



Arkansas Infant and Child Death Review Program

FY 20 report on deaths occurring in 2018

Compiled by:

Arkansas Infant and Child Death Review Program

Arkansas Children's Hospital Injury Prevention Center

Funding provided by:

The Family Health Branch of the Arkansas Department of Health (ADH)



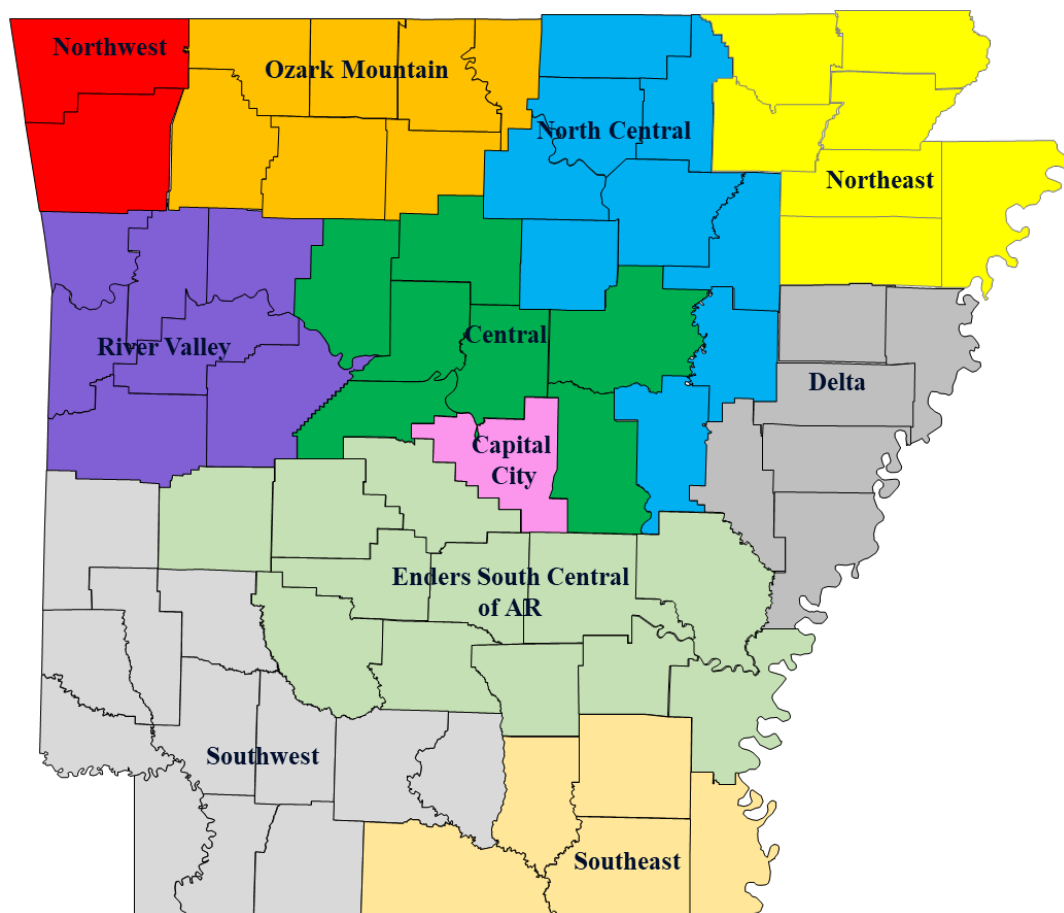
Key notes about this Report

Arkansas Infant and Child Death Review Program Vision and Mission Statement

Vision Statement: Eliminate all preventable infant and child deaths in Arkansas.

Mission Statement: To review all unexpected infant and child deaths in the state of Arkansas. These reviews result in the development of interventions and recommendations through multidisciplinary team collaboration, community education and policy.

- Previous annual reports were compiled on a calendar year, rather than fiscal year, resulting in duplicate death data being reported. For clarity, this annual report is being reported on a fiscal year, matching the funding stream, and is only covering cases in which the child death occurred in 2018.
- Although coding guides (ICD-10) use the term “accident” as a manner of death experts in the field refer to injuries as unintentional. The word accident imparts a sense that nothing can be done when in reality injuries are predictable and preventable. This report will utilize accident as appropriate for this report.



Introduction

The Infant and Child Death Review Process: Purpose and Data

KEY FINDINGS

- In 2018, there were 442 child deaths between the 0-17 years of age
- Among the 442 all-cause deaths, 156 (35%) cases were eligible for review by local ICDR teams.
- In 2017, 79% of eligible cases were reviewed. In 2018, 84% of eligible cases were reviewed.

OF 2018 CASES REVIEWED (N=131)

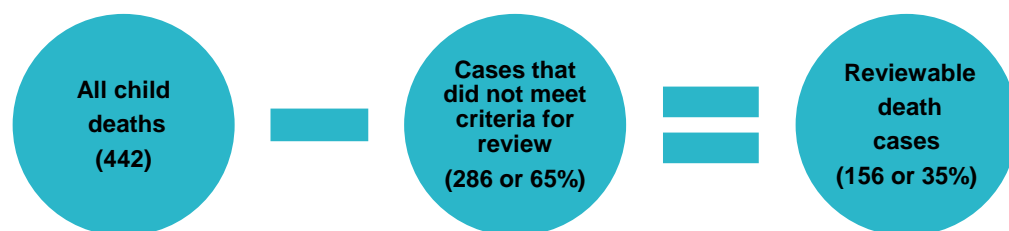
- Fifty-two percent were accidents, with motor-vehicle crashes and drowning being the leading causes of accidental death.
- Forty-four percent of all preventable deaths were among children \leq 1 years of age, followed by 15-17 years of age at 24%.

Overview: Established in 2010, the Arkansas (AR) Infant and Child Death Review (ICDR) Program has expanded to 11 regional teams that review unexpected deaths of Arkansas children under the age of 18. The teams cover all 75 Arkansas counties, giving the ICDR Program the potential to evaluate 100% of reviewable pediatric deaths, as required by ACT 1818 of 2005. All local team members work and/or reside in the area of the team they serve, which allows firsthand insight into the local environment and needs of the community.

Case Selection: Under ACT 1818 of 2005, cases that are reviewable meet the following criteria:

1. Child was not under the care of a licensed physician for treatment of an illness/condition that contributes to the cause of death (IE cancer, prematurity, congenital abnormalities etc.).
2. Death was due to Sudden Infant Death Syndrome (SIDS)
3. Death was due to an unknown cause
4. Death is not under criminal investigation or being prosecuted

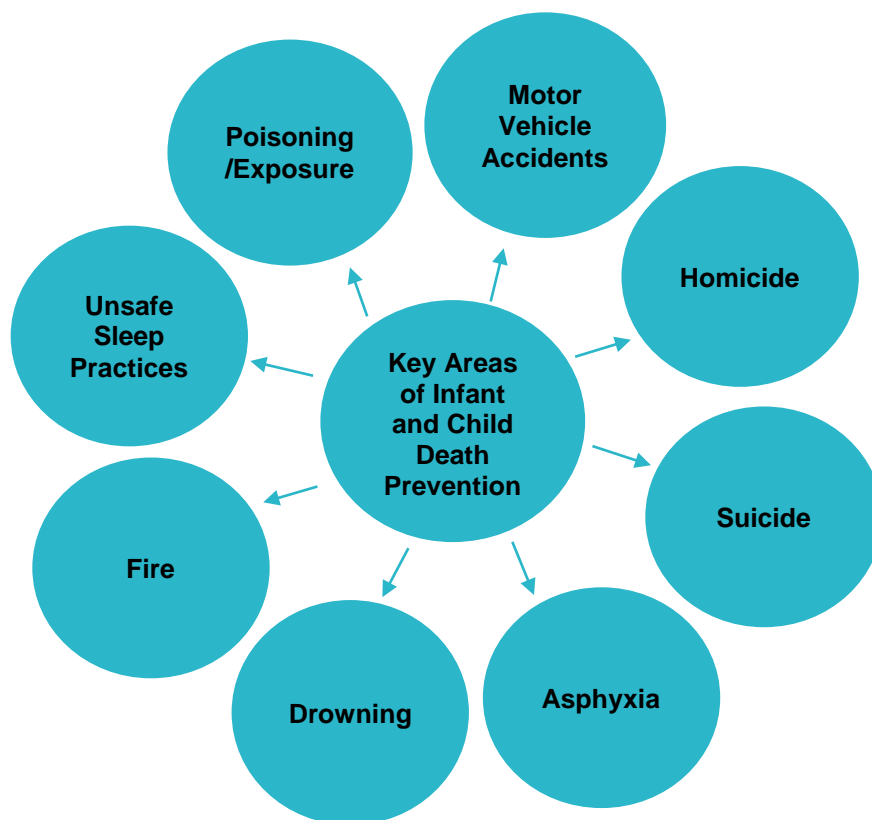
CDR Data: Information collected from multiple disciplines at a case review are entered into the National Center for Fatality Review and Prevention (NCFRP) data base. The data is analyzed to generate an overview and in-depth annual report on the cases reviewed by the local ICDR teams. Key data entered into the NCFRP database are derived from death/birth certificates, child health records, autopsy reports, coroner's reports, sudden unexplained infant death investigation (SUIDI) forms, toxicology reports, witness interviews, on-scene investigation reports and any other documentation that teams identify as helpful in a review in order to make effective prevention recommendations.



Goal of the Infant and Child Death Review Program

The ICDR Program remains committed to the goal of reducing preventable child death in Arkansas. This effort requires the steadfast commitment of all local team members, ICDR Program staff staying abreast of best practices regarding child death reviews, and the assistance of partner organizations for expertise in prevention strategies. Specific goals for the ICDR Program include:

- Monitor and train all local teams and members.
- Provide resources for specific team recommendations and monitoring of teams carrying out recommendations.
- Identify and implement additional targeted prevention campaigns with local team support.



The total infant and child deaths (ages 0-17) in Arkansas for 2018 was 442 deaths, of those 156 (35%) were eligible for review and 131 (84%) of the eligible cases were reviewed.

General statistics for 2018 deaths:

- Accidental deaths decreased while undetermined death increased: The increase in undetermined deaths is due to lack of thorough SUID investigations with doll re-enactments.
- Between 2016-2018, there is a decrease trend in deaths among children <1 years of age and an increase trend in deaths among children 10-14 years old.

Death statistics by manner of death for 2018:

1) Accidental Deaths (N=68):

- **Motor Vehicle Accidents (N=31):**
 - Increased by 11% compared to 2017.
 - 12% increase in motor vehicle crashes among children 15-17 years old.
 - 14% increase in motor vehicle deaths where a teen was the driver.
 - 28% increase in motor vehicle where a seatbelt was used.
- **Asphyxia (N=10):**
 - 40% increase in asphyxia deaths among children 1-4 years of age.
 - 30% increase in asphyxia deaths among males.
 - The rate of African American children who died of asphyxia was significantly higher than among Caucasian children.
 - 60% asphyxia related deaths were sleep related.
 - Couches were the leading location where infant deaths occurred.
- **Drowning (N=13):**
 - Between 2017-2018 drowning deaths among 1-4 year olds showed a 24% decrease.
 - 77% of drownings were in open water.

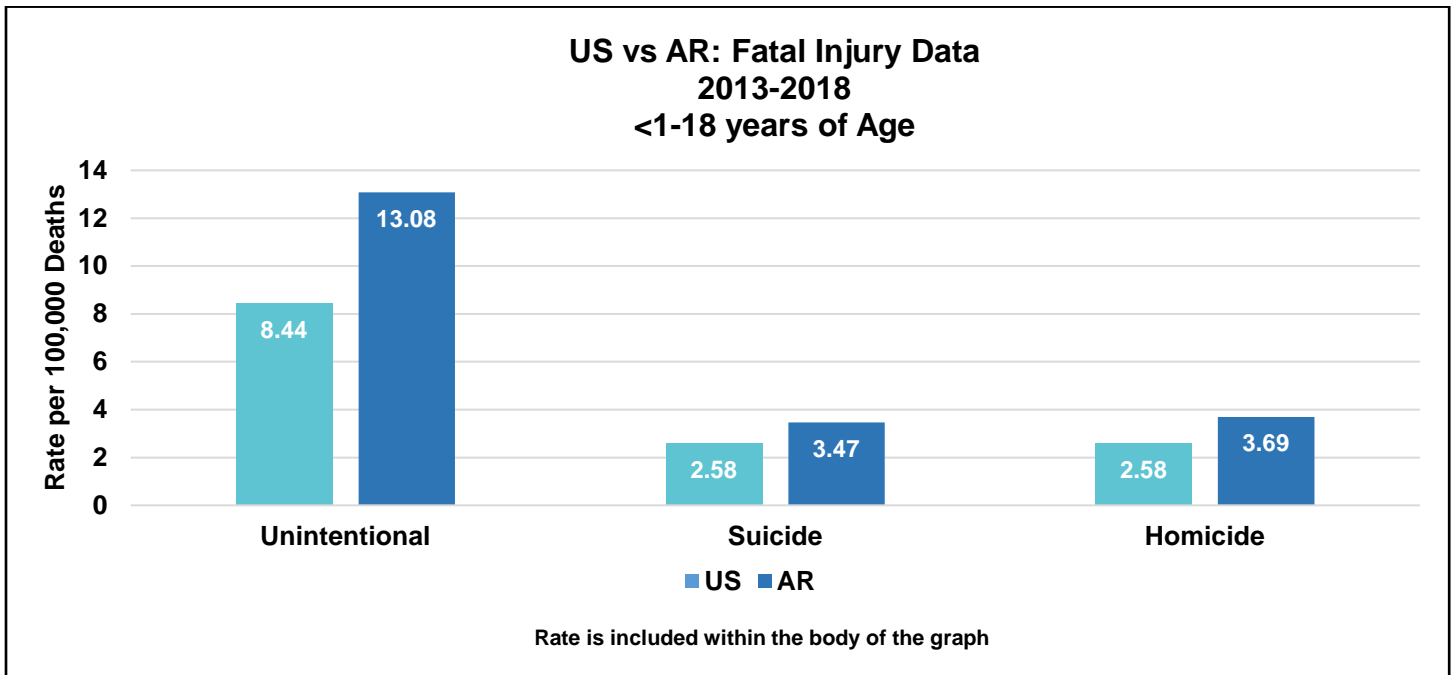
2) Undetermined Deaths (N=46):

- 100% of undetermined deaths were sleep related and among children <1 year of age.
- African American children had a higher rate of undetermined deaths than Caucasian children and children of all other races.
- Undetermined deaths predominately occurred in adult beds.

3) Suicide (N=16):

- Suicide deaths increased by 21% among children 10-14 years old.
- Suicide deaths by strangulation increase by 36% among children 10-14 years old.
- Family and school issues were the leading contributing factors in suicide deaths.

US vs AR: Fatal Injury Data



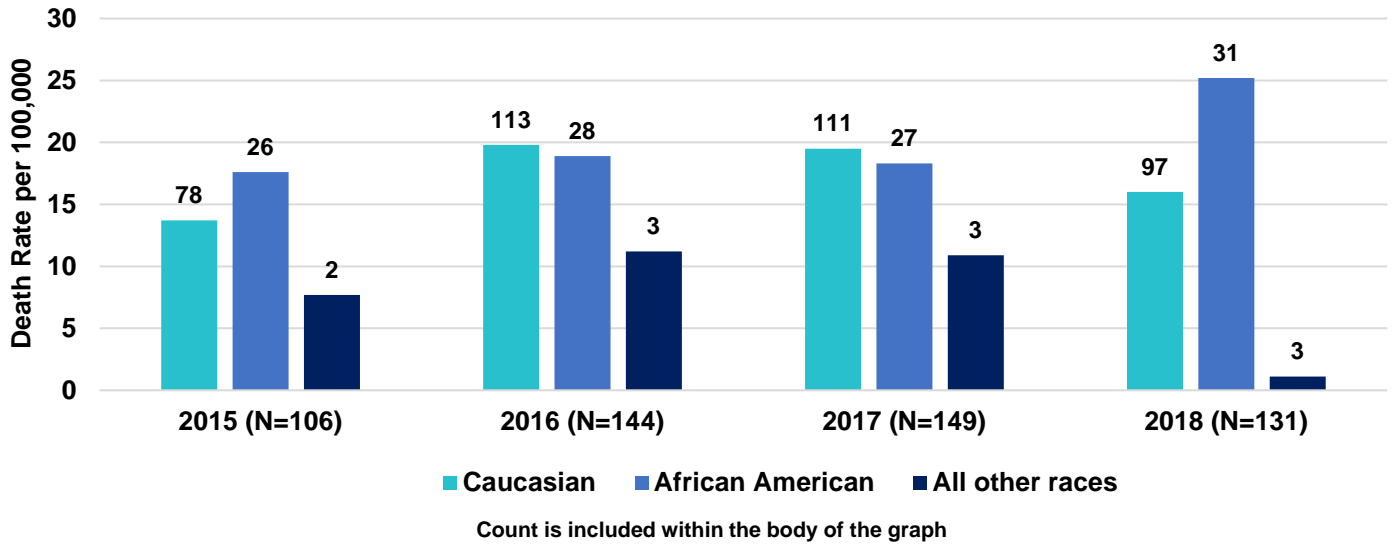
Arkansas ranks 8th in the nation for Unintentional deaths in children under 18 years of age, between 2013-2018 (WISQARS, 2020).

Arkansas ranks 13th in the nation for Suicide deaths in children under 18 years of age, between 2013-2018 (WISQARS, 2020).

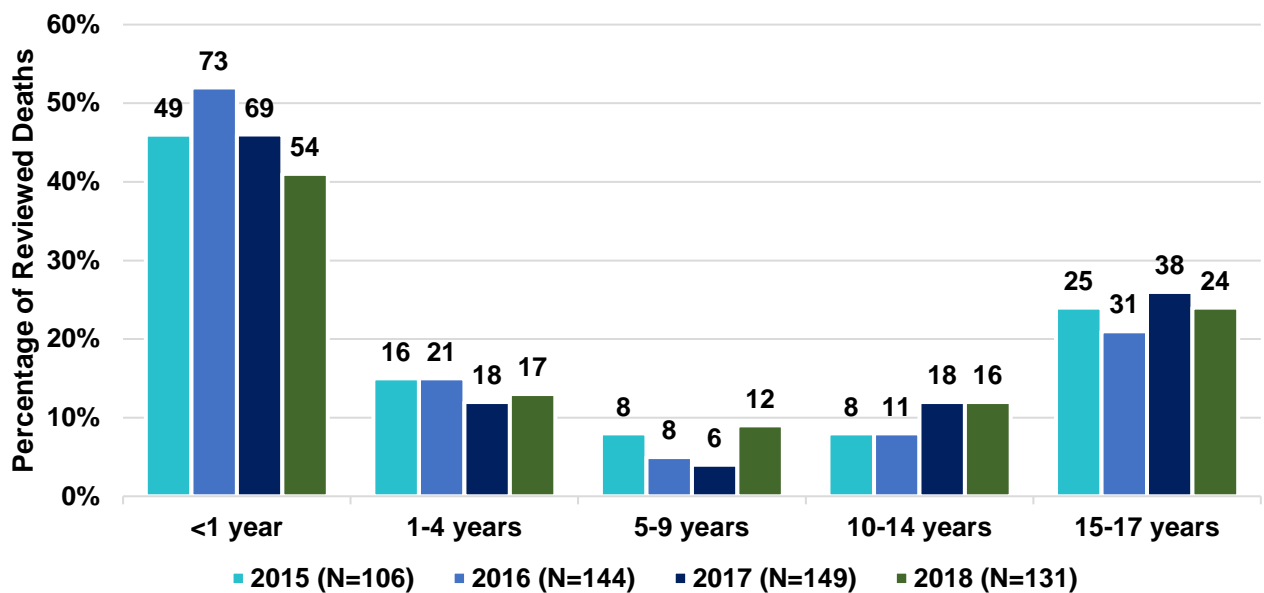
Arkansas ranks 10th in the nation for Homicide deaths in children under 18 years of age, between 2013-2018 (WISQARS, 2020).

Reviewed Infant and Child Deaths: Demographic Characteristics

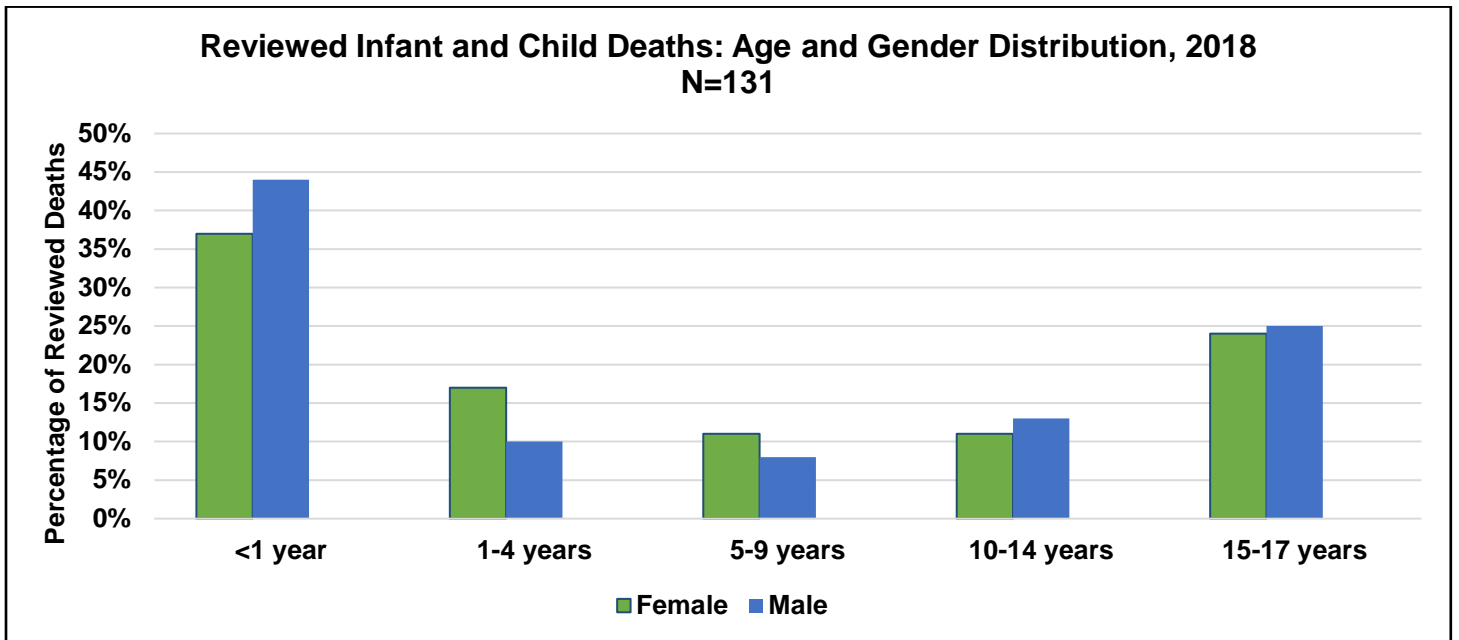
Reviewed Infant and Child Deaths:Racial Distribution, 2015-2018



Reviewed Infant and Child Deaths: Age at Time of Death, 2015-2018

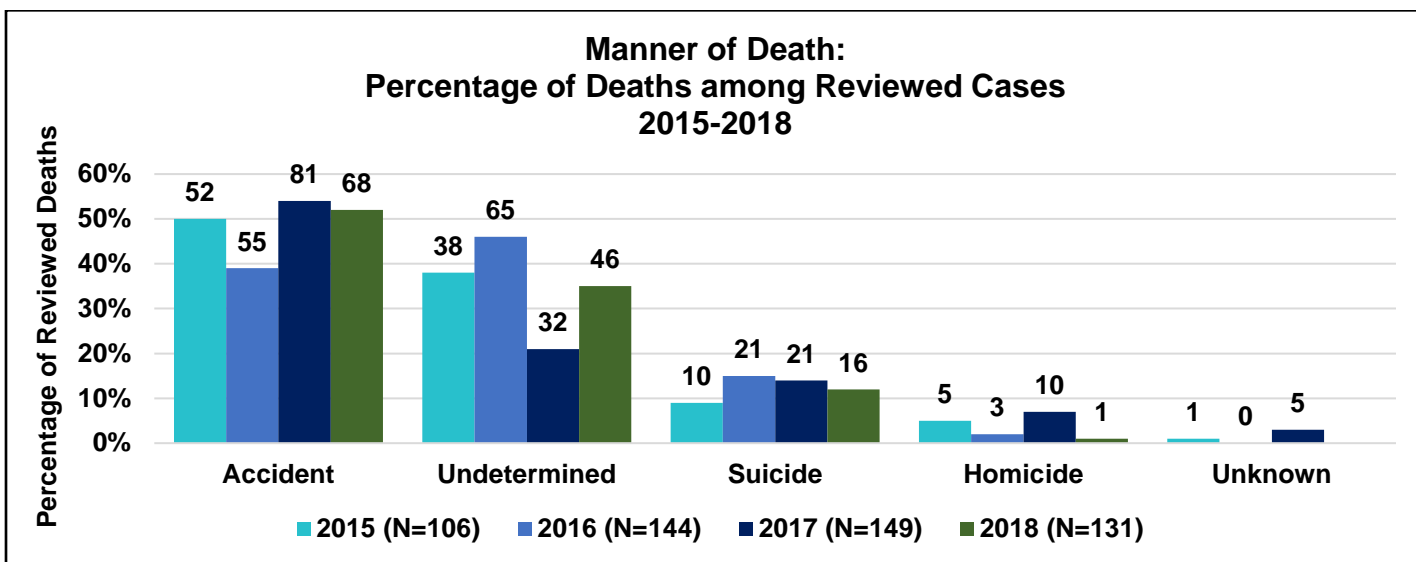
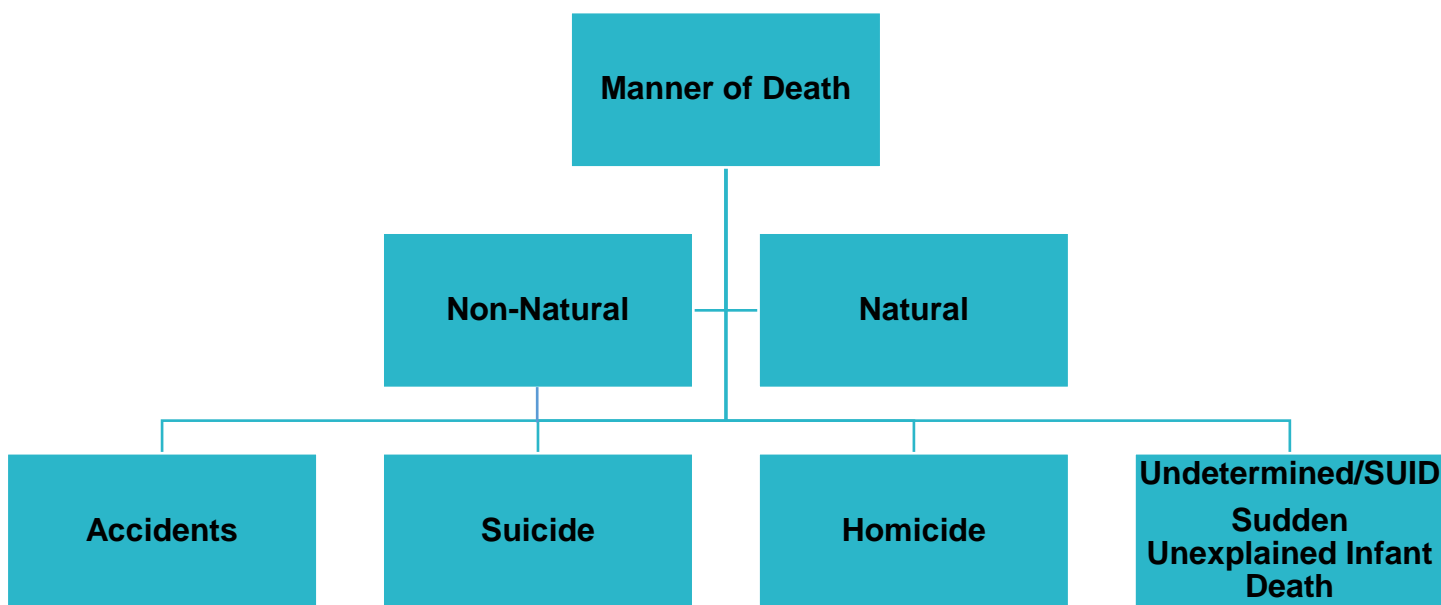


