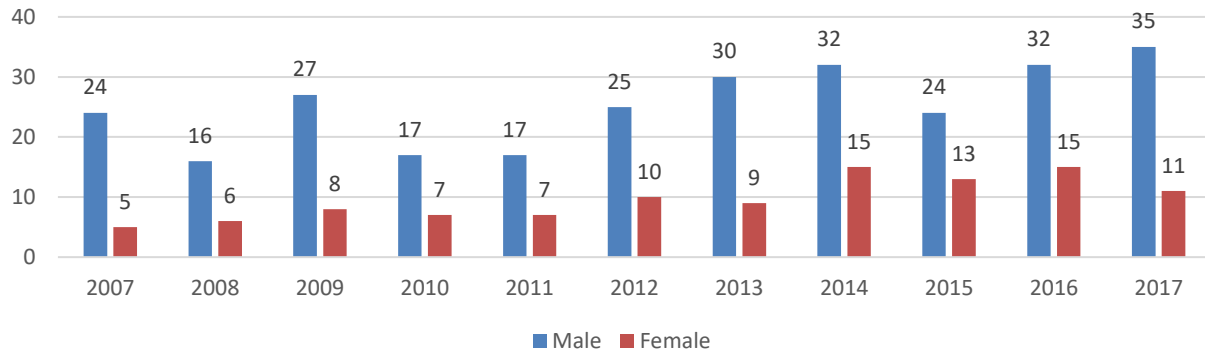
2017 Suicide by Age Category



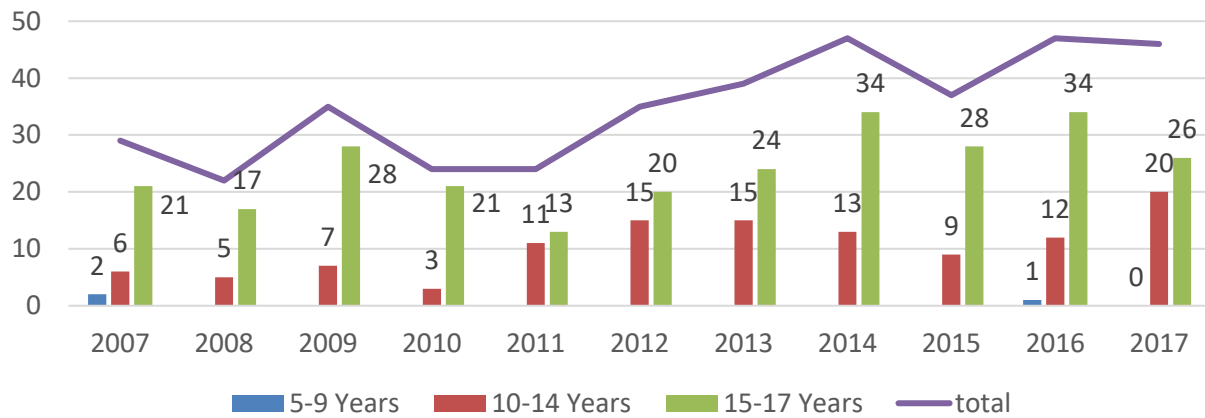
2017 Suicides by Means



2017 Suicide by Gender



Suicide by Age 2007-2017



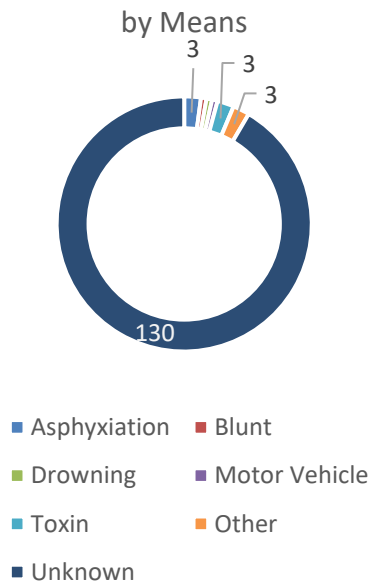
UNDETERMINED

There were 142 deaths that were certified as undetermined manner. Of those, 131 were assigned an unknown means, 3 asphyxiation, 3 related to toxins, 2 with other means of death, 1 drowning, 1 motor vehicle, and 1 blunt.

