

Coconino County  
Health and Human Services  
Medical Examiner's Office

# Annual Report

# 2018

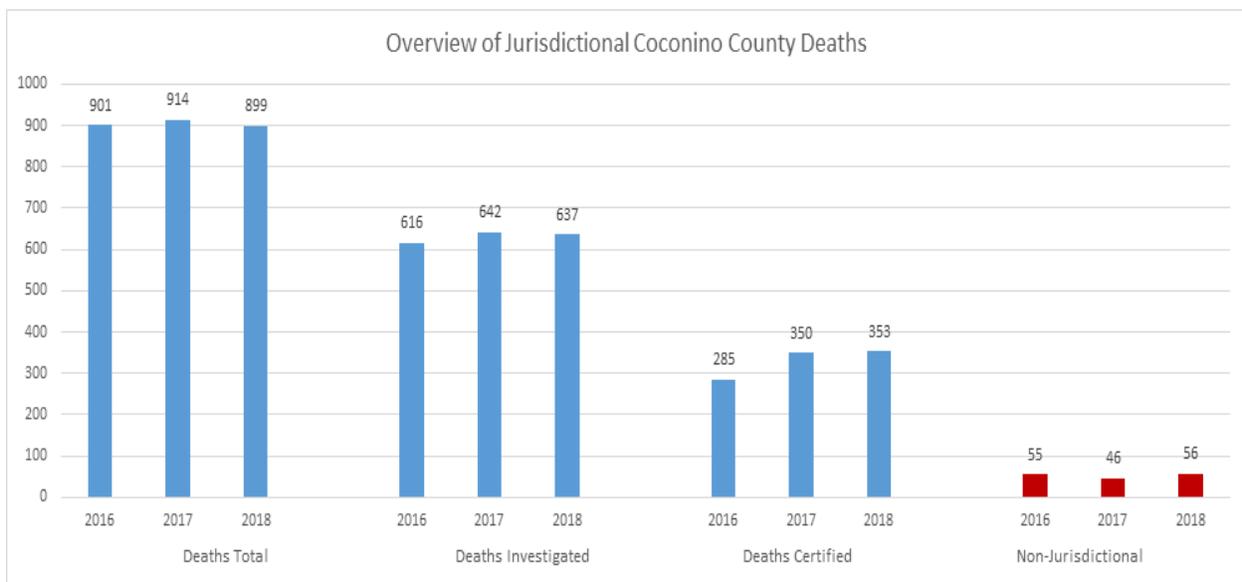
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## INTRODUCTION

Coconino County Health and Human Services Medical Examiner's Office (CCHHS MEO) investigates any death in Coconino County that falls under the jurisdiction of the CCHHS MEO. Death investigations include sudden, violent, unexpected, or deaths in which the cause of death is unknown. This report is a statistical review of the types of cases processed by the office over calendar year 2018 that fell under the jurisdiction of the CCHHS MEO. In 2018, there were 899 deaths in Coconino County; of these, 638 (71%) were reported to the CCHHS MEO for investigation and 353 (39%) received death certification. In addition to this, 56 deaths were referred to CCHHS MEO for examination from non-jurisdictional regions of the state (i.e., tribes, federal law enforcement, other Arizona counties, etc.).



## **OVERVIEW**

### **Reportable Deaths**

Arizona Revised Statute §11 – 593 delineates 9 circumstances in which a death is reportable to a Medical Examiner’s Office:

1. Death when not under the current care of a health care provider (physician, nurse practitioner, physician assistant) for a potentially fatal illness or when an attending healthcare provider is unavailable.
2. Death resulting from violence.
3. Unexpected or unexplained death.
4. Death of a person in a custodial agency as defined in section 13-4401.
5. Unexpected or unexplained death of an infant or child.
6. Death occurring in a suspicious, unusual or non-natural manner, including death from an accident believed to be related to the deceased person's occupation or employment.
7. Death occurring as a result of anesthetic or surgical procedures.
8. Death suspected to be caused by a previously unreported or undiagnosed disease that constitutes a threat to public safety.
9. Death involving unidentifiable bodies.

### **Definitions**

**Autopsy:** A decedent is examined both externally and internally for evidence of injury or natural disease which may have caused or contributed to the individual’s death.

**External Examination:** A decedent is examined externally, without an internal examination.

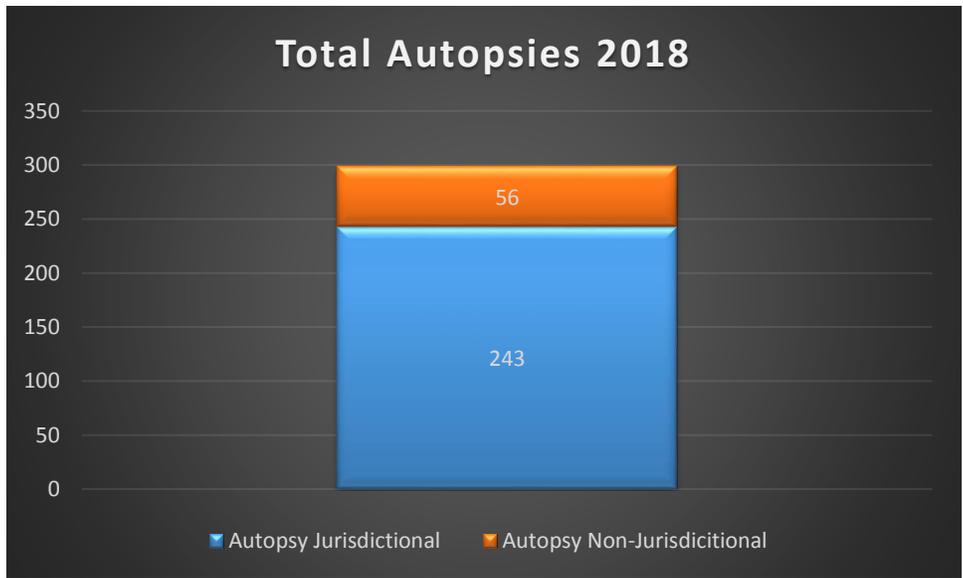
**Chart Review:** A review of the medial records, law enforcement reports and any other information that may be necessary to determine the cause and manner of death without physical examination of the decedent.

**Cause of Death:** A medical opinion, stating the disease or injury (or combination) that initiated the lethal chain of events that brought about a person’s death.

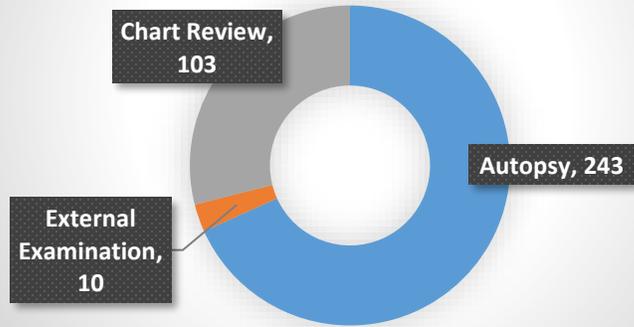
**Manner of Death:** A description of the circumstances under which a person died. On Arizona’s death certificate, there are 5 manner of death categories: natural, suicide, accident, homicide and undetermined.