Reviewed Infant and Child Deaths: Demographic Characteristics



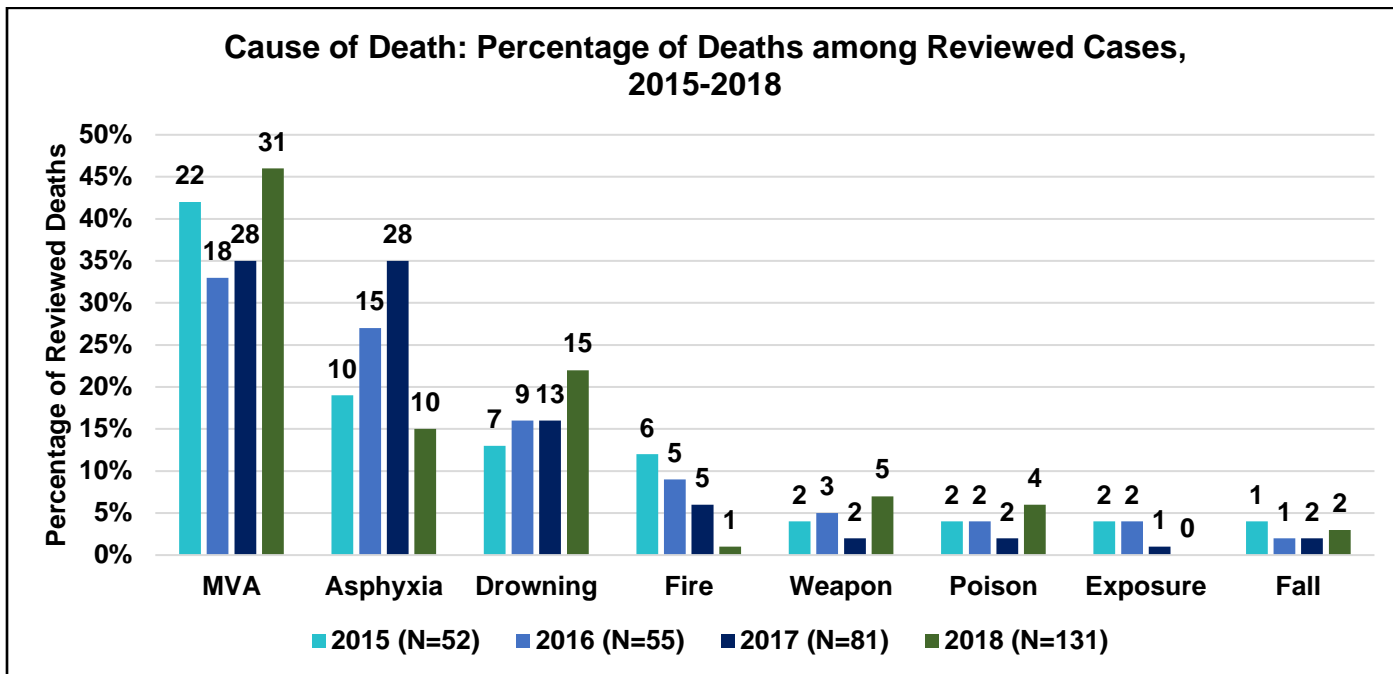
Reviewed Infant and Child Deaths: Manner of Death

Manner of Death describes how the infant or child died and explains the cause of death. Deaths are categorized as natural or non-natural based on the manner of death. Natural deaths result from a disease process and non-natural deaths are generally injury related. Non-natural deaths are further classified into the following groups: accident, homicide, suicide, and undetermined.

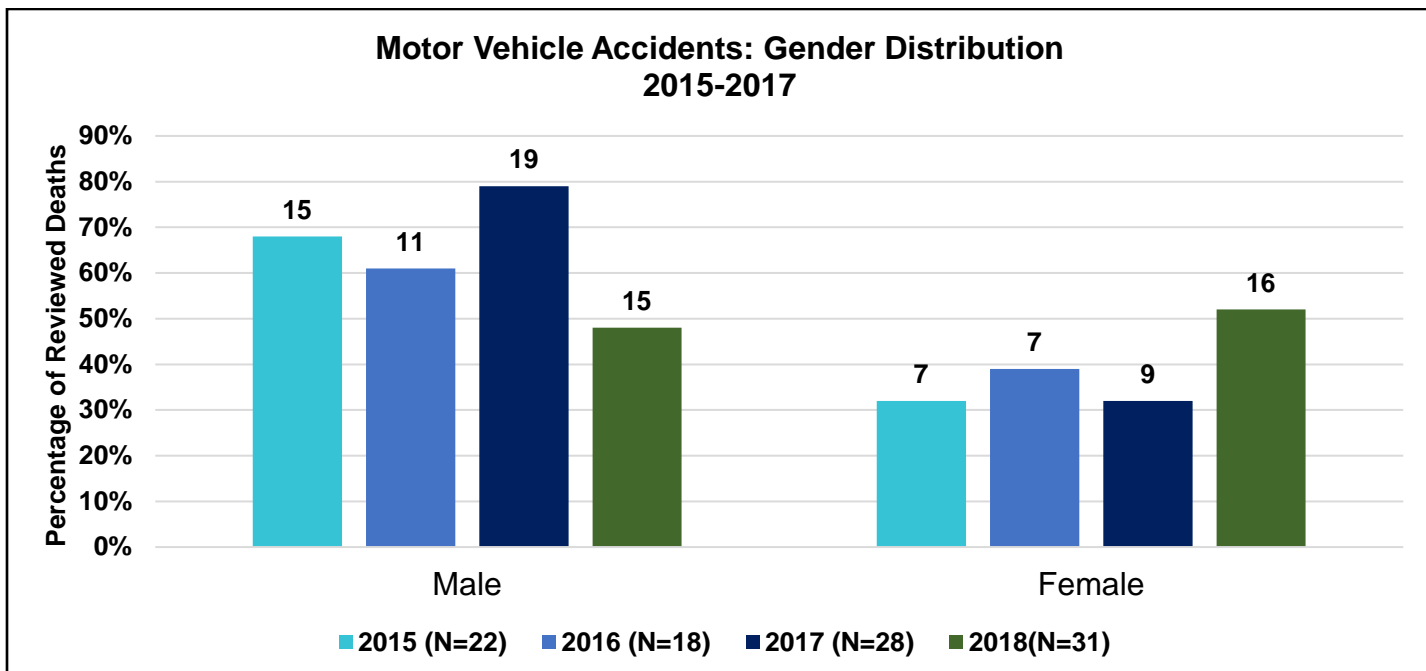
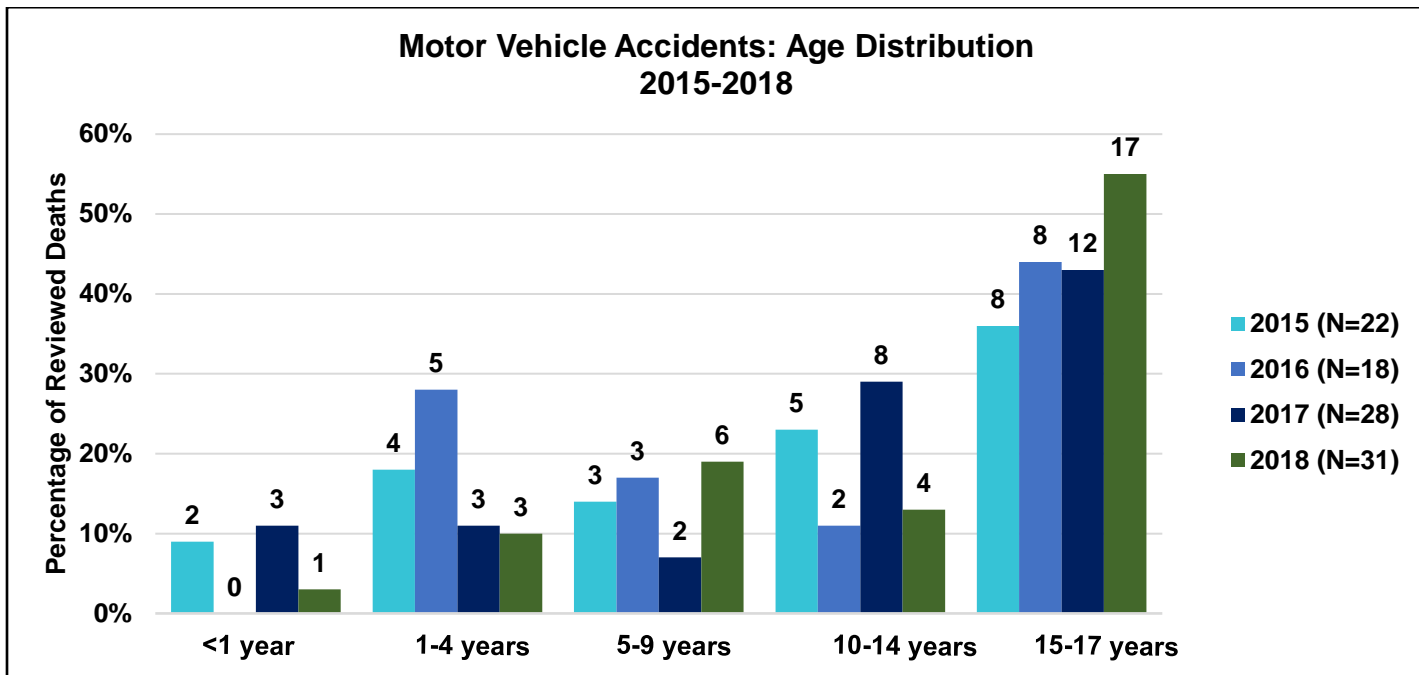


1. Reviewed Infant and Child Accidental Deaths

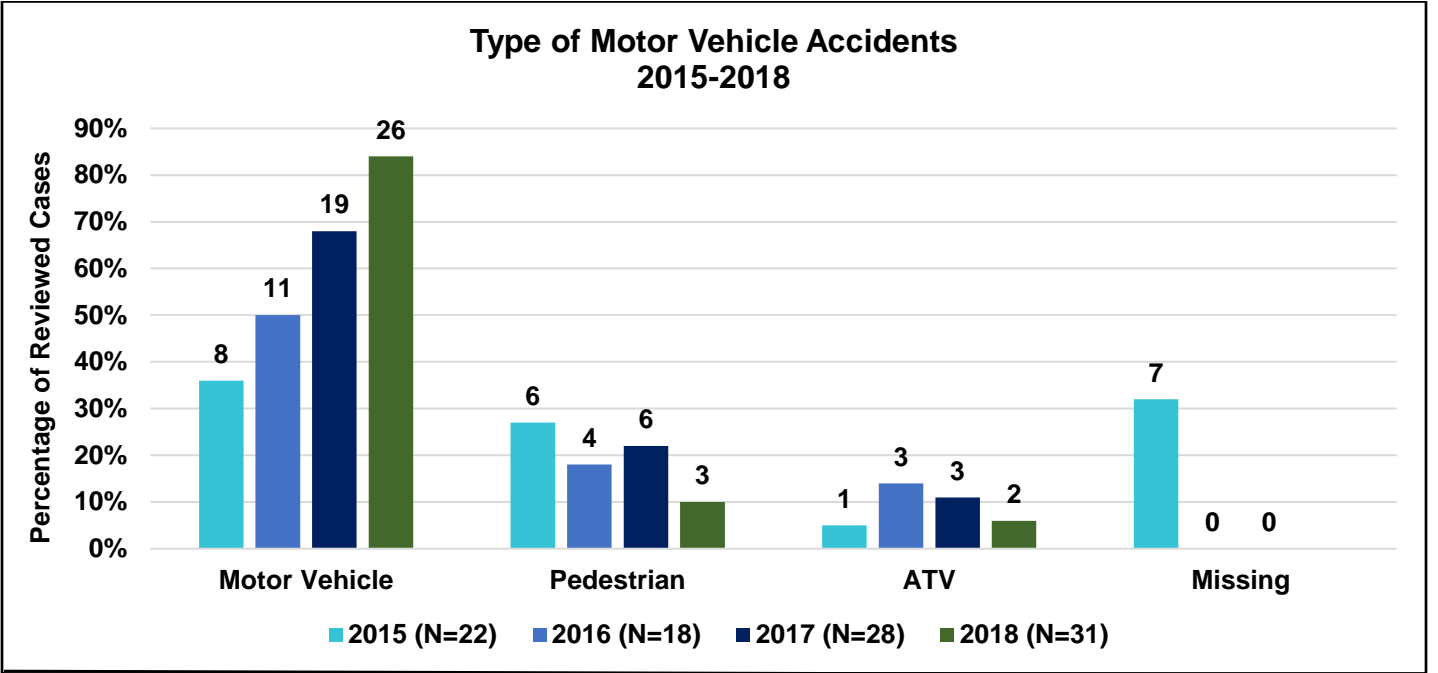
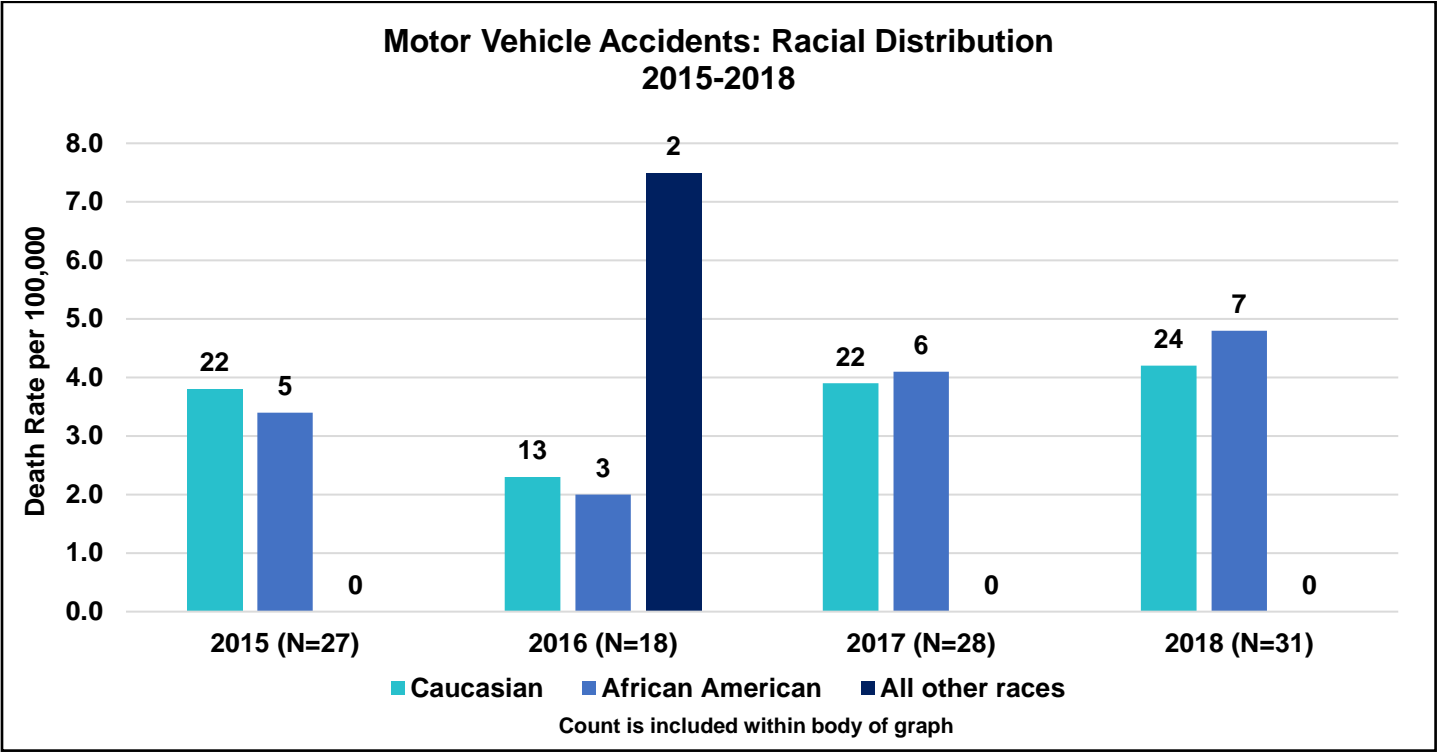
Cause of Death is the reason a child died. A few examples of accidental death include motor vehicle accident, drowning, poisoning, or fire related. The cause of death may be further classified as underlying (injury that initiated the events resulting in death) or immediate (final condition resulting in death).