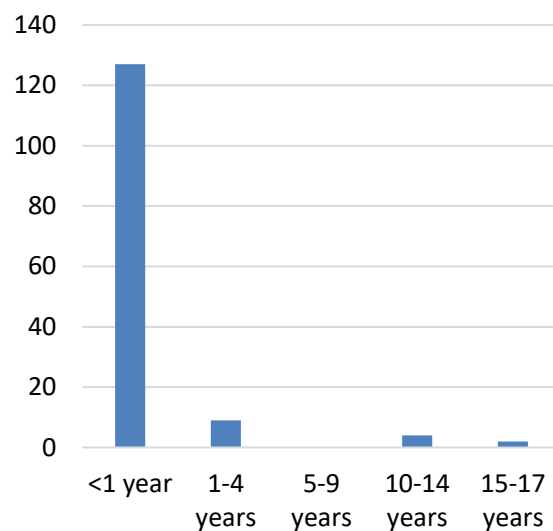
Of the undetermined manner, 127 children were under 1 year of age, 9 children were ages 1-4 years, 4 children age 10-14 years, and 2 children age 15-17 years.

As is the case for most of the infants with an undetermined manner, 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.

2017 Undetermined Child Fatalities



2017 Undetermined Means by Age

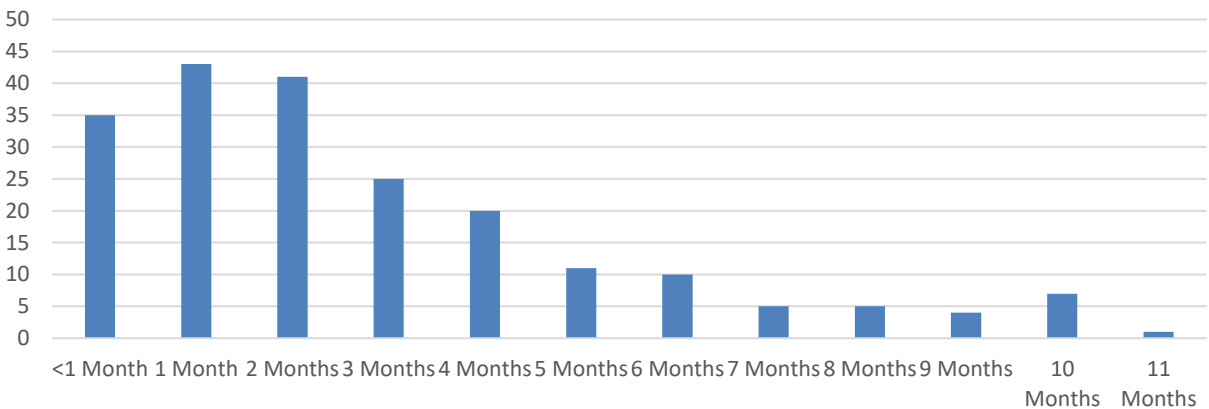


SPOTLIGHT ON INFANT DEATH

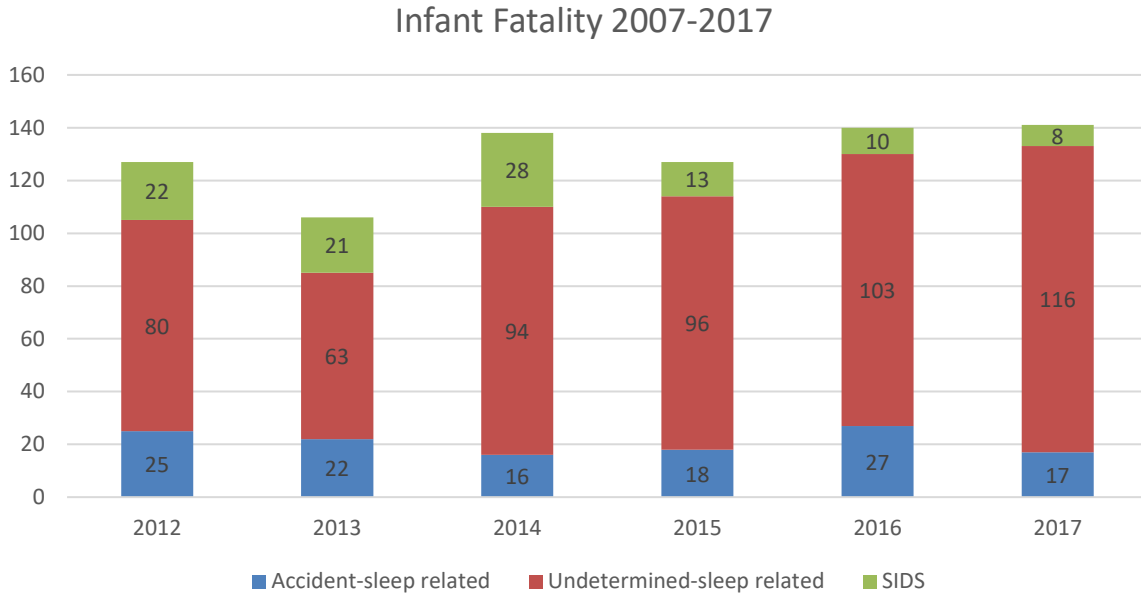
Infants are defined as children under 1 year of age. With a total of 207 infant deaths in 2017, below represents the breakdown by manner and means.