**MEDICAL EXAMINER OFFICE (MEO) CASES**

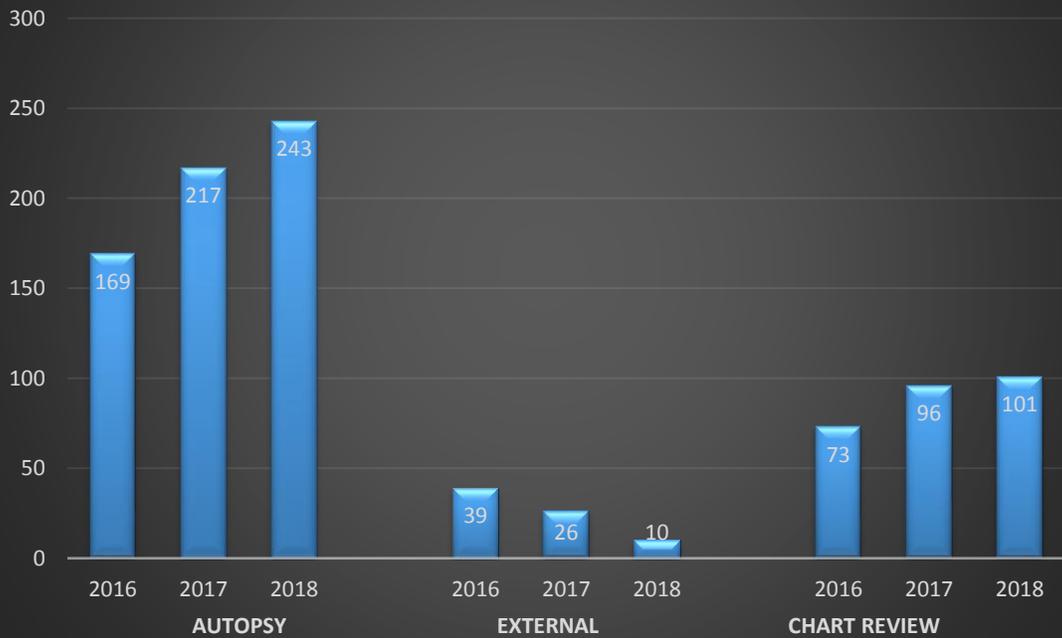
Medical Examiner Office (MEO) cases are defined as all reportable cases as defined by ARS 11-593 in which jurisdiction is assumed and cause and manner of death are assigned by the medical examiner. Those cases include autopsies, external examinations and chart reviews. In 2018, for jurisdictional Coconino County and non-jurisdictional regions of Arizona, 299 autopsies, 10 external examinations and 103 chart reviews were performed. Jurisdictional Coconino County alone accounted for 243 autopsies, 10 external examinations and 101 chart reviews. 598 death certificates were reviewed for cremation authorization.



## 2018 Medical Examiner Cases Jurisdictional Coconino County

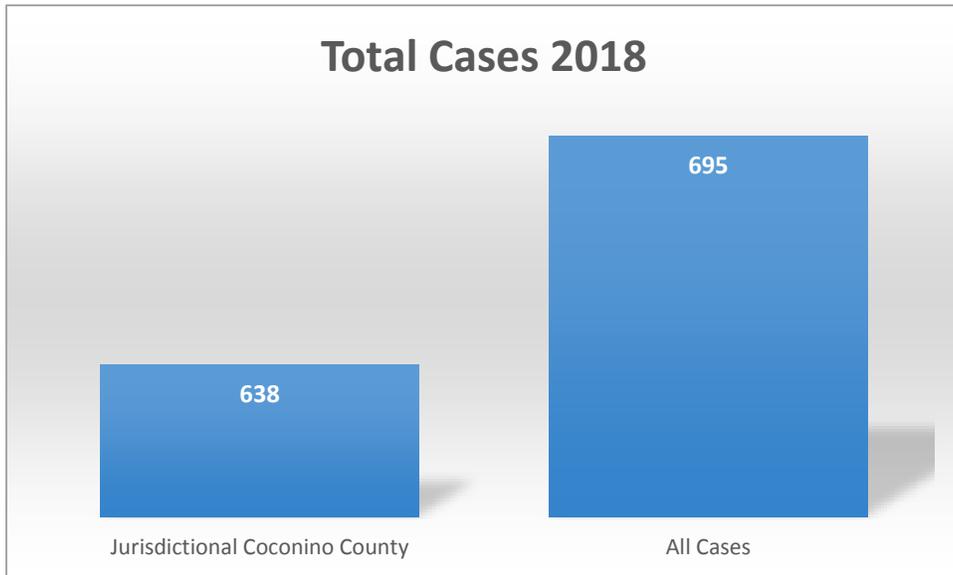


## Certified Cases 2016-2018 Jurisdictional Coconino County



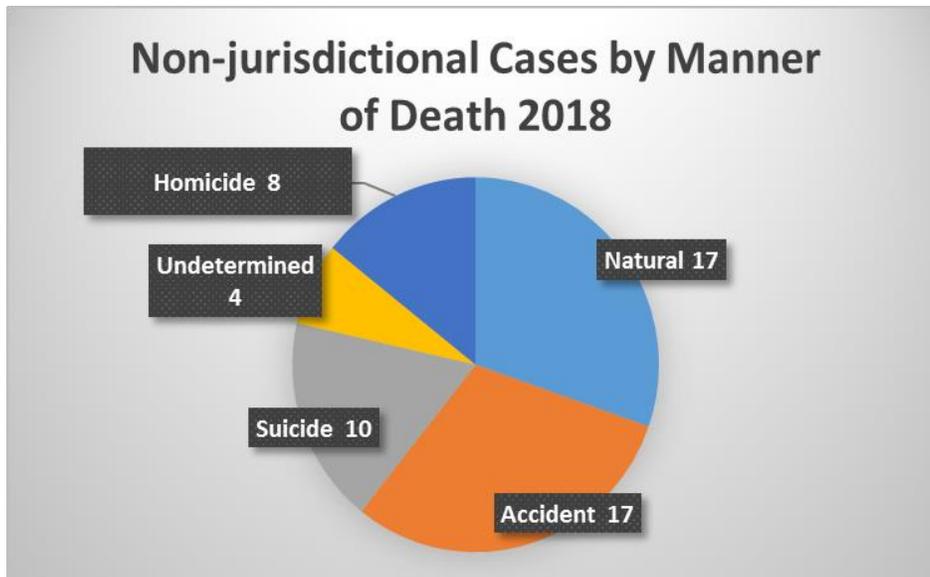
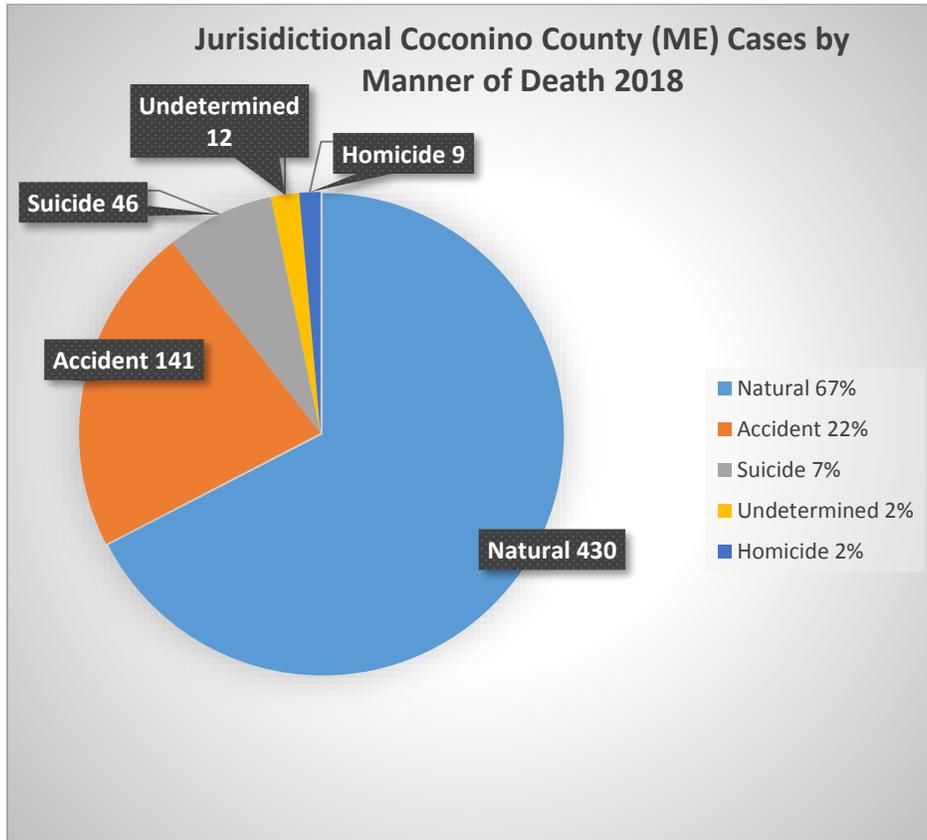
## TOTAL CASES

The CCHHS Medical Examiner's Office forensic investigators processed 695 reports of death, 637 from Jurisdictional Coconino County and 58 reports from other entities (Federal Bureau of investigation, Bureau of Indian Affairs, Navajo County Medical Examiner, etc.). Deaths of Native Americans that occur on Tribal Lands (Navajo Nation, Hopi Nation, Hualapai Tribe, Havasupai Tribe and Kaibab Paiute Tribe) within Coconino County do not fall under the jurisdiction of the CCHHS Medical Examiner's Office.