1a. Motor Vehicle Deaths

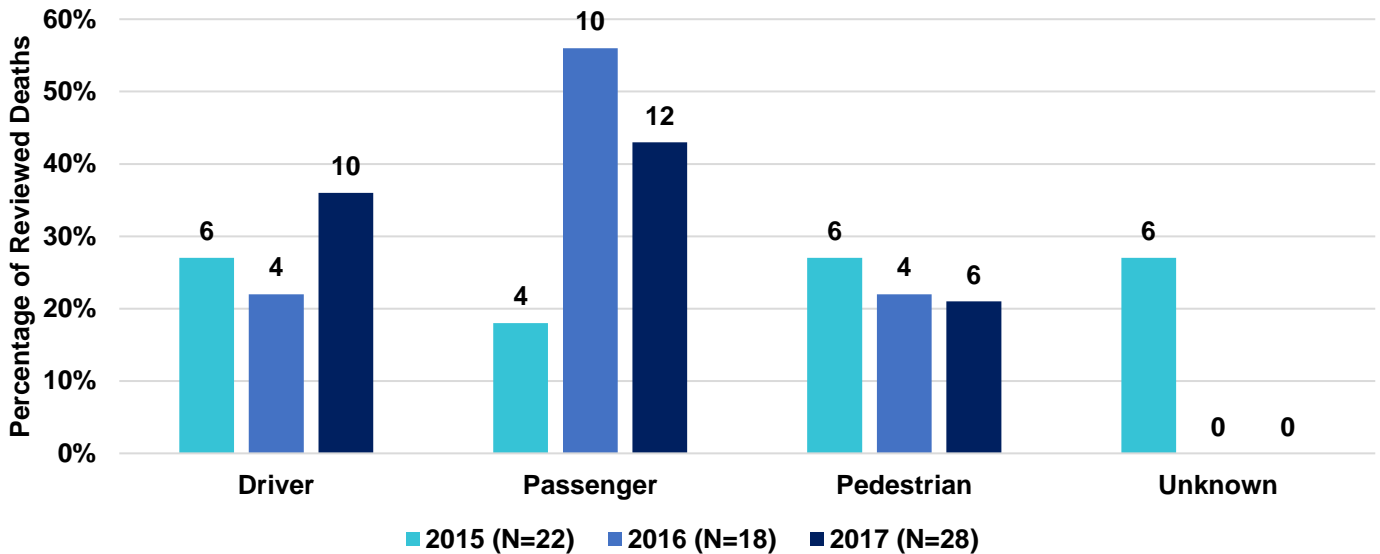


1a. Motor Vehicle Deaths

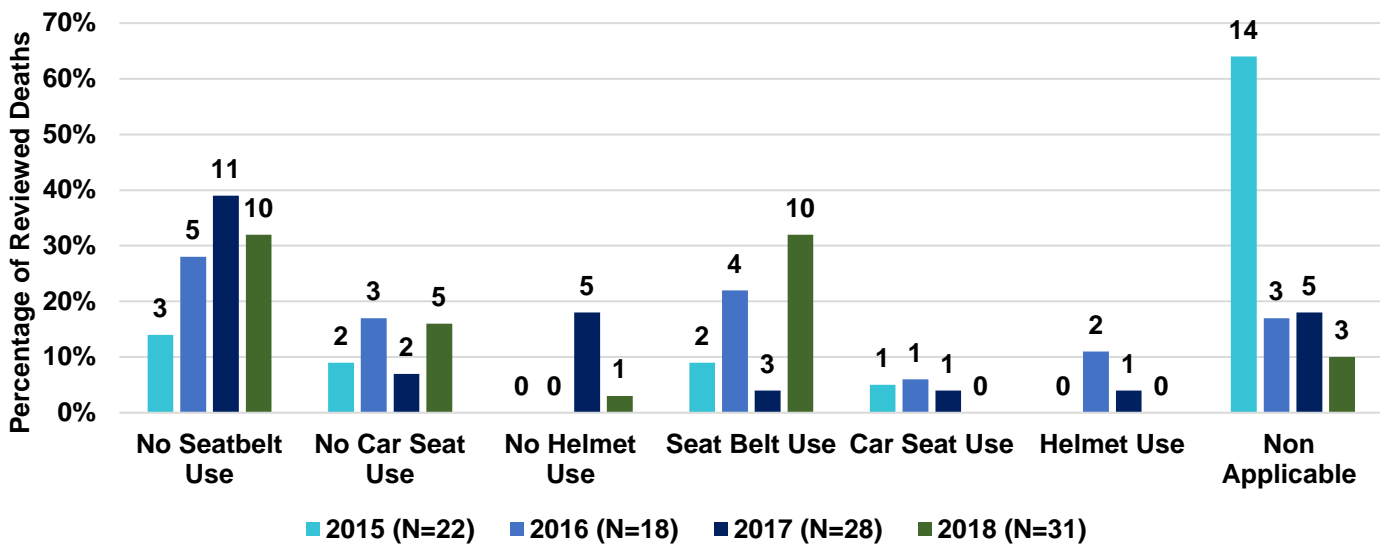


1a. Motor Vehicle Deaths

Motor Vehicle Accidents: Position of Chld at Time of Death, 2015-2017

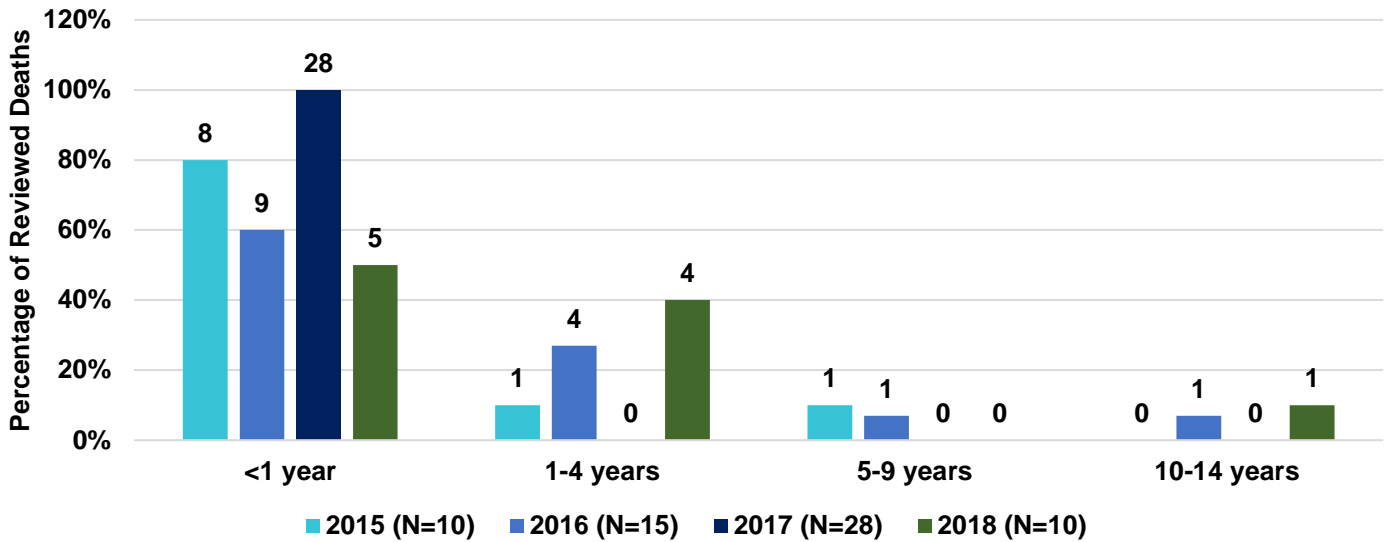


Motor Vehicle Accidents: Restraint Systems Use 2015-2018

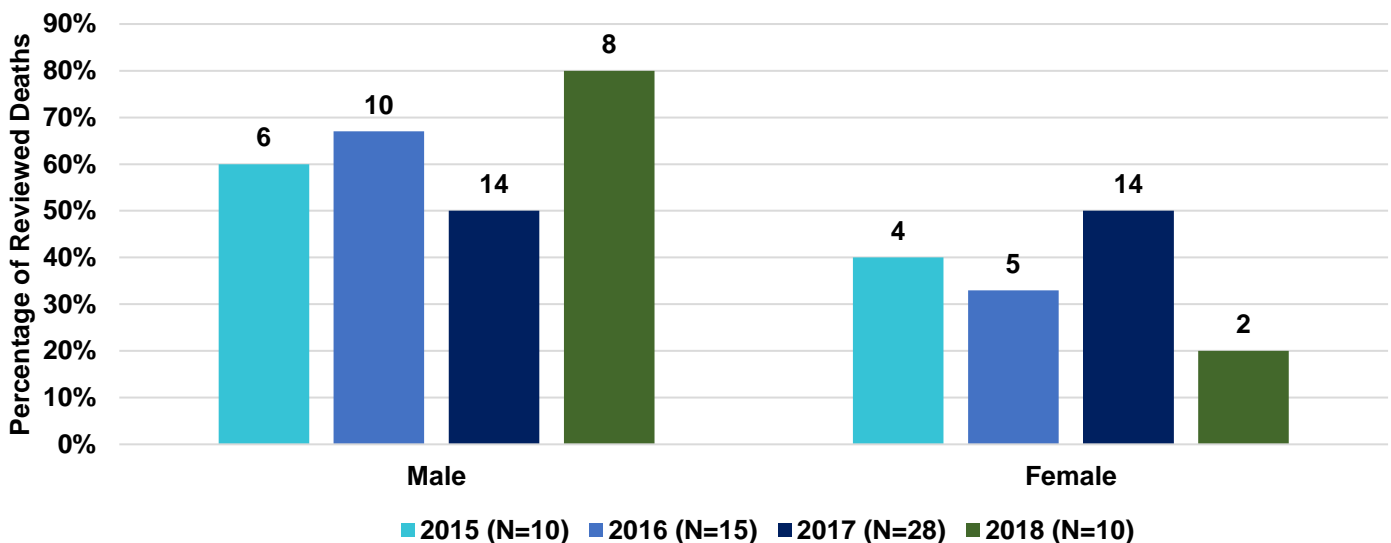


1b. Asphyxia Deaths

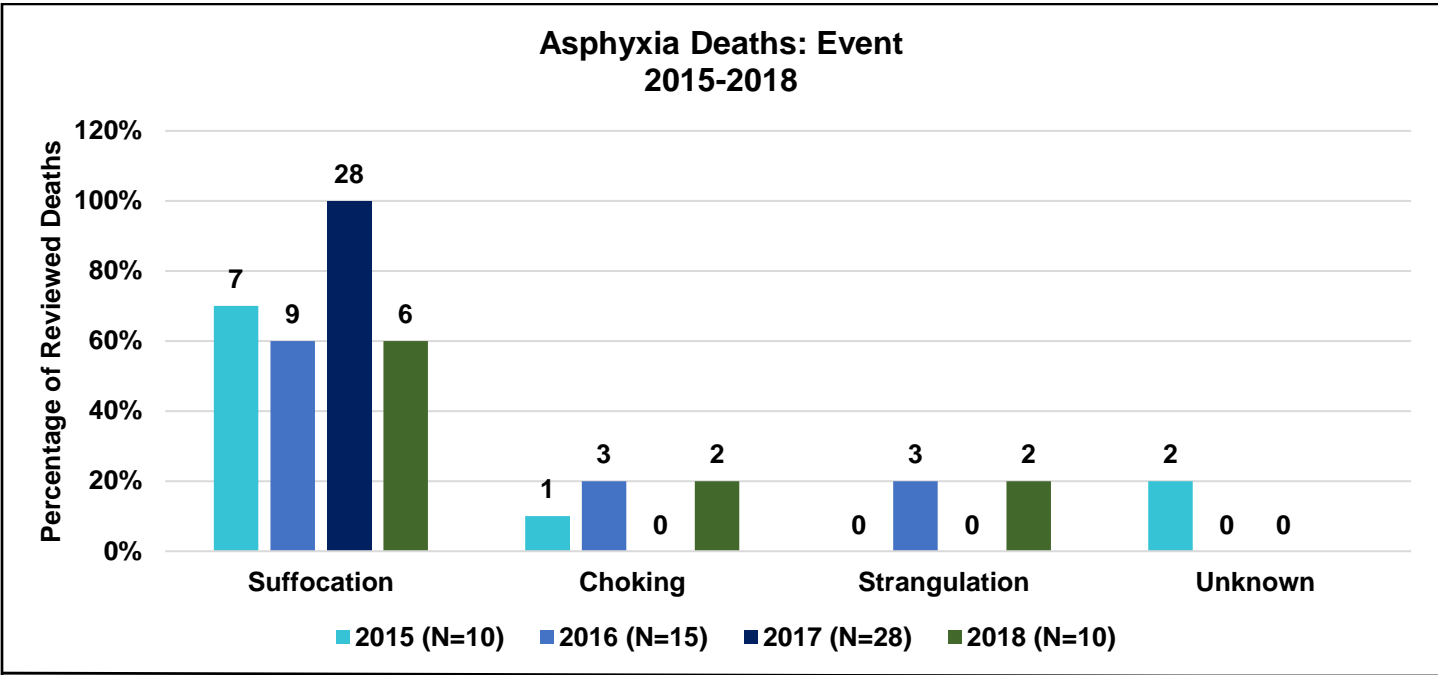
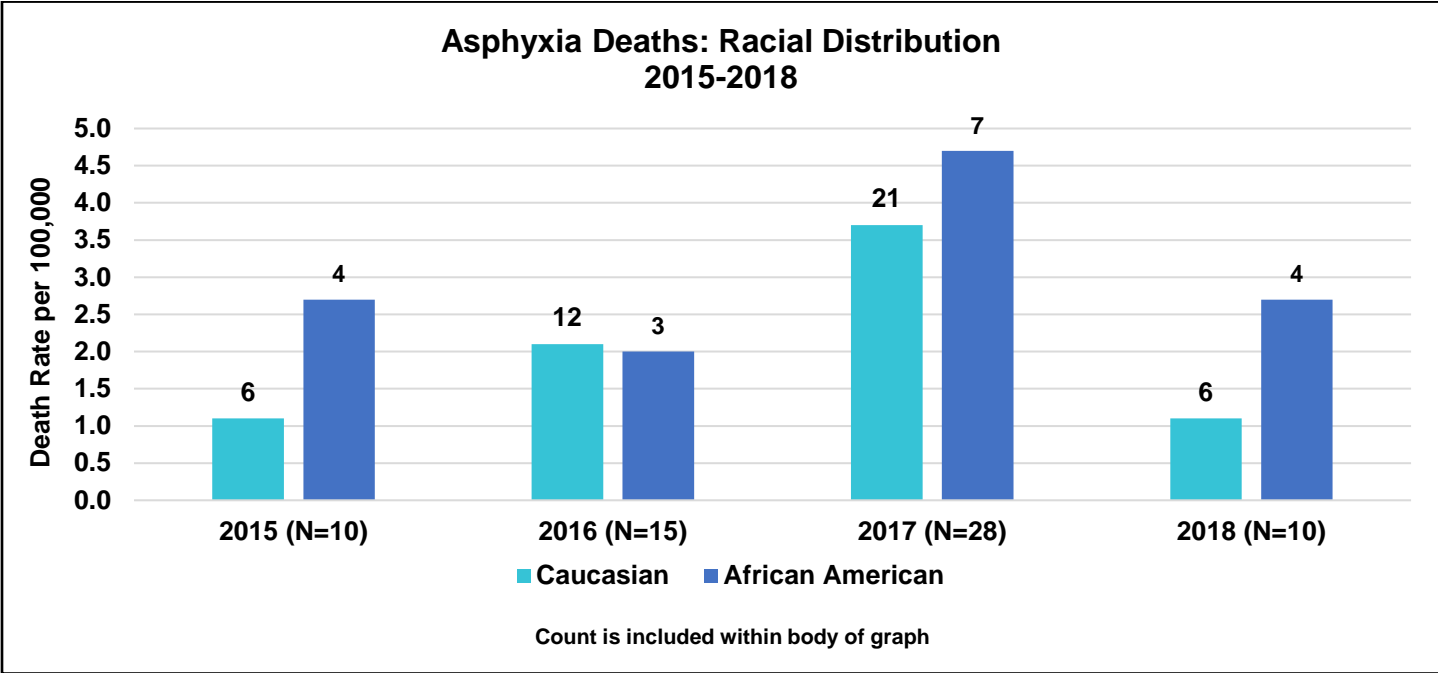
**Asphyxia Deaths: Age Distribution
2015-2018**



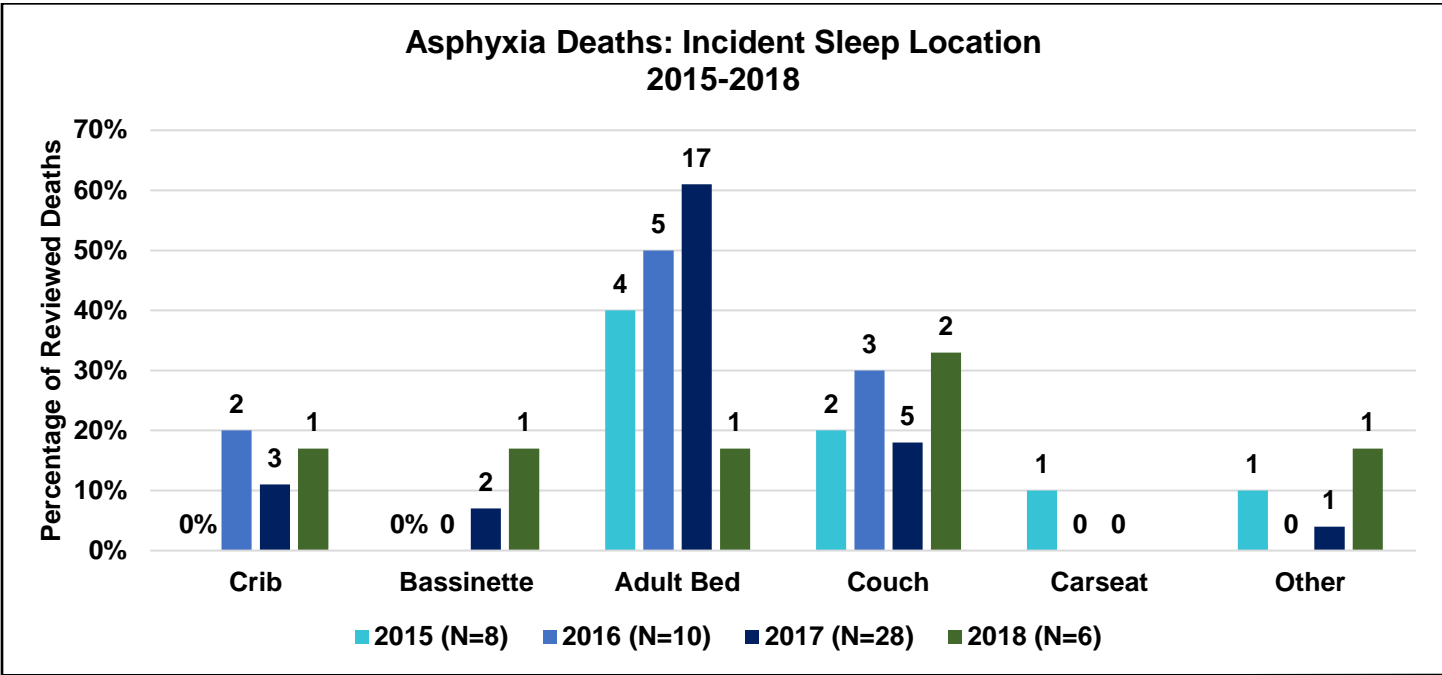
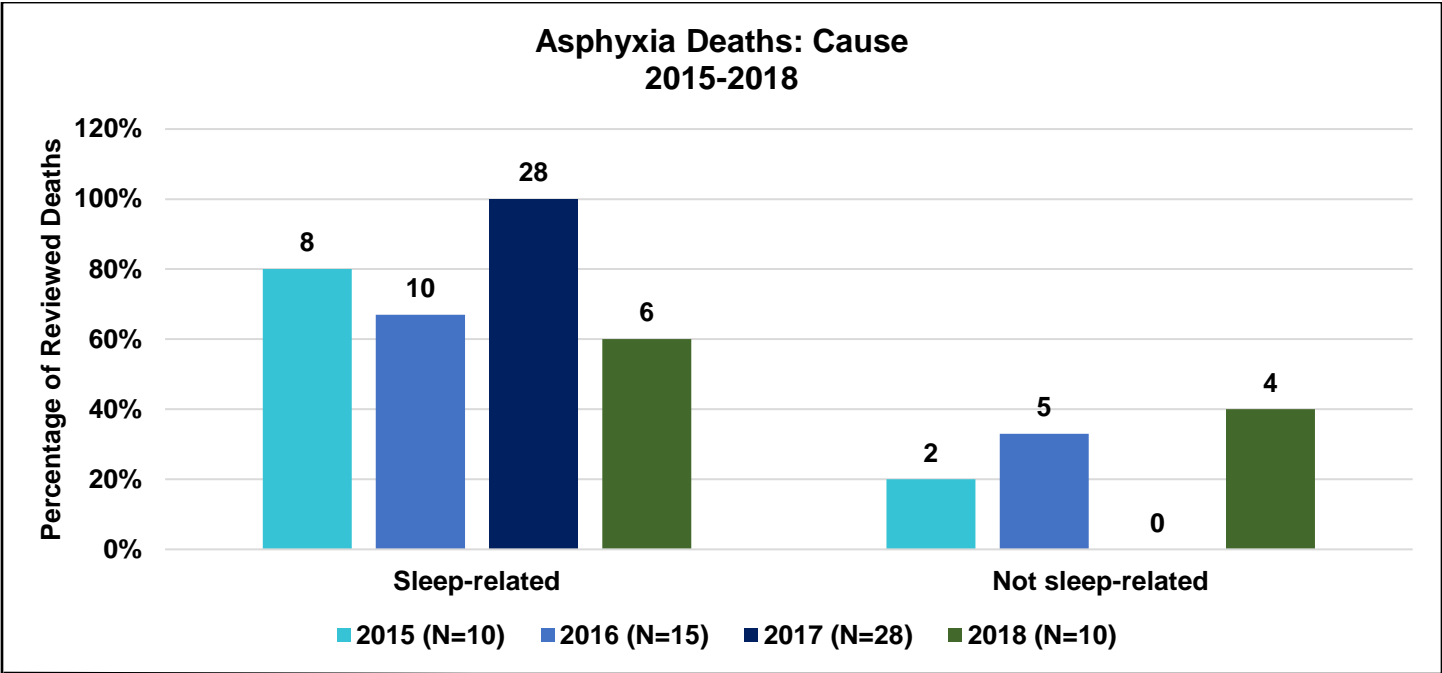
**Asphyxia Deaths: Gender Distribution
2015-2018**



