



North Carolina Office of the Chief Medical Examiner  
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Office of the Chief Medical Examiner  
NC Child Fatality Prevention Team Annual Summary  
2018 Child Deaths in NC (ages 0-17 years)

Report prepared by:

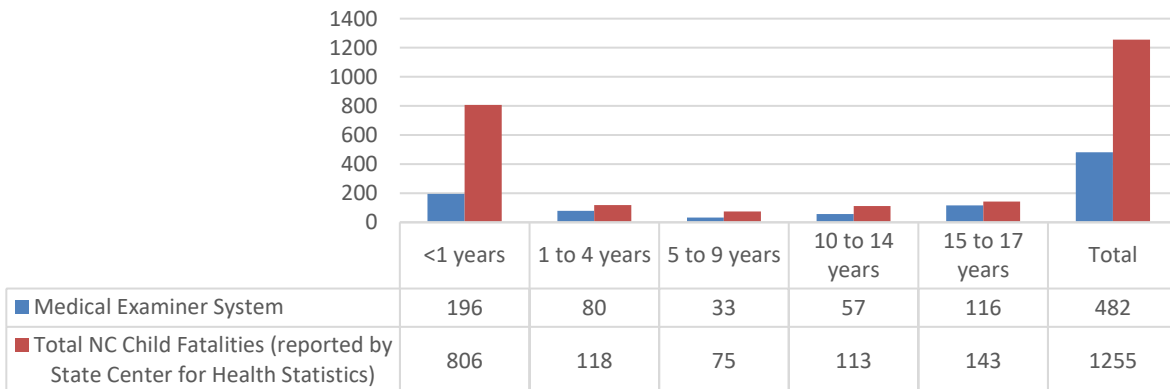
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## TOTAL NUMBER OF DEATHS 2018 North Carolina under the Age of 18 Years

Throughout the 2018 calendar year, the State Center for Health Statistics (SCHS) reported **1,255** children died in North Carolina. Many of these deaths were expected and included children who died from a known natural disease or illness. The North Carolina Medical Examiner system investigated the cause and manner of death for **482** children.

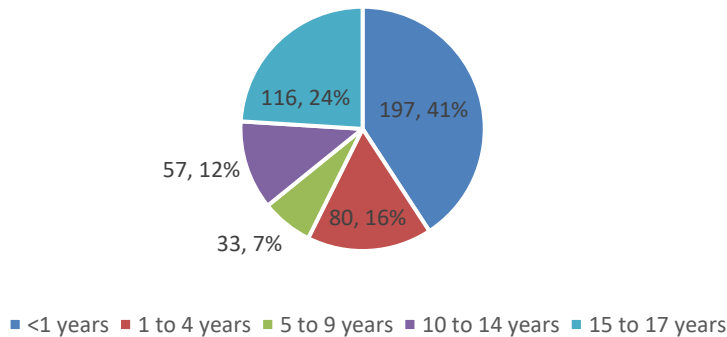
The cases investigated by the Medical Examiner system included a number of natural deaths, as well as accident, homicide, suicide and deaths for which no cause and/or manner of death could be determined. The cases investigated by the Medical Examiner System are also assigned a means of death which refers to how the death occurred. Means included unknown, motor vehicle, natural, gun, asphyxia, drowning, blunt, fire, toxicology, other, SIDS, fall/jump, animal, electrocution, exposure, medical treatment, environmental, falling object, and sharp.

### North Carolina Child Fatalities, 2018



Note: Total NC Death numbers retrieved from 2018 Child Death Fact Sheet  
<https://schs.dph.ncdhhs.gov/data/vital/cd/2018/CFinNC2018.pdf>

### Medical Examiner 2018 Child Fatalities



**The Child Fatality Prevention Team (CFPT) staff reviews child fatalities that are investigated by the Medical Examiner System.** With a total of 1,255 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, 5, which totals 477 children. Due to pending cases, numbers are subject to change. Of note:

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

2018 OCME Child Fatalities		
Manner	Means	Number of Children
<b>Accident</b> (170)	Animals	1
	Asphyxia	31
	Blunt	3
	Drowning	31
	Electrocution	1
	Exposure	1
	Fall	1
	Fire	13
	Gun	4
	Medical Treatment	1
	Machinery	1
	Motor Vehicle	76
	Toxin	6
<b>Homicide</b> (52)	Asphyxia	5
	Blunt	10
	Gun	32
	Motor Vehicle	1
	Other	3
	Unknown	1
<b>Natural</b> (70)	Natural	67
	SIDS	3
<b>Suicide</b> (52)	Asphyxia	23
	Fall/Jump	1
	Fire	1
	Gun	25
	Motor Vehicle	1
	Toxin	1
<b>Undetermined</b> (126)	Asphyxia	1
	Toxin	1
	Unknown	122
	Other	2
<b>Fetal</b>		7
Pending		5

