

PIMA COUNTY

OFFICE OF THE
MEDICAL EXAMINER

Annual Report 2022



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INTRODUCTION

The mission of the Pima County Office of the Medical Examiner (PCOME) is to provide accurate, timely, compassionate, and professional death investigation services for the citizens of Pima County, Arizona. The PCOME investigates any death in Pima County that is sudden, unexpected, violent, and/or in which the cause of death is unknown. The PCOME also serves as the Medical Examiner (ME) for Cochise, Graham, La Paz, and Santa Cruz Counties. For Apache, Gila, Greenlee, Navajo, and Pinal Counties, the PCOME does not serve as the ME, but performs examinations as needed on a fee-for-service basis.

This annual report consists of four main sections. The first is an overview of PCOME operations, activities, and notable events of the office over the course of the report year. The second is a statistical review of the types of all cases processed by the office regardless of the county of death. The third is a breakdown of fatality data for the five counties in which the PCOME is the appointed medical examiner (Pima, Cochise, Graham, La Paz, and Santa Cruz Counties). The fourth is a breakdown of deaths reported to and certified by the PCOME for counties in which the PCOME is not the appointed medical examiner.

Accreditation

The PCOME has maintained full accreditation by the National Association of Medical Examiners (NAME) following a two-day inspection in October 2011. This accreditation requires in-person inspection every five years and annual verification. NAME accredited offices represent the highest quality of death investigation systems. There are 69 fully accredited Medical Examiner's Offices across the United States.

Jurisdiction

Not all deaths that occur in a county are required to be reported to or investigated by the appointed Medical Examiner. Arizona Revised Statute (ARS) [§11-593 B](#) delineates the following circumstances under which a death is required to be reported to the PCOME:

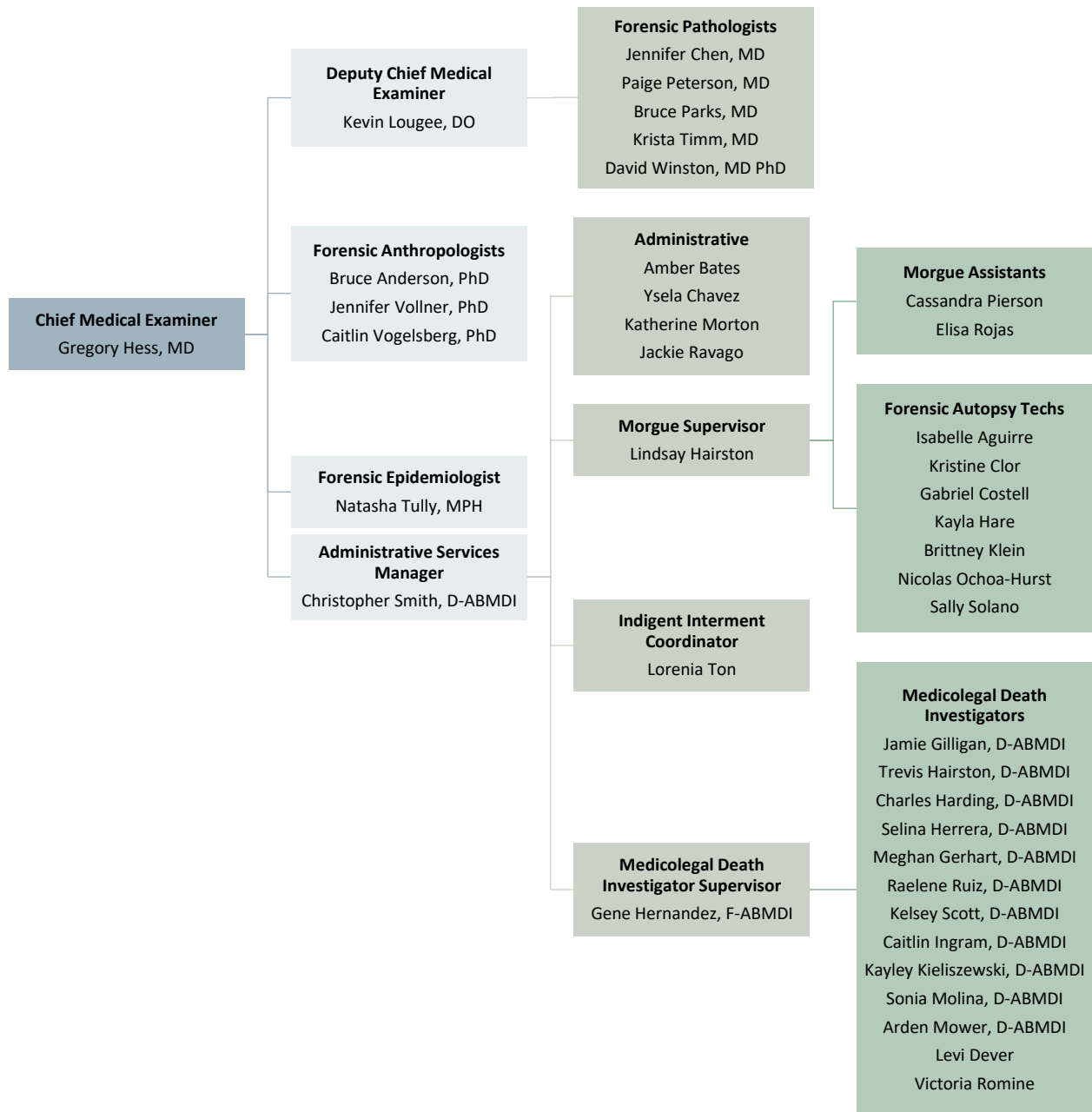
1. Death when not under the current care of a health care provider as defined pursuant to section 36-301.
2. Death resulting from violence.
3. Unexpected or unexplained death.
4. Death of a person in a custodial agency as defined in section 13-4401.
5. Unexpected or unexplained death of an infant or child.
6. Death occurring in a suspicious, unusual, or non-natural manner, including death from an accident believed to be related to the deceased'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.

Data Definitions

- County/Death Location: Due to the nature of law enforcement and PCOME death investigation, all deaths presented in this report are based upon locality of occurrence (i.e., death location) and not a decedent's county of residence.
- Crude Death Rates: Death rates in this report are a ratio of the number of deaths that occurred in a county for each manner of death (MOD) or cause of death (COD) category, relative to the population size of the county of death that year. County population size is reported by [Arizona Department of Health Services \(ADHS\) Vital Statistics](#). At the time this report was written, ADHS had not yet released county population statistics for 2022. Therefore, 2022 death rates were calculated using 2021 population size and are subject to change.
- Natural Deaths: Natural death data in this report is limited to deaths certified by the PCOME and does not reflect the total number of natural deaths in a county each year. Most natural deaths that occur do not fall under the jurisdiction of a medical examiner and instead, are certified by a decedent's healthcare provider. The PCOME accepts jurisdiction of cases that appear to be natural deaths if the decedent is not in the care of a healthcare provider, dies while in custody, is unidentified, and/or a previously healthy individual dies suddenly/unexpectedly, as defined by the medical examiner.
- Overdose Deaths: Deaths in which an overdose of a combination of drugs or a single drug caused or contributed to death. These deaths do not include situations in which intoxication may have been a factor in an incident leading to death (e.g., motor vehicle crashes, environmental exposures). This report does not include data on all drugs detected that were not listed as contributing to or causing death. Deaths attributed to chronic drug/alcohol use are not included in overdose deaths.
- Subsumed Cases: A subsumed case represents a case of human remains later identified as remains of a previous case where a death certificate was already issued. The subsumed case information is absorbed into the previously certified case. Therefore, demographic information and cause and manner of death is recorded and reported on the primary case only.
- Race/Ethnicity: New to the 2022 Annual Report is data on decedent race/ethnicity for counties in which the PCOME serves as the appointed medical examiner. Race/ethnicity data is collected from death certificate data and medical records. Race/ethnicity designations used in this report follow ADHS definitions and include White non-Hispanic, Hispanic or Latino, Black or African American, American Indian or Alaska Native, and Asian or Pacific Islander. The PCOME uses ADHS race/ethnicity methodology in classifying decedents such that "individuals identified as Hispanic plus another race are included in the racial/ethnic category with the lowest population in the state. This approach to bridging is defined as the smallest group deterministic whole method" ([Arizona Health Status and Vital Statistics 2012](#)).
- Veterans: Veteran status is determined by the state death certificate data field "ever served in the U.S. armed forces," completed and verified by a funeral director.

PCOME OPERATIONS & COLLABORATIONS

Organizational Chart



Medicolegal Death Investigators

The American Board of Medicolegal Death Investigators (ABMDI) certifies individuals of their knowledge and skills in the field of medicolegal death investigation. In addition to the PCOME MDI Supervisor and Administrative Services Manager, 11 MDIs are ABMDI certified. PCOME Forensic Pathologists lecture to MDIs on varying topics monthly. In accordance with our MDI quality assurance and performance improvement program, 10% of reports are reviewed by a pathologist monthly and 10% of reports are peer reviewed quarterly.

Community Education and Presentations

The PCOME receives numerous requests from various groups, organizations, individuals, and schools for presentations regarding a host of forensic issues annually. Not all requests can be honored due to time and personnel constraints, but examples of educational activities include but are not limited to: presentations at local primary and secondary schools; lectures at various institutions and departments at the University of Arizona; presentations and tours for humanitarian organizations; and university border studies courses.

Data Sharing and Media Interviews

Our office regularly answers data requests from several local, state, and national agencies and organizations. Over the calendar year, the Chief Medical Examiner recorded 124 contacts with media to respond to external data inquiries (i.e., interviews, emails, and phone calls). The Forensic Epidemiologist handled 96 data requests (i.e., monthly reports, quarterly reports, and ad hoc data requests) from media, outside agencies, and other county departments. The PCOME also partners with the Pima County Health Department to provide data and to support various public health projects related to overdose deaths, child fatalities, and more. In September 2022, the PCOME launched several online, interactive data dashboards, accessible at the [PCOME website](#), for reporting data to the public regarding deaths occurring in the counties served by the PCOME. Data presented in this report is an end of year, point-in-time analysis of PCOME data and may differ slightly from data presented in our dashboards (updated monthly).

Medical Education Agreements

Forensic Pathology Fellowship: The PCOME's Forensic Pathology training program began in 2016, funded by the University of Arizona's College of Medicine, Department of Pathology. The year-long program is certified by the Accreditation Council for Graduate Medical Education (ACGME) and prepares the fellow for board certification in pathology; it is the only such training program offered in Arizona.

Pathology Resident and Medical Student Rotations: Pathology residents and medical students from the University of Arizona's College of Medicine, Department of Pathology, elect to participate in a month-long rotation at the PCOME. In 2022, four pathology residents and six medical students participated in rotations.

Forensic Anthropology Internship: A semester-long internship is offered to students from the University of Arizona's College of Social & Behavioral Sciences, School of Anthropology. One anthropology student interned at the PCOME in 2022.

Clinical and Academic Appointments: PCOME Forensic Pathologists hold clinical appointments with the Department of Pathology at the University of Arizona, College of Medicine, where they are involved with pathology resident and medical student teaching. PCOME Forensic Anthropologists hold academic appointments at the University of Arizona's College of Social & Behavioral Sciences, School of Anthropology.

Law Enforcement and Legal System

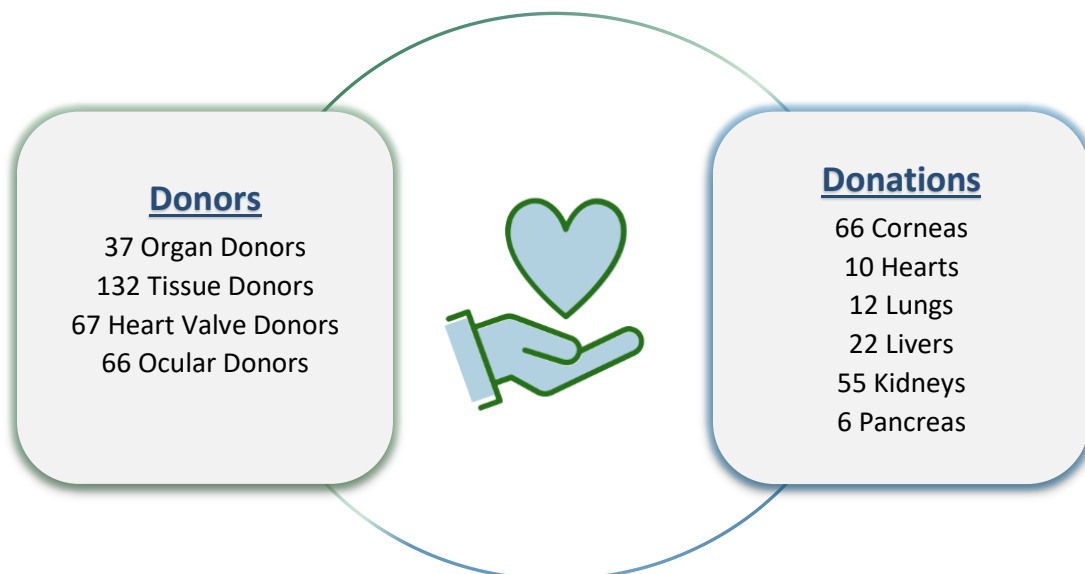
An important function of the PCOME is the availability of our pathologists to assist or advise law enforcement personnel in their investigations and the legal system in its proceedings. Involvement of the PCOME in the legal system generally consists of pretrial interviews, depositions, and courtroom testimony. In 2022, PCOME Forensic Pathologists and Forensic Anthropologists participated in several pretrial interviews, depositions, and jury trials for Pima County and out-of-county cases.