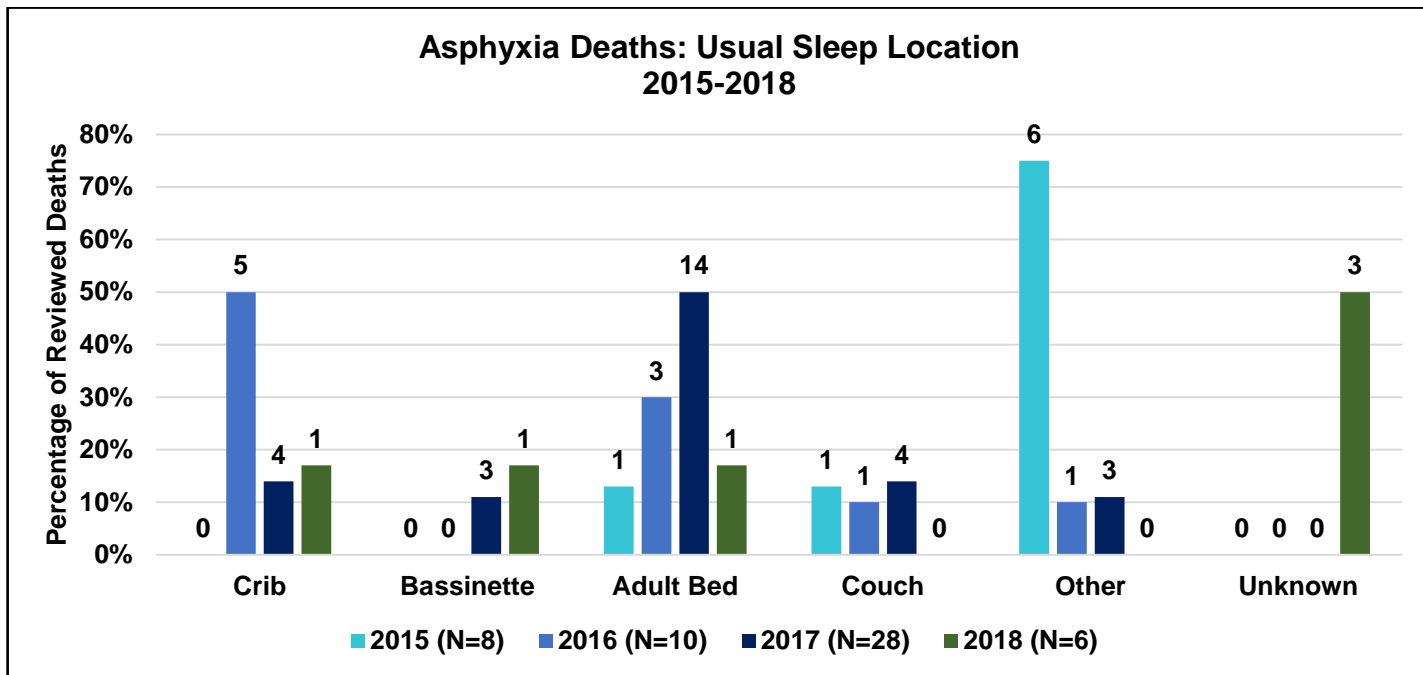
1b. Asphyxia Deaths



1b. Asphyxia Deaths

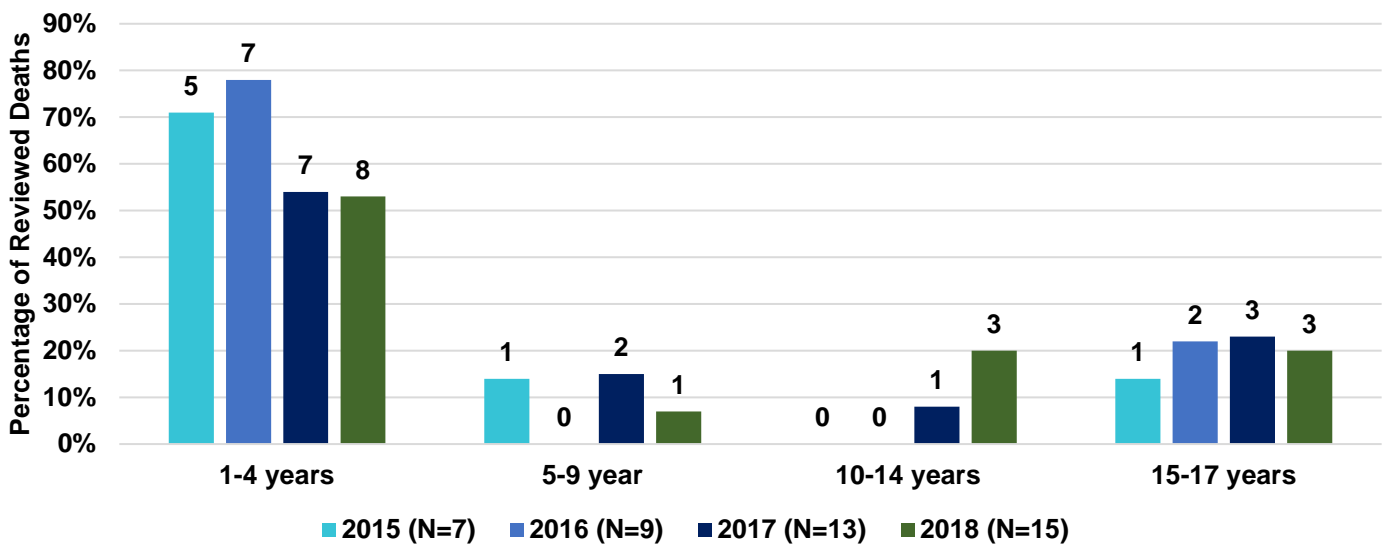


1b. Asphyxia Deaths

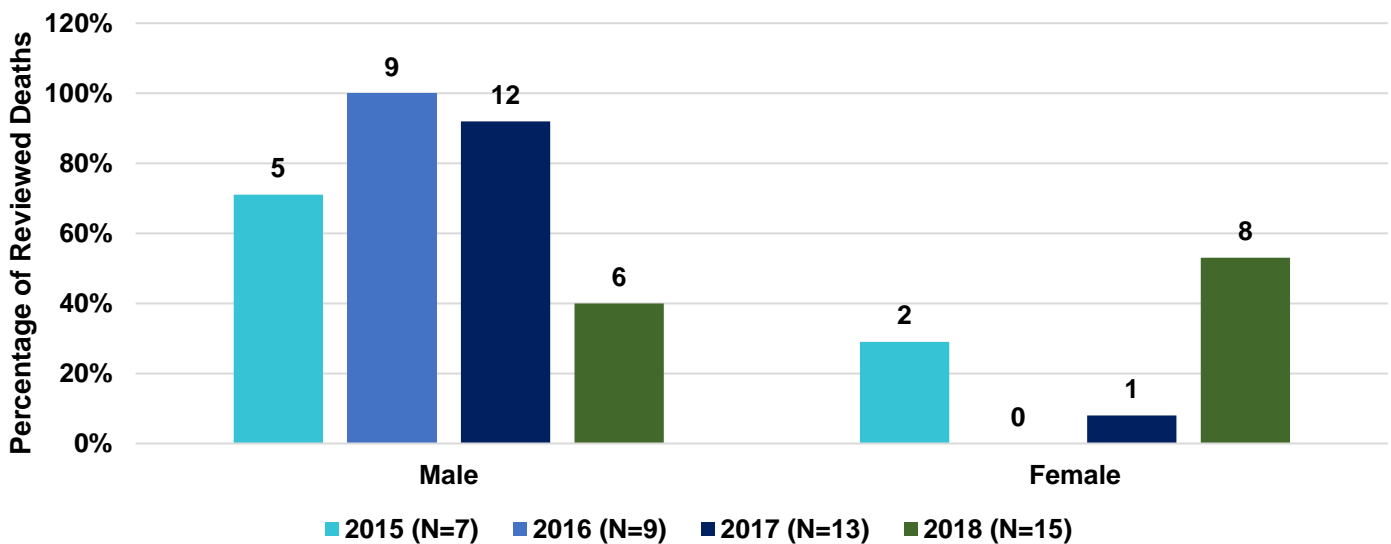


1c. Drowning Deaths

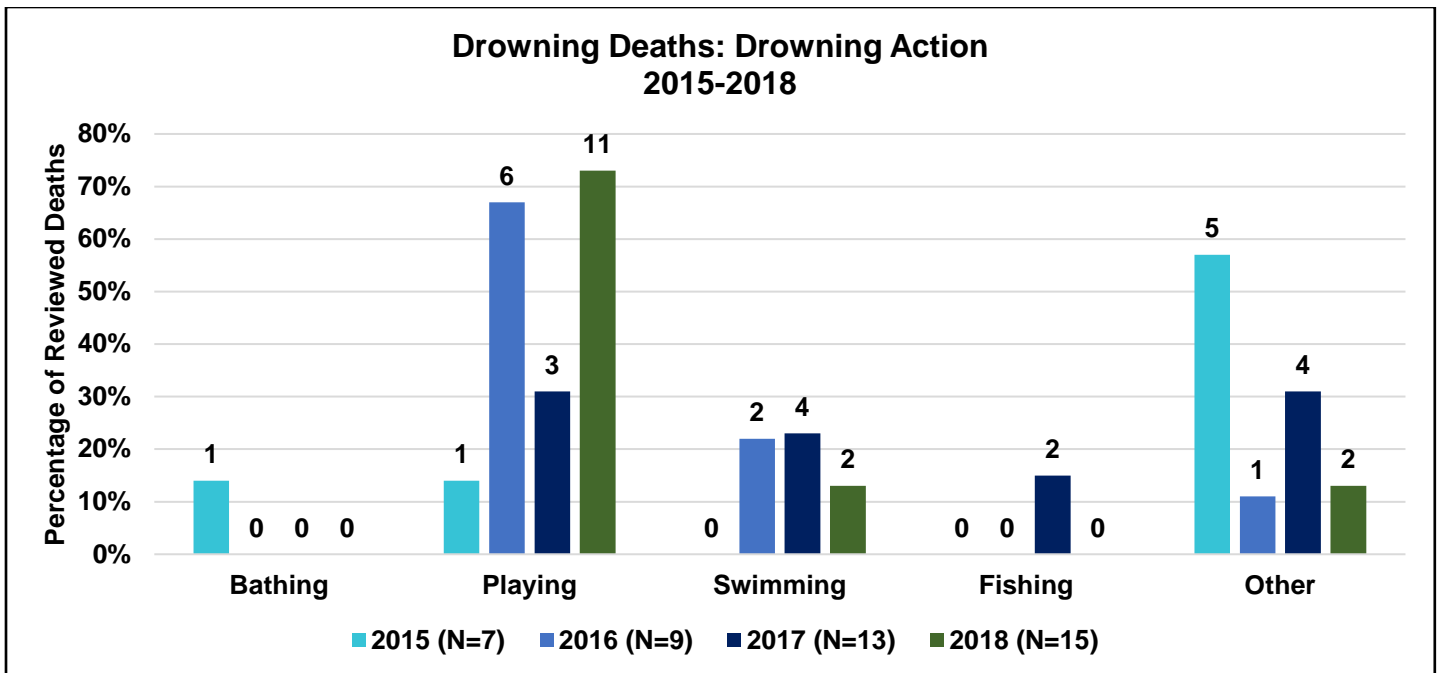
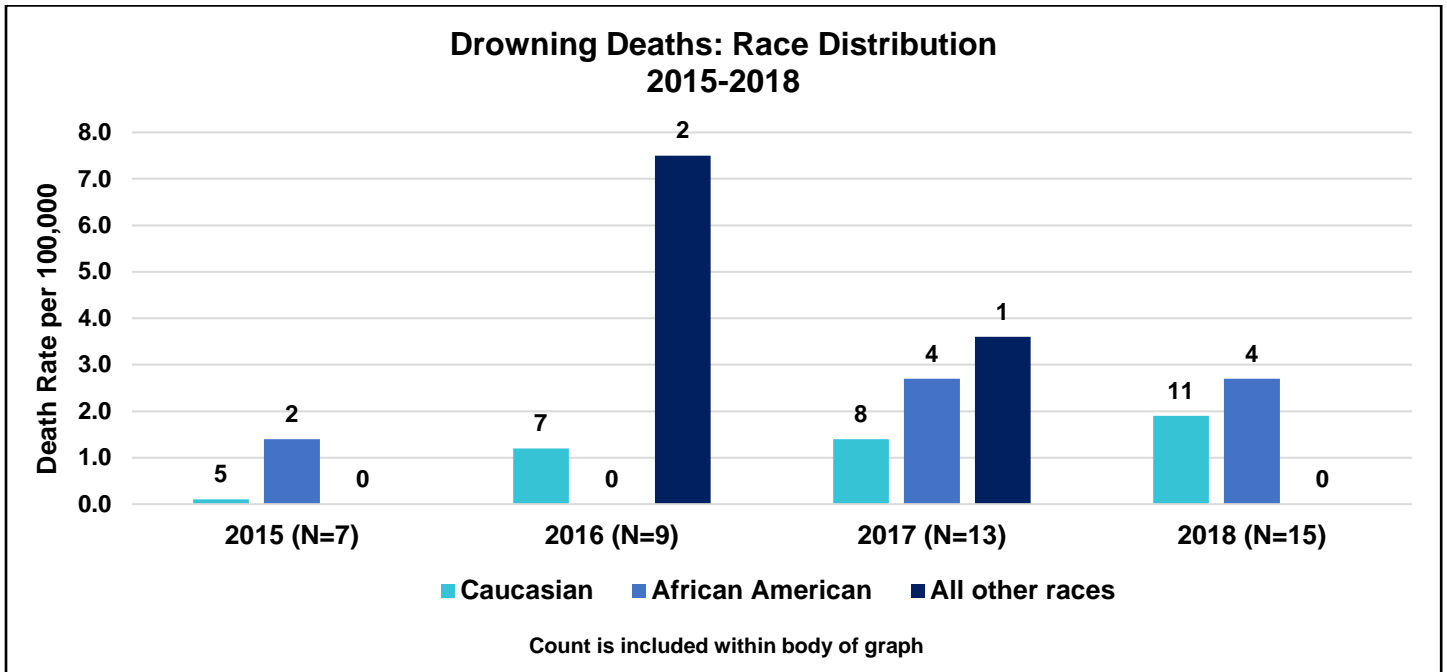
Drowning Deaths: Age Distribution 2015-2018



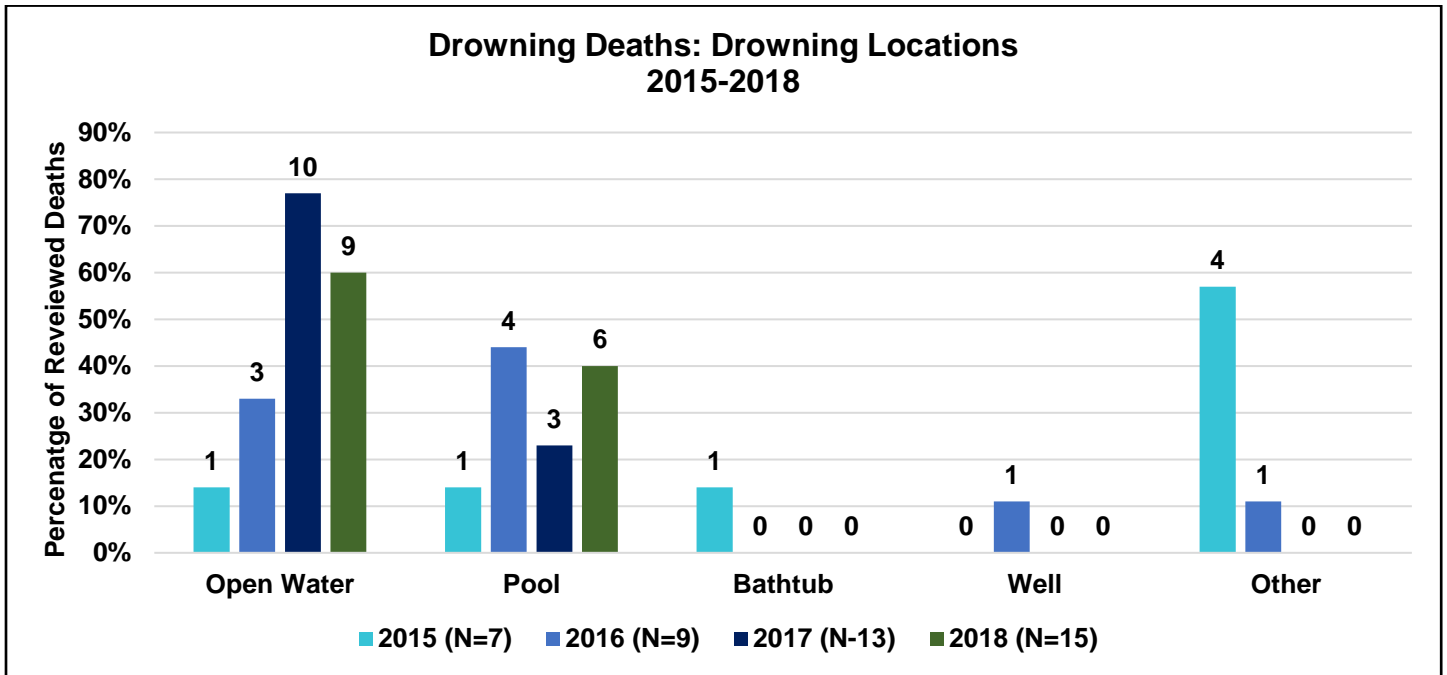
Drowning Deaths: Gender Distribution 2015-2018



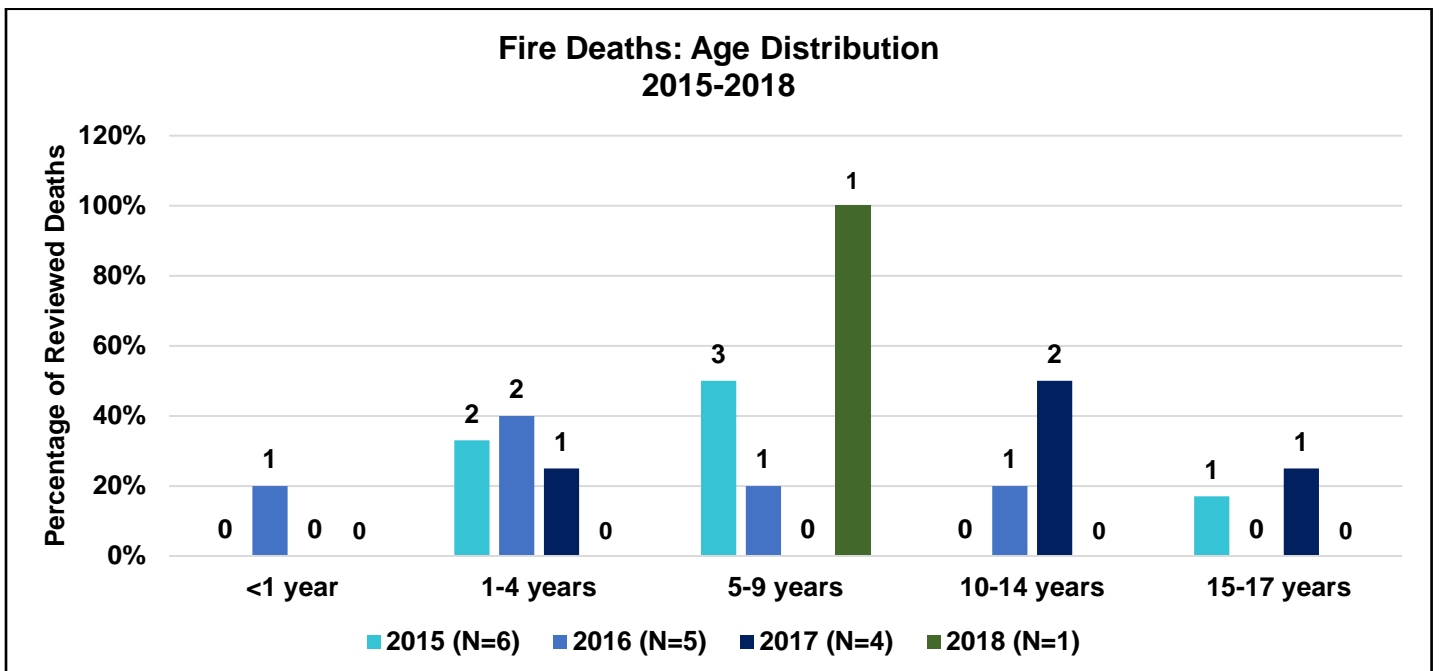
1c. Drowning Deaths



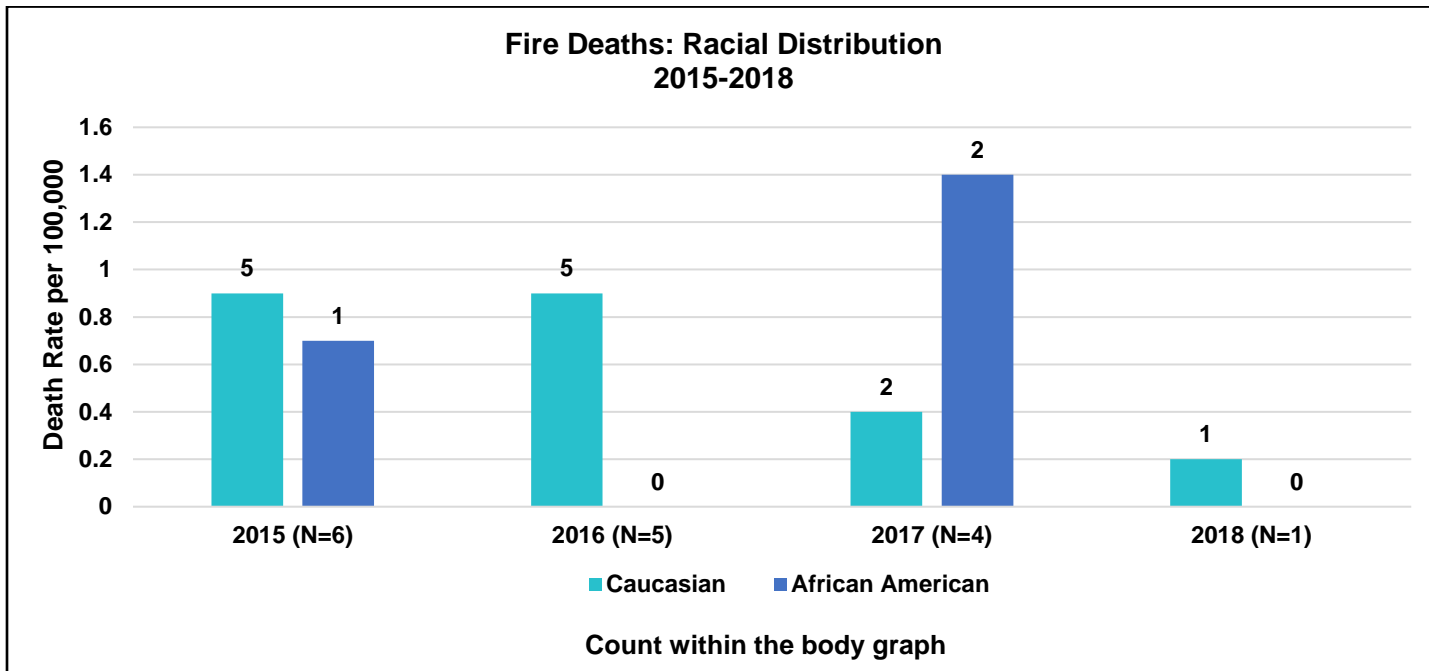
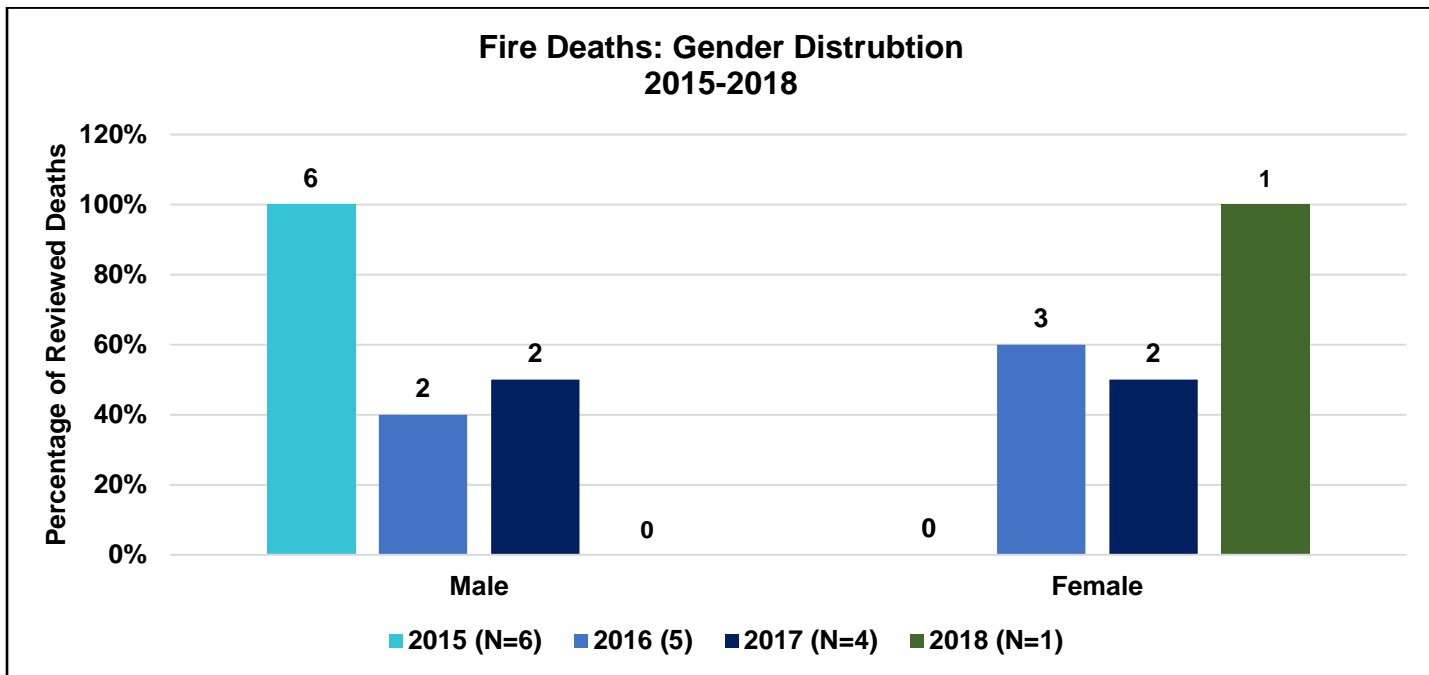
1c. Drowning Deaths



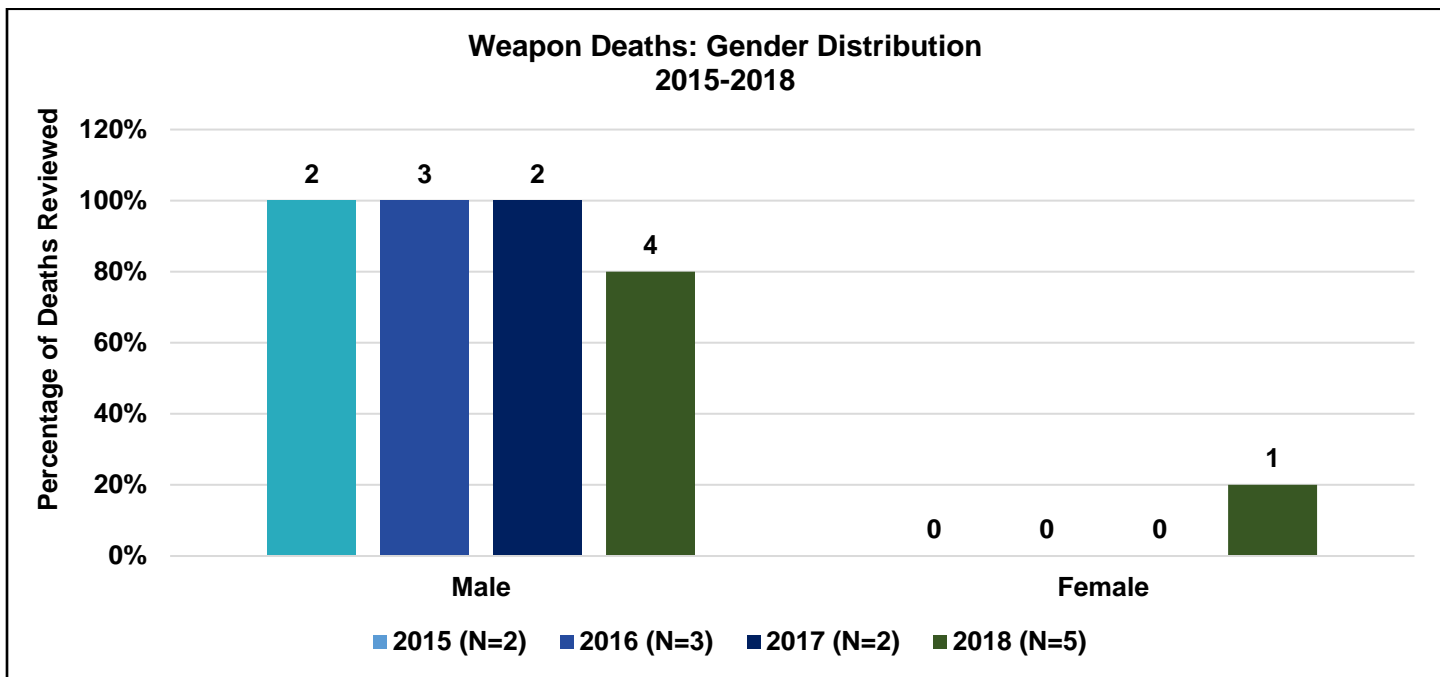
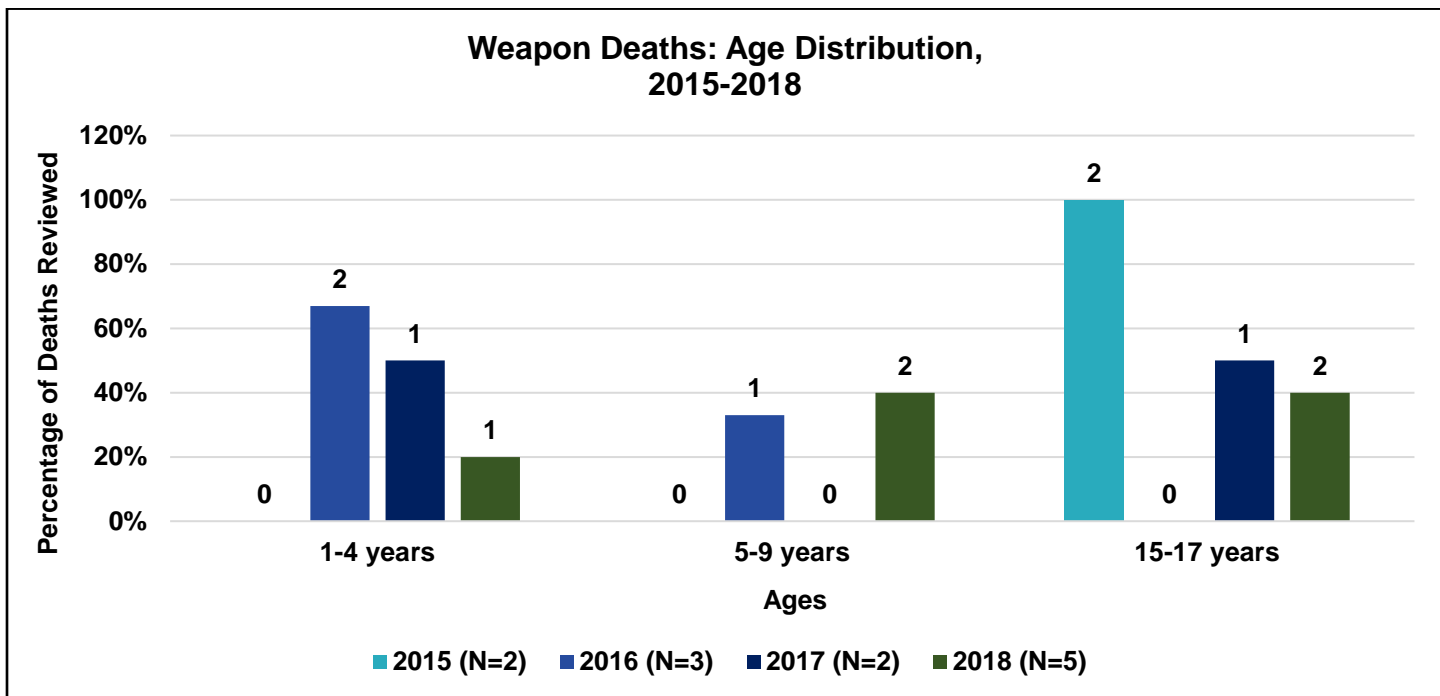
1d. Fire Deaths