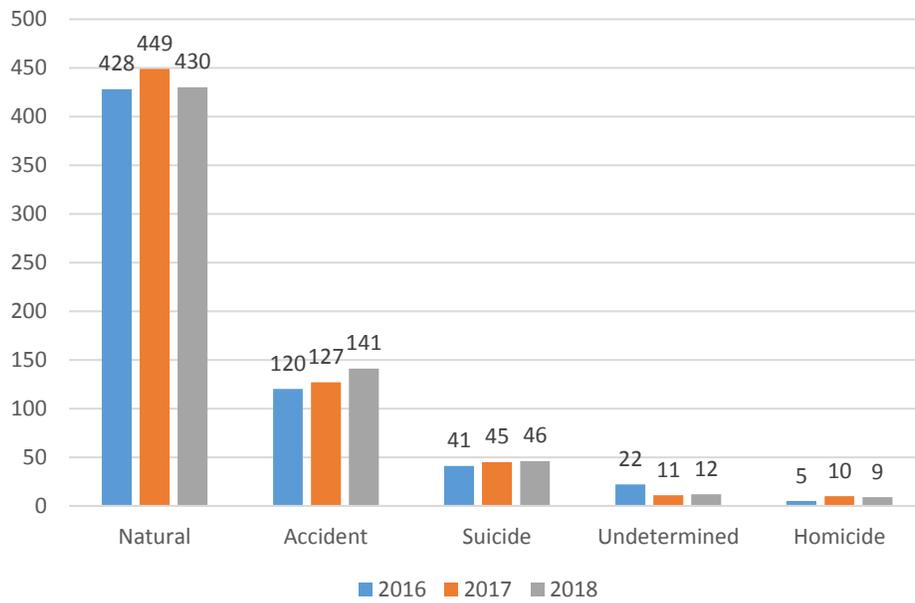


### MANNER OF DEATH (Jurisdictional Coconino County)

The manner of death represents the means or circumstances by which the cause of death occurred. There are 5 categories on the Arizona death certificate: Natural, Accident, Suicide, Undetermined and Homicide.

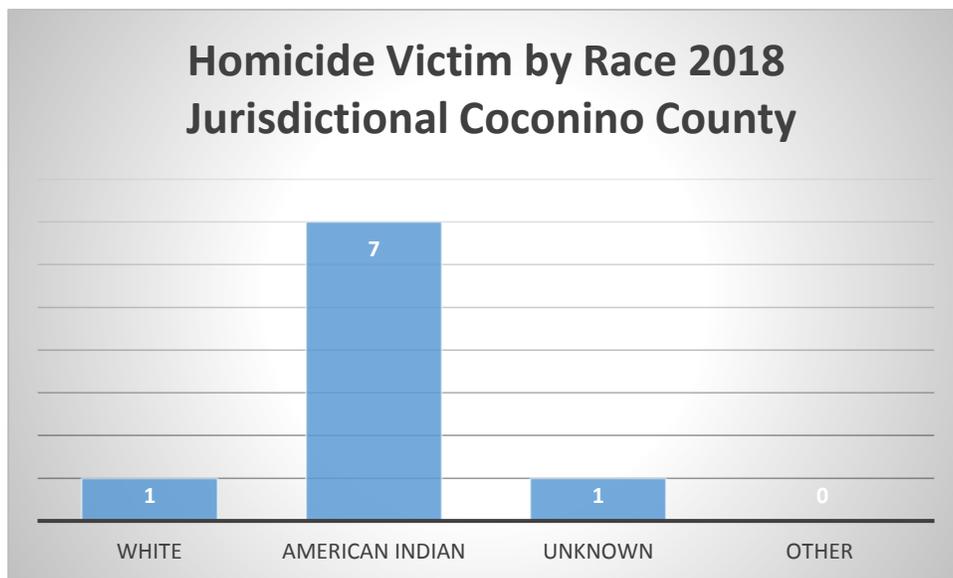
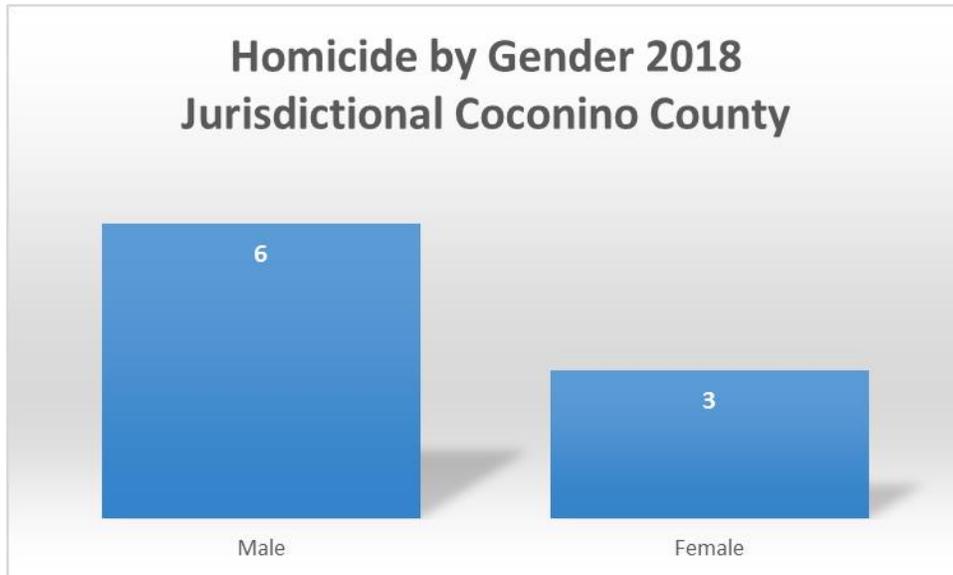


### Jurisdictional Coconino County (ME) Cases by Manner of Death 2016-2018

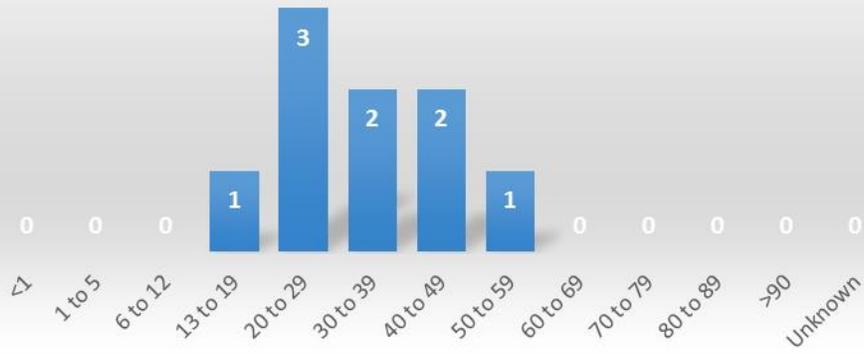


## HOMICIDE DEATHS (Jurisdictional Coconino County)

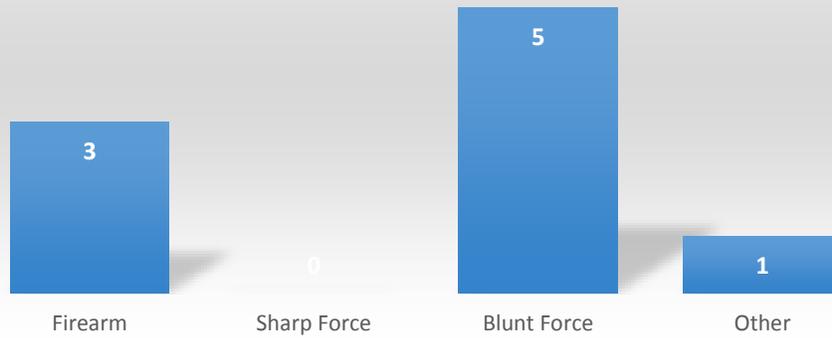
Deaths due to homicides, accounted for 2% of the Jurisdictional Coconino County ME deaths investigated by the CCHHS Medical Examiner's Office in 2018. For Jurisdictional Coconino County, homicide victims were most frequently male (70%), American Indian (80%) and between the ages of 20 to 29 (30%) and died as a result of blunt force injuries (60%).