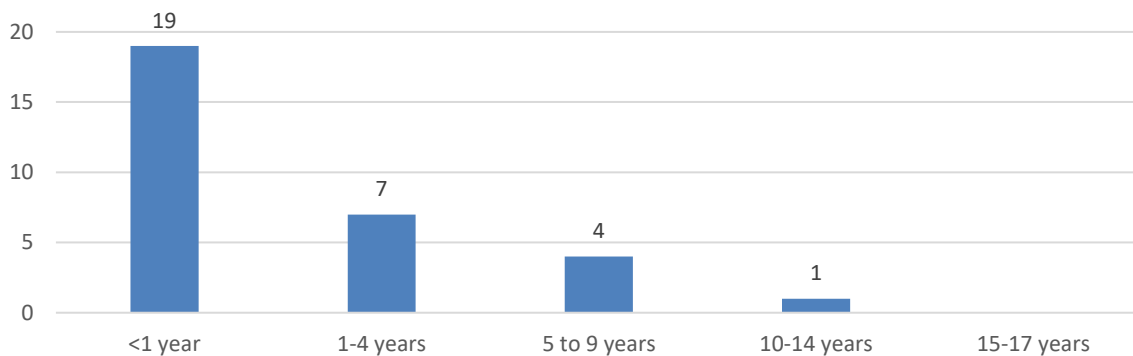
## ACCIDENTS

Each year, accidental deaths comprise the largest number of non-natural deaths of children in North Carolina. In 2018, there were 170 deaths investigated by the NC Medical Examiner System certified as accident in manner. The CFPT utilizes multiple means based upon circumstances of these deaths.

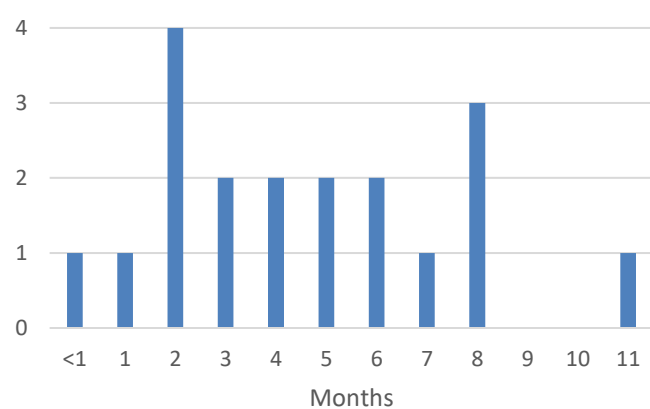
### *Asphyxia*

Accidental asphyxiation caused the deaths of 31 children in 2018. Infants constituted the majority, 19, of the deaths with 16 deaths due to accidental asphyxiation in a sleep environment—either during co-sleeping or by being placed in an unsafe sleep environment. Twelve accidental asphyxiation deaths of children between the ages of 1 and 14 years included 7 deaths due to choking, 3 deaths were related to positional asphyxia, 1 death related to asphyxia due to a cord, and 1 death to smoke inhalation of a house fire.

2018 Asphyxia Death by Age Category



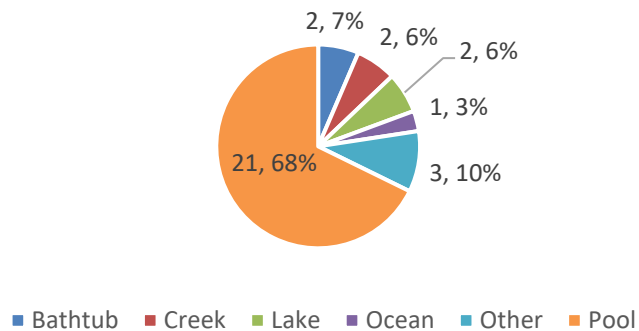
2018 Infant Accidental Asphyxia Death by Month Age



## ***Drowning***

Drowning resulted in the deaths of 31 children in 2018. Twenty-one drownings occurred in a pool, 2 drownings in a bathtub, 2 drownings in a creek, 2 drownings in a lake, 1 drowning in an ocean, and three drownings located in other locations identified as a waterpark structure, toilet, and flooded road. Of the drowning deaths, 1 child was under 1 year of age, 18 children were ages 1 to 4 years, 5 children were ages 5 to 9 years, and 7 children were between 15 and 17 years old.

2018 Accidental Drowning by Location



## ***Vehicle-related***

In 2018, there were 76 vehicle related deaths. Majority of these deaths, 44, were passengers, while 18 of were drivers, and 14 were outside of a vehicles/pedestrian.

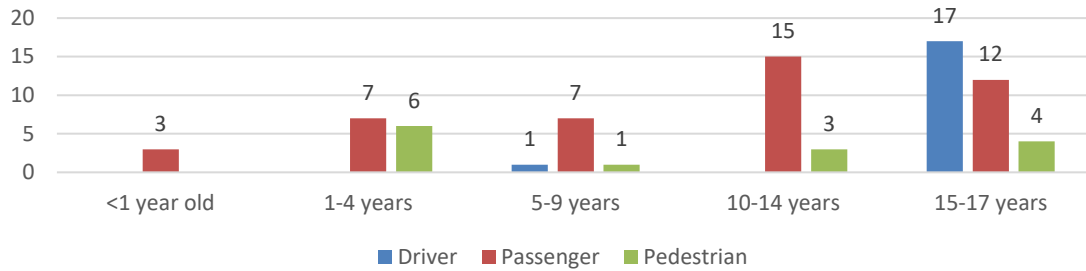
Types of vehicles involved included 34 passenger cars, 17 SUV's, 3 pickup trucks, 3 vans, and 1 commercial truck. In addition to motor vehicles, other modes of transportation involved in collisions included 1 ATV's, 1 bicycle, 1 golf cart, and 1 jet ski. Other vehicles unknown or had multiple fatalities.