1d. Fire Deaths

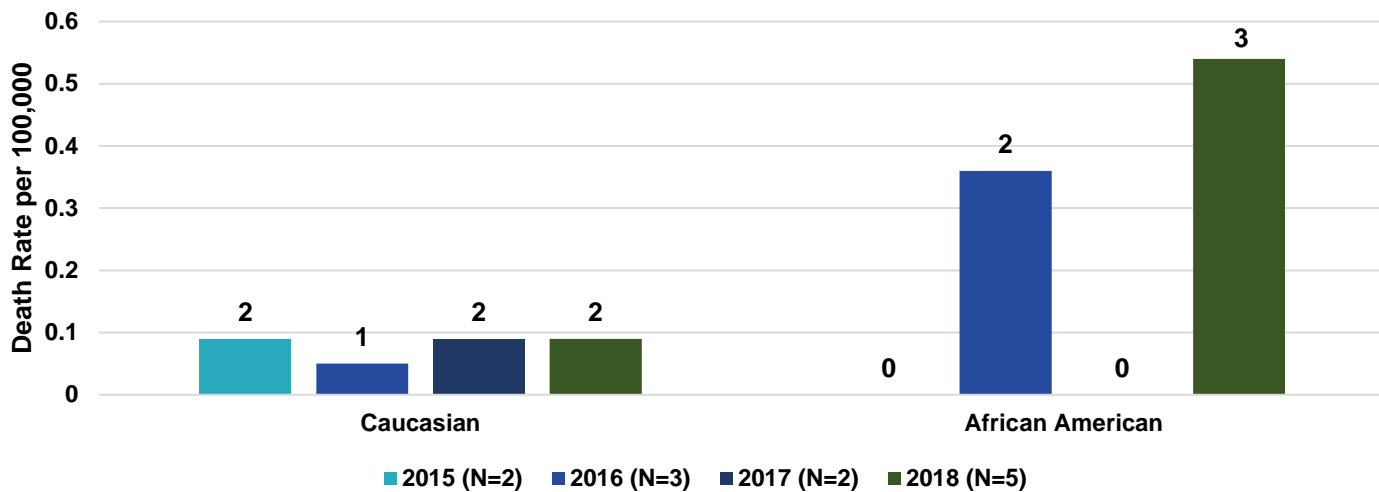


1e. Weapon Deaths



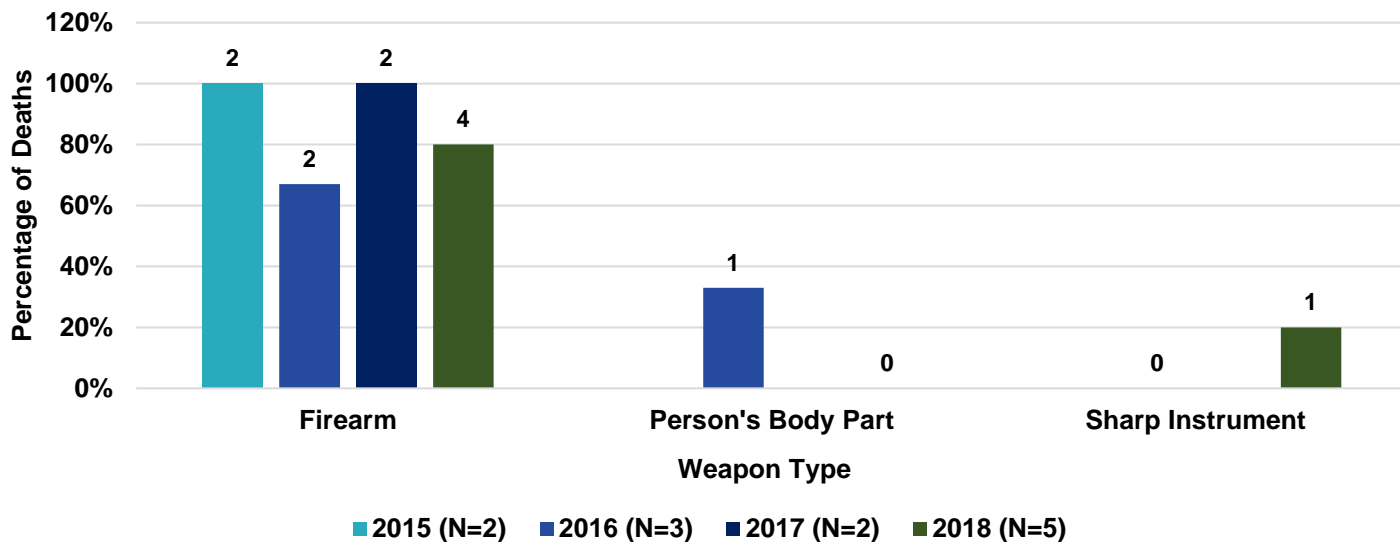
1e. Weapon Deaths

Weapon Deaths: Racial Distribution 2015-2018



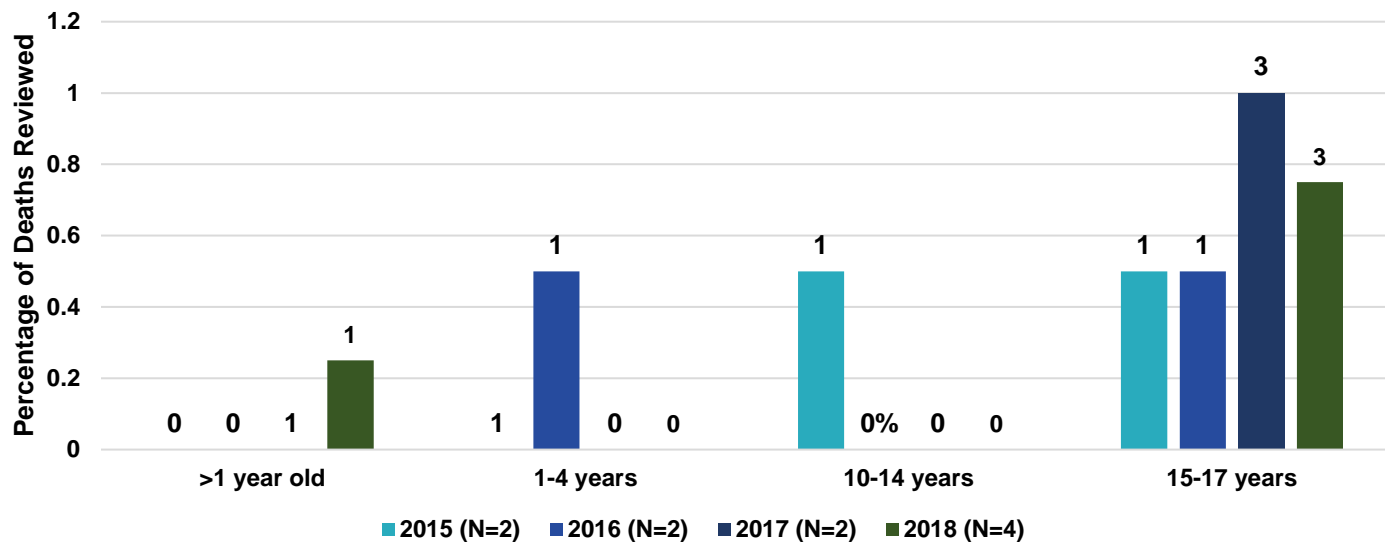
Count within the body of the graph

Weapon Deaths: Weapon Type 2015-2018

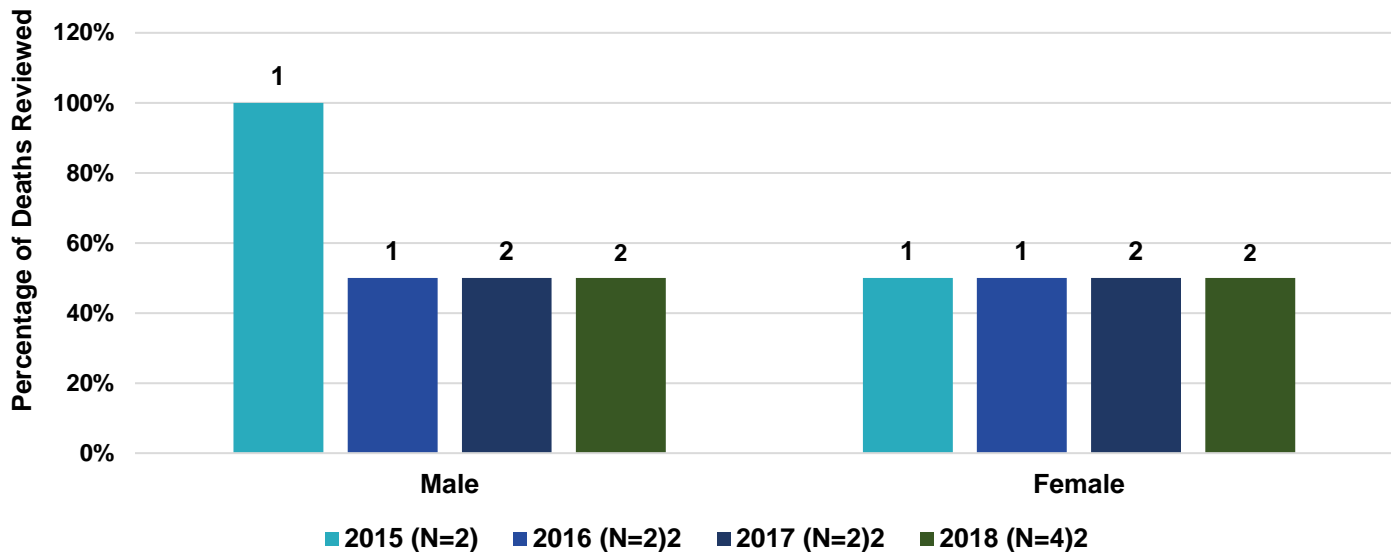


1f. Poison Deaths

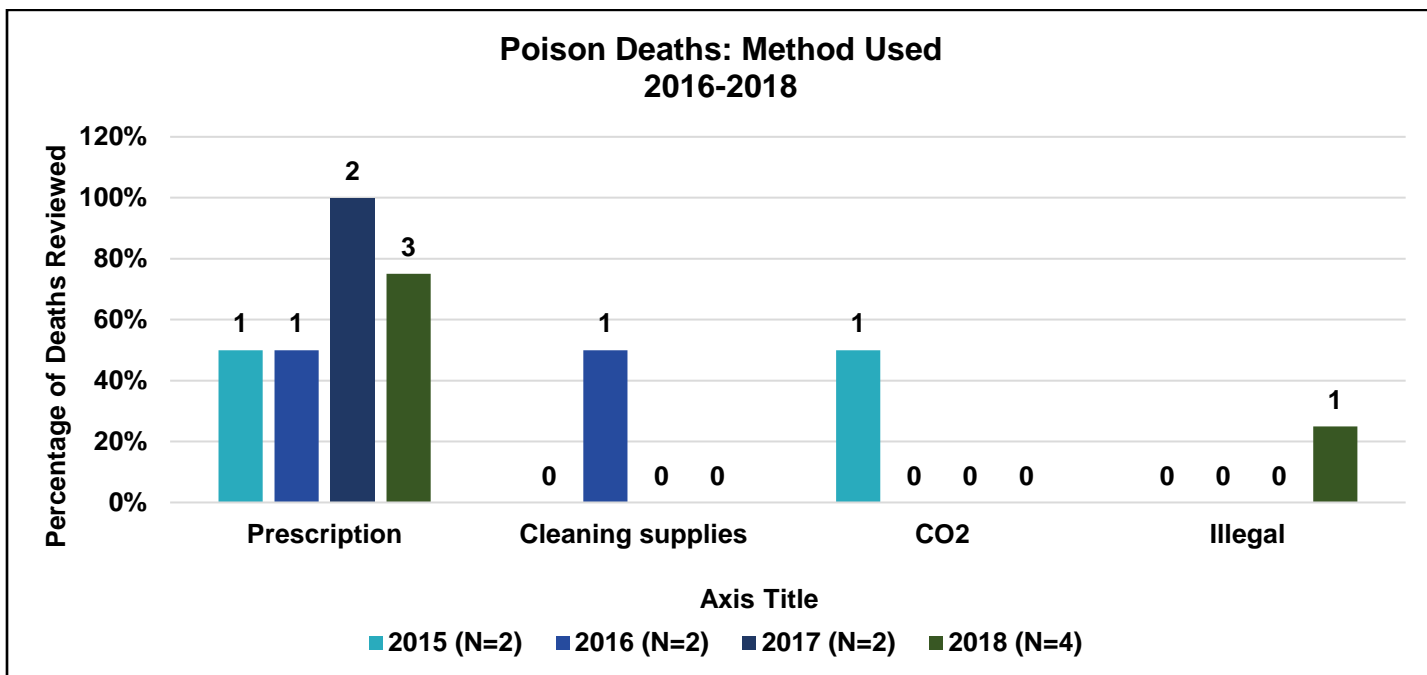
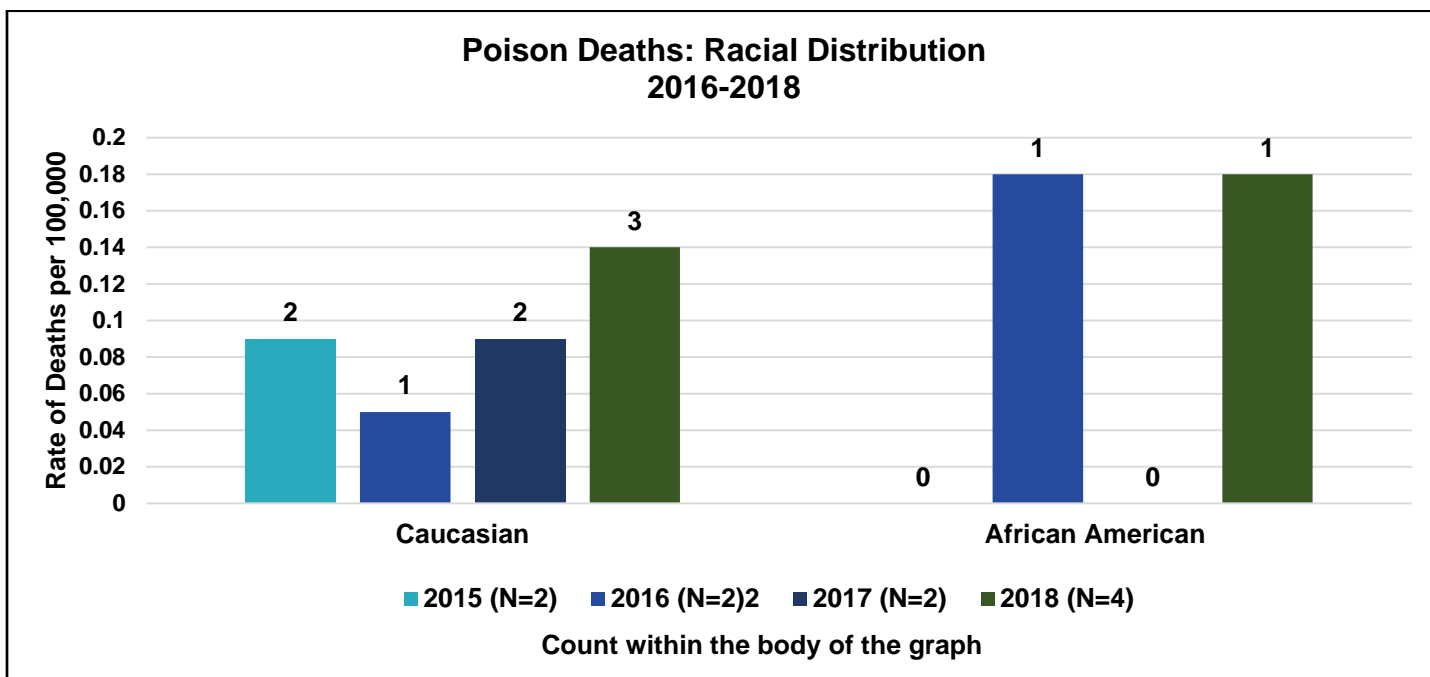
Poison Deaths: Age Distribution 2016-2018



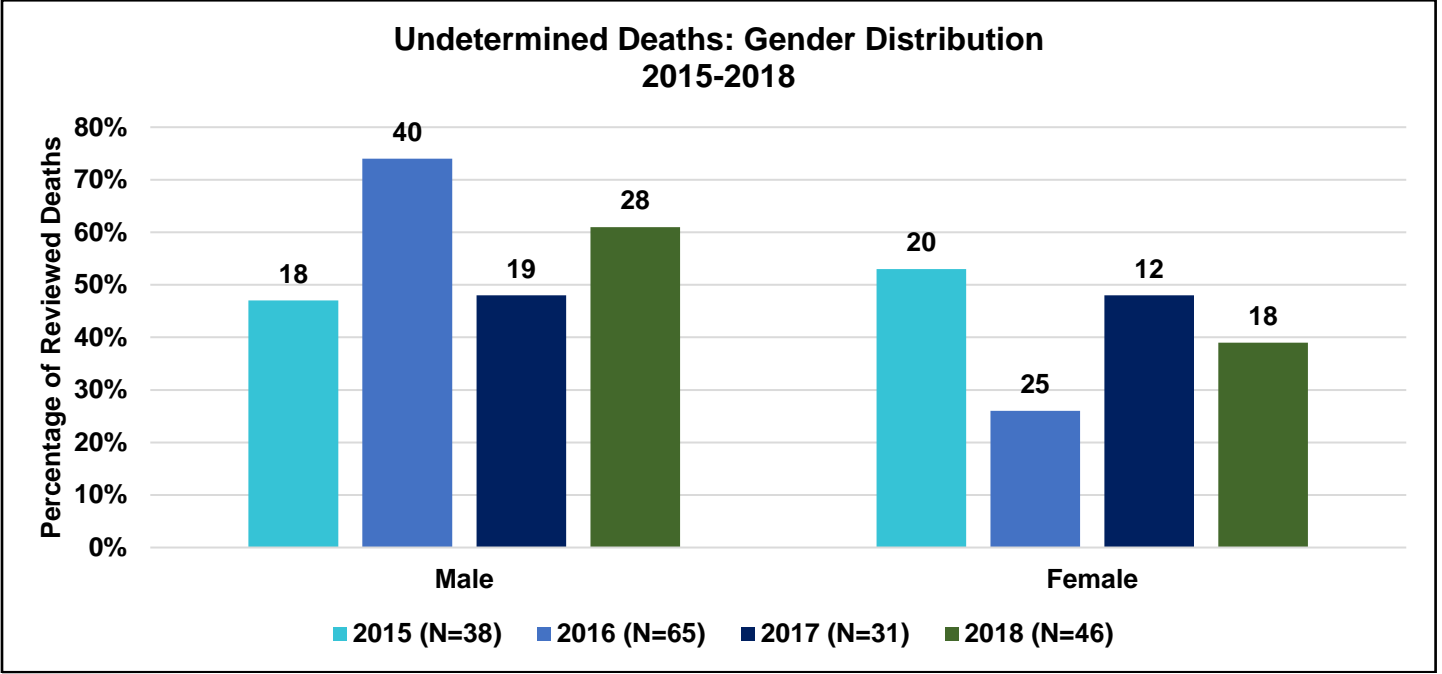
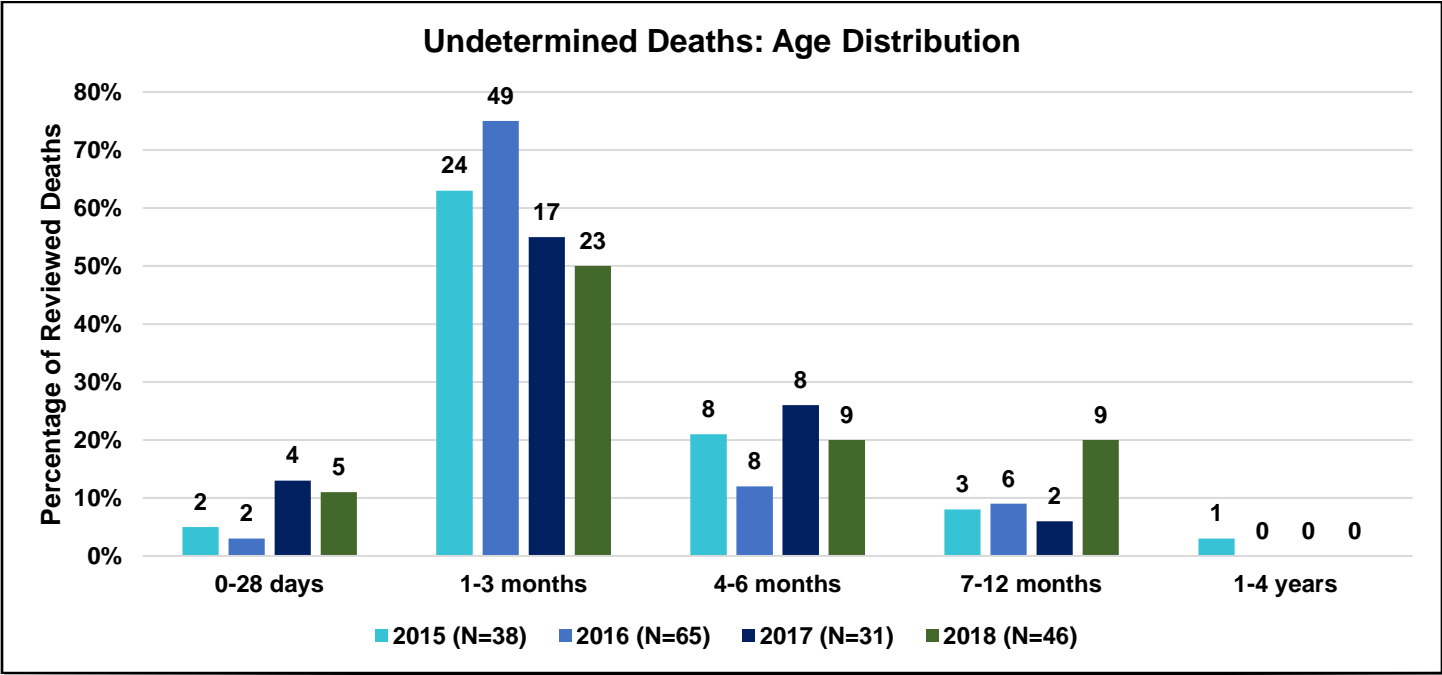
Poison Deaths: Gender Distribution 2016-2018



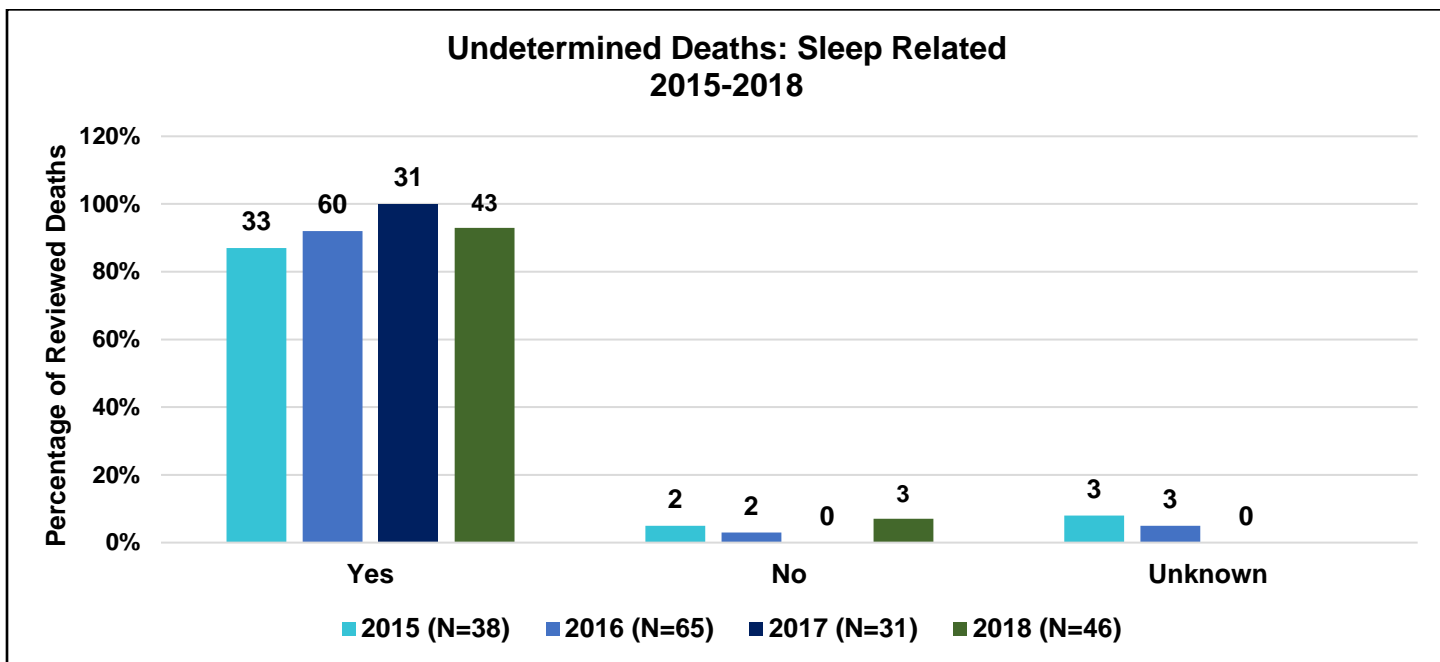
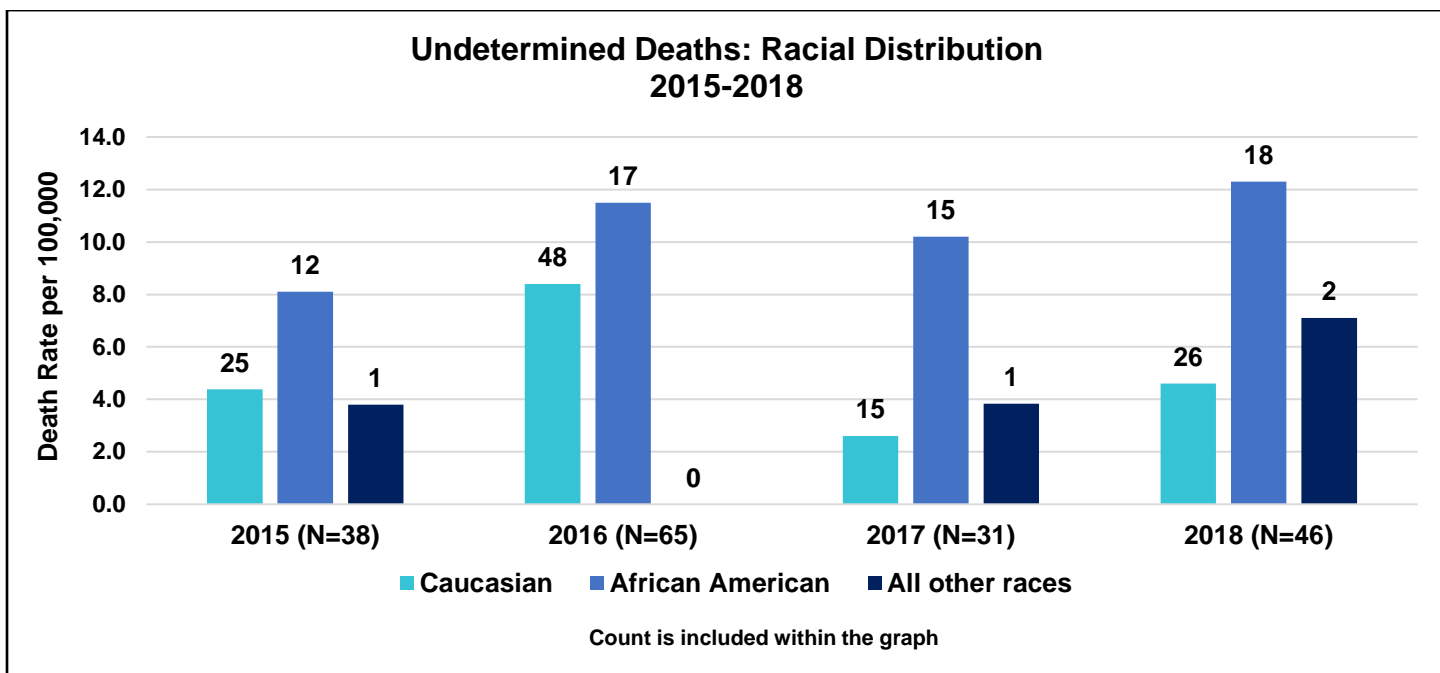
1f. Poison Deaths