Cremation Permit Authorizations

The PCOME reviews thousands of cremation permit requests each year. Forensic Pathologists review the death certificates to ensure that deaths that should have been reported to and investigated by our office, are in fact, properly investigated by the PCOME before cremation is authorized.

Organ and Tissue Donation

Pursuant to [A.R.S §36-861](#), the PCOME refers death notifications to, and partners with, [Donor Network of Arizona](#) and other associated tissue research agencies for the coordination and procurement of anatomic gifts. The importance of supporting the efforts of the organ and tissue transplant and research communities in Arizona cannot be understated. Anatomic gifts can be lifesaving for organ and tissue recipients and these donations are always in short supply. In 2022, the PCOME authorized procurement of organs for all donation requests: 37 organ donors and 132 tissue donors.



2022 MEDICAL EXAMINER CASES (ALL COUNTIES)



Deaths Reported
to the PCOME

4,769



Medical Examiner
Cases

2,666



Death Certificate
Cremation
Authorization Reviews

10,355



Decedents
Transported to the
PCOME

2,362



Postmortem Exams
Performed

2,244



Anthropologic
Examinations

121



Arizona Counties
that Reported Deaths
to the PCOME

12 of 15



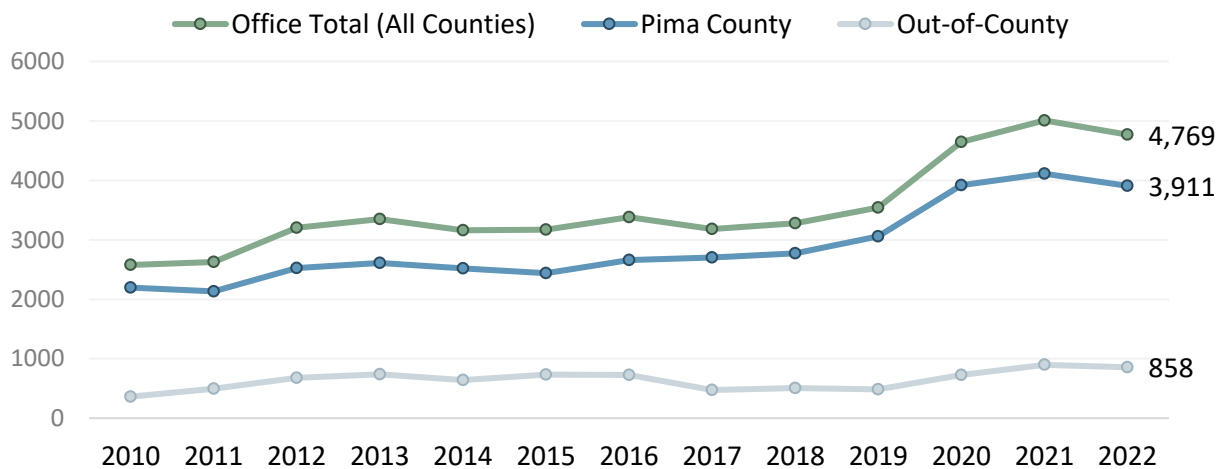
Undocumented
Border Crosser
Cases

173

Reported Deaths

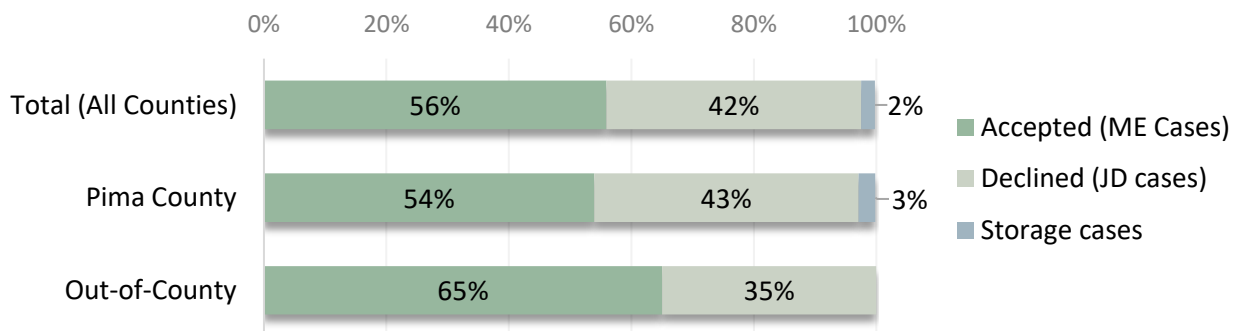
When a death is reported to the PCOME, a Medicolegal Death Investigator determines if the PCOME will accept jurisdiction of the case, decline jurisdiction, or provide storage, if needed. For cases in which jurisdiction is accepted (ME cases), the PCOME will formally investigate the death and certify the cause and manner of death by means of autopsy, external examination, or medical record review. Cases in which jurisdiction is declined (JD cases) are certified by the decedent's healthcare provider. Other cases may be reported to the PCOME and transported to our facility to temporarily hold until funeral arrangements are made (storage cases). A few cases each year are reported to the PCOME for an anthropologic exam only and are not included in ME case, JD case, or storage case counts. The total deaths reported to and handled by the PCOME each year are the sum of the aforementioned case types. In 2022, a total of 4,769 deaths were reported to the PCOME (3,911 cases from Pima County and 858 cases from other counties). "Out-of-County" includes cases reported to the PCOME from Apache (27), Cochise (416), Gila (25), Graham (91), Greenlee (9), La Paz (170), Maricopa (3), Mohave (4), Navajo (24), Pinal (9), and Santa Cruz (80) Counties.

Deaths Reported to the PCOME



Of the 4,769 reported deaths, 2,666 cases (56%) were accepted under the jurisdiction of the PCOME; jurisdiction was declined in 1,985 cases (42%); and 108 deaths (2%) were reported to the PCOME for temporary storage at our facility. Ten cases, excluded in the graph below, were reported to and transported to the PCOME for anthropologic or pathologic examination only, without certification of the death by the PCOME.

Jurisdictional Disposition of Deaths Reported, 2022

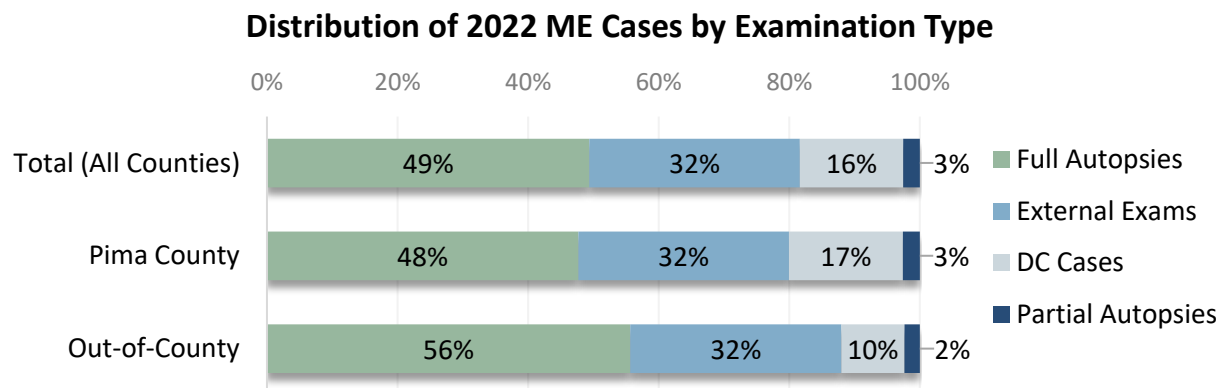
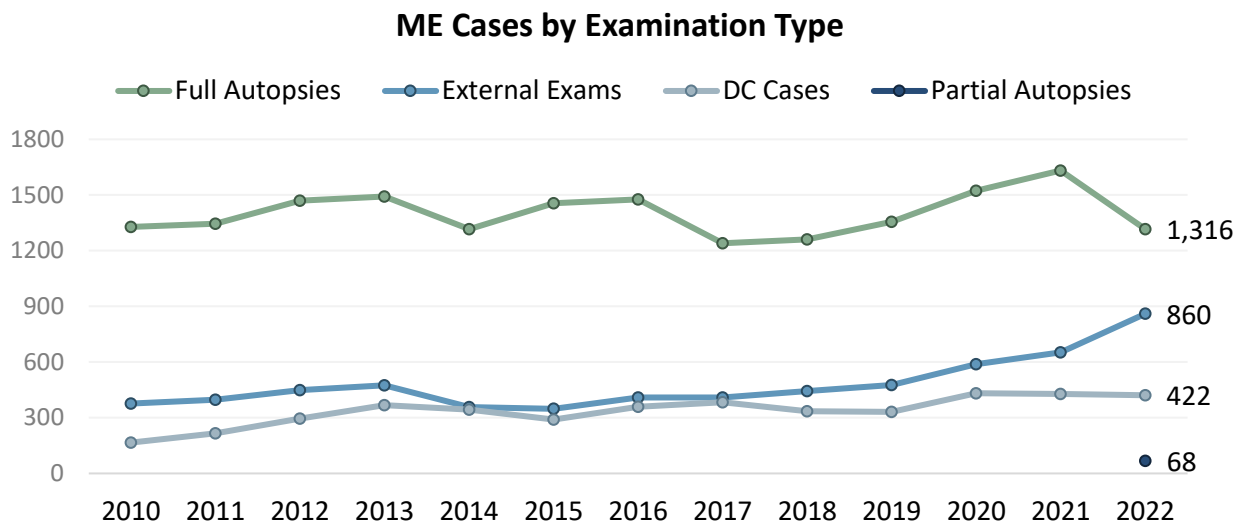


Examination Type

Cases in which the PCOME accepts jurisdiction, conducts a death investigation, and certifies the cause and manner of death are considered “medical examiner cases” (ME cases). Depending on the needs of the investigation, a medical examiner case will undergo one of four types of examinations, as determined by a Forensic Pathologist:

1. **Full autopsy:** examination of a decedent, both externally and internally, for evidence of injury or natural disease which may have caused or contributed to the individual’s death.
2. **Partial autopsy:** examination of a decedent limited to a specific area or areas of the body, often to an internal examination of the head. The PCOME began performing partial autopsies mid-year in 2021. Counts of partial autopsies in 2021 were included in the count of full autopsies.
3. **External examination:** examination of the external surfaces of the body only.
4. **Death certificate (DC) case:** review of the medical 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.

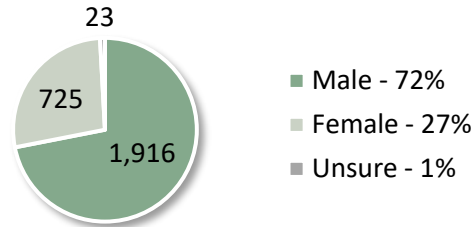
Out of the 2,666 cases accepted in 2022 (2,109 Pima County deaths and 557 out-of-county deaths), the PCOME performed 1,316 full autopsies, 68 partial autopsies, 860 external examinations, and certified 422 DC cases. Distribution of exam types are displayed in the bar chart below.



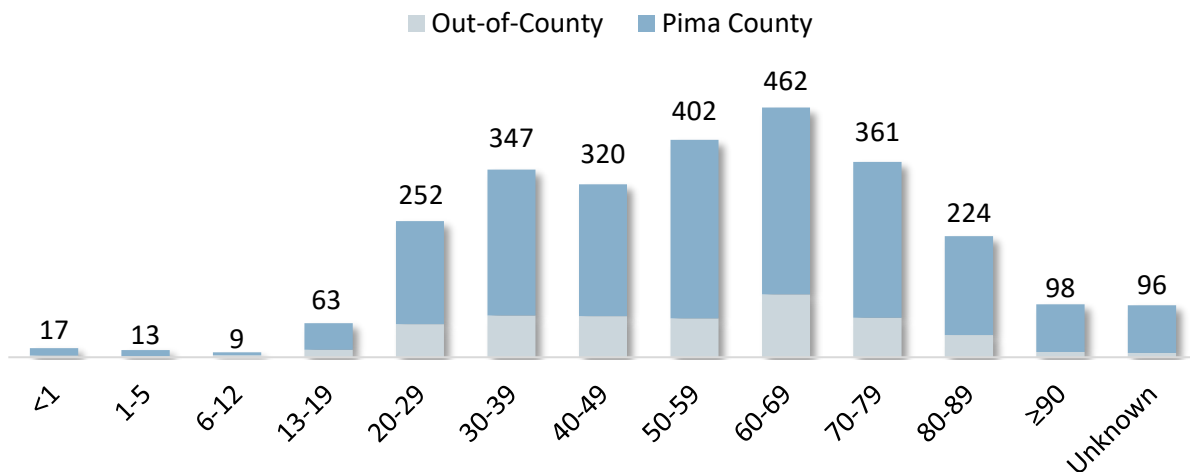
Demographics

Decedent demographic information is detailed below for 2022 ME cases; subsumed cases are excluded. At the time this report was written, two 2022 cases were subsumed. Male decedents comprised the majority of ME cases in 2022 (72%). Among all age groups, decedents in their sixties accounted for the largest percentage of ME cases (17%).