Influence of drug or alcohol contributed to 10 motor vehicle accidents. Five passengers or were in vehicle driven by a driver under the influence of drugs or alcohol, 4 were the decedent as the driver, and 1 was a decedent as the pedestrian struck by a driver under the influence of drugs or alcohol.

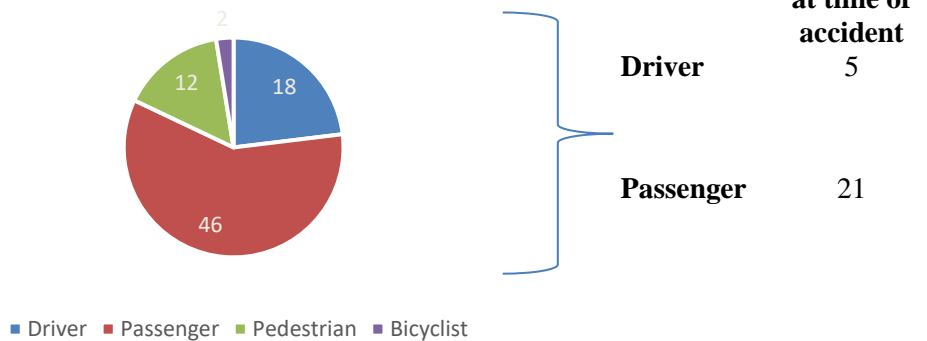
Among the 18 drivers, 11 children were 17-years-old, 6 were 16-years-old, and 1 was 7-years-old.

Of all the children involved in vehicle-related accidents, 27 children were either not wearing seat belts or were improperly restrained. Regarding seat restraint use, of the 18 drivers, 5 were properly restrained; and of the 45 passengers, 21 were properly restrained.

### Motor Vehicle Deaths by Age Categories



### Motor Vehicle Deaths by Position



### Toxins

There were 6 deaths from toxic substances (i.e. poisoning). Three of these deaths were children 15-17 years old, 1 child was between 5 and 9 years, 1 child was between 1 and 4 years, and 1 child was under 1 year of age.

### Fire

There were a total of 13 deaths from fires/burns/carbon monoxide. Six of these children were between 1 and 4 years old, 5 children were between 5 and 9 years old, and 2 children were between 10 and 17 years old.

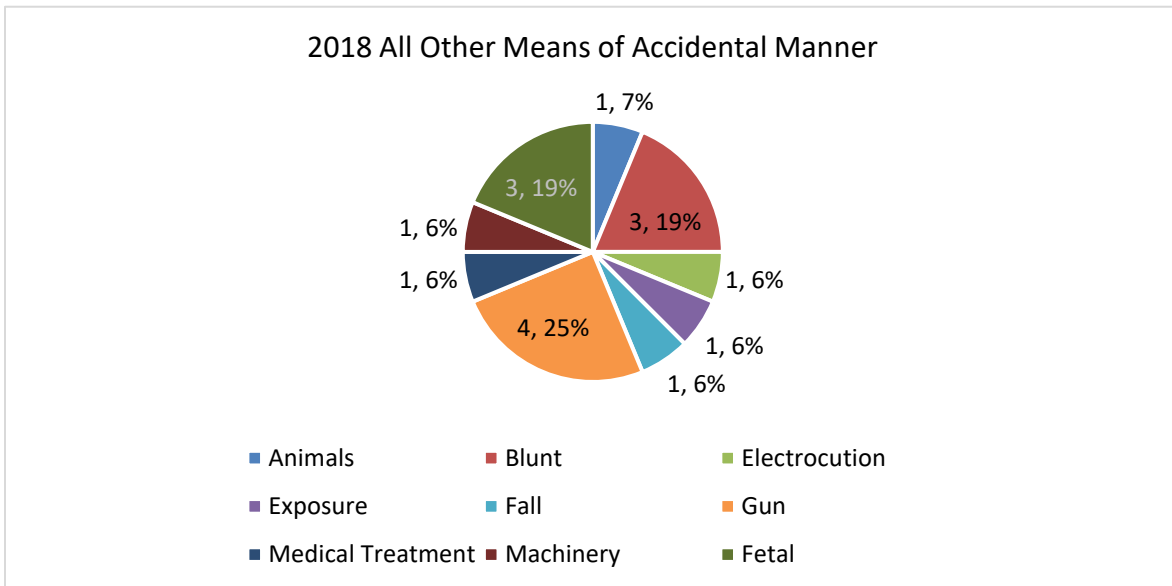
Fires/burns contributing to these deaths were 8 separate incidences, with some occurrences claiming multiple lives. Among these 8 incidences, 9 deaths occurred in a residence setting, 3 deaths in a vehicle, and 1 death was a result of a severe burn. Two of the residence fires did not have operational smoke detectors. Sources of the residence fires ranged from kerosene heater, lighters, space heater, and a melted pot on a stove.