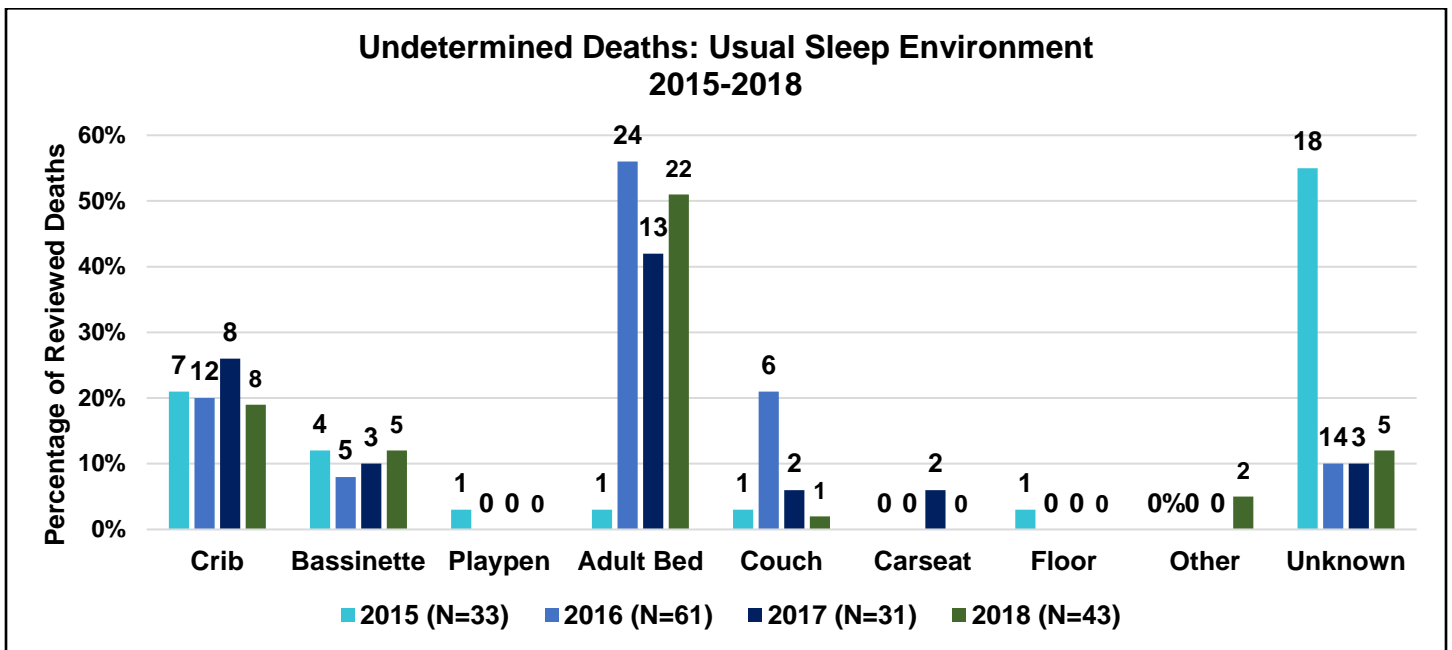
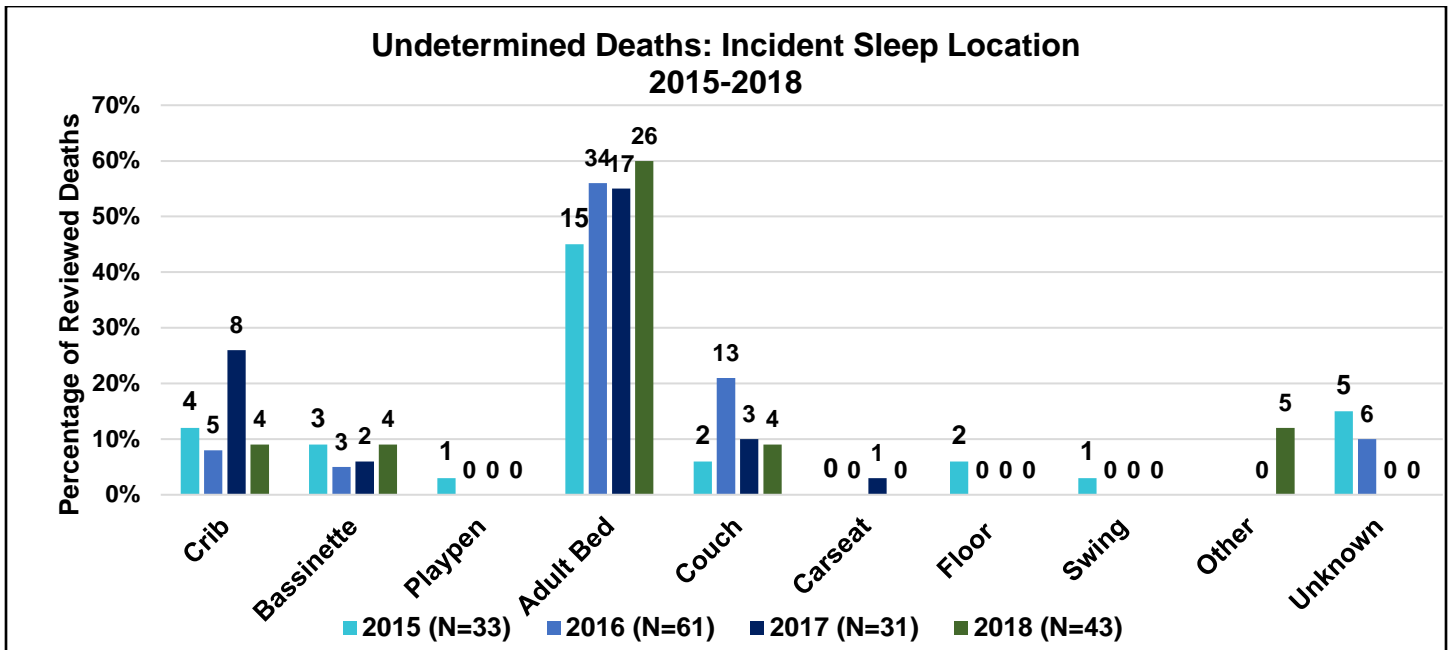
2. Undetermined Deaths



2. Undetermined Deaths

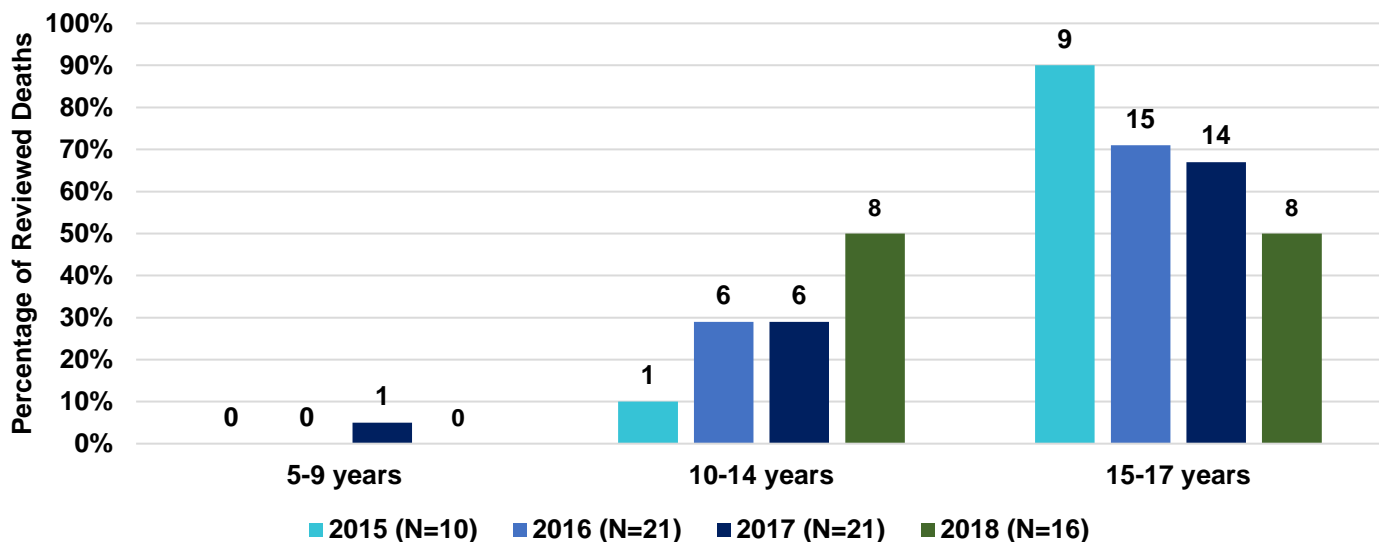


2. Undetermined Deaths

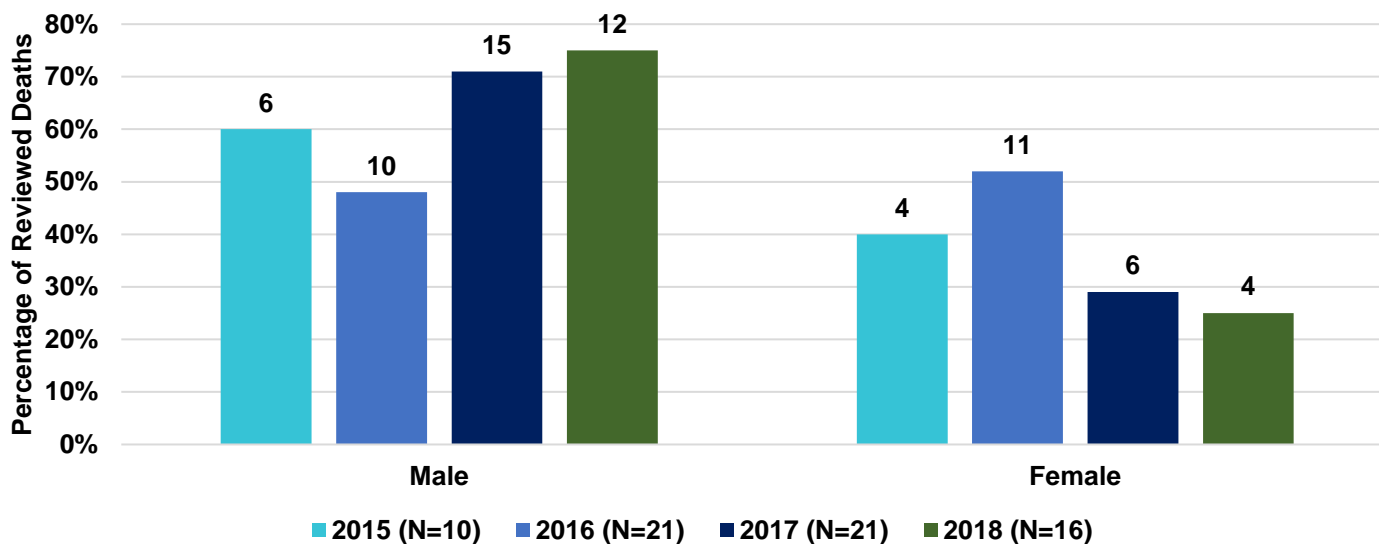


3. Suicide Deaths

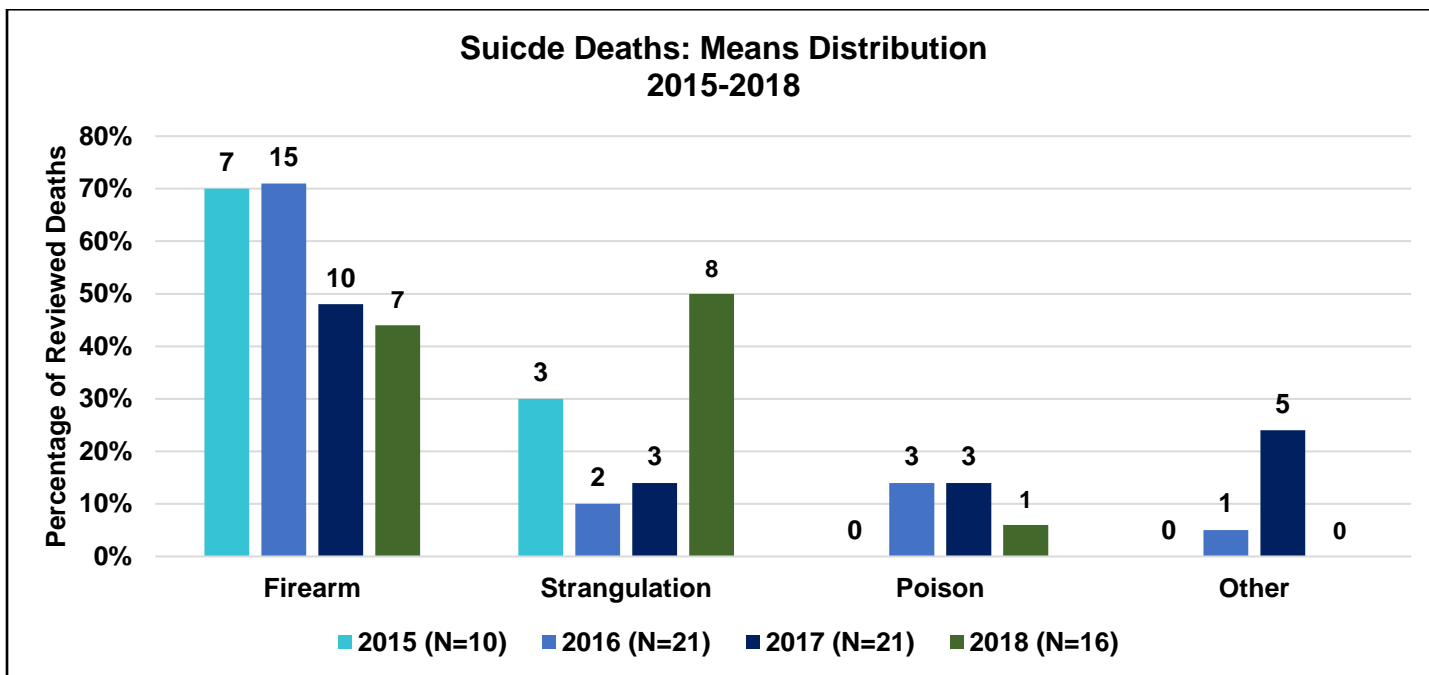
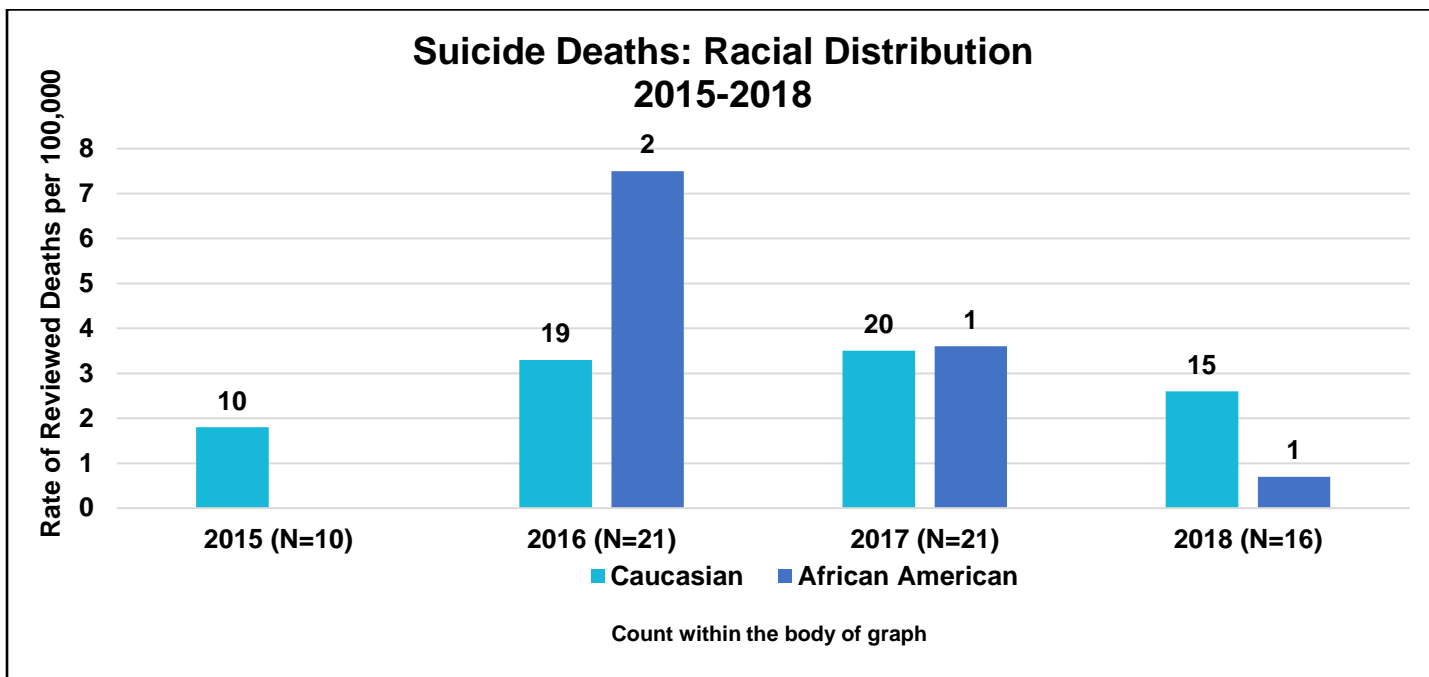
**Suicide Deaths: Age Distribution
2015-2018**



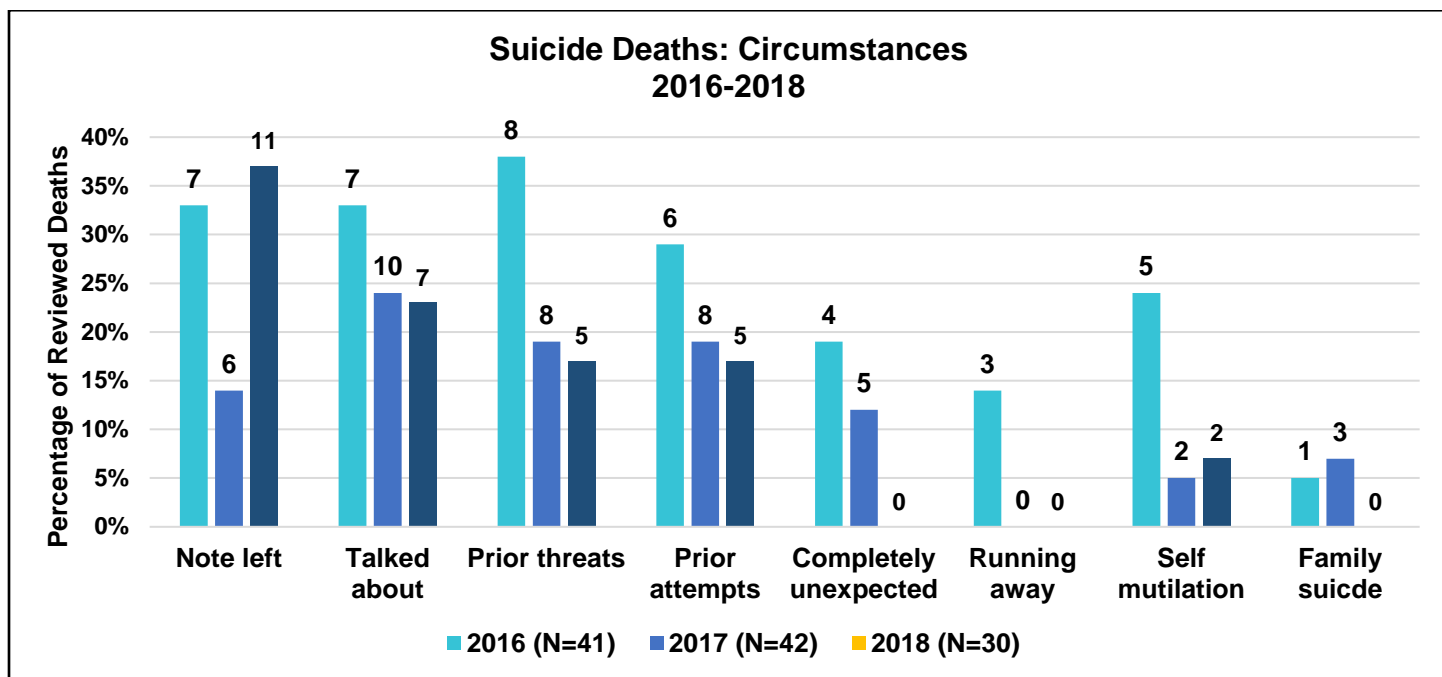
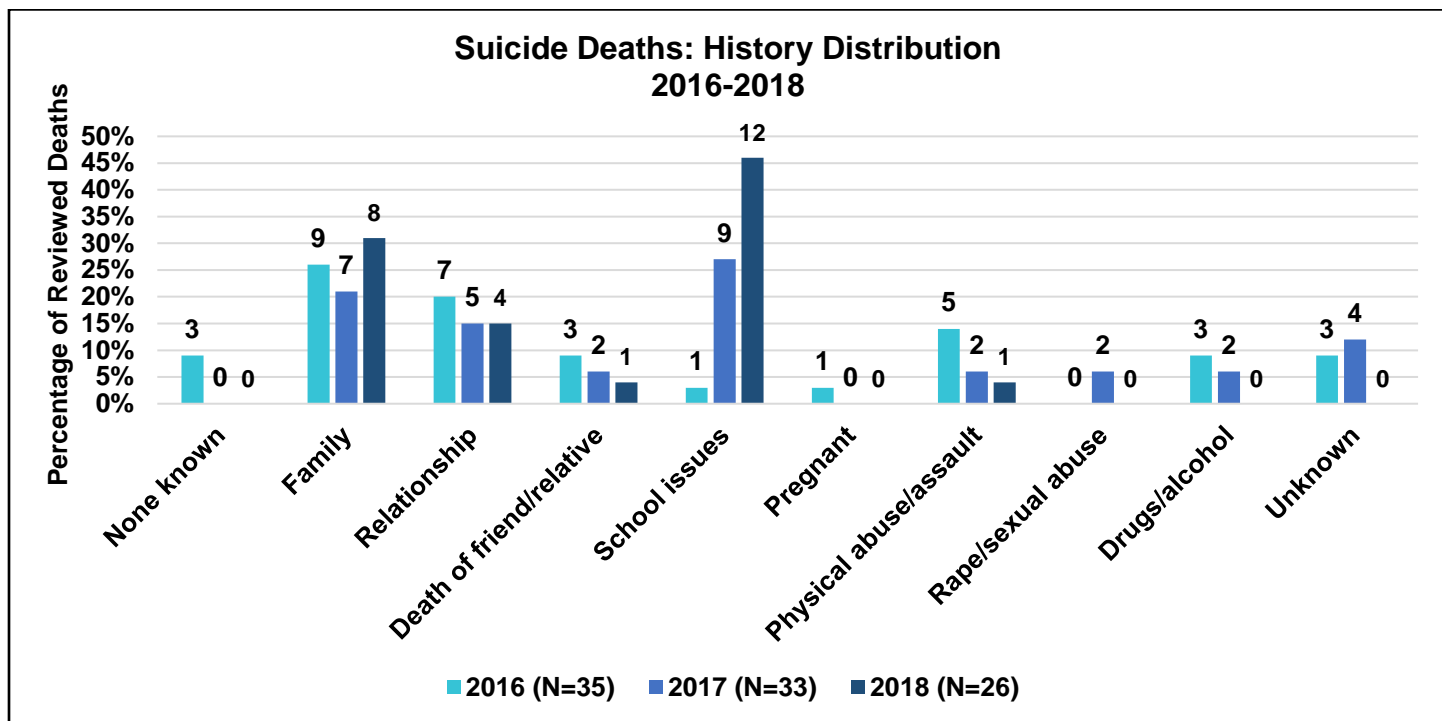
**Suicide Deaths: Gender Distribution
2015-2018**