2022 ME Cases by Decedent Sex (All Counties)



2022 ME Cases by Decedent Age Group (All Counties)

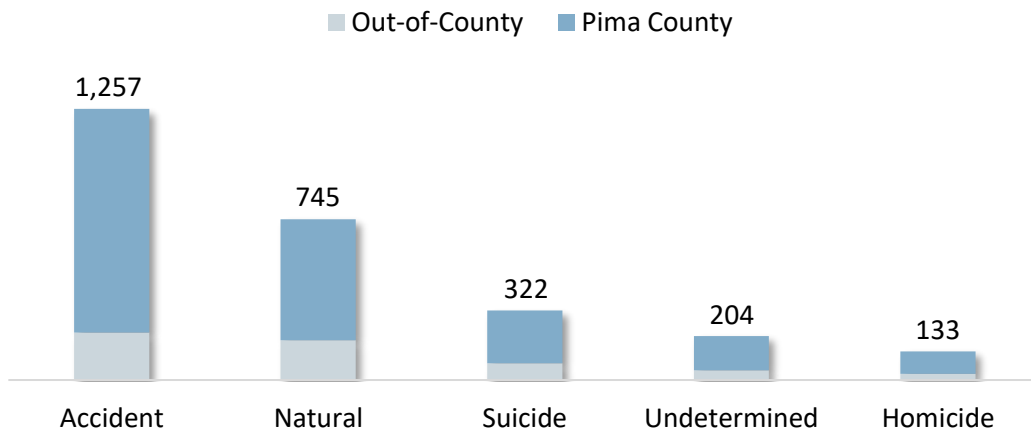


	<1	1-5	6-12	13-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	≥90	Unkn.
Pima County	14	11	5	49	191	270	244	330	346	288	183	88	88
Out-of-County	3	2	4	14	61	77	76	72	116	73	41	10	8

Manner of Death

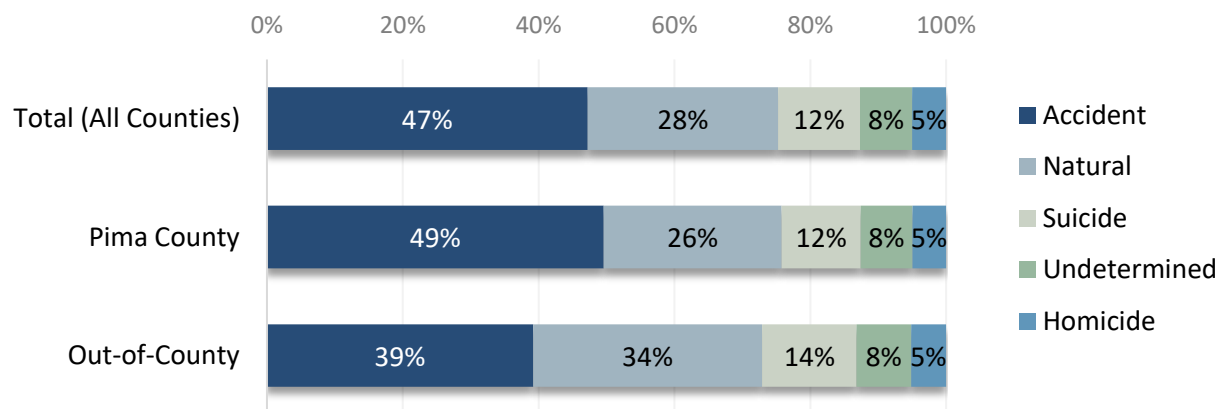
Manner of Death (MOD) is a medicolegal determination of death based on the circumstances surrounding a cause of death. MOD classifications include accident, homicide, natural, suicide, and undetermined. The certifier of death must report the MOD on a death certificate, except in the case of a fetal death. Subsumed cases and fetal death cases are excluded in the graphs and chart below (5 Pima County cases, 0.2% of ME cases). In 2022, a total of 2,661 cases were certified by the PCOME with a MOD. More deaths were certified as accidents than any other manner (1,257 cases, 47%).

2022 ME Cases by Manner of Death (All Counties)



	Accident	Natural	Suicide	Undeterm.	Homicide
Pima County	1,037	560	244	159	104
Out-of-County	220	185	78	45	29

Distribution of 2022 ME Cases by Manner of Death

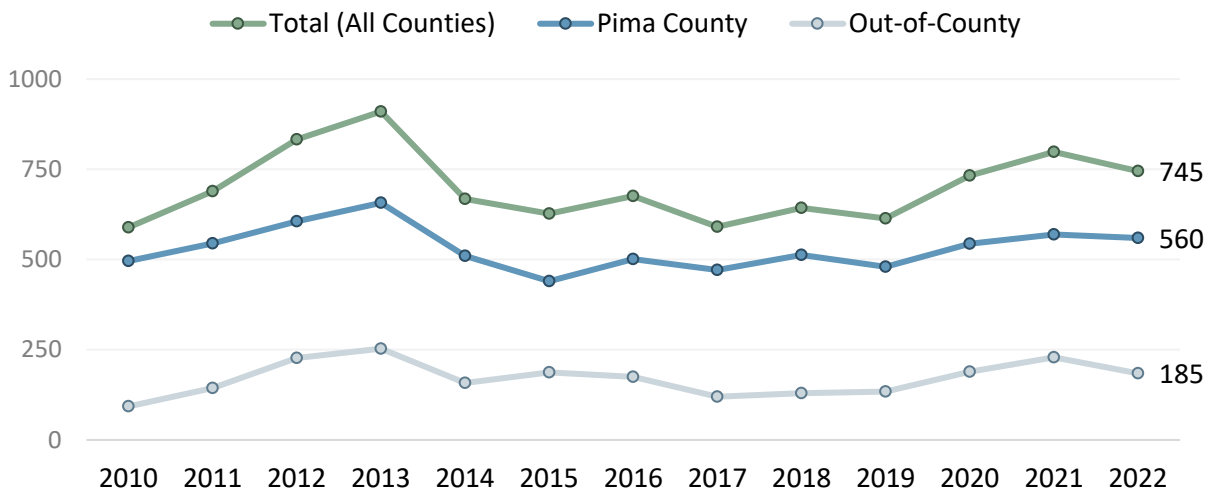


Natural (All Counties)

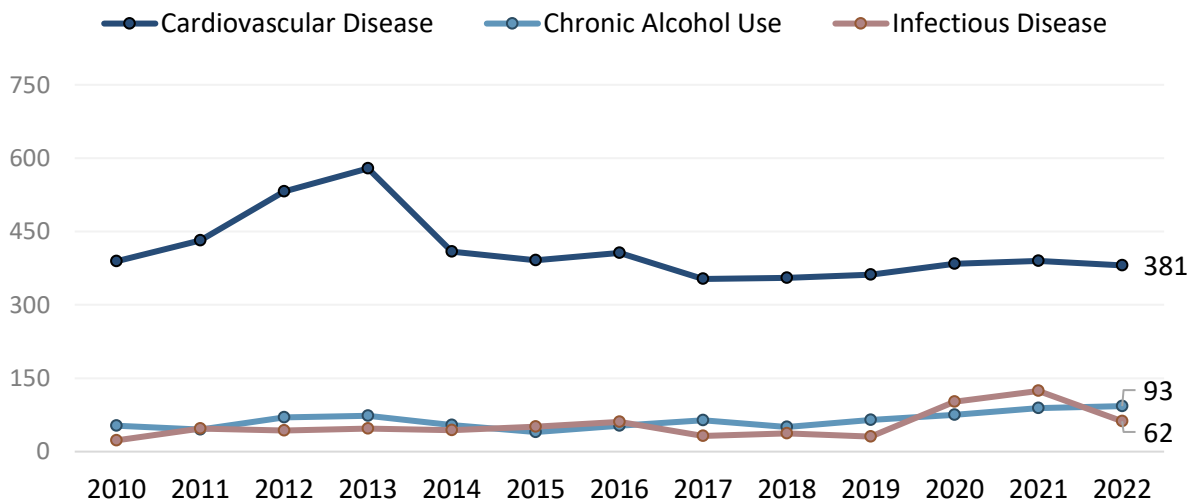
Natural death data in this report is limited to deaths certified by the PCOME (ME cases) and does not reflect the total number of natural deaths in a county each year. Most natural deaths that occur do not fall under the jurisdiction of a medical examiner and instead, are certified by a decedent's healthcare provider. The PCOME accepts jurisdiction of cases that appear to be natural deaths if the decedent is not in the care of a healthcare provider, dies while in custody, is unidentified, and/or a previously healthy individual dies suddenly/unexpectedly, as defined by the medical examiner. The PCOME is not aware of the number of natural deaths certified by physicians in the community, therefore natural death data presented in this report should be interpreted with caution.

A total of 745 natural deaths were certified by the PCOME in 2022 (28% of ME cases); 560 deaths in Pima County and 185 deaths in other counties. Cardiovascular disease remains the most frequent cause of natural deaths certified by the PCOME (381 in 2022).

Natural Deaths Certified by the PCOME



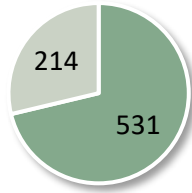
Natural Deaths by Cause of Death (Top 3)



Male decedents made up the majority of PCOME-certified natural deaths in 2022 (71%). Decedents age 60-to-69 years old accounted for the largest portion of natural deaths of any age group (28%). Cardiovascular disease was the most common cause of death (51%), followed by chronic alcohol use (12%), and infection (8%).

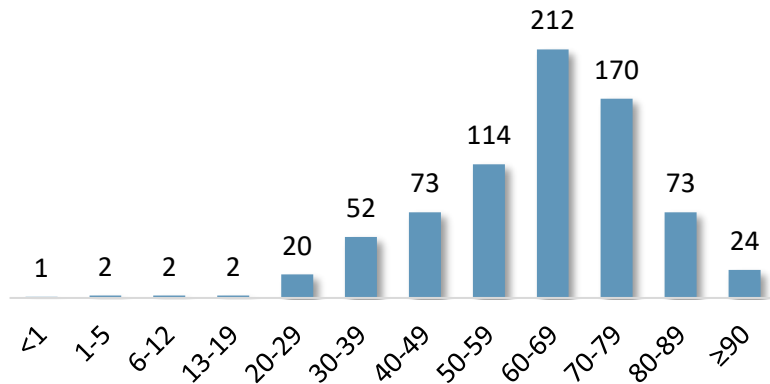
2022 Natural Deaths (All Counties)