**Other**

Other deaths with an accidental manner, totaling 13 deaths, included

- 4 firearm deaths
- 3 blunt related trauma deaths
- 1 of each following means of death: animal, electrocution, exposure, fall/jump, medical and machinery.

Three additional fatalities among the Accident manner of death were assigned blunt and motor vehicle means of death with the addition of intrauterine fetal demise classification. In two cases, the mothers were involved in a vehicle related accident while carrying the decedent and in a third, the mother received abdominal trauma while carrying the child.



## HOMICIDES

There were 52 children who died at the hands of another in 2018.

Once these deaths are given 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 18 of the 52 total child homicides in 2018. Infants, children under 1 year of age, accounted for half, 9, of those deaths. There were 9 deaths between the ages of 1-17 years:

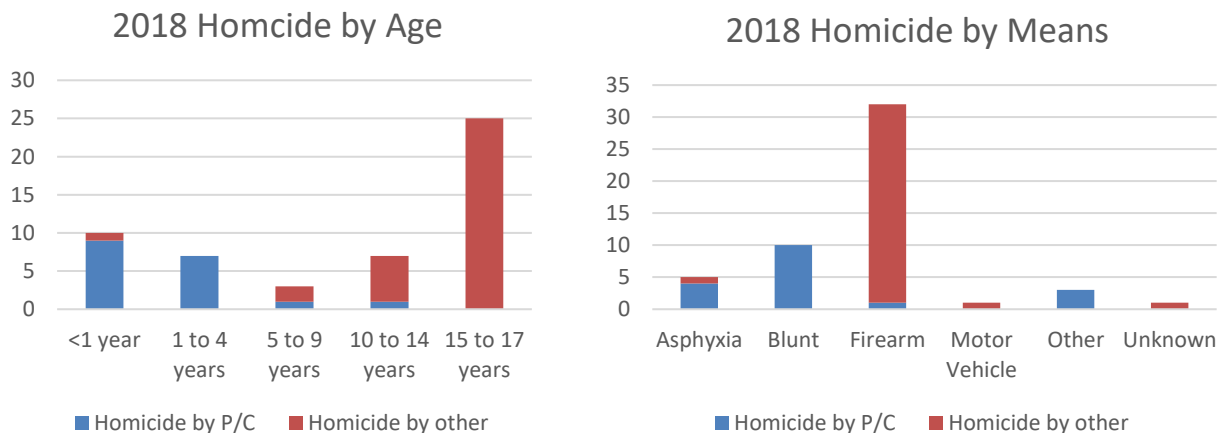
- Seven deaths among ages 1 to 4 years
- One death among ages 5-9
- One death among ages 10-14 for 1 death.

Regarding means, blunt force trauma was the assigned means for 10 deaths, 4 deaths with an asphyxia means, one death with a means of firearm, and 3 deaths with an other means of death.

### *Homicides by Other*

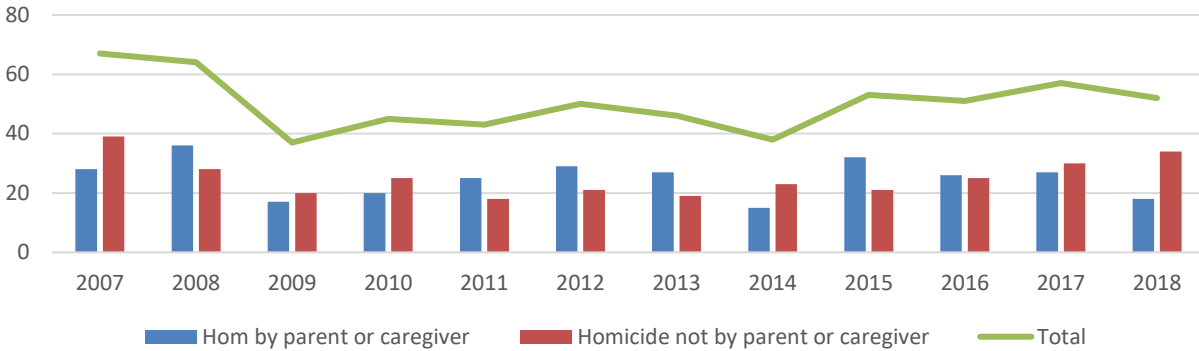
Other homicides, in which the parent or caregiver was not a suspect or perpetrator, comprised 34 of the 52 total 2018 child homicides. Teenagers between the ages of 15 and 17 years accounted for 25 of the homicides. Ages 0 to 4 years accounted for 1 death, ages 5 to 9 years for 2 deaths and 10 to 14 years for 6 deaths. Thirty-one of the 34 deaths (91%) not by parent or caregiver were due to firearms, 1 death due to asphyxiation, 1 death by motor vehicle, and 1 death with a means of unknown.