Manner	Means	Number of Children
Accident (27)	Asphyxia	17
	Drowning	1
	Medical Treatment	1
	Motor Vehicle	8
Homicide (14)	Asphyxia	2
	Blunt	8
	Sharp	1
	Other	3
Natural (31)	Natural	23
	SIDS	8
Undetermined (129)	Asphyxia	1
	Blunt	1
	Unknown	122
	Toxin	1
	Other	2
Fetal Death		7
Pending		1

2017 Infant Fatality by Age in Months



Infant Unsafe Sleep Fatalities



Total number of sleep related deaths in NC: 133

Among the accidental asphyxiation deaths, 11 of the 17 were co-sleeping.

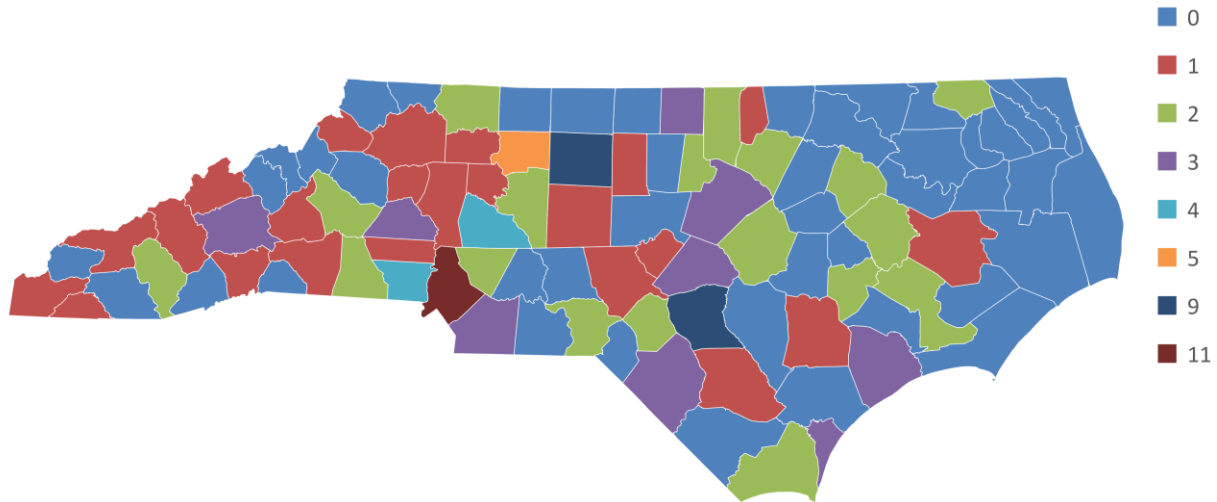
Among the undetermined unknown deaths, 68 of the 116 were co-sleeping.

This makes for a total of 79 fatalities while in a co-sleeping situation. An additional 54 infants were in other potentially unsafe sleep environments at their time of death such as extra items in the crib, an unsafe sleep location (adult bed, on pillow(s), on couch, etc.).

	Accidental Asphyxiation	Undetermined Asphyxia and Unknown
Co-sleeping	11	68
Other potential unsafe sleep environment related	6	48
Total potential unsafe sleep environment deaths	17	116
	133	

2017 Infant Unsafe Sleep Fatalities by Residence County

2017 Infant Unsafe Sleep Fatalities by Residence County



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Number of Fatalities	Counties of Residence
1	Alamance, Alexander, Beaufort, Bladen, Cherokee, Clay, Davie, Duplin, Haywood, Henderson, Iredell, Lee, Lincoln, Madison, McDowell, Moore, Randolph, Rutherford, Swain, Vance, Watauga, Wilkes, Yadkin
2	Brunswick, Burke, Cabarrus, Cleveland, Craven, Davidson, Durham, Edgecombe, Franklin, Gates, Granville, Hoke, Jackson, Johnston, Lenoir, Pitt Richmond, Surry
3	Buncombe, Catawba, Harnett, New Hanover, Onslow, Person, Robeson, Union, Wake
4	Gaston, Rowan
5	Forsyth
9	Cumberland, Guilford
11	Mecklenburg

*Not listed, counties with no infant unsafe sleep fatalities

* Five children were not residents of North Carolina.