Decedent Sex

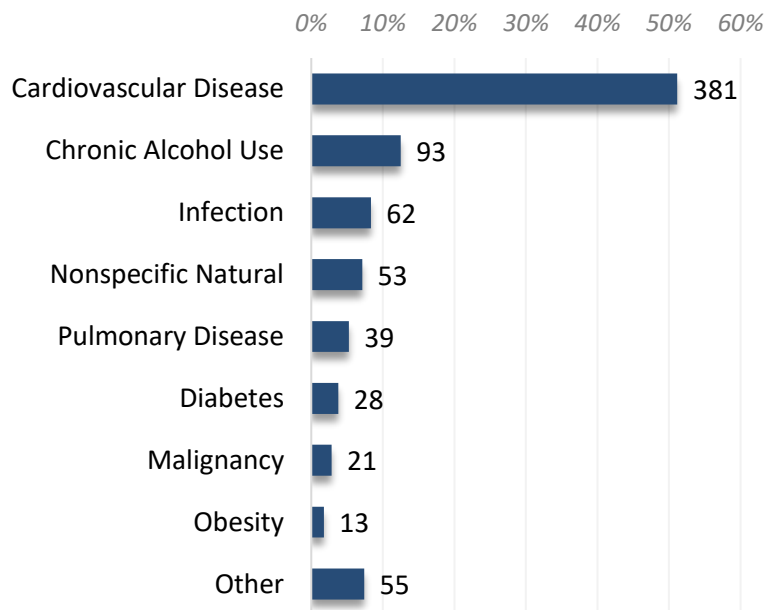


■ Male - 71%
■ Female - 29%

Decedent Age Group



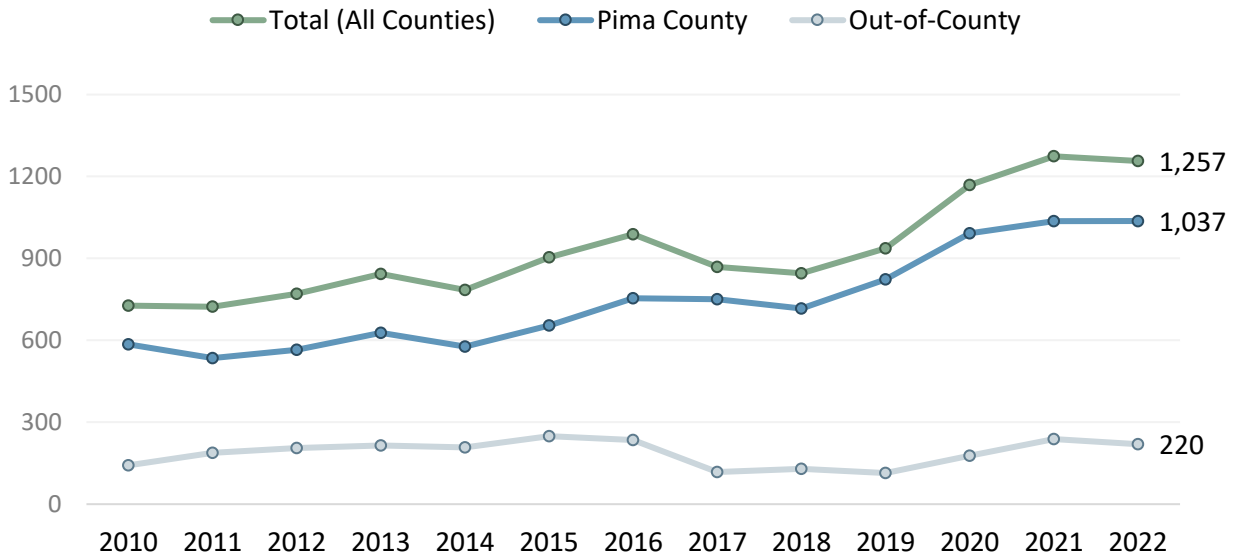
Cause of Death



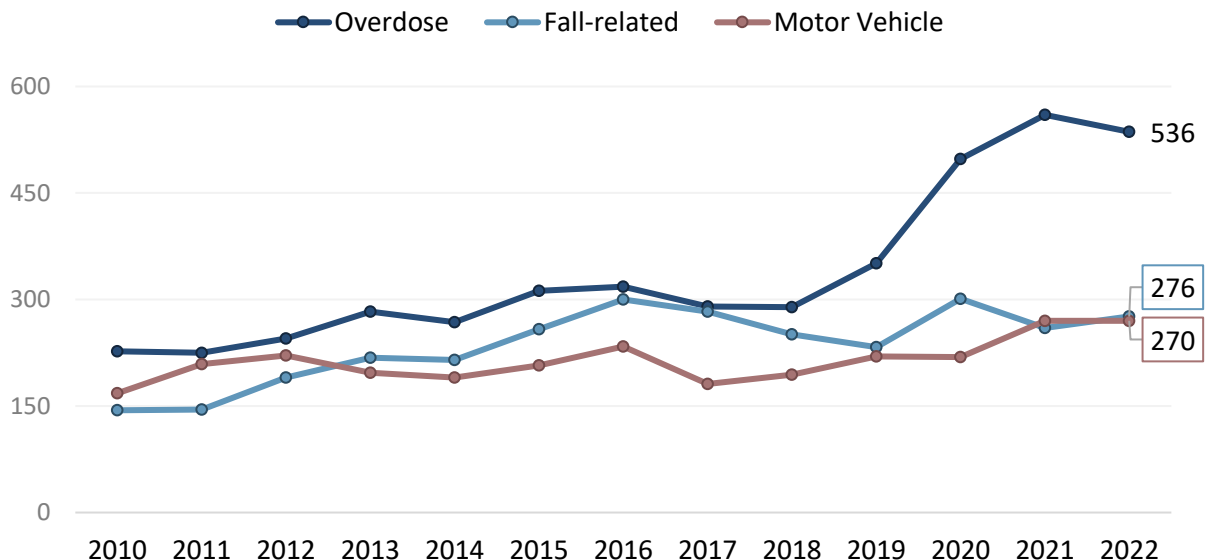
Accident (All Counties)

Deaths certified as accidents totaled 1,257 in 2022 (47% of ME cases); 1,037 deaths in Pima County and 220 deaths in other counties. For over a decade, overdose has been most common cause of accident deaths certified by the PCOME. In 2022, the PCOME certified 536 accidental overdose deaths, a 4% decrease from the year prior. Since 2013, fall-related injuries have been the second most common cause of accident deaths, excluding 2021 when more accidents were a result of motor vehicle-related fatalities than falls.

Accident Deaths Certified by the PCOME



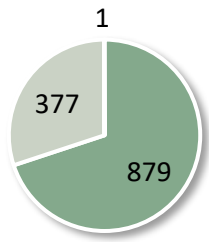
Accidents by Cause of Death (Top 3)



Male decedents made up the majority of deaths certified as accidents in 2022 (70%). Decedents age 50-to-59 years old accounted for 17% of accident deaths, the largest portion of any age group. Overdose was the most common cause of accidental deaths (43%), followed by fall-related injuries (22%), and motor vehicle-related fatalities (21%). Deaths due to environmental exposure (84 hyperthermia and 12 hypothermia) represent 8% of accident deaths certified by the PCOME in 2022.

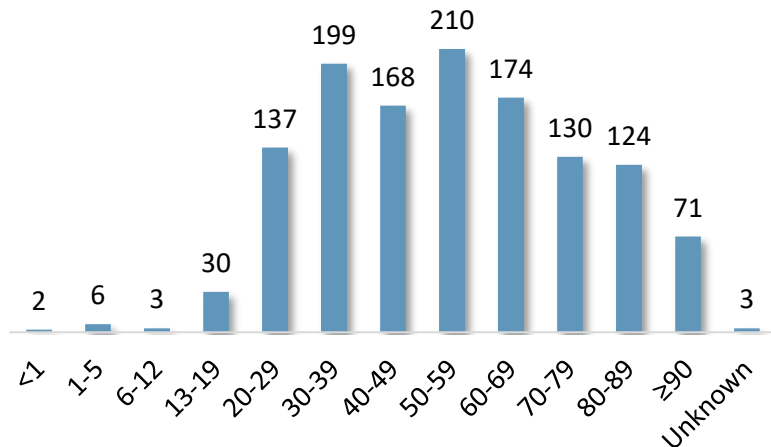
2022 Accident Deaths (All Counties)

Decedent Sex

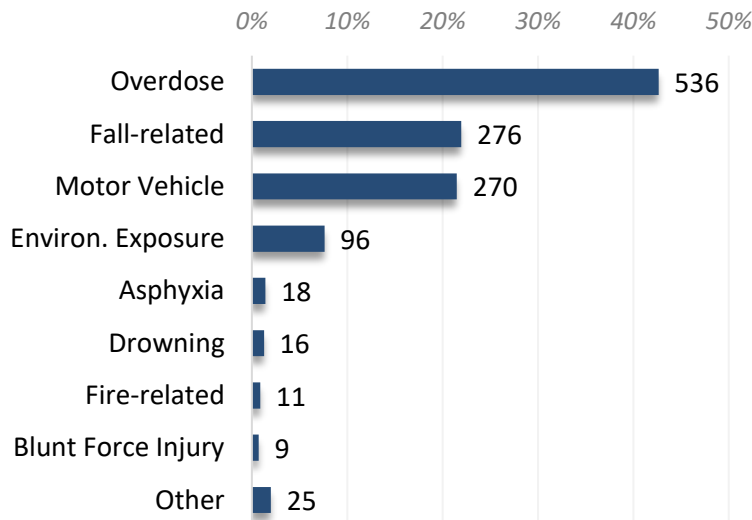


■ Male - 70%
 ■ Female - 30%
 ■ Unsure - <1%

Decedent Age Group



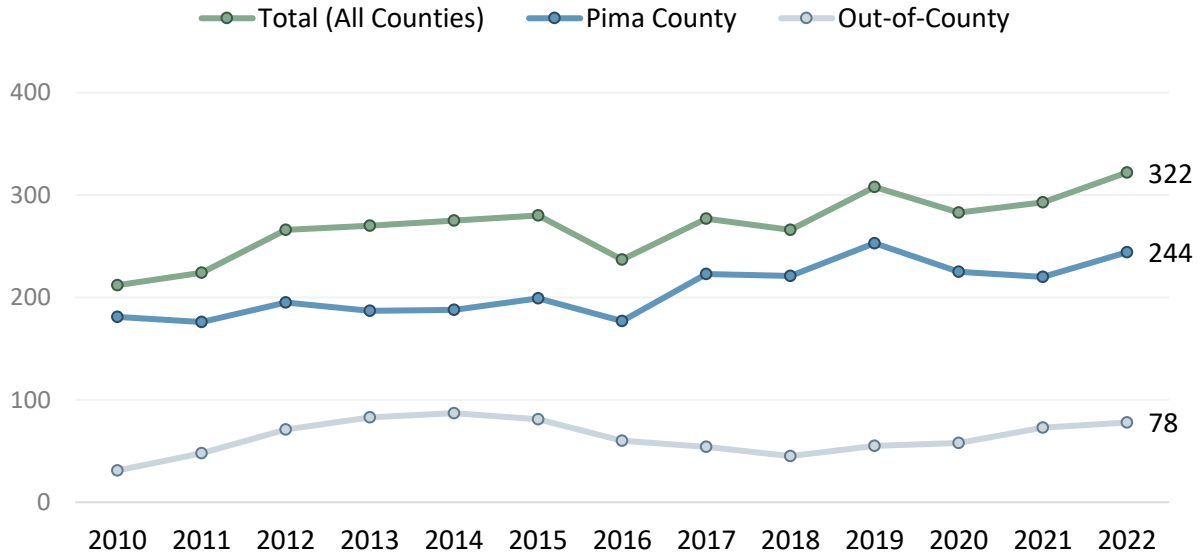
Cause of Death



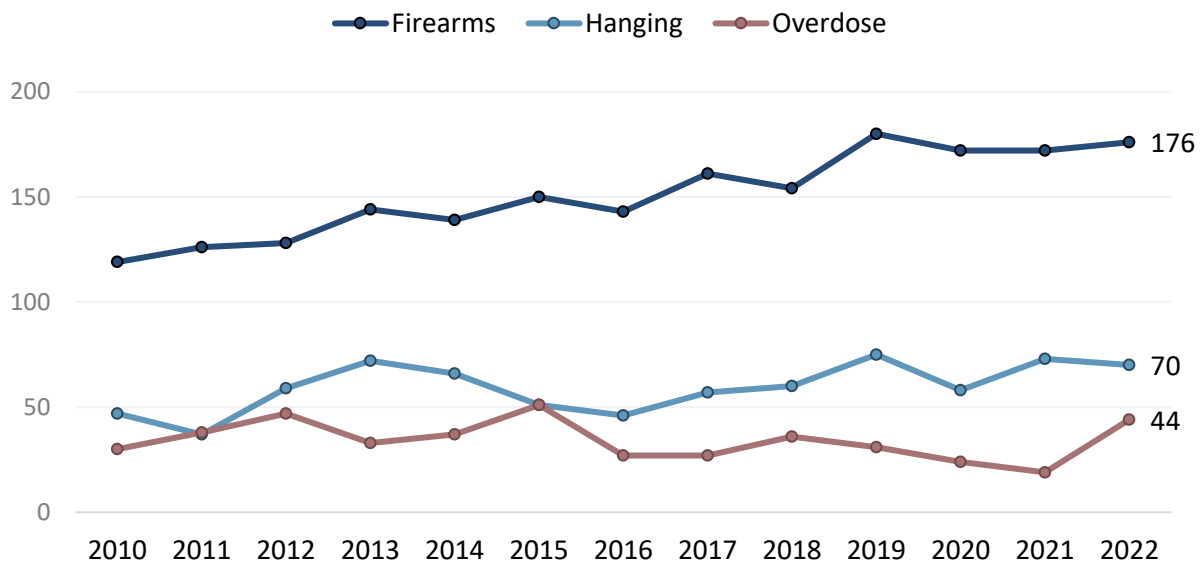
Suicide (All Counties)

In 2022, 322 deaths were certified as suicides by the PCOME (12% of ME cases). Of these, 244 deaths were in Pima County and 78 deaths were in other counties. Firearms continue to be the most common means of suicide deaths certified by the PCOME (176 in 2022).

Suicides Certified by the PCOME



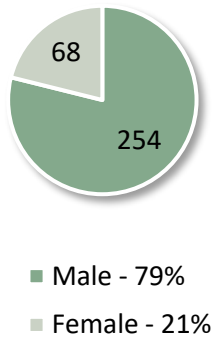
Suicides by Cause of Death (Top 3)



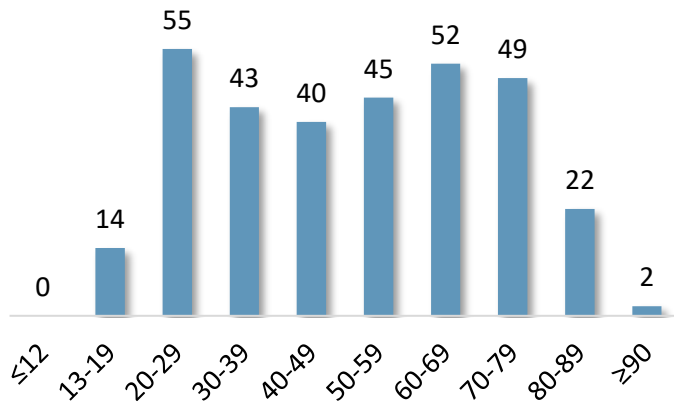
Males comprised 79% of suicides certified by the PCOME in 2022. Decedents age 20-to-29 years old accounted for 17% of suicides, the largest portion of any age group. Fifty-five percent of suicides were a result of firearm. Suicide by firearm was most common (176, 55%) and was 2.5 times that of the next leading means of suicide, hanging (70, 22%).