Of all the homicides, Black non-Hispanic children comprised the majority of homicides, 31 deaths; 14 deaths were White non-Hispanic children, 3 were white Hispanic, 2 were American Indian, 1 Asian, and 1 unknown Hispanic.





### 2007-2018 Homicide Trends

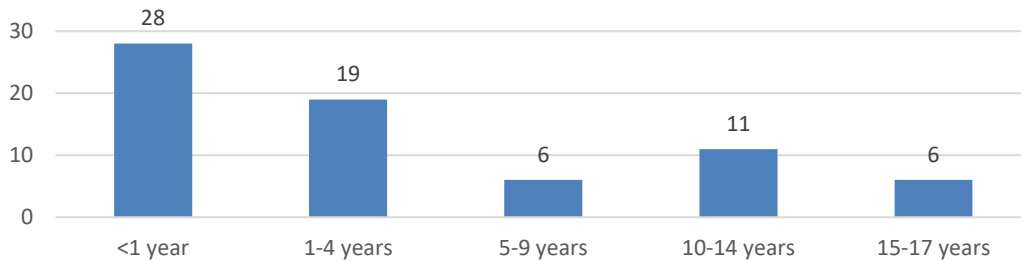


### NATURAL

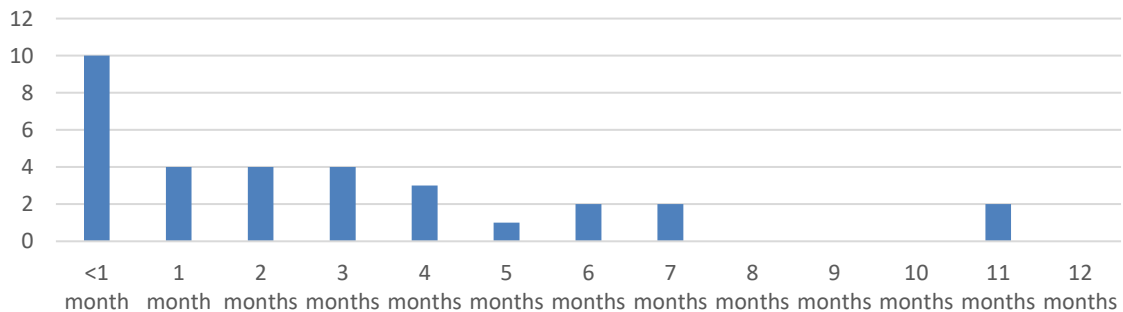
Seventy deaths were determined to be natural in manner. Of these, 3 death were given a classification of Sudden Infant Death Syndrome (SIDS), and 67 deaths were other natural causes.

The top 5 means of death with a natural manner in 2018 were: complications of pneumonia, congenital heart defect, seizure, complications of prematurity, and underlying neurological disorder.