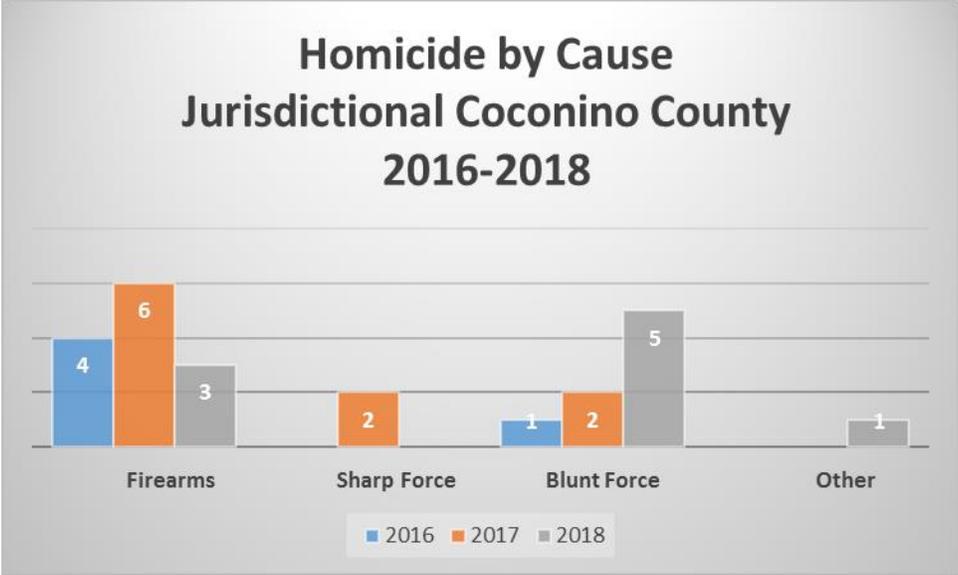


### Homicide by Age 2018 Jurisdictional Coconino County



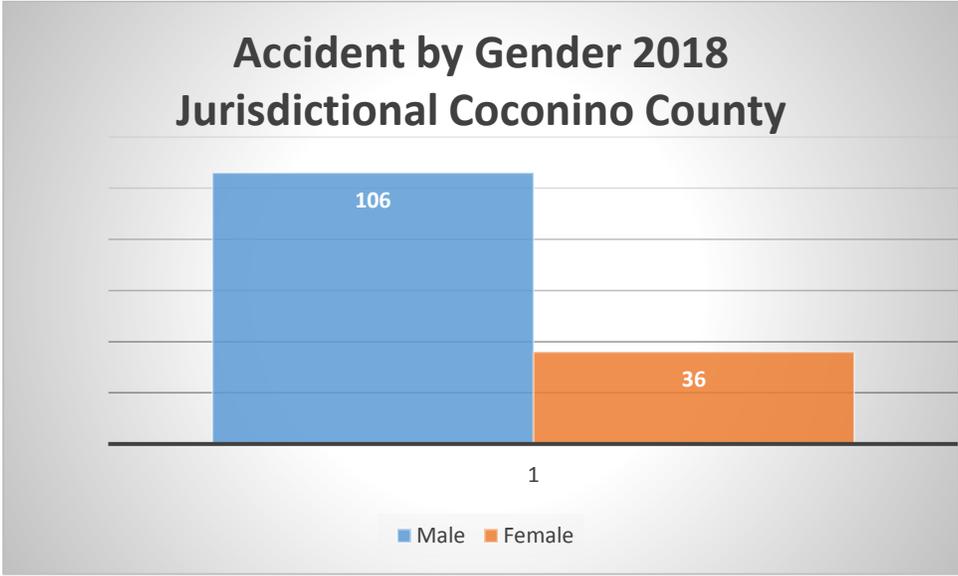
### Homicide by Cause 2018 Jurisdictional Coconino County



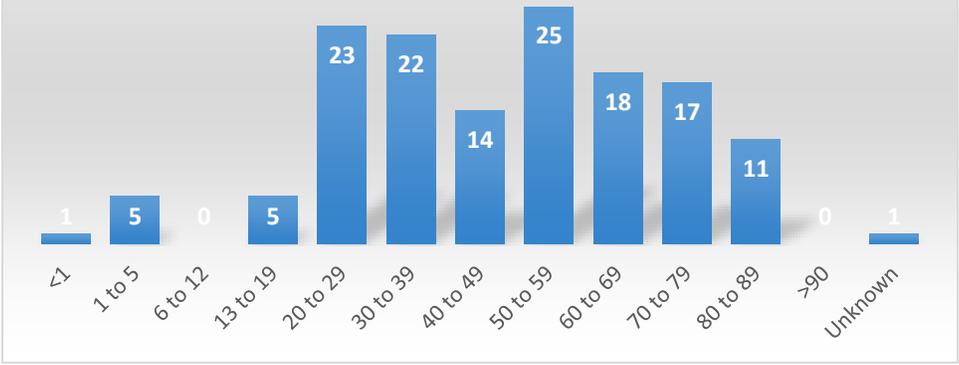


**ACCIDENTAL DEATHS (Jurisdictional Coconino County)**

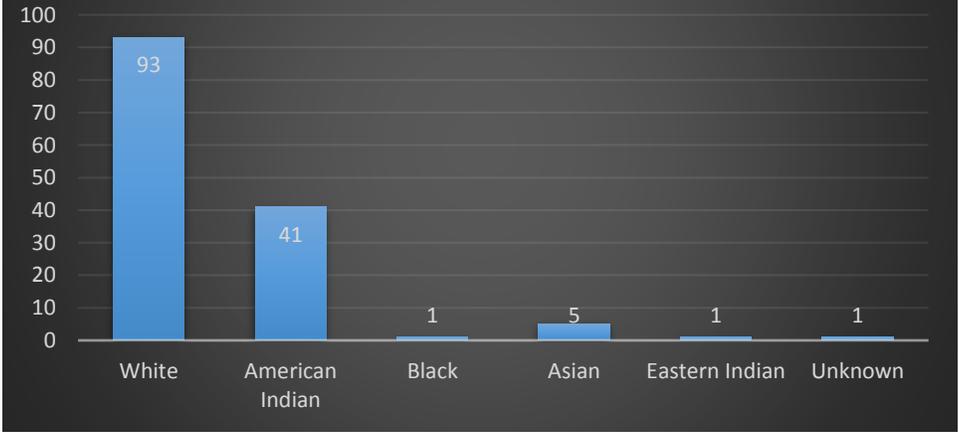
Deaths due to accidents accounted for 22% of the ME deaths investigated by the CCHHS Medical Examiner’s Office in 2018. Accident victims were most frequently male (75%), between 50-59 years of age (18%), white (66%) and died as the result of a motor vehicle accident (37%).