2022 Suicides (All Counties)

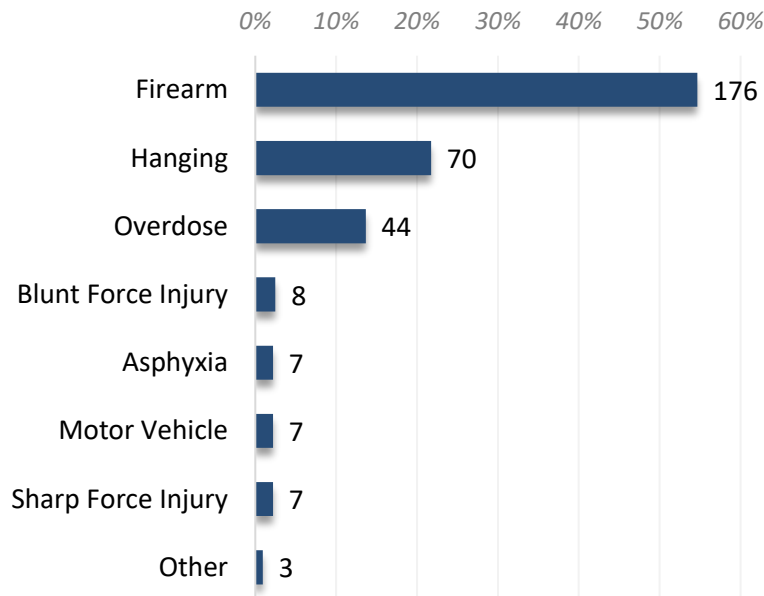
Decedent Sex



Decedent Age Group



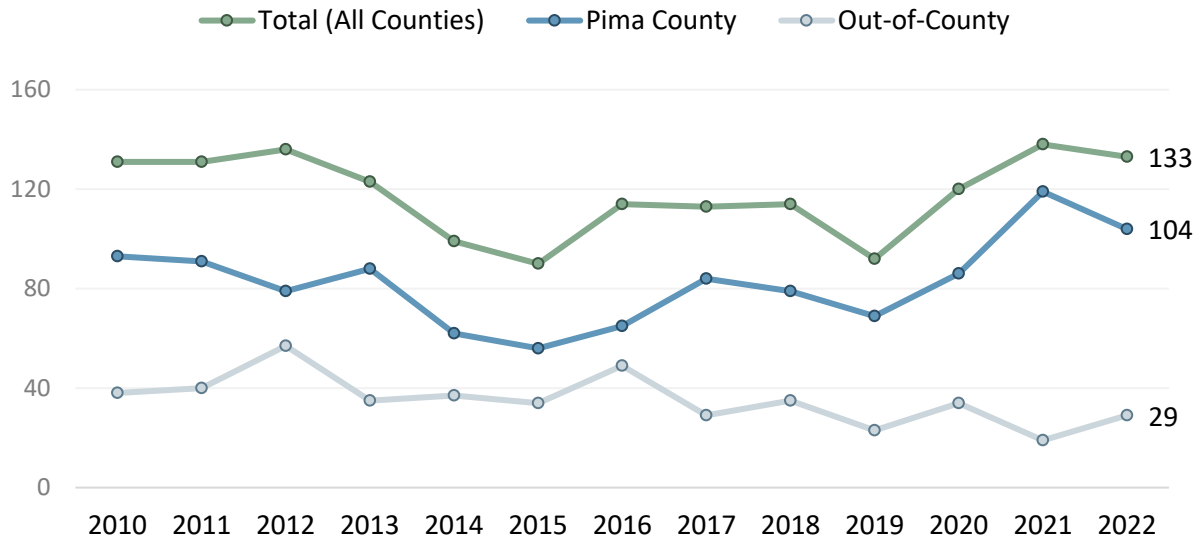
Cause of Death



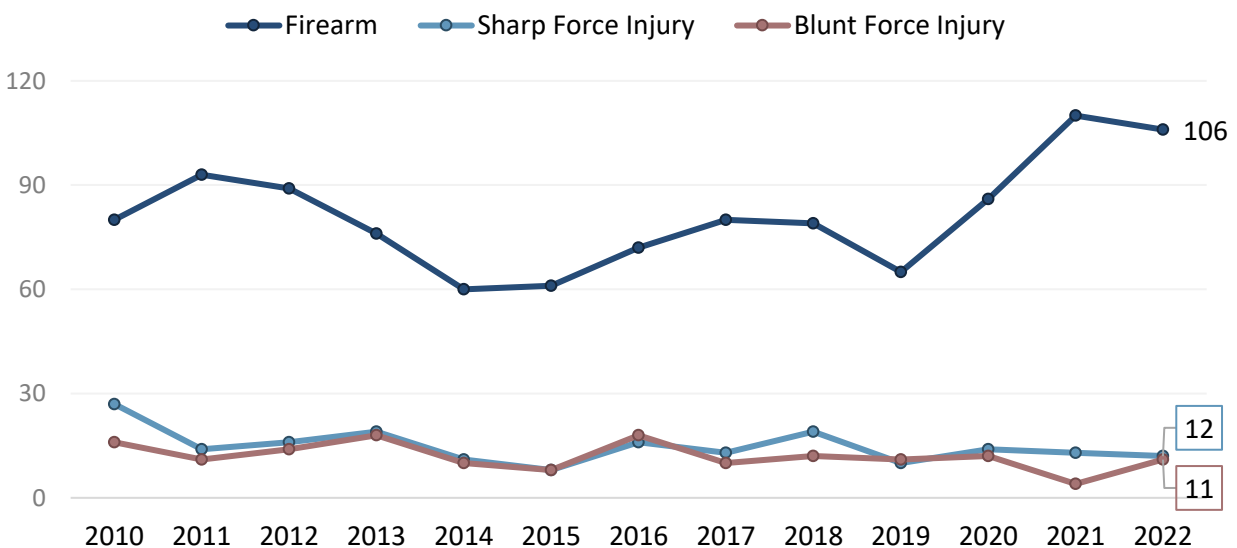
Homicide (All Counties)

Homicide deaths accounted for the smallest portion of ME cases investigated by the PCOME in 2022 (5%). A total of 133 deaths were certified as homicides (104 in Pima County and 29 in other counties), a 4% decrease from the year prior. Most homicide deaths certified by the PCOME each year are a result of firearm injuries. In 2021, the PCOME recorded the highest number of firearm homicides to date (110, 80%). The following year, firearm homicides decreased by 4% but remained elevated (106, 80%).

Homicides Certified by the PCOME



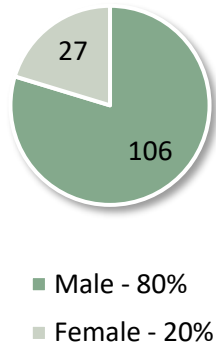
Homicides by Cause of Death (Top 3)



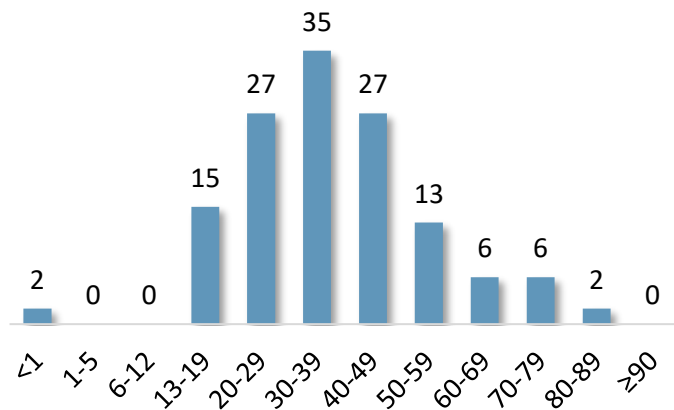
In 2022, males comprised 80% of homicide deaths certified by the PCOME. Of all age groups, decedents age 30-to-39 years old represented the largest percentage of homicide deaths (26%). As mentioned previously, most homicides were a result of firearm injuries (80%); a smaller portion were caused by sharp force injuries (9%), blunt force injuries (8%), and other causes (4%).

2022 Homicides (All Counties)

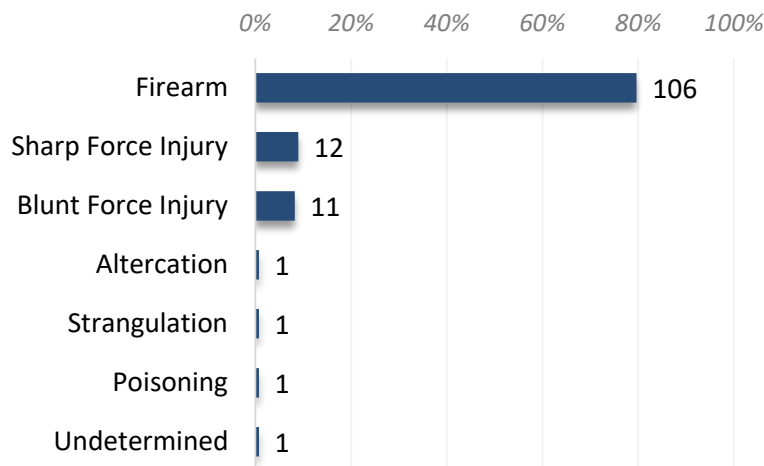
Decedent Sex



Decedent Age Group



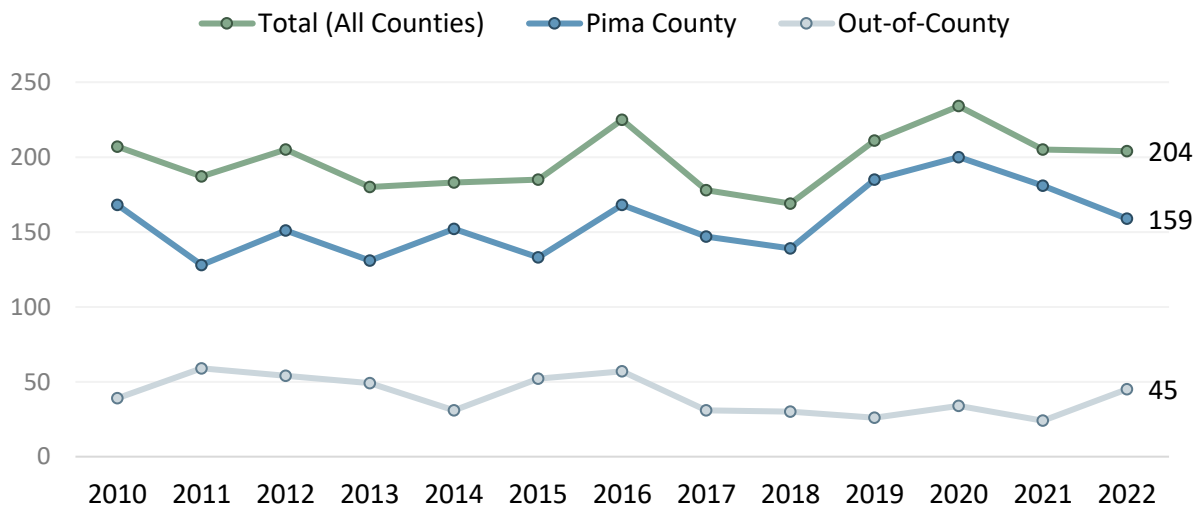
Cause of Death



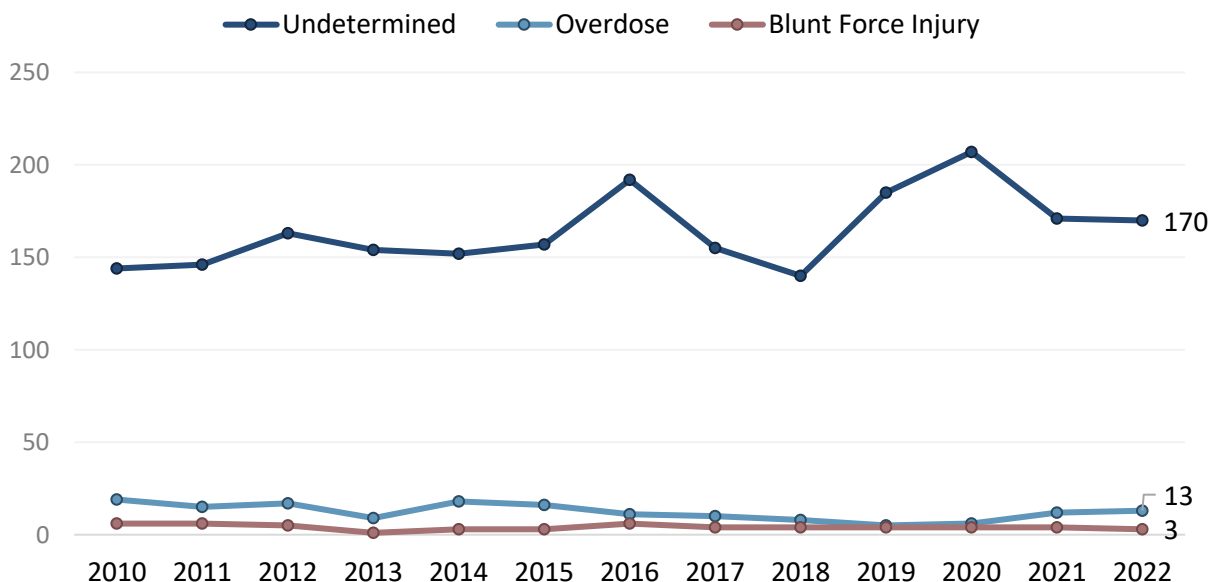
Undetermined (All Counties)

For a small number of cases each year, the manner of death is certified as undetermined. Deaths certified by the PCOME with an undetermined manner totaled 204 in 2022 (8% of ME Cases); 159 deaths in Pima County and 45 in other counties. Undetermined manner deaths certified by the PCOME are most frequently certified with an undetermined cause, often due to exam limitations of decomposed/skeletal remains or sparse investigative information. Of the 170 cases with an undetermined cause and manner in 2022, 121 (59%) were decomposed or skeletal remains. The second most common cause of death certified in undetermined manner deaths is overdose.

Undetermined MOD Cases Certified by the PCOME



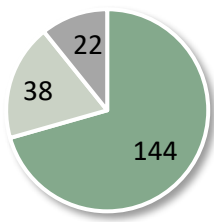
Undetermined MOD Cases by Cause of Death (Top 3)



In 2022, males comprised 71% of deaths certified with an undetermined manner. Decedents of an unknown age made up 45% of undetermined MOD cases. The majority of cases were certified with an undetermined cause (83%). The remaining 17% of undetermined MOD cases were caused by drug overdose (7%) and other less common causes (e.g., blunt force injury, fall-related, firearm etc., 10%).