### 2018 Natural Manner by Age Category

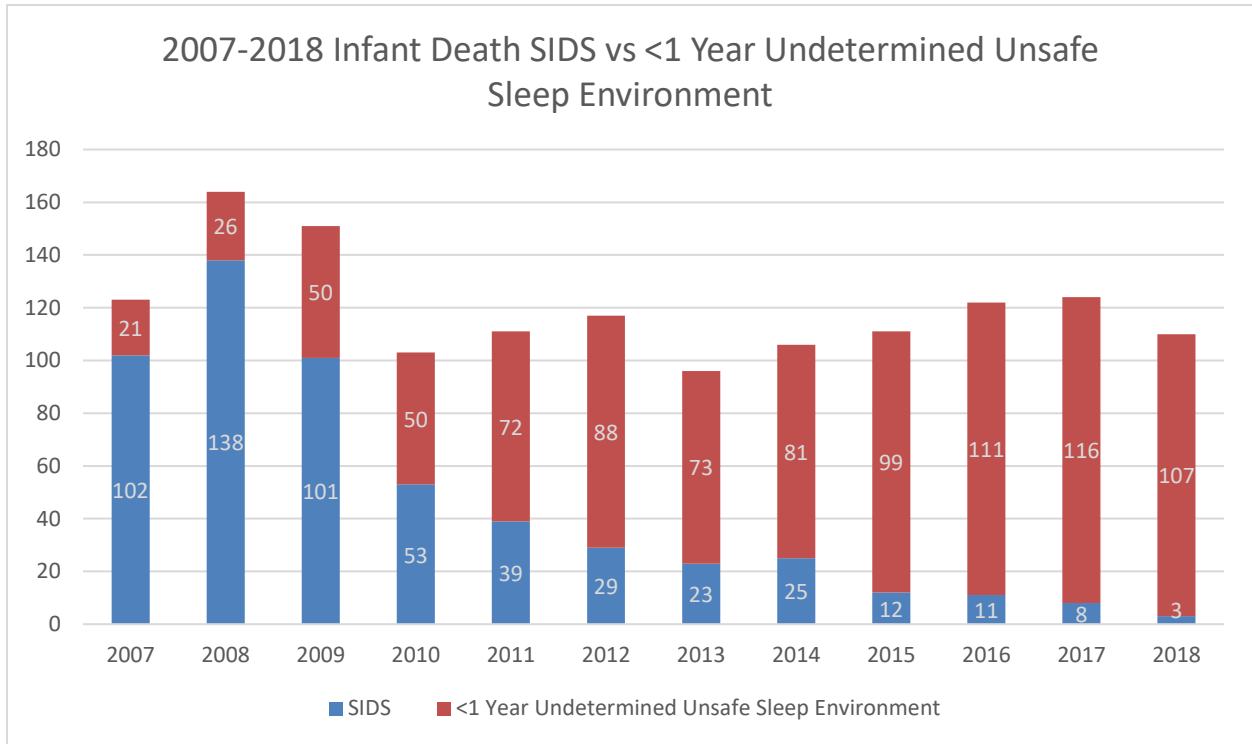


### 2018 Natural Means by Ages in Months Under 1 year of Age



### *Sudden Infant Death Syndrome*

Sudden Infant Death Syndrome (SIDS) means of death falls under the Natural manner of death. There were 3 infants who died from SIDS in 2018. For two of the deaths, infants were placed on their side and found in another position.



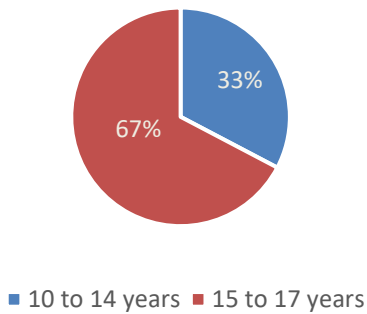
## SUICIDES

Suicide was the manner of death of 52 children in 2018. Most of the deaths with a suicide manner were of children between the ages of 15 to 17 years, accounting for 35 deaths (67%). Additionally, there were 17 deaths with a suicide manner of children between the ages of 10 to 14 years.

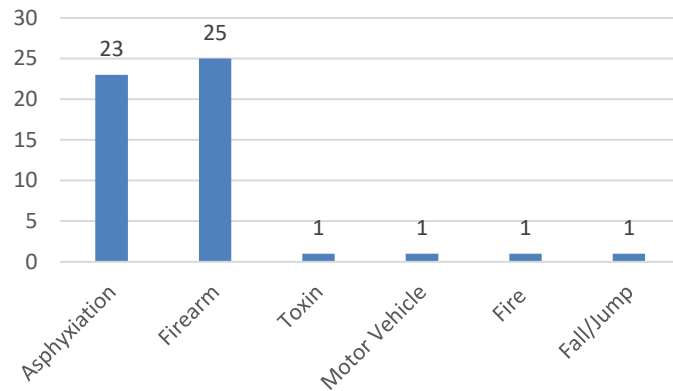
Males accounted for 39 deaths, females for 13 deaths.

The means of death in suicides included 23 deaths from an asphyxia event, 25 deaths from use of a firearm, 1 death from toxin, 1 death due to a motor vehicle crash, 1 death from a fire, and 1 death due to a fall/jump.