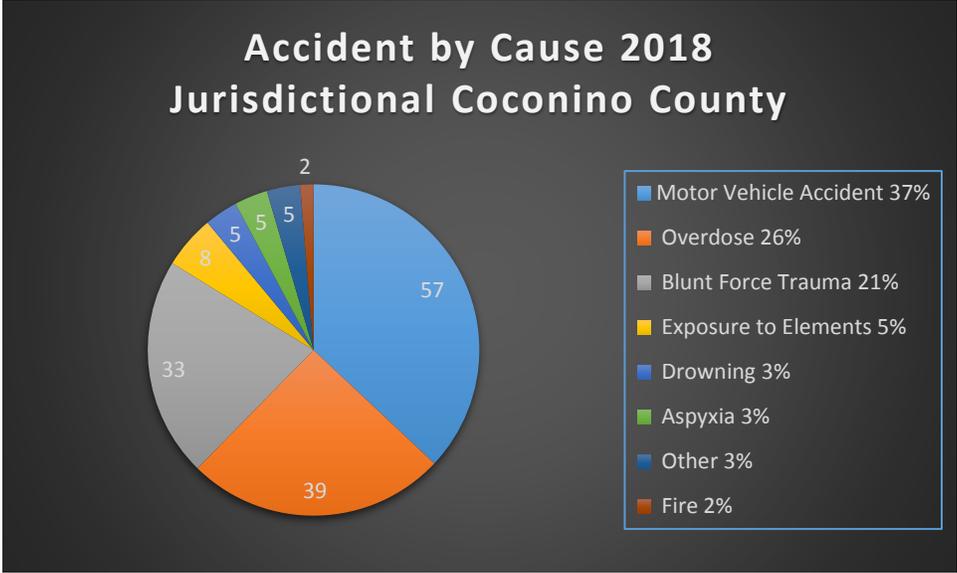


### Accident by Age 2018 Jurisdictional Coconino County



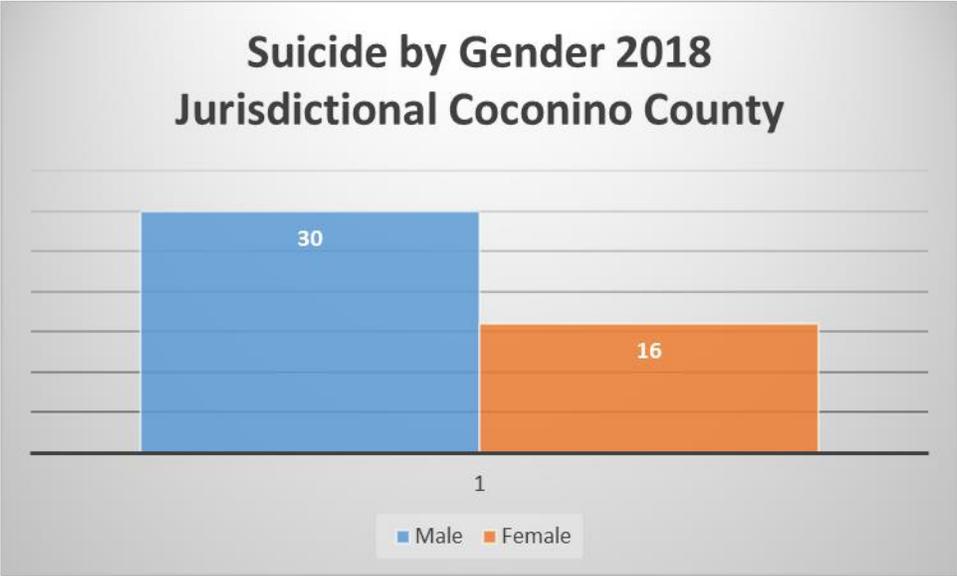
### Accident by Race 2018 Jurisdictional Coconino County





**SUICIDE DEATHS (Jurisdictional Coconino County)**

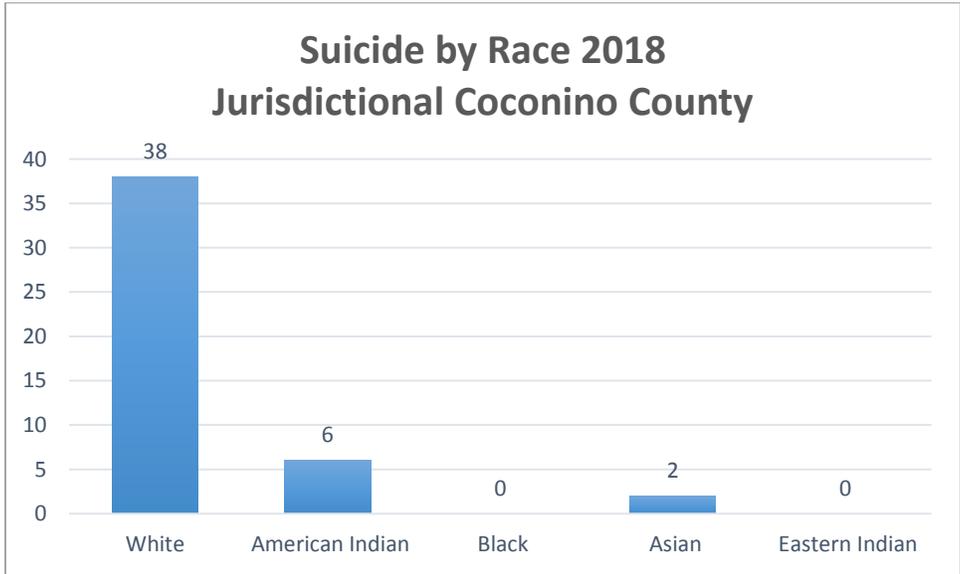
Suicide deaths accounted for 7% of the ME deaths investigated by the CCHHS Medical Examiner’s Office in 2018. Suicide victims were most frequently males (65%), between 30 – 39 years of age (22%), white (83%) and died as the result of firearms (40%).

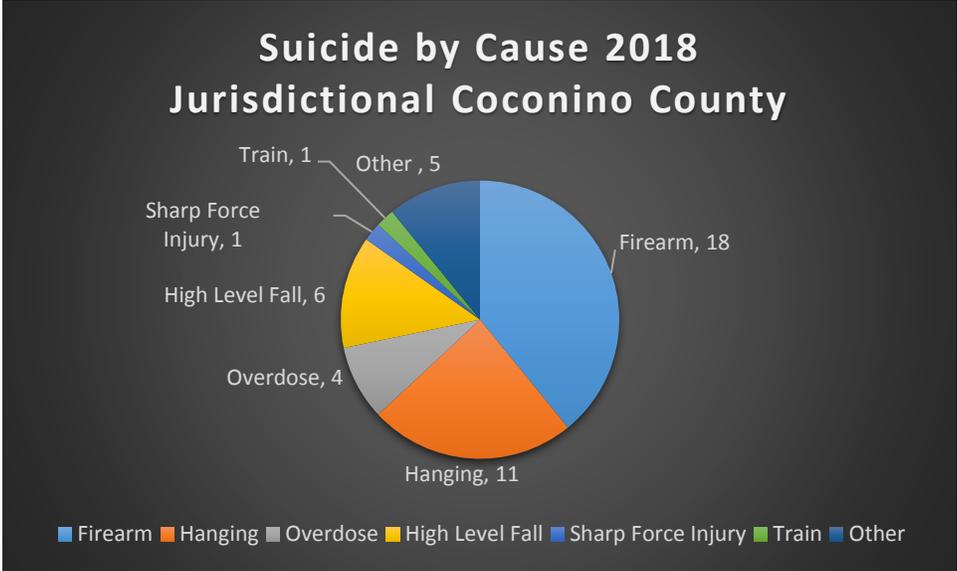


### Suicide by Age 2018 Jurisdictional Coconino County



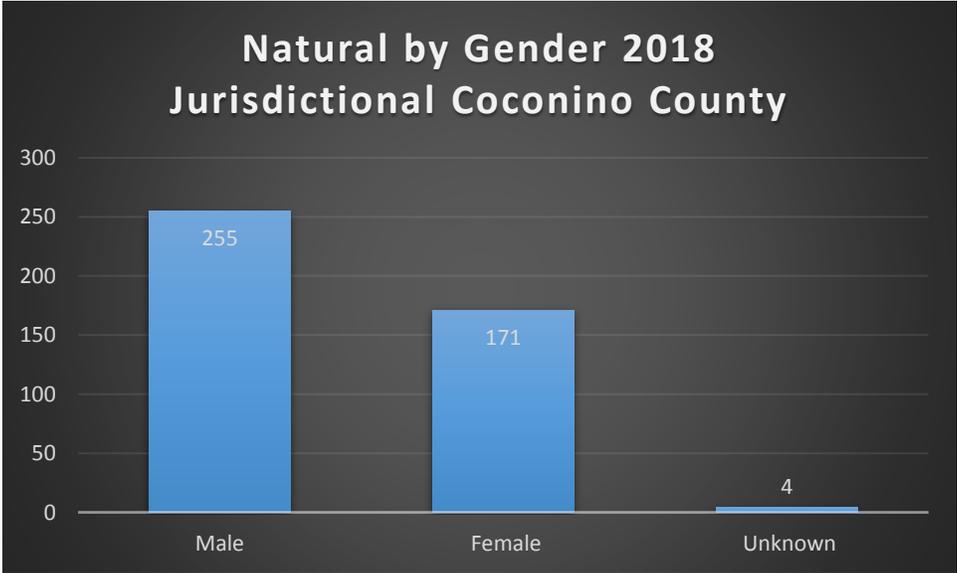
### Suicide by Race 2018 Jurisdictional Coconino County