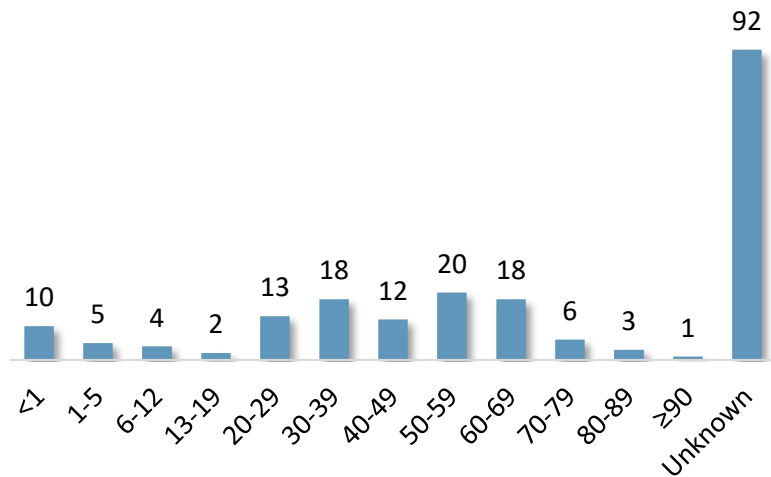
2022 Undetermined MOD Cases (All Counties)

Decedent Sex

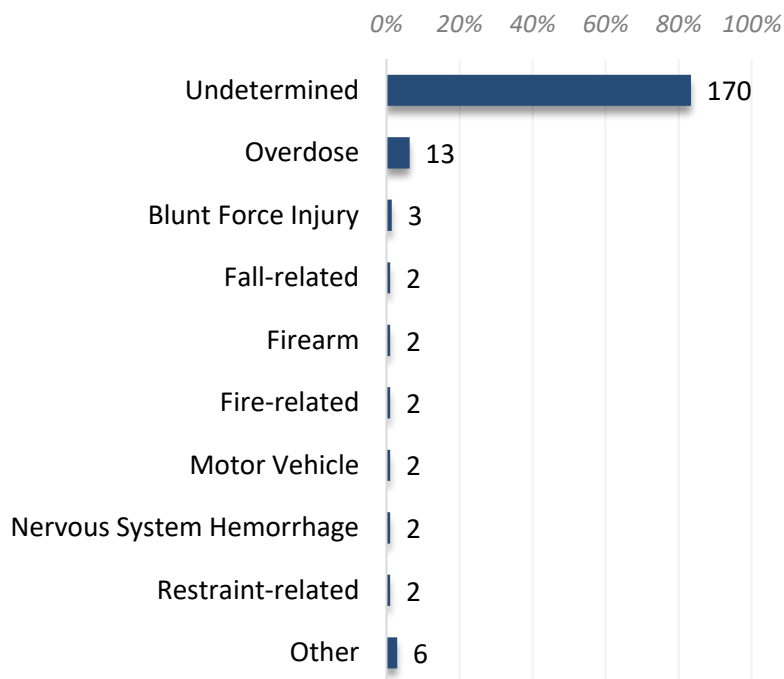


- Male - 71%
- Female - 19%
- Unsure - 11%

Decedent Age Group



Cause of Death



Cause-Specific Deaths

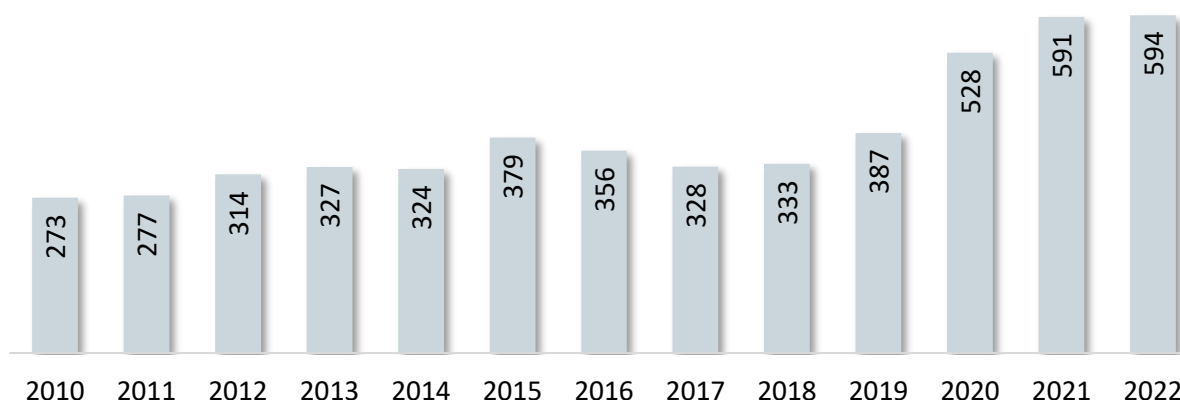
The leading causes of death for cases certified with a non-natural manner (i.e., accidents, homicides, suicides, and undetermined manner deaths) are presented in this section. In 2022, the PCOME certified 1,916 deaths with a non-natural manner. Of those, the most common causes of death, were overdose (n=594, 31%), firearm (n=287, 15%), and motor vehicle-related injuries (n=279, 15%).

Overdose (All Counties)

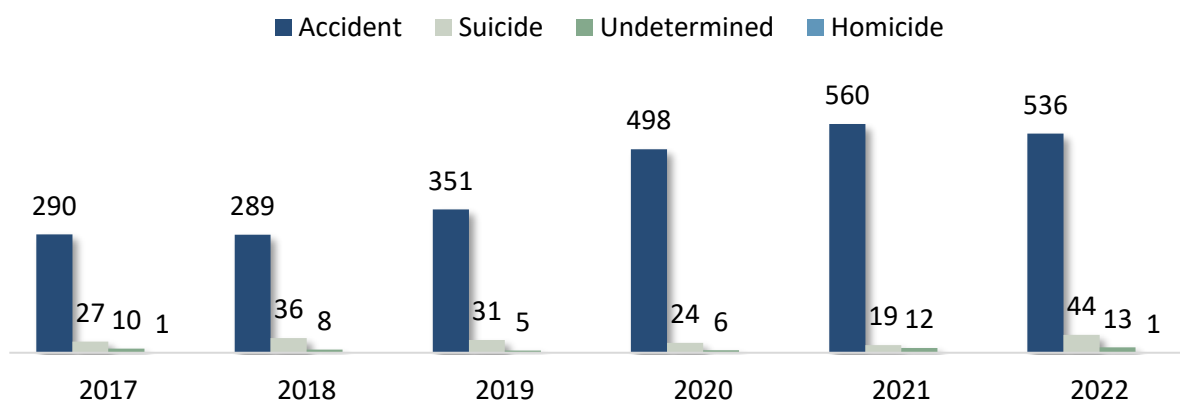
Since 2017, overdose deaths certified by the PCOME have increased annually; the largest change occurring between 2019 and 2020 (a 36% increase). Overdose deaths in 2022 (594) were consistent with the year prior (591), increasing by less than 1%. The PCOME certified overdose deaths from 10 counties in 2022: Pima (495), Cochise (48), Graham (15), La Paz (15), Apache (6), Navajo (5), Santa Cruz (5), Greenlee (3), Gila (1), and Pinal (1) County. The majority of overdose deaths certified each year are accidents. In 2022, 90% of overdose deaths were accidents and the other 10% were certified as suicides (7%), undetermined manner deaths (2%), and homicides (i.e., drug poisoning, <1%).



Overdose Deaths Certified by the PCOME (All Counties)



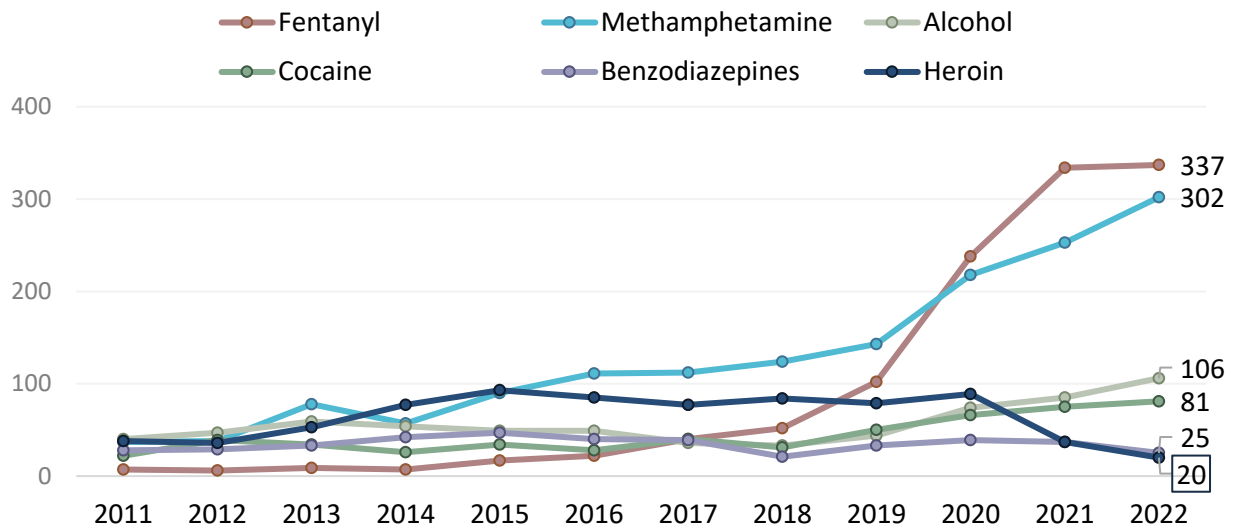
Overdose Deaths by MOD (All Counties)



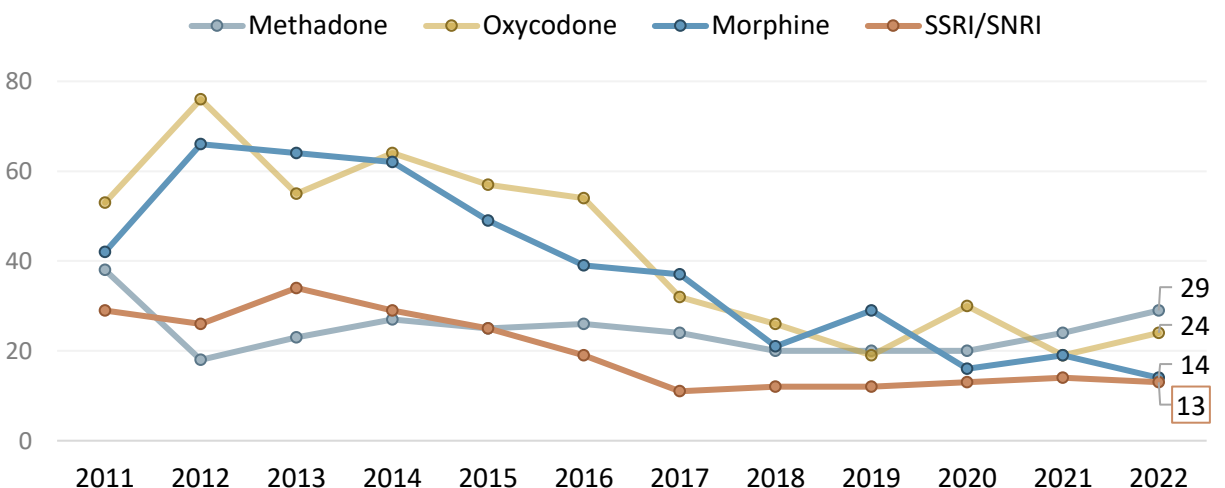
ALL COUNTIES

The two graphs below show overdose deaths involving select drugs over time. Fentanyl deaths sharply increased from 2019 to 2020 and again in 2021, increasing a total of 227% in two years. Since 2020, fentanyl has contributed to more overdose deaths than any other drug. In 2022, for the first time in several years, fentanyl deaths did not increase substantially but remained at a level comparable to the year prior (334 deaths in 2021 and 337 deaths 2022). Meanwhile, methamphetamine deaths have risen steadily since 2019, reaching levels near that of fentanyl deaths in 2022. Deaths involving heroin, on the other hand, have decreased since 2020 and in 2022, fell below counts of alcohol, cocaine, benzodiazepines, methadone, and oxycodone. It is important to note that heroin deaths are likely underreported each year as heroin is rapidly metabolized to morphine by the body; if the metabolite indicative for heroin, 6-monoacetylmorphine, is not present on the toxicology report, the cause of death may be classified as morphine intoxication or opiate (unspecified) intoxication. Even so, deaths involving morphine have been on a downward trend for the past decade and heroin deaths have decreased for two consecutive years.

Overdose Deaths involving Select Drugs (All Counties)



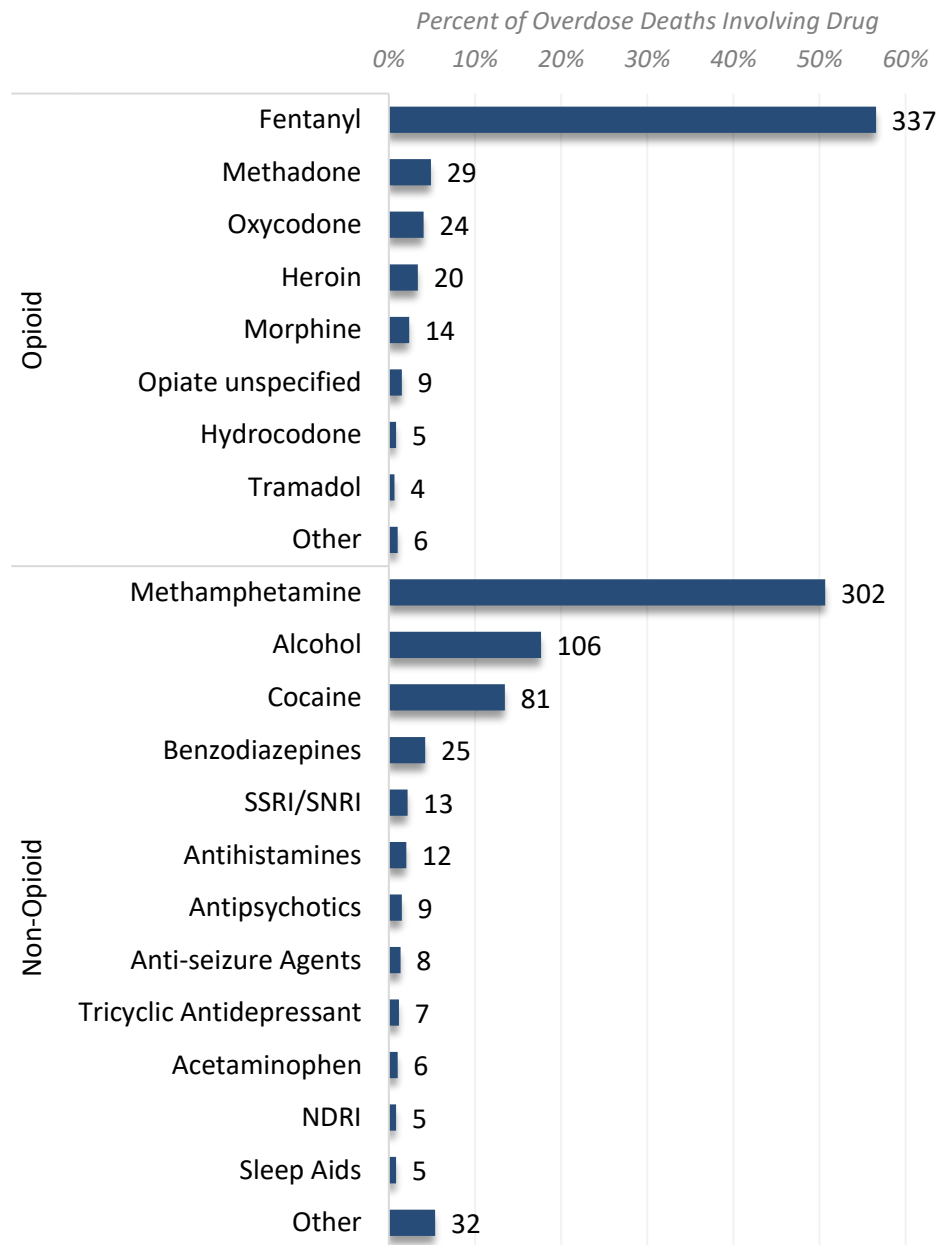
Overdose Deaths involving Select Drugs (All Counties)



A single drug contributed to an overdose death in 258 cases (43%) and a combination of drugs contributed to death in 336 cases (57%). An opioid contributed to death, either as a single drug or as a component of a polydrug overdose, in 397 overdose deaths (67%).

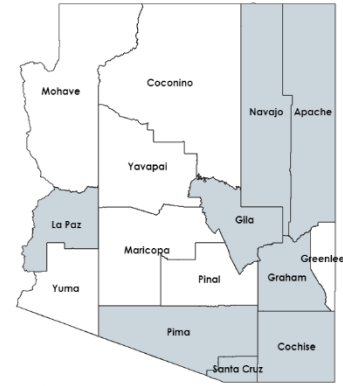
Fentanyl was the most frequently found drug in overdose deaths, contributing to 57% of 2022 overdoses, followed by methamphetamine (51%), alcohol (18%), cocaine (14%), and methadone (5%). An overdose death may involve more than one drug, therefore the sum of drugs contributing exceeds the sum of total overdose deaths for the year.

Frequency of Drugs Contributing to Overdose Deaths (All Counties), 2022

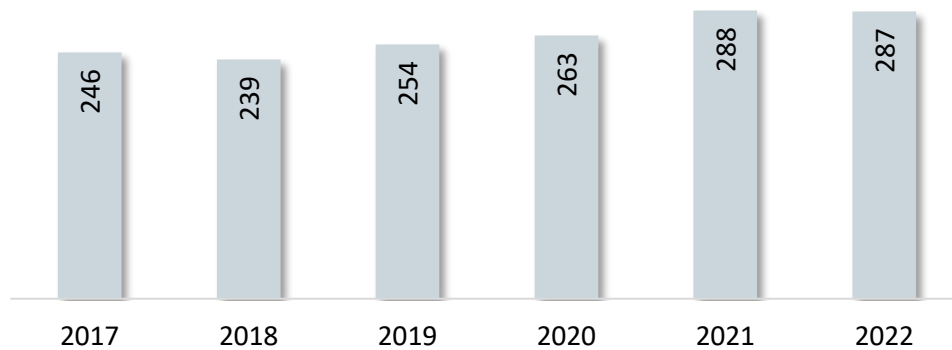


Firearms (All Counties)

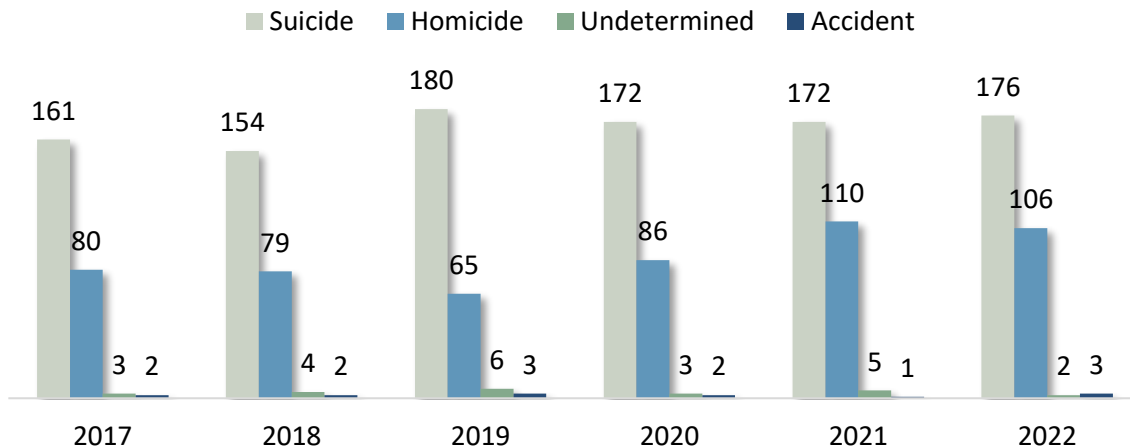
Firearm deaths certified by the PCOME reached a high of 288 in 2021. The following year, nearly the same number of firearm deaths were certified (287). The PCOME investigated and certified firearm deaths from 8 counties in 2022: Pima (226), Cochise (25), Graham (11), La Paz (10), Santa Cruz (7), Gila (4), Apache (2), and Navajo (2) County. More firearm deaths are certified as suicides than any other MOD. In 2022, 61% of the 287 firearm fatalities were suicides, 37% were homicides, 1% were undetermined manner deaths, and 1% were accidents.



Firearm Deaths Certified by the PCOME (All Counties)



Firearm Deaths by MOD (All Counties)

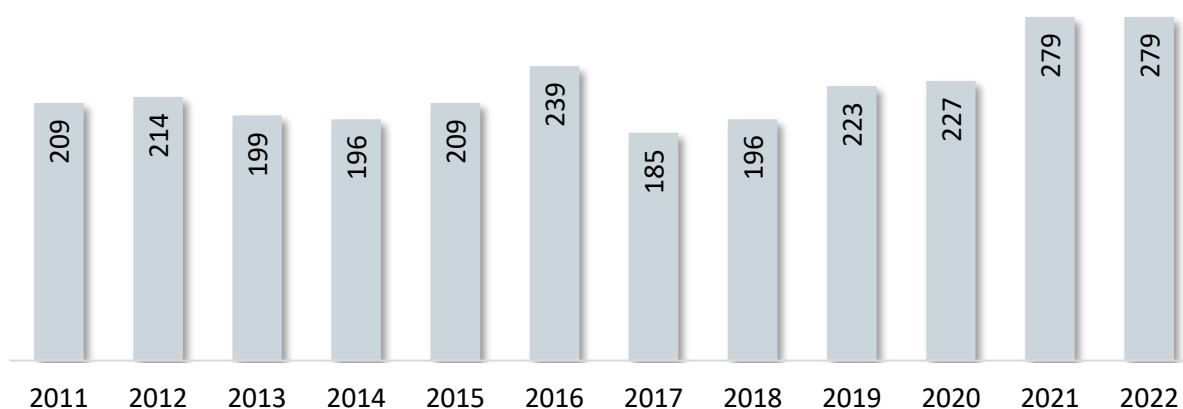


Motor Vehicle-Related (All Counties)

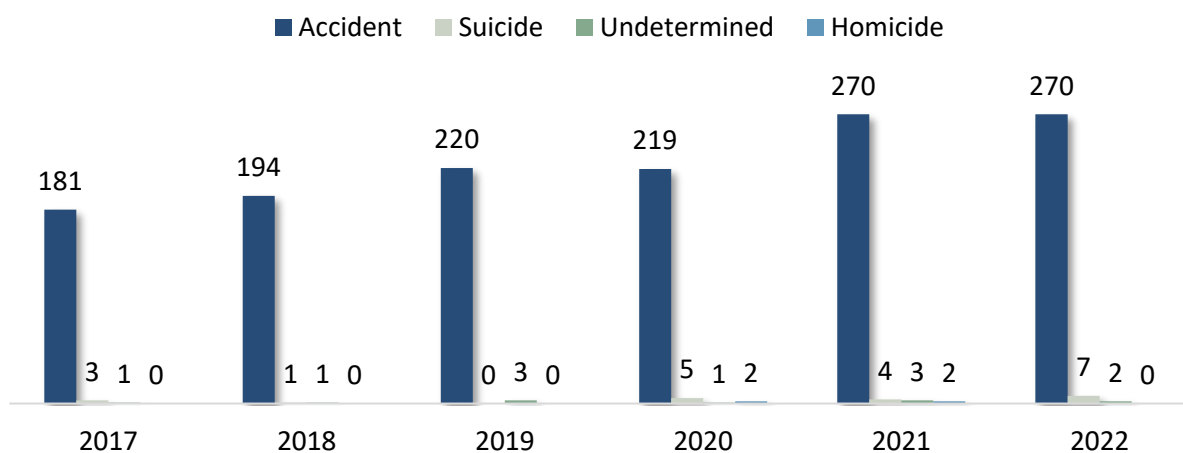
Motor vehicle-related (MV-related) fatalities accounted for 279 total deaths in both 2021 and 2022, the highest number certified by our office to date. The PCOME certified MV-related deaths from 9 counties in 2022: Pima (214), Cochise (26), La Paz (11), Gila (10), Santa Cruz (6), Graham (5), Apache (3), Greenlee (2), and Navajo (2) County. Of these 279 fatalities, most were certified as accidents (97%). Suicides and undetermined manner deaths accounted for 3% and less than 1%, respectively, of all MV-related deaths in 2022.



MV-Related Deaths Certified by the PCOME (All Counties)

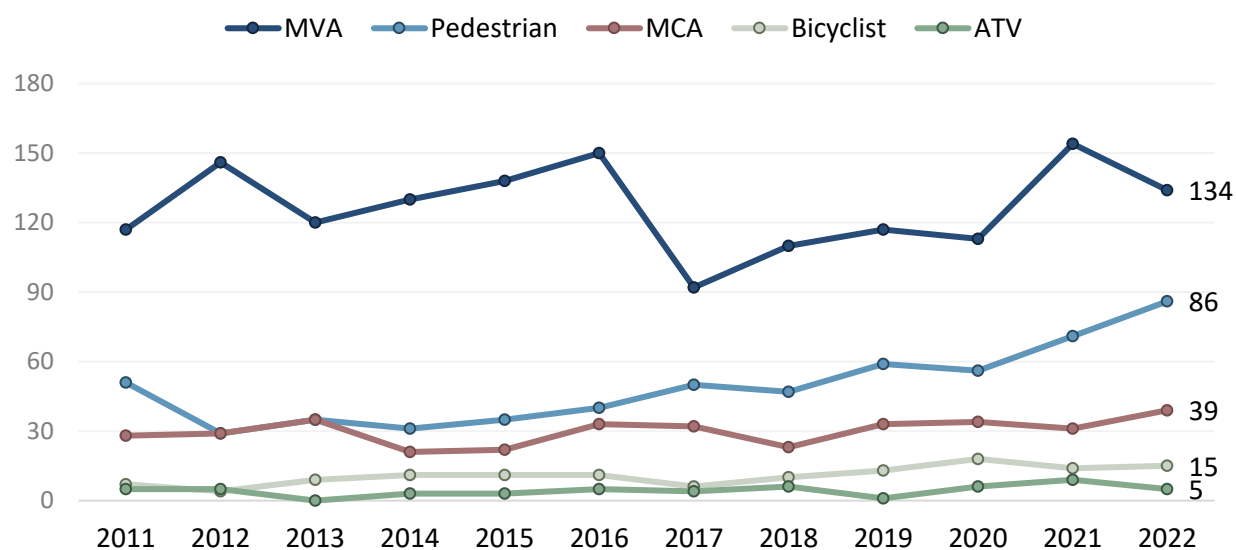


MV-Related Deaths by MOD (All Counties)



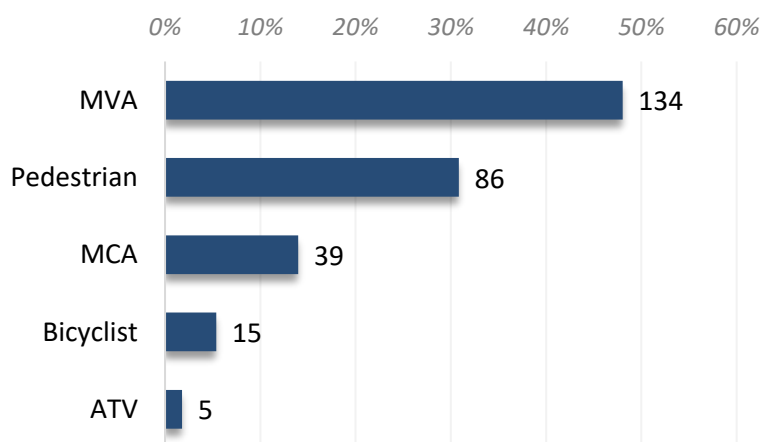
Most MV-related deaths certified by the PCOME are occupants of a motor vehicle (i.e., driver or passenger) involved in an accident (MVA). The second most common MV-related fatality is pedestrians struck by vehicles. Pedestrian deaths have increased in the past two years, from 56 deaths in 2020 to 86 in 2022, a 54% increase. A smaller portion of MV-related deaths consist of motorcycle riders involved in an accident (MCA), bicyclists struck by vehicles, occupants involved in all-terrain vehicle (ATV) accidents, and other types of drivers/riders (e.g., car surfing, horseback rider struck by vehicle, and vehicle struck by a train). Other drivers/riders have been removed from the graph below due to low numbers (1 in 2011, 1 in 2012, and 1 in 2017).