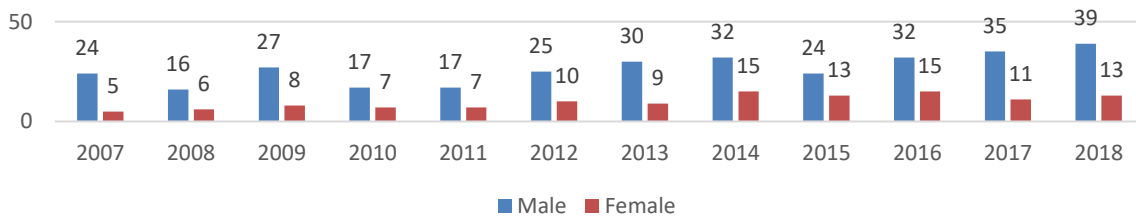
2018 Suicide by Age Category



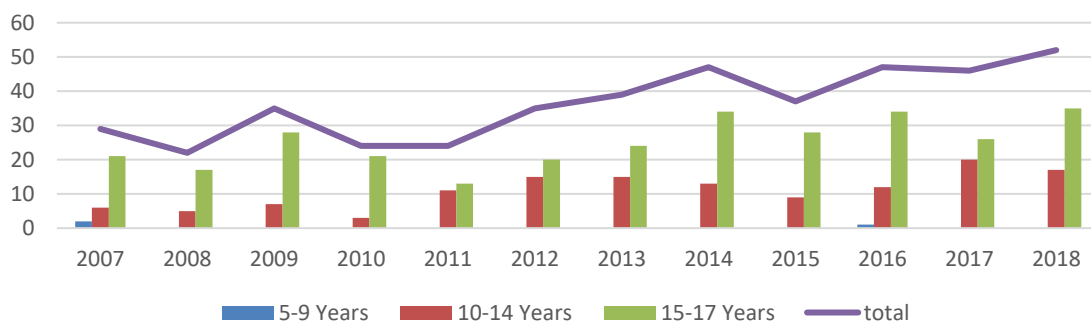
2018 Suicide by Means



2018 Suicide by Gender



Suicide by Age 2007-2018



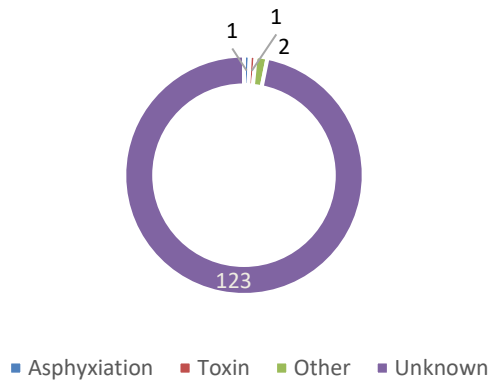
## UNDETERMINED

There were 126 deaths that were certified as undetermined manner. Of those, 122 deaths were certified as unknown means, 1 death was certified as an asphyxiation, 1 death was related to toxin, and 2 deaths with of other means of death.

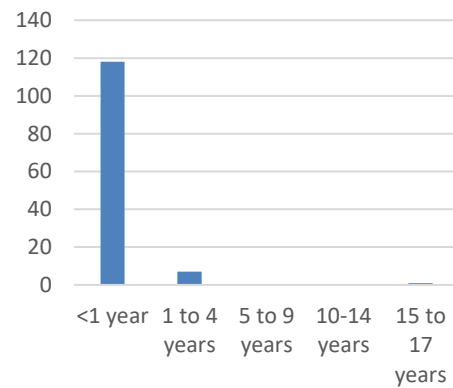
Of the undetermined manner, 118 children were under 1 year of age, 7 children were ages 1-4 years, and 1 child was age 15-17 years.

As is the case for most of the infants with an undetermined manner, when a known risky or potential 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.

2018 Undetermined Child Fatalities  
by Means



2018 Undetermined  
Means by Age

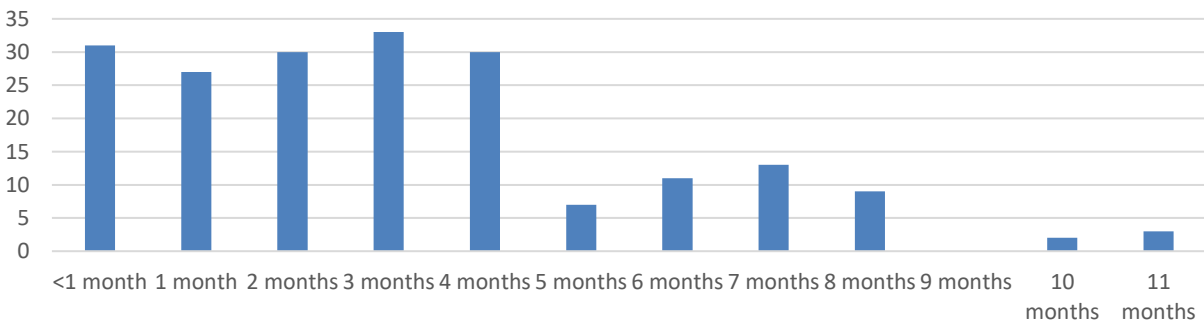


## SPOTLIGHT ON INFANT DEATH

Infants are defined as children under 1 year of age. With a total of 196 infant deaths in 2018, below represents the breakdown by manner and means.

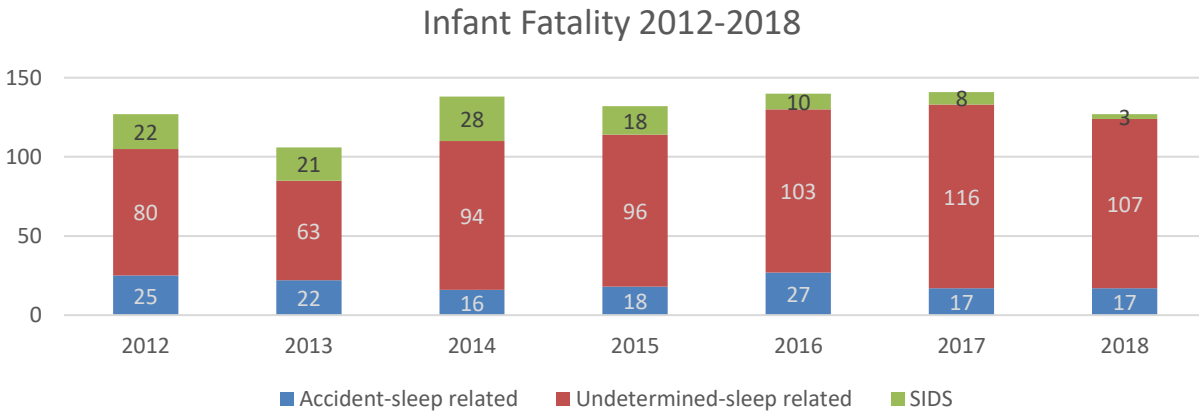
Manner	Means	Number of Children
Accident (38)	Asphyxia	19
	Blunt	2
	Drowning	1
	Exposure	1
	Motor Vehicle	4
	Toxin	1
Homicide (10)	Asphyxia	1
	Blunt	6
	Firearms	1
	Other	2
Natural (28)	Natural	25
	SIDS	3
Undetermined (118)	Asphyxia	1
	Unknown	114
	Toxin	1
	Other	2
Fetal		7
Pending		5