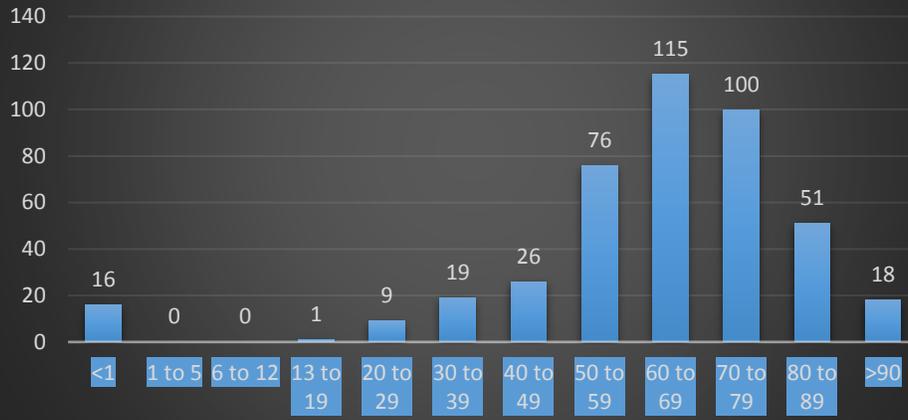


**NATURAL DEATHS (Jurisdictional Coconino County)**

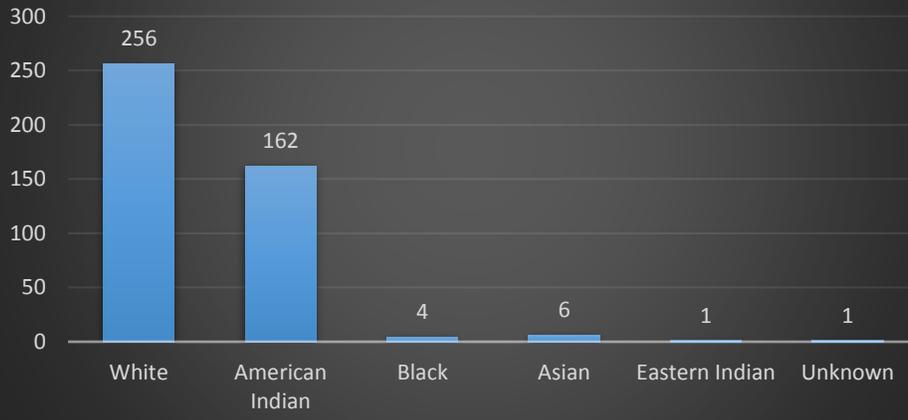
Natural deaths accounted for (67%) of the ME deaths investigated by the CCHHS Medical Examiner’s Office in 2018. Individuals who died from natural causes were most frequently male (59%), between the ages of 60-69 (27%), white (60%) and died from cardiovascular disease (39%).

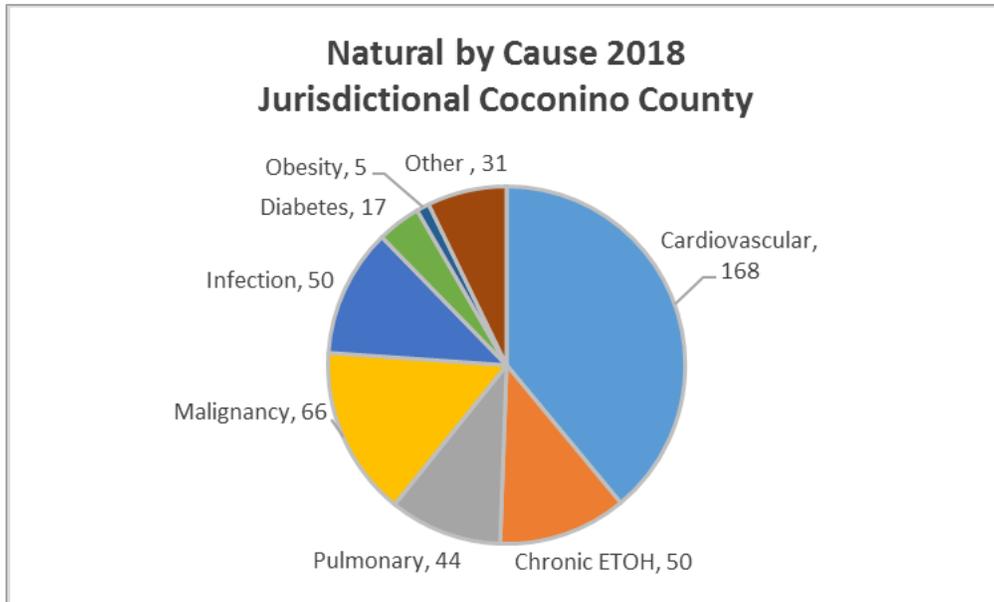


### Natural by Age 2018 Jurisdictional Coconino County



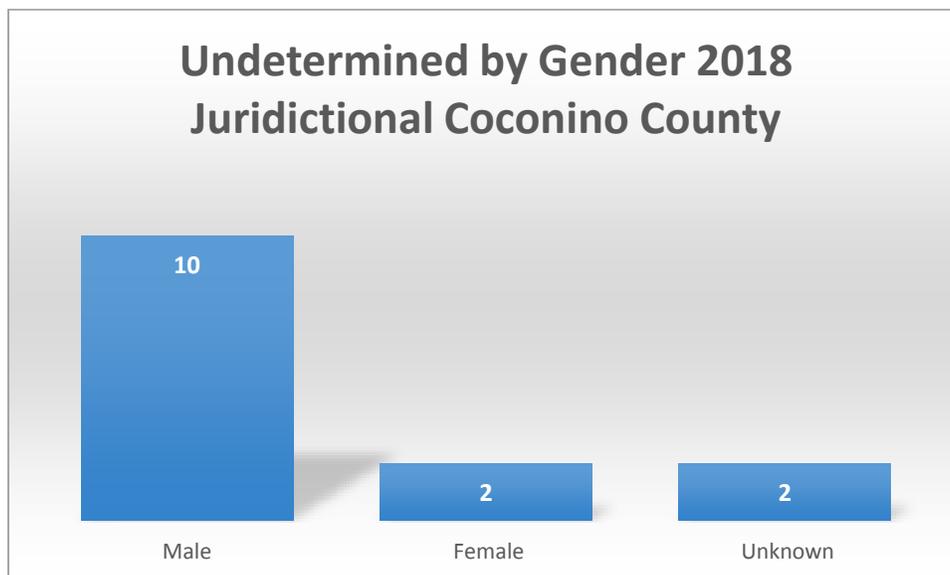
### Natural by Race 2018 Jurisdictional Coconino County



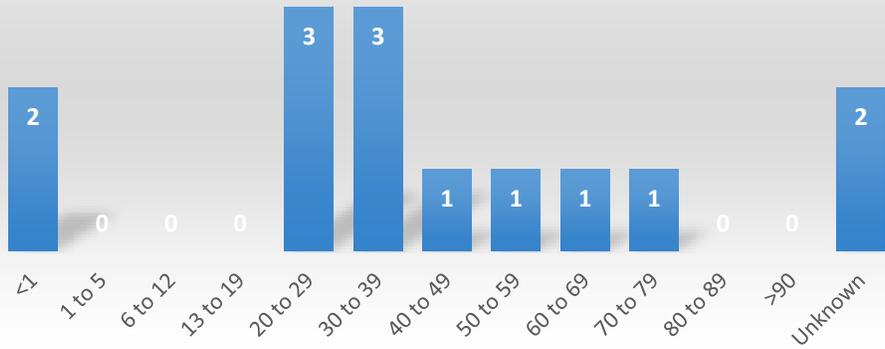


### UNDETERMINED MANNER OF DEATH (Jurisdictional Coconino County)

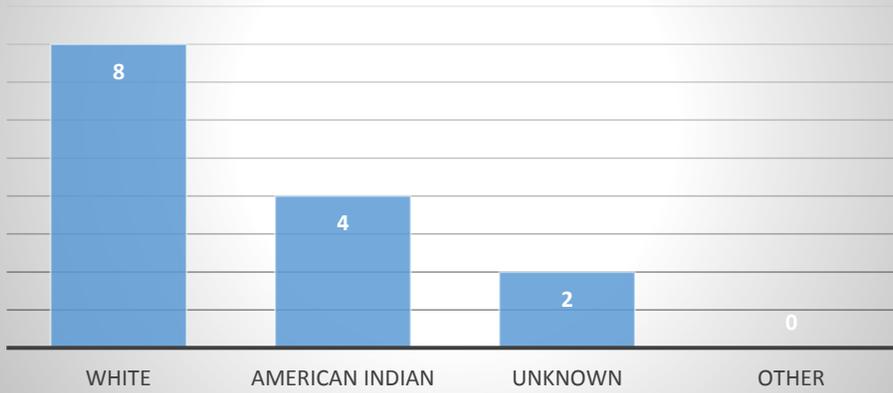
Details in which the manner of death was undetermined accounted for 2% of the deaths investigated by the CCHHS Medical Examiner’s Office in 2018. The manner of death is classified as undetermined when there is an insufficient degree of certainty required to certify the manner as accident, suicide, homicide or natural. There are occasions where the cause and manner of death are classified as undetermined. Individuals who died with an undetermined manner were most frequently males (77%), between the ages of 20 to 39 (46%), white (62%) and died of an overdose (31%). Two of the fourteen undetermined cases from 2018 have yet to be identified, with an unknown gender, age and race.

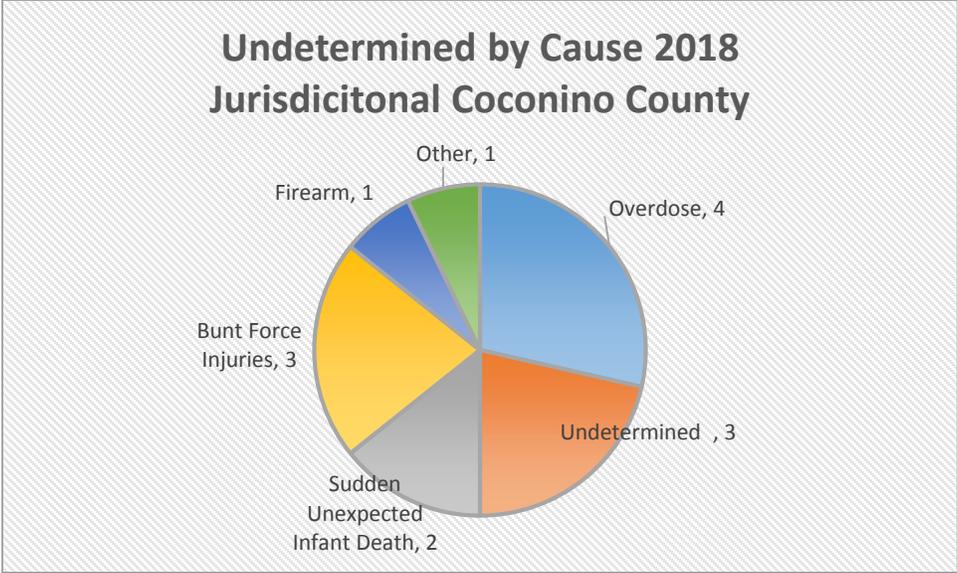


### Underdetermined by Age 2018 Jurisdictional Coconino County



### Undetermined by Race 2018 Jurisdictional Coconino County

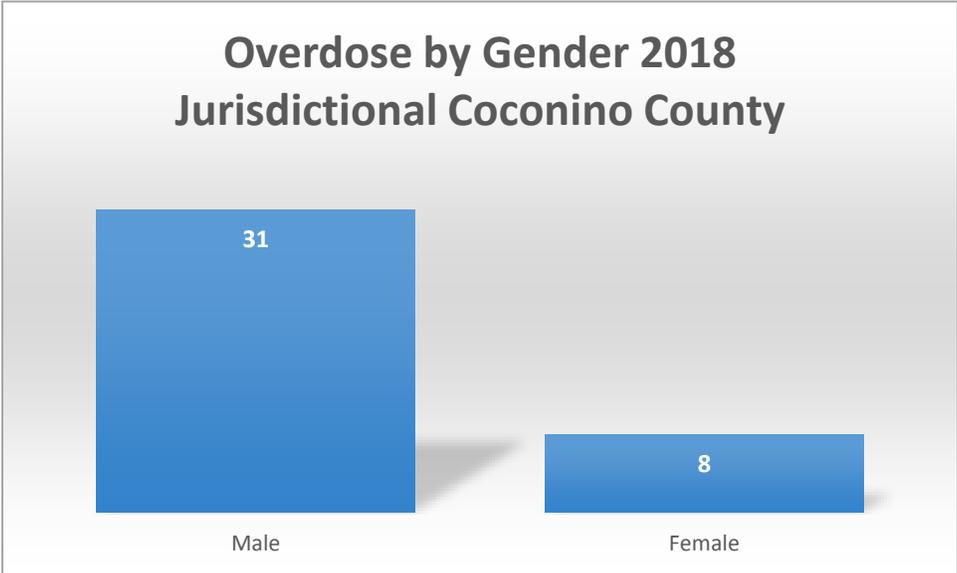




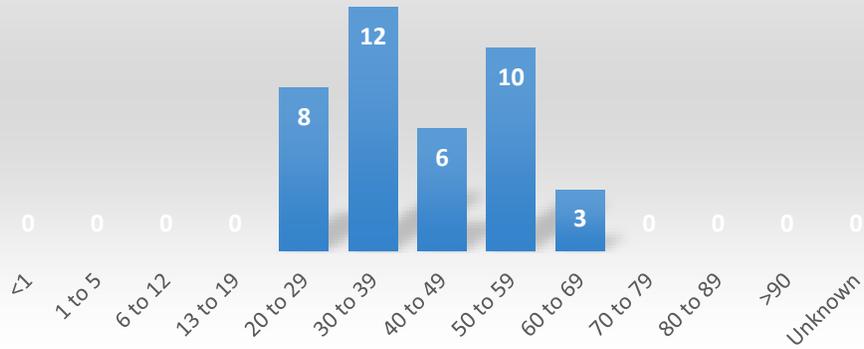
**OVERDOSE DEATHS (Jurisdictional Coconino County)**

Overdose deaths accounted for 6% of the ME deaths investigated by the CCHHS Medical Examiner’s Office in 2018. Individuals who died from overdose were most frequently male (79%), between the ages of 30-39 (31%), white (69%) and died of a single opiate overdose or a mixed substance overdose which included an opiate (54%).

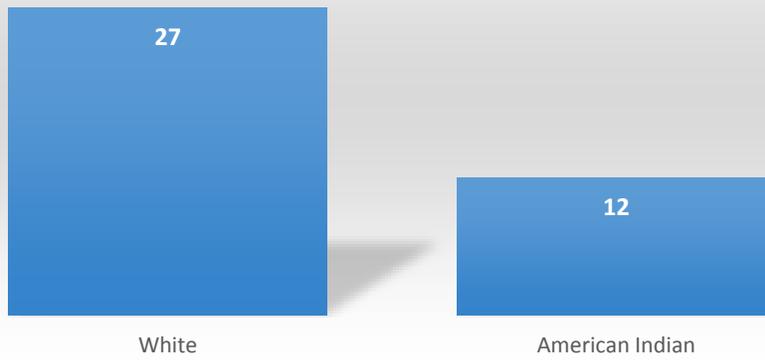
2018 showed an increase in accidental overdoses due to opiates. The most common drugs contributing to death were ethanol, methamphetamine, fentanyl and heroin. In 2018, there were 11 single opiate overdoses, 7 of which were due to fentanyl (an abrupt increase from previous years).