MV-Related Deaths by Incident Type (All Counties)



In 2022, nearly half of decedents involved in MV-related fatalities were occupants of a MVA, 31% were pedestrians, 14% were motorcycle riders, and the remaining 7% were either bicyclists or occupants of an ATV (5% and 2%, respectively).

2022 MV-Related Deaths by Incident Type (All Counties)

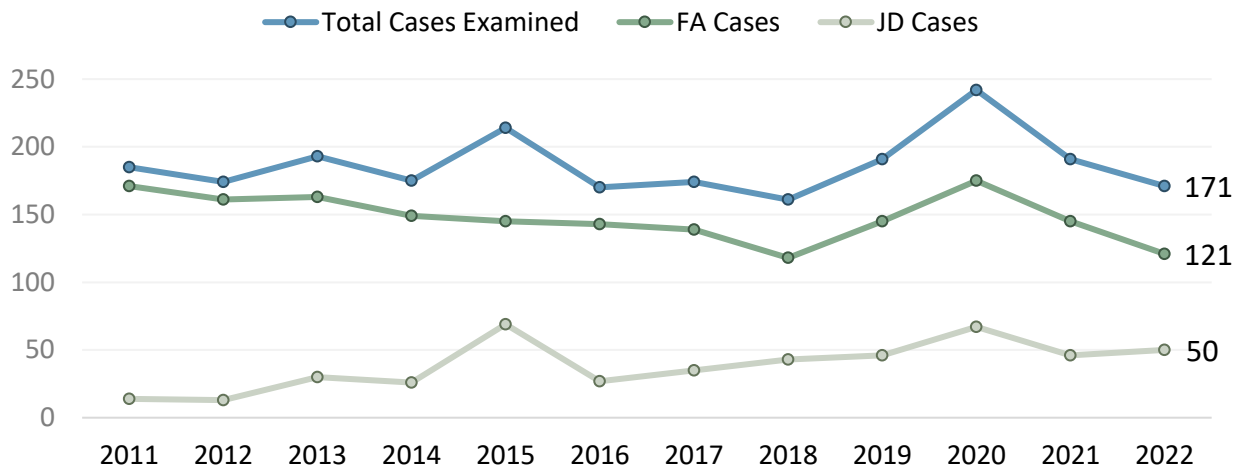


W.H. Birkby Forensic Anthropology Laboratory

The Walter H. Birkby Forensic Anthropology Laboratory, located within the PCOME, conducts forensic anthropological analyses to determine human versus non-human remains, the medicolegal significance of human remains, and positive identifications. In 2022, a total of 171 cases were reported to and examined by PCOME Forensic Anthropologists. Of those, 121 cases were determined to be human remains of forensic significance, classified as Forensic Anthropology (FA) cases. The other 50 cases were deemed non-human, historic, prehistoric, or otherwise not forensically significant (47 non-human and 3 cases of no modern medicolegal significance) and jurisdiction of the remains was declined in those cases (JD cases).

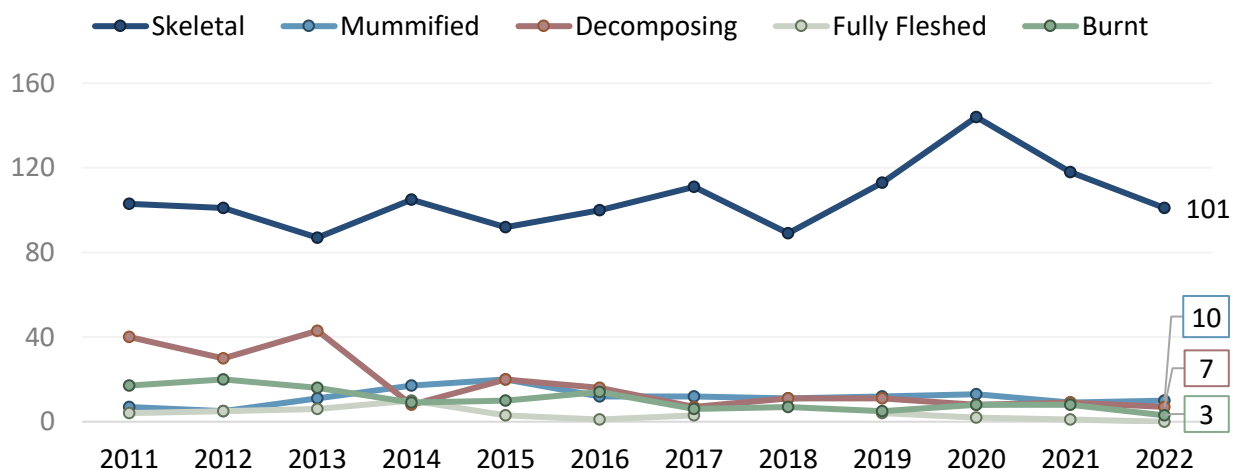


Jurisdictional Disposition of Forensic Anthropology Examinations

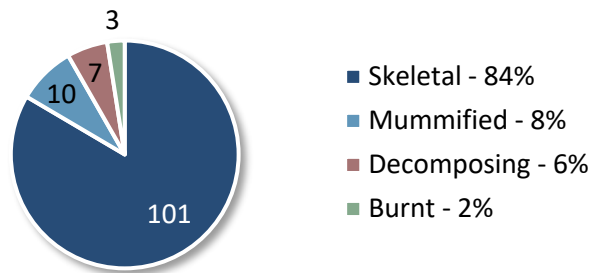


When performing an examination on a FA case, Forensic Anthropologists will describe the extent of postmortem decomposition of a particular set of remains as they were found (“condition of remains”) and if necessary, will clean and prepare the remains for examination. The condition of remains are categorized as skeletal, mummified, decomposing, fully fleshed/minimal decomposition, or burnt. Most FA cases each year are skeletal remains. In 2022, skeletal remains comprised 84% of FA cases.

FA Cases by Condition of Remains



2022 FA Cases by Condition of Remains

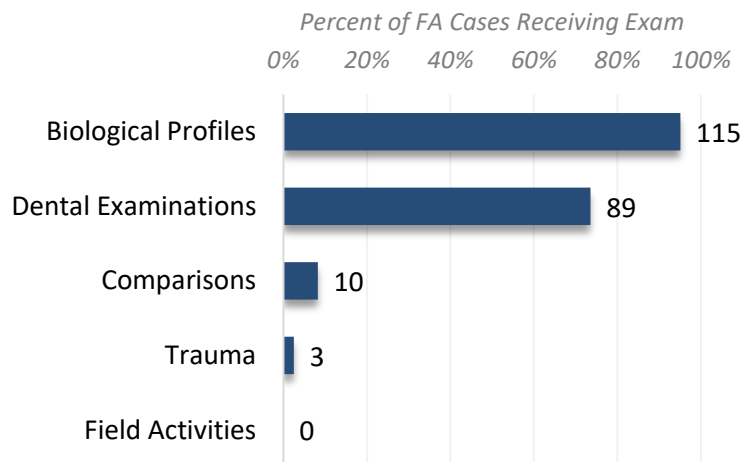


Five main types of forensic anthropological exams are performed on FA cases:

1. **Biological Profile:** Exam to estimate biological information including sex, age, ancestry, stature, and postmortem interval of a set of remains.
2. **Dental Examination:** Entails charting, descriptions, radiographs, and photographs in an effort to preserve dental information.
3. **Trauma Evaluation:** Exam to characterize the nature of an injury, implement(s) used to cause injury to the bone, age of injury, etc.
4. **Comparisons to Antemortem Information:** Evaluation of postmortem distinctive skeletal characteristics and/or dental information to antemortem information for purposes of identification.
5. **Field Activities:** Exhumations or other excursions from the office to assist local law enforcement with the recovery of remains.

It is common for a set of remains to receive more than one type of examination, therefore the sum of exam types in a calendar year does not equal the sum of FA cases. The graph below displays the number of FA exam types performed in 2022 and the ratio of FA cases receiving each type of exam.

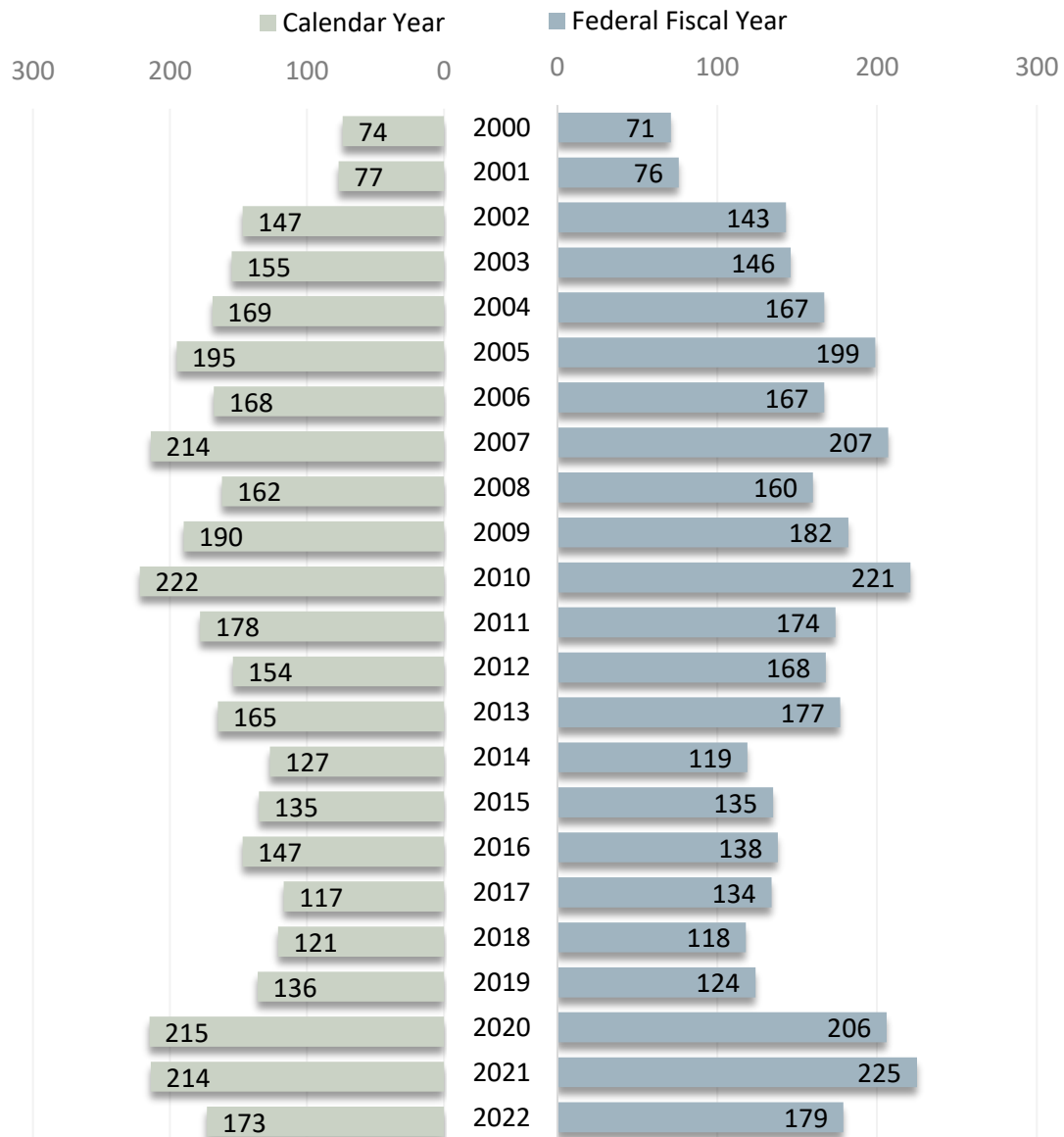
2022 FA Cases by Exam Type



Undocumented Border Crosser Remains