3. Suicide Deaths



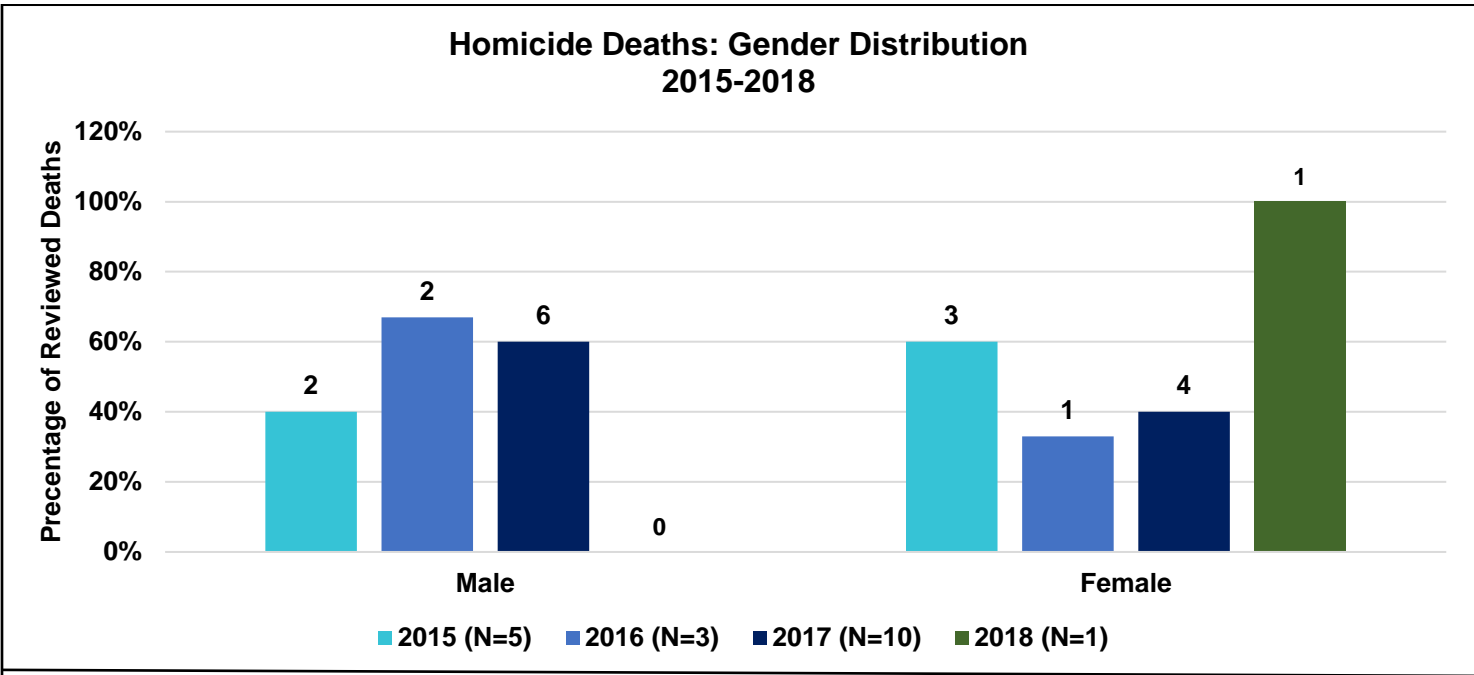
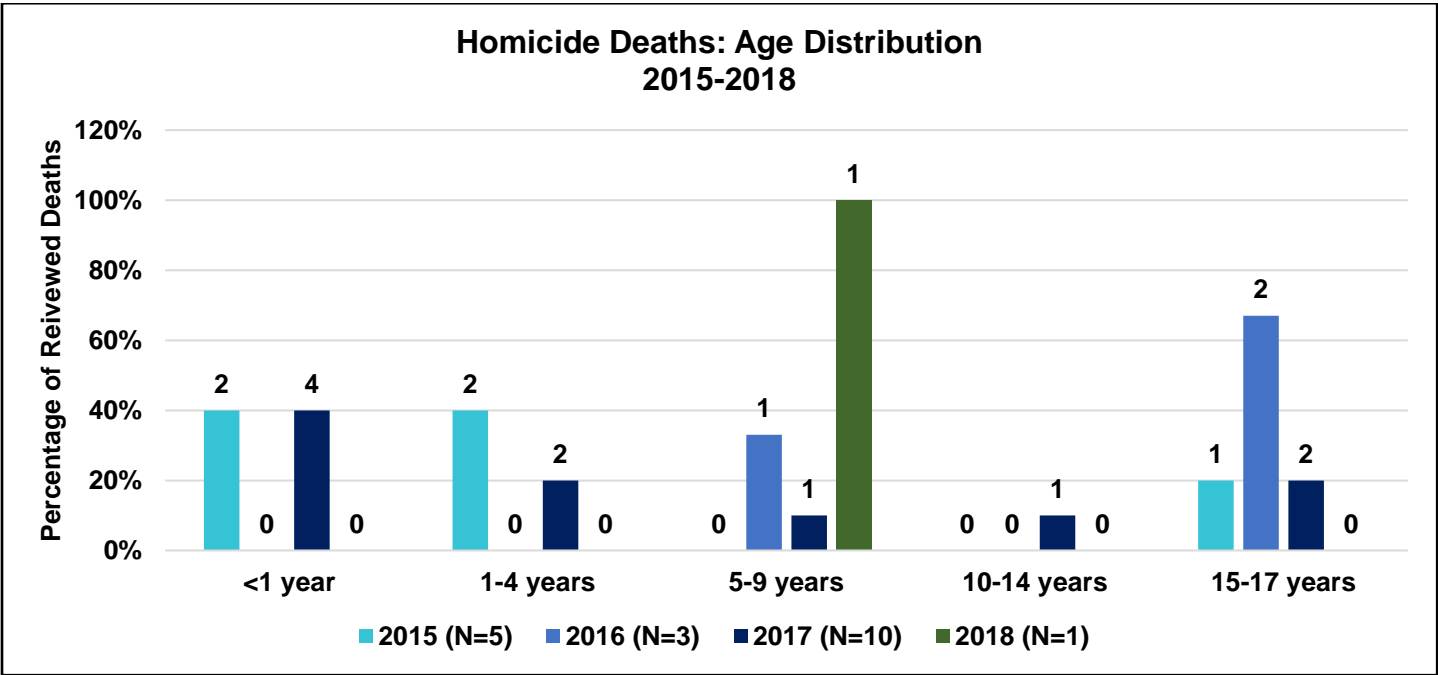
3. Suicide Deaths



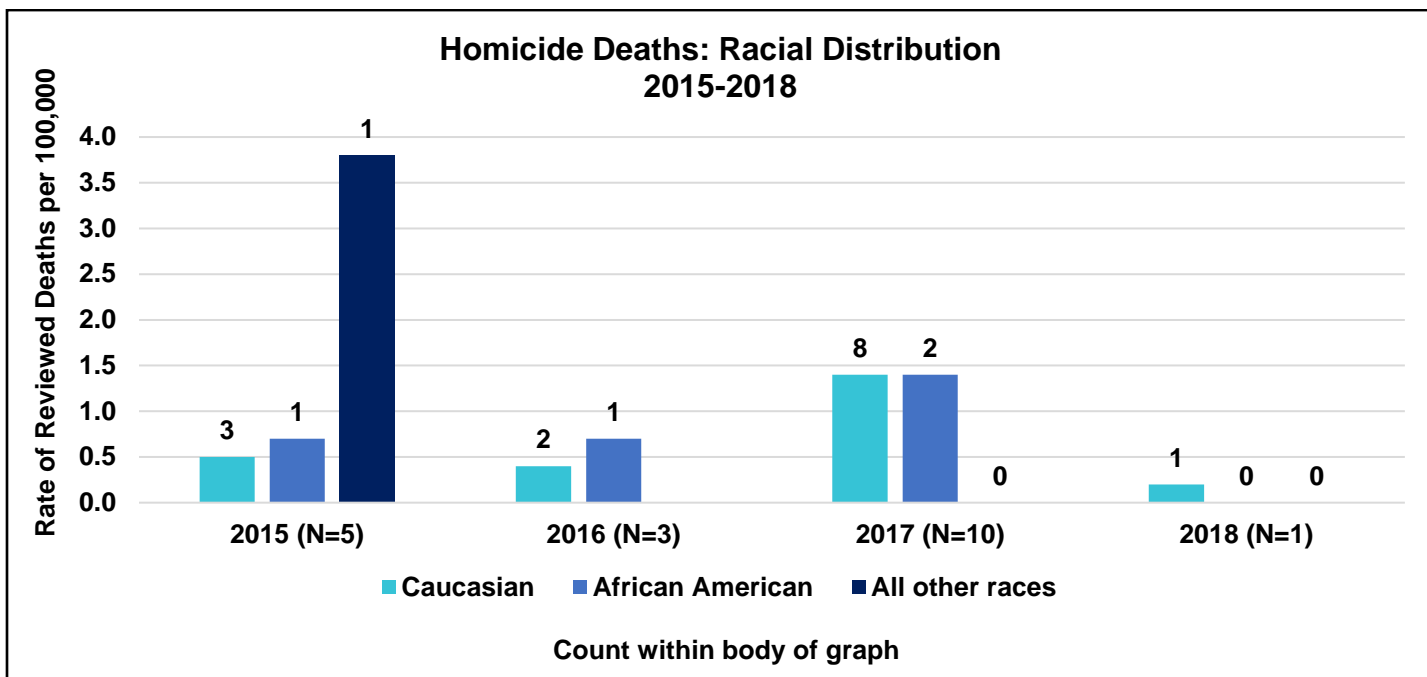
*In 2015 the history and circumstances data for suicide deaths were not collected.

*Each death can have multiple History/Circumstance factors. The results will equal more than (n).

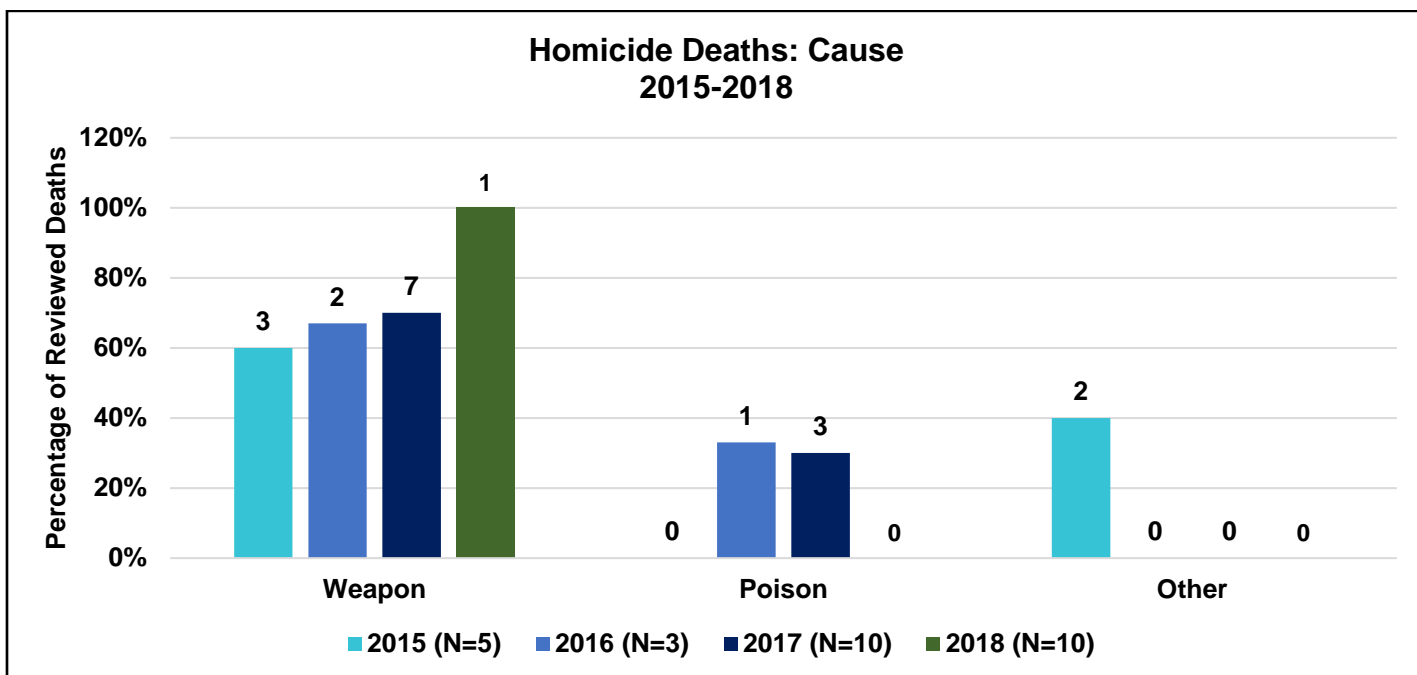
4. Homicide Deaths

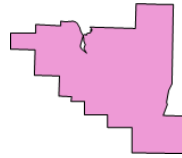


4. Homicide Deaths



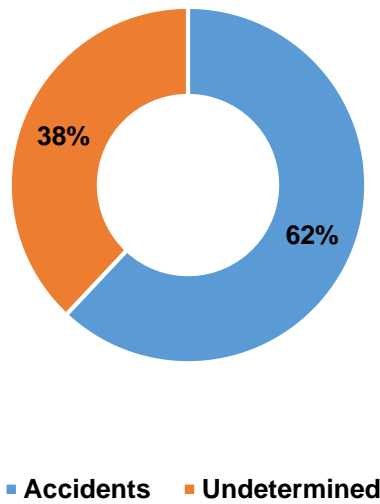
*Racial numbers are too small for valid rates in Homicide Deaths.



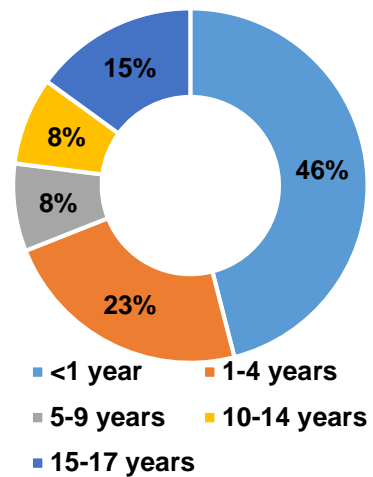


Capital City Team: Pulaski County

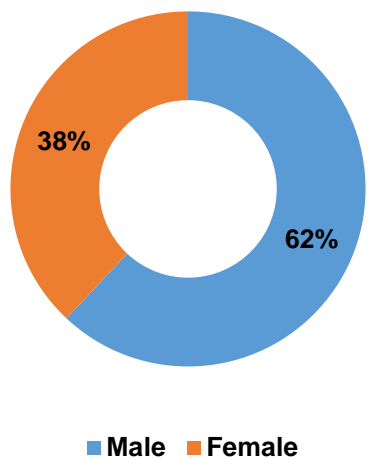
2018 Reviewed Deaths:
Manner of Death
N=13



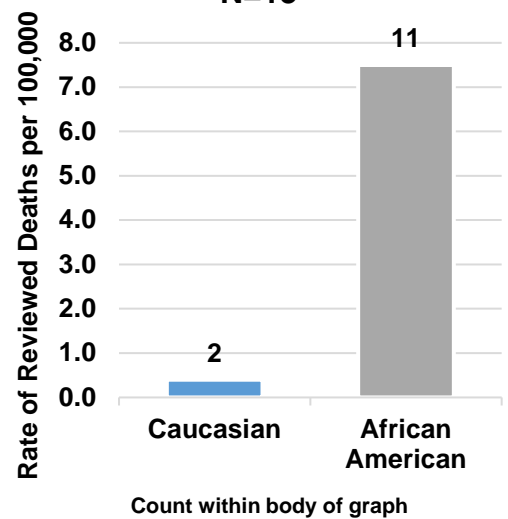
2018 Reviewed Deaths:
Age Distribution
N=13



2018 Reviewed Deaths:
Gender Distribution
N=13



2018 Reviewed Deaths:
Racial Distribution
N=13

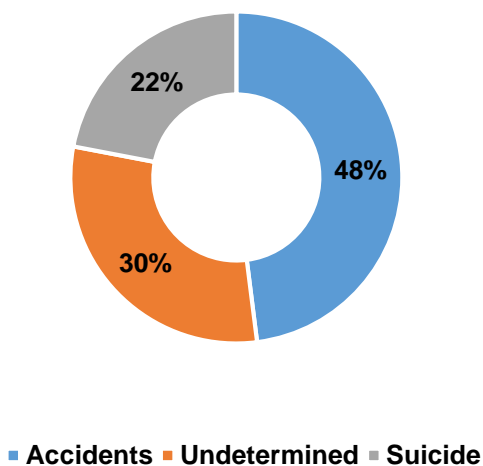


ICDR Team Data

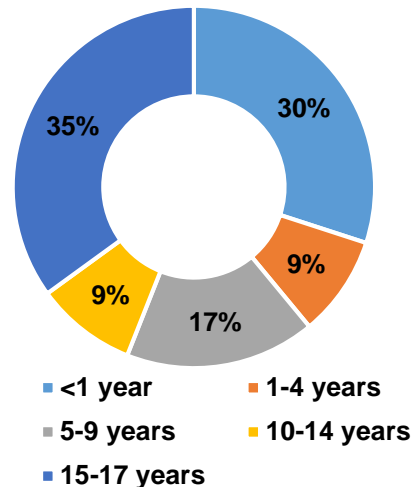


Central Team: Conway, Faulkner, Lonoke, Perry, Pope, Van Buren and White Counties

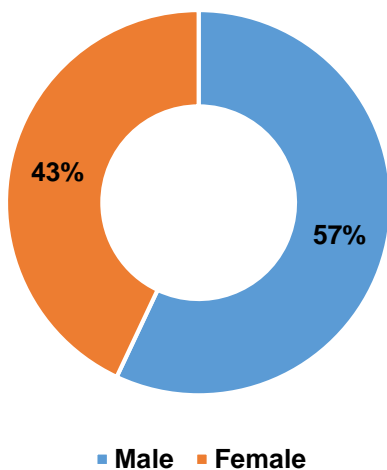
2018 Reviewed Deaths:
Manner of Death
N=23



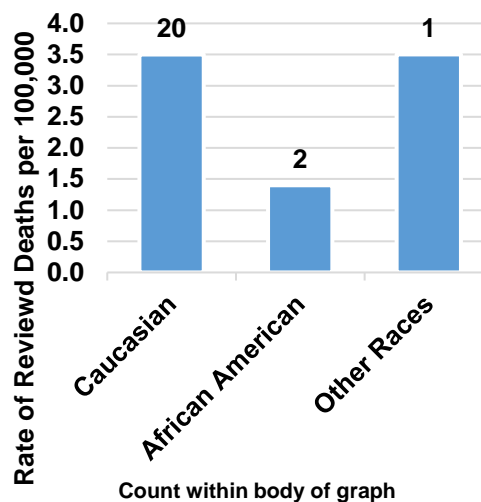
2018 Reviewed Deaths: Age
Distribution
N=23



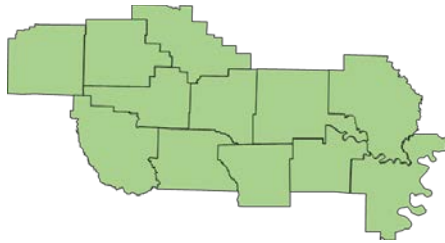
2018 Reviewed Deaths:
Gender Distribution
N=23



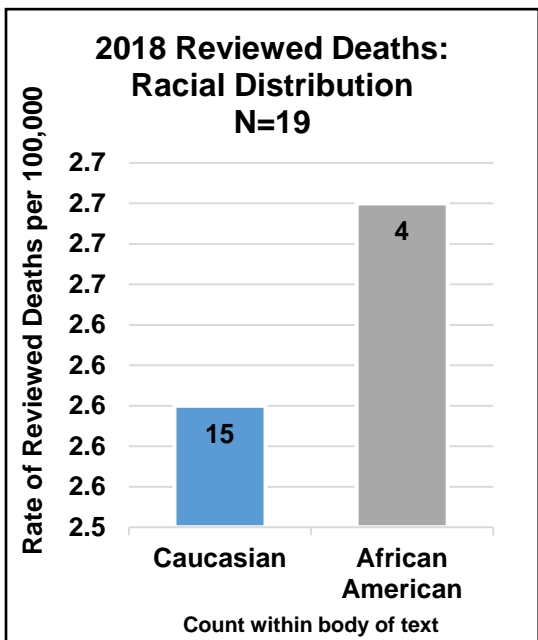
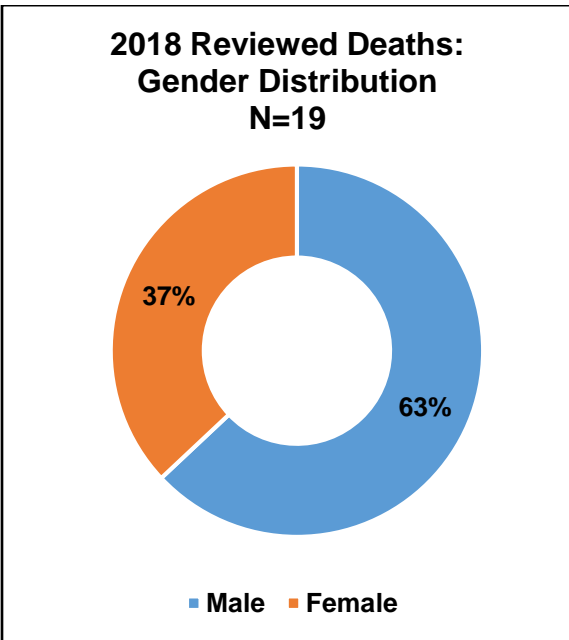
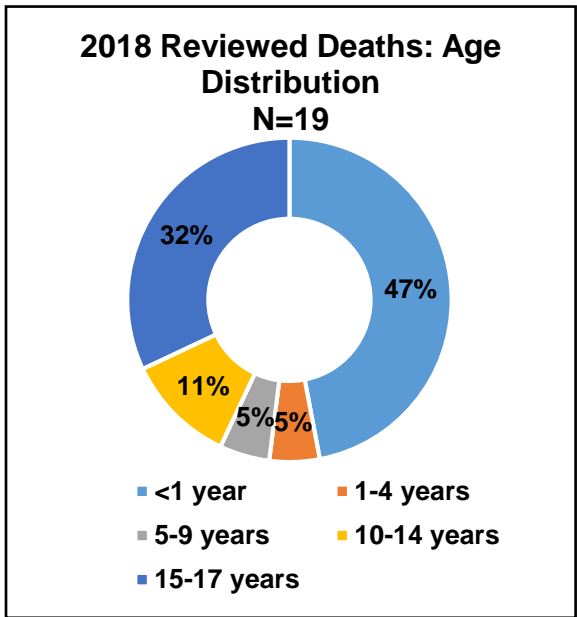
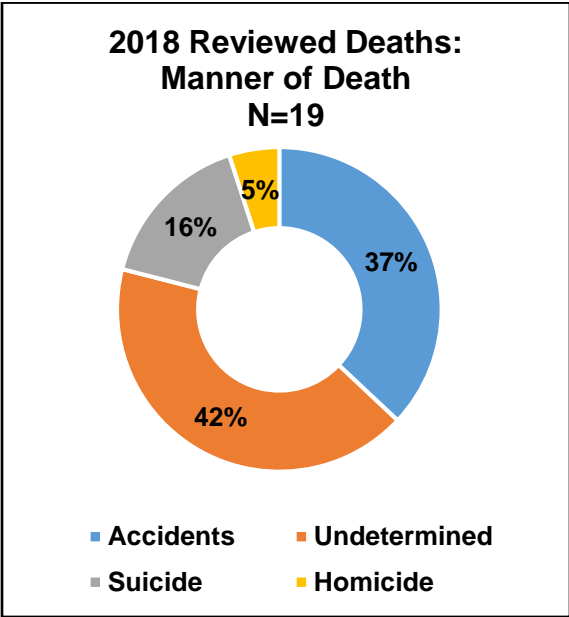
2018 Reviewed Deaths:
Racial Distribution
N=23



ICDR Team Data



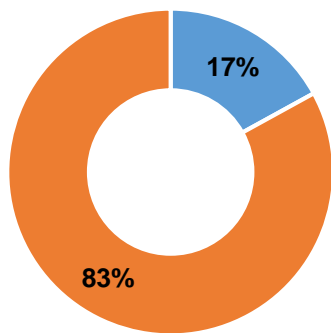
Enders South Central Team: Arkansas, Clark, Cleveland, Dallas, Desha, Garland, Grant, Hot Spring, Jefferson, Lincoln, Montgomery and Saline Counties





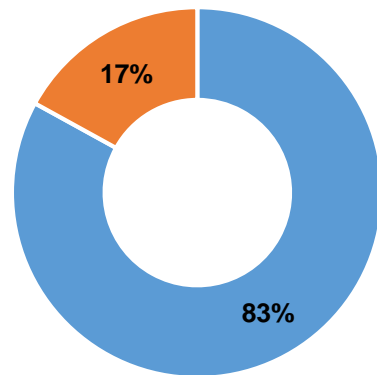
Delta Team: Crittenden, Cross, Lee, Monroe, Phillips, and St. Francis Counties

2018 Reviewed Deaths:
Manner of Death
N=6



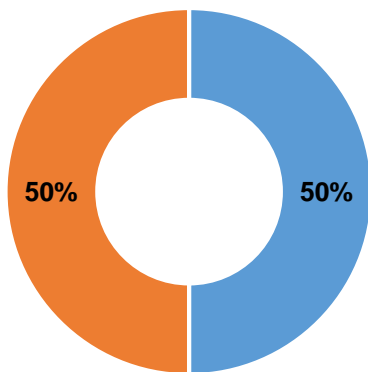
■ Accidents ■ Undetermined

2018 Reviewed Deaths:
Age Distribution
N=6



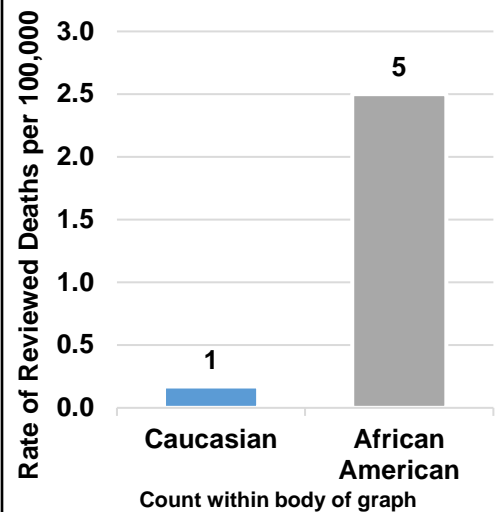
■ <1 year ■ 1-4 years

2018 Reviewed Deaths:
Gender Distribution
N=6



■ Male ■ Female

2018 Reviewed Deaths:
Racial Distribution
N=6

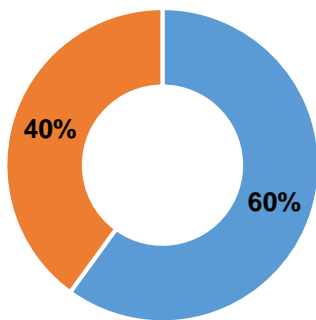


ICDR Team Data



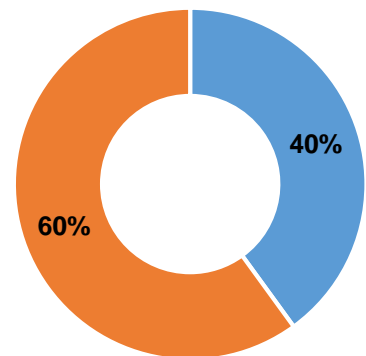
North Central Team: Cleburne, Fulton, Independence, Izard, Jackson, Prairie, Sharp, Stone and Woodruff Counties