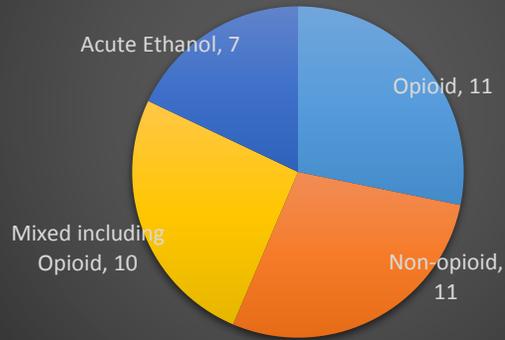
### Overdose by Age 2018 Jurisdictional Coconino County



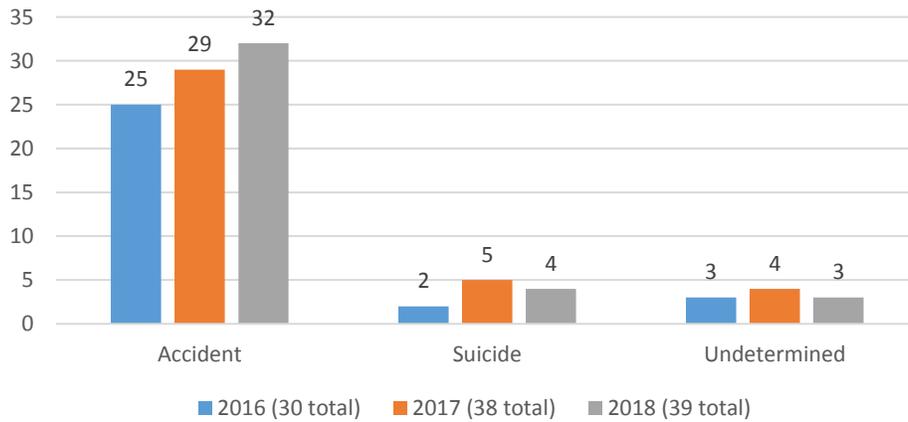
### Overdose by Race 2018 Jurisdictional Coconino County

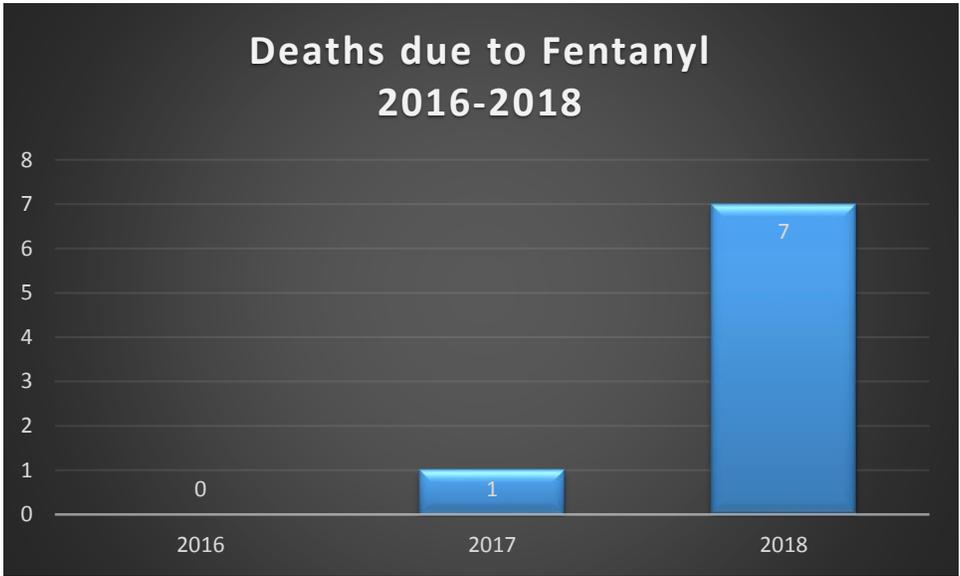
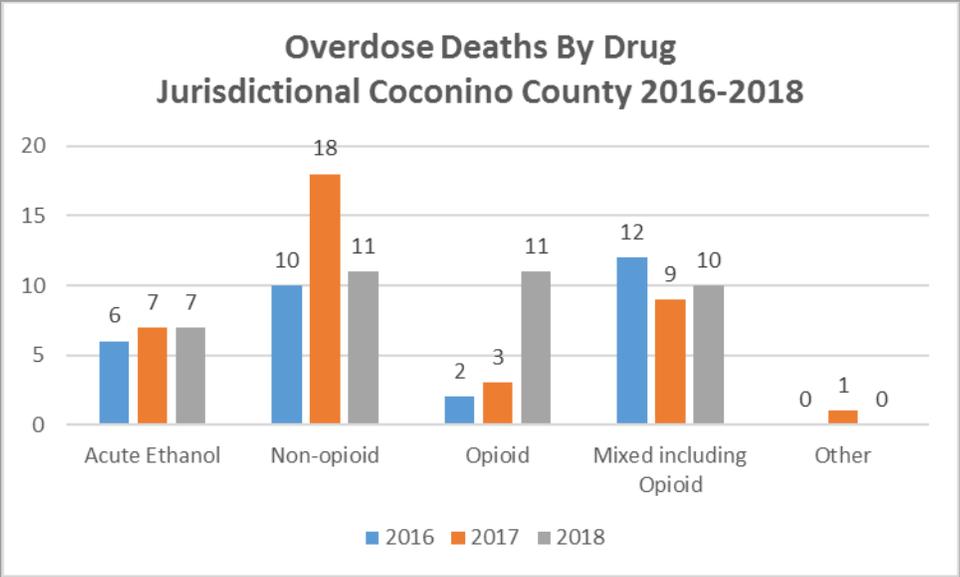


## Overdose Deaths by Drug 2018 Jurisdictional Coconino County



## Overdose Deaths By Manner Jurisdictional Coconino County 2016-2018

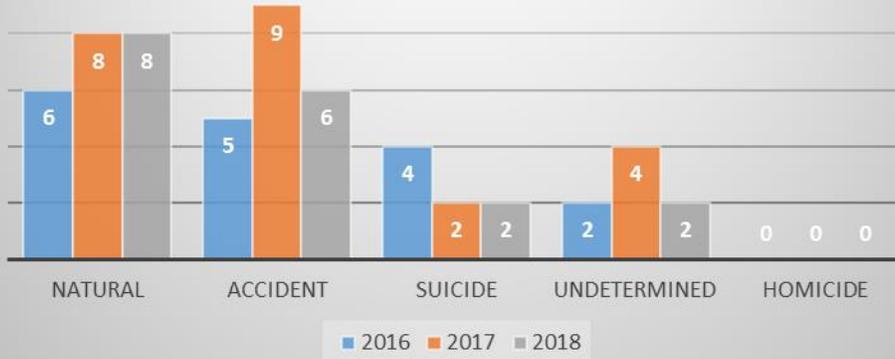




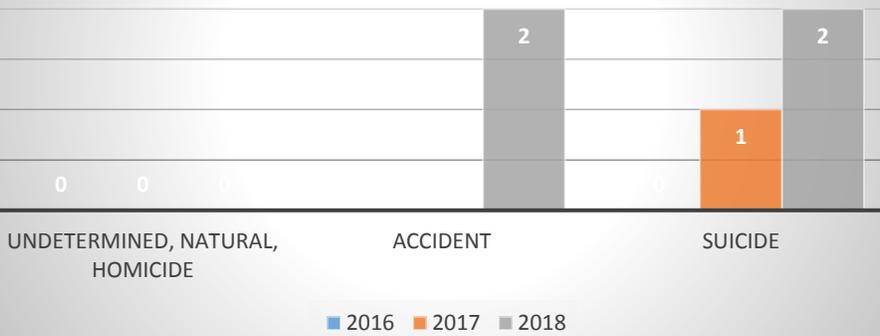
**NATIONAL PARK DEATHS (Jurisdictional Coconino County)**

National parks within Coconino County include the Grand Canyon and Horseshoe Bend. Below are graphs depicting the jurisdictional deaths that have occurred in these two parks.

## Grand Canyon National Park Deaths by Manner 2016-2018



## Horseshoe Bend Deaths by Manner 2016-2018



## SUMMARY

The CCHHS Medical Examiner's Office Annual Report reflects the activities associated with the investigation of the cause and manner of death of cases occurring in jurisdictional Coconino County and cases referred to the office for examination. This report presented an analysis of the different manners of death investigated and the demographics in which they occurred.

In 2018, there were 899 deaths in Coconino County that were under the CCHHS Medical Examiner's Office jurisdiction. Of these cases, 638 (71%) were reported for investigation and 353 (39%) received death certification by the Medical Examiner's Office. In addition, 56 decedents were referred to the CCHHS Medical Examiner's Office from non-jurisdictional regions of the state for examination.

CCHHS Medical Examiner's Office Forensic Pathologists performed 299 autopsies, 10 external examinations, and 103 chart reviews. For jurisdictional Coconino County, there were 9 homicides (56% involved blunt force), 142 accidental deaths (37% involved a motor vehicle), 46 deaths by suicide (39% involved firearms), and 430 deaths due to natural causes (39% were due to cardiovascular disease). There were also 39 drug overdoses of which 48% were from an opioid or mixed substance including an opioid.

The data contained within this report provides information to help guide the development of Public Health policies. In turn, these policies can be used to reduce the number of preventable deaths and improve the overall health of the community we serve.