2018 Infant Fatality by Age in Months



\*Includes Pending Cases

## Infant Unsafe Sleep Fatalities



Total number of sleep related deaths in NC: 124

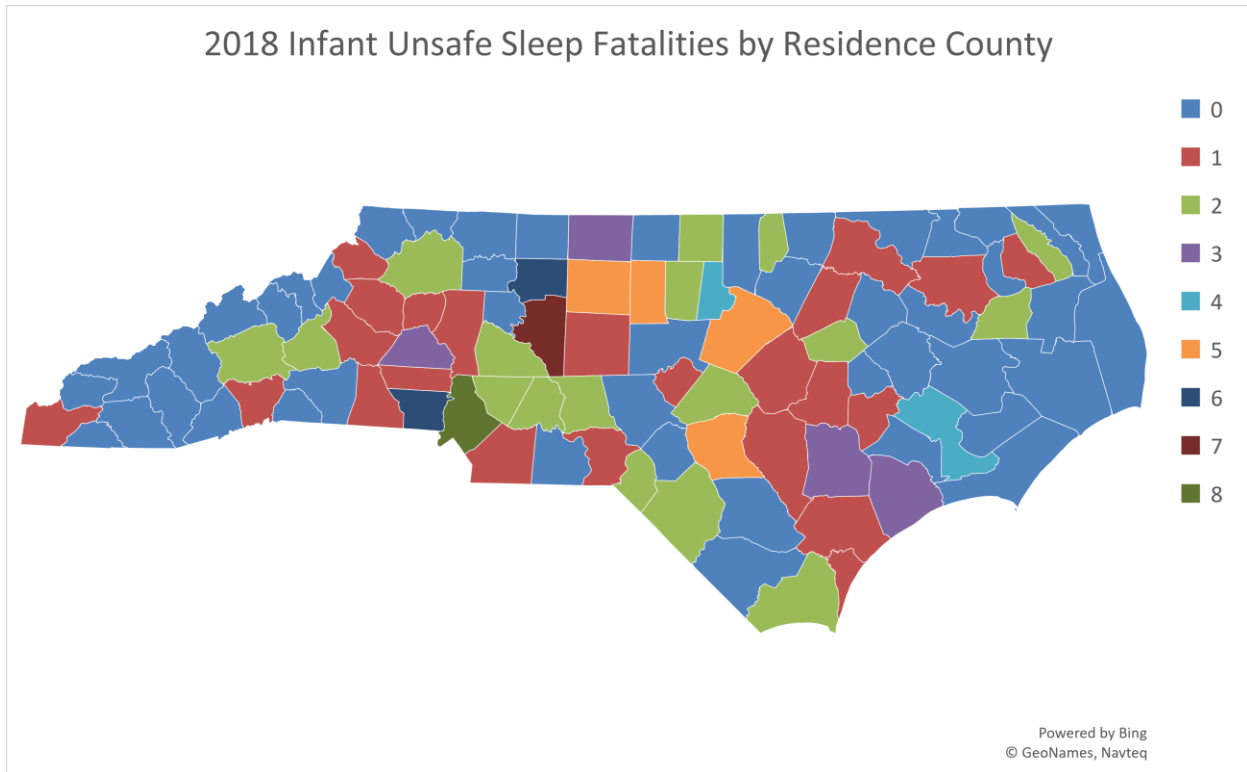
Among the infant accidental asphyxiation deaths, 8 of the 17 deaths were in a co-sleeping environment.

Among the undetermined unknown deaths, 60 of the 107 deaths were in a co-sleeping environment.

This makes for a total of 68 potential co-sleeping related fatalities. An additional 56 infants were in other unsafe sleep environments 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
<b>Co-sleeping at time of death</b>	8	60
<b>Other potential unsafe sleep environment related</b>	9	47
<b>Total potential unsafe sleep environment deaths</b>	17	107
	 124	

## 2018 Infant Unsafe Sleep Fatalities by Residence County



Number of Fatalities	Counties of Residence
1	Alexander, Bertie, Burke, Caldwell, Cherokee, Cleveland, Halifax, Henderson, Iredell, Johnston, Lee, Lenoir, Lincoln, New Hanover, Pasquotank, Pender, Perquimans, Randolph, Richmond, Rowan, Sampson, Scotland, Union, Washington, Watauga, Wayne
2	Brunswick, Buncombe, Cabarrus, Harnett, McDowell, Montgomery, Nash, Orange, Person, Robeson, Stanly, Vance, Wilkes, Wilson
3	Catawba, Duplin, Onslow, Rockingham
4	Craven, Durham
5	Alamance, Cumberland, Guilford, Wake
6	Forsyth, Gaston
7	Davidson
8	Mecklenburg

\*Not listed, counties with no infant unsafe sleep fatalities

\* Two children were not residents of North Carolina.