2018 Reviewed Deaths:
Manner of Death
N=5



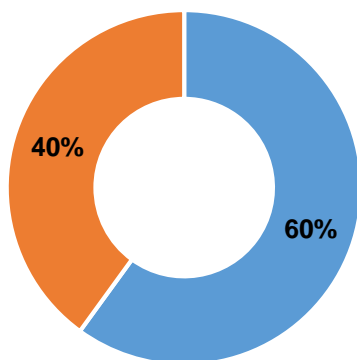
■ Accidents ■ Suicide

2018 Reviewed Deaths:
Age Distribution
N=5



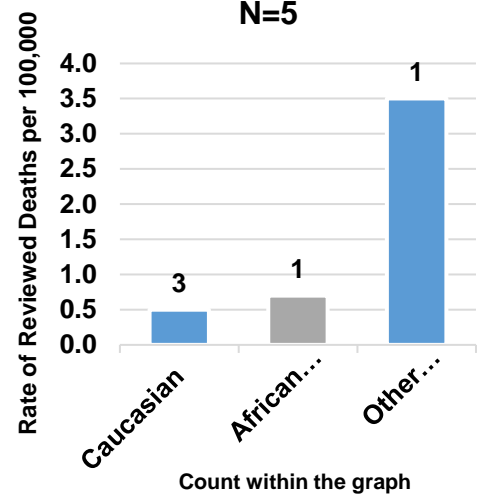
■ 10-14 years ■ 15-17 years

2018 Reviewed Deaths:
Gender Distribution
N=5

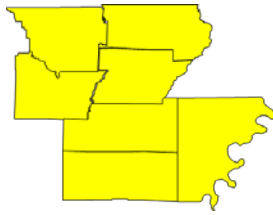


■ Male ■ Female

2018 Reviewed Deaths:
Racial Distribution
N=5

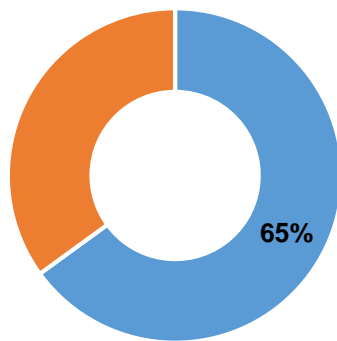


ICDR Team Data



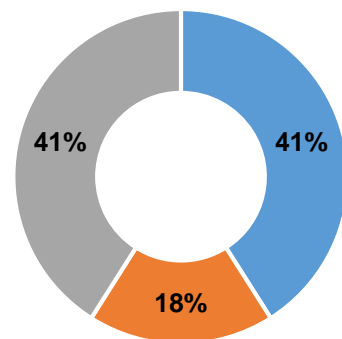
Northeast Team: Clay, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph Counties

2018 Reviewed Deaths: Manner of Death N=17



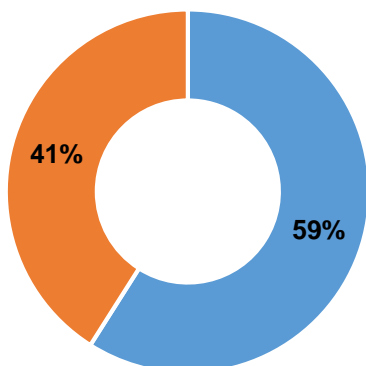
■ Accidents ■ Undetermined

2018 Reviewed Deaths: Age Distribution N=17



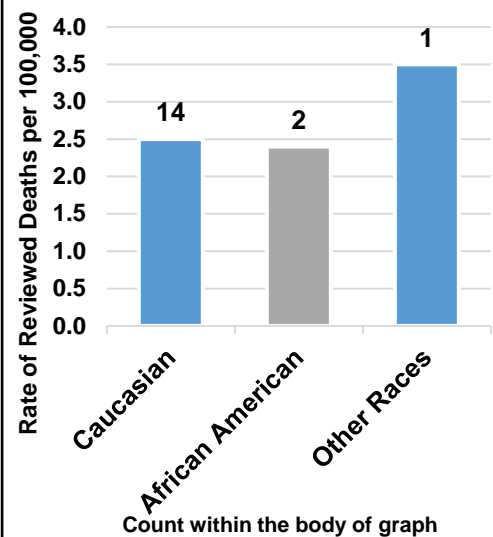
■ <1 year ■ 1-4 years
■ 15-17 years

2018 Reviewed Deaths: Gender Distribution N=17



■ Male ■ Female

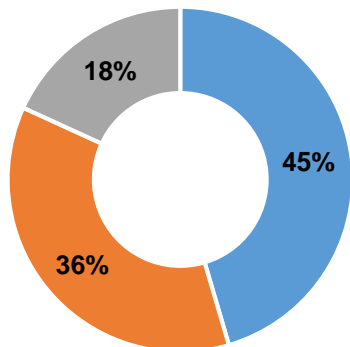
2018 Reviewed Deaths: Racial Distribution N=17





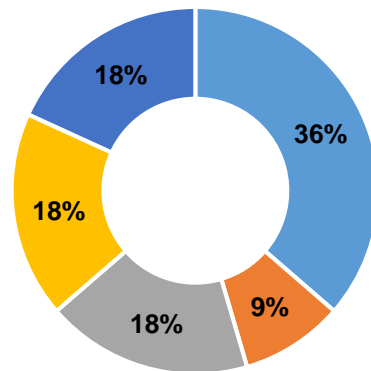
Northwest Team: Benton and Washington Counties

2018 Reviewed Deaths:
Manner of Death
N=11



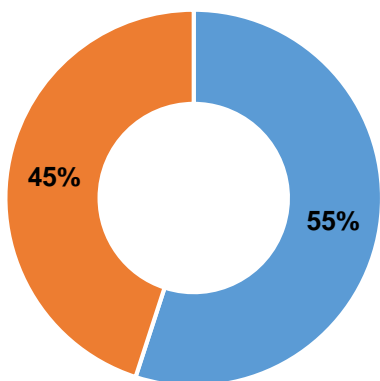
■ Accidents ■ Undetermined
■ Suicide

2018 Reviewed Deaths:
Age Distribution
N=11



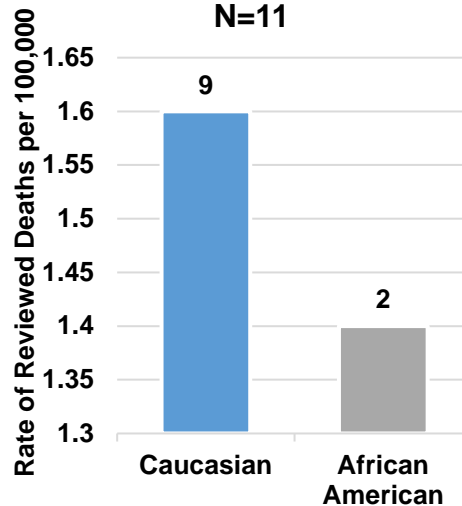
■ <1 year ■ 1-4 years
■ 5-9 years ■ 10-14 years
■ 15-17 years

2018 Reviewed Deaths:
Gender Distribution
N=11



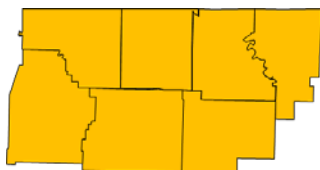
■ Male ■ Female

2018 Reviewed Deaths:
Racial Distribution
N=11



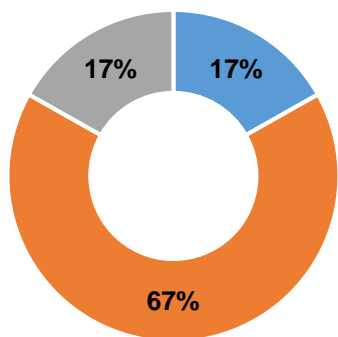
Count within body of graph

ICDR Team Data



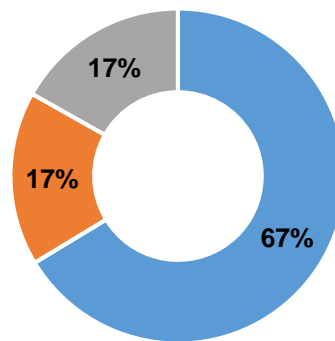
ICDR Ozark Mountain Team: Baxter, Boone, Carroll, Madison, Marion, Newton and Searcy Counties

2018 Reviewed Deaths:
Manner of Death
N=6



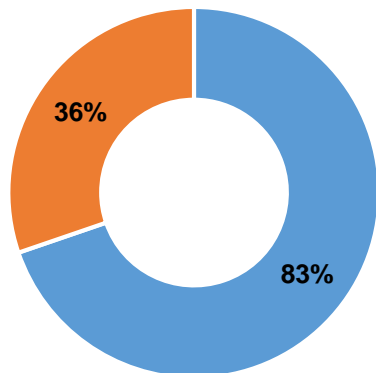
■ Accidents ■ Undetermined
■ Suicide

2018 Reviewd Deaths:
Age Distribution
N=6



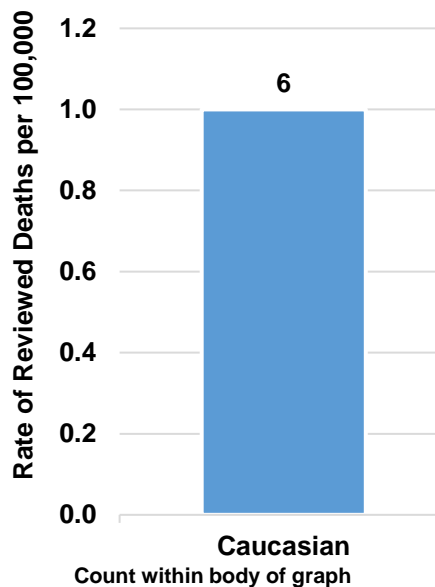
■ <1 year ■ 10-14 years
■ 15-17 years

2018 Reviewed Deaths:
Gender Distribution
N=6



■ Male ■ Female

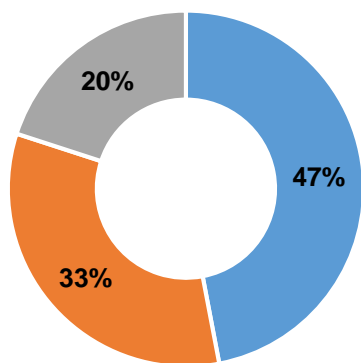
2018 Reviewed Deaths:
Racial Distribution
N=6





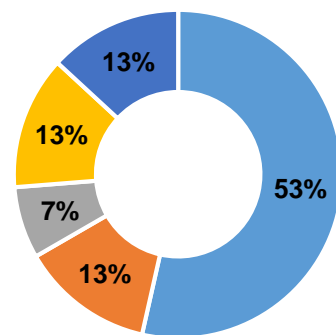
River Valley Team: Crawford, Franklin, Johnson, Logan, Scott, Sebastian and Yell Counties

2018 Reviewed Deaths:
Manner of Death
N=15



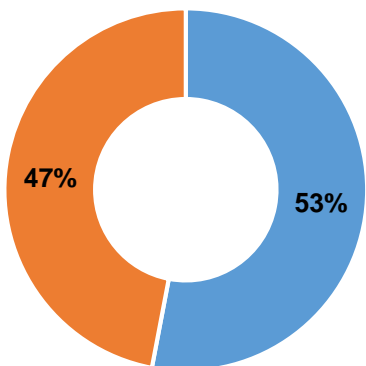
■ Accidents ■ Undetermined
■ Suicide

2018 Reviewed Deaths:
Age Distribution
N=15



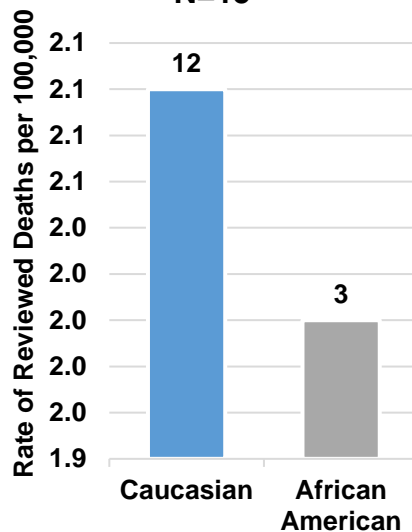
■ <1 year ■ 1-4 years
■ 5-9 years ■ 10-14 years
■ 15-17 years

2018 Reviewed Deaths:
Gender Distribution
N=15



■ Male ■ Female

2018 Reviewed Deaths:
Racial Distribution
N=15

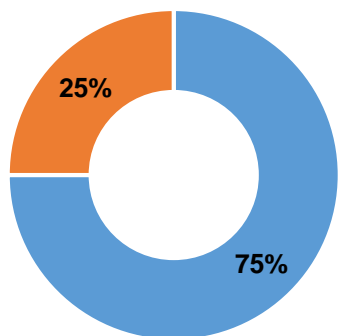


Count within body of graph



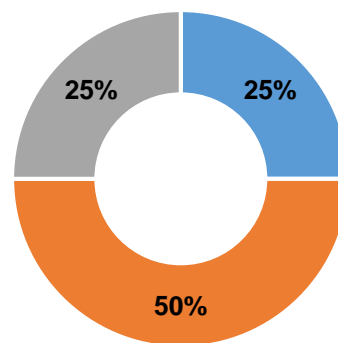
Southeast Team: Ashley, Bradley, Chicot, Drew and Union Counties

2018 Reviewed Deaths:
Manner of Death
N=4



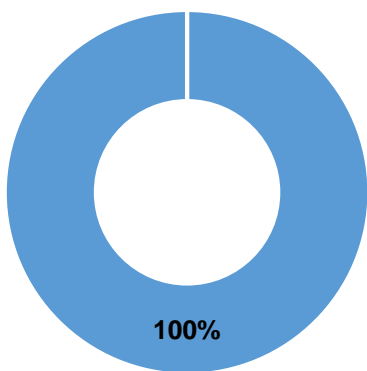
■ Accidents ■ Undetermined

2018 Reviewed Deaths:
Age Distribution
N=4



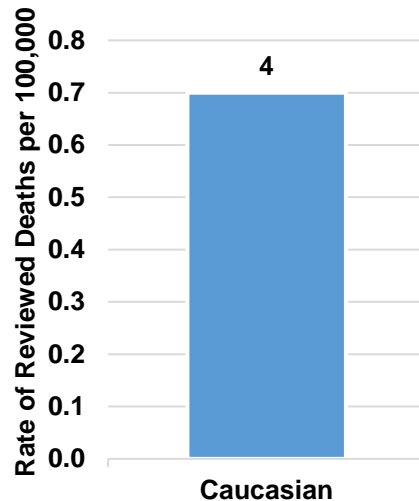
■ <1 year ■ 10-14 years
■ 15-17 years

2018 Reviewed Deaths:
Gender Distribution
N=4

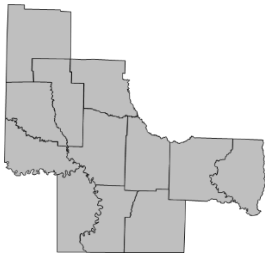


■ Male

2018 Reviewed Deaths:
Gener Distribution
N=4

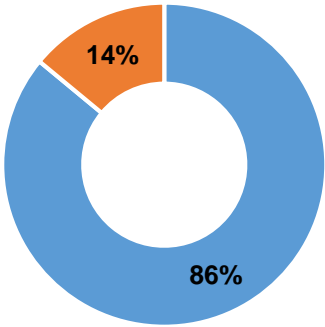


Count within body of graph



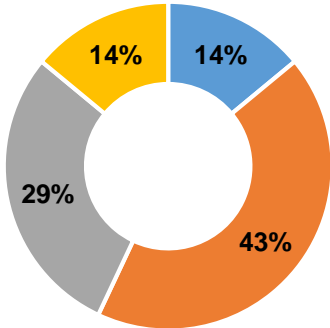
Southwest Team: Calhoun, Columbia, Hempstead, Howard, Lafayette, Little River, Miller, Nevada, Ouachita, Pike, Polk, and Sevier Counties

2018 Reviewed Deaths:
Manner of Death
N=7



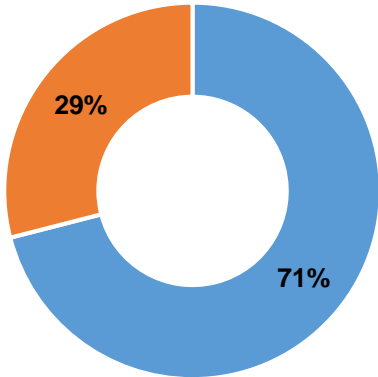
■ Accidents ■ Undetermined

2018 Reviewed Deaths:
Age Distribution
N=7



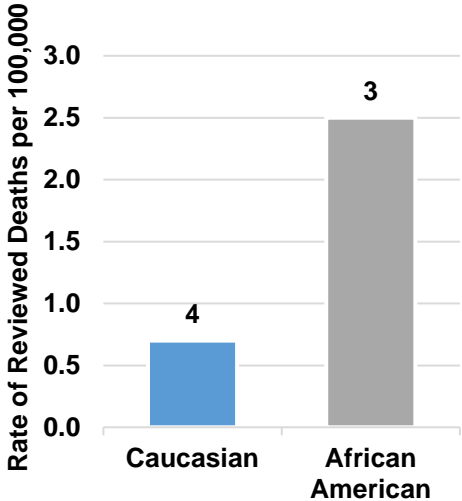
■ <1 year ■ 1-4 years
■ 5-9 years ■ 10-14 years

2018 Reviewed Deaths:
Gender Distribution
N=7



■ Male ■ Female

2018 Reviewed Deaths:
Racial Distribution
N=7



Count within body of graph

ICDR Team Discretionary Projects

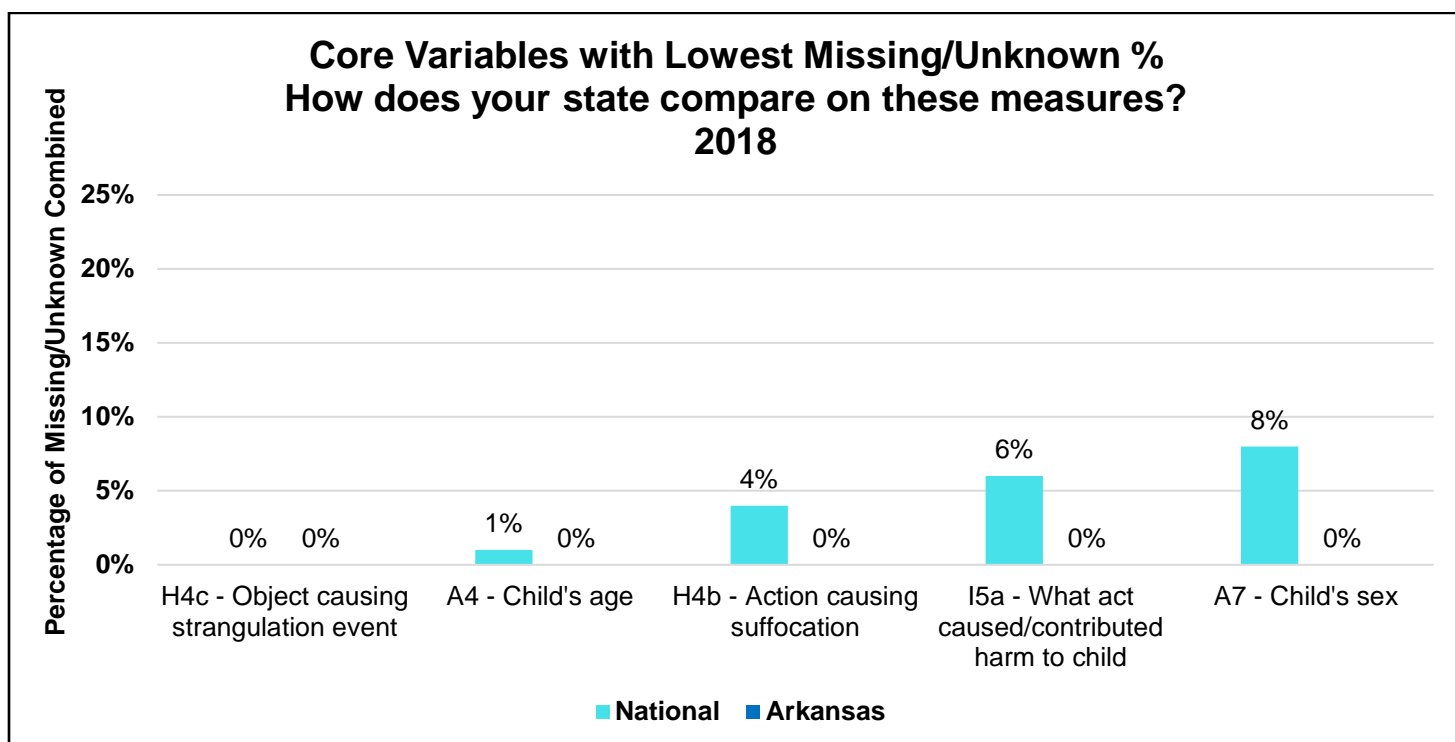
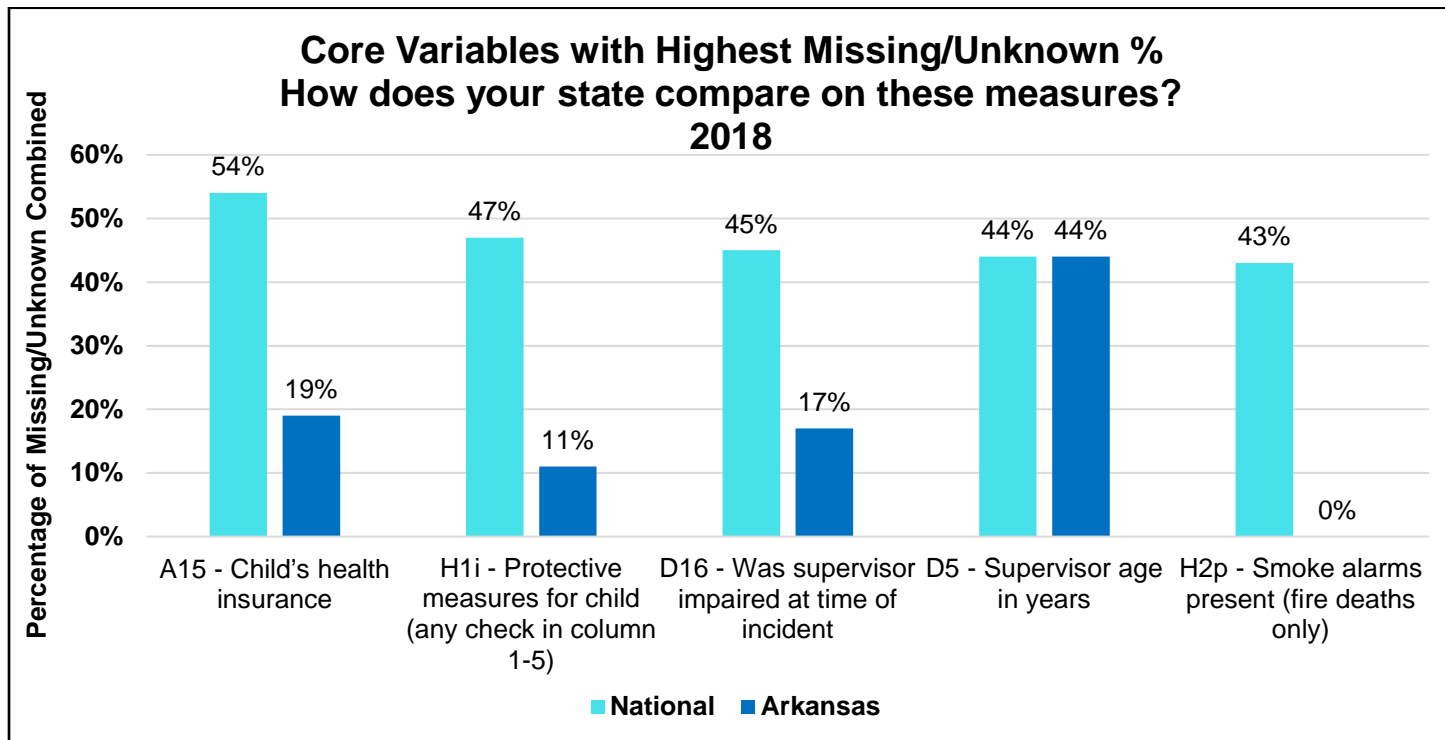
The ICDR Discretionary Projects was created by the ICDR Strategic Planning Committee to assist local teams with addressing gaps and needs within their communities. Those gaps or needs could be providing training for local agencies, assisting with policy implementation or creating and implementing education. **Due to COVID-19 discretionary projects were not used as much as FY19.**

FY20

Northeast Team: Gap Identified: Different methods to promote ABC's of safe sleep. Luggage tags with the ABC's of Safe sleep message distributed to new mothers.

Data Analysis: National vs. Arkansas

The data quality summary report identifies the “missing” and “unknown” data variables that are identified by the National Child Fatality Review Program (NCFRP) as CORE variables. Dawn Porter serves on the NCFRP Data Quality Committee. The ICDR sets goals to reduce missing elements utilizing the following data.



Infant and Child Death Review and Prevention SUIDI Train the Trainer

The Infant and Child Death Review and Prevention program hosted a Sudden Unexplained Infant Death Investigation (SUIDI) train the trainer on March 2nd and 3rd, 2020.

- 15 attendees; 12 certified as SUIDI Investigators
 - 7 Coroners/Deputy Coroners
 - 2 Law Enforcement
 - 3 Injury Prevention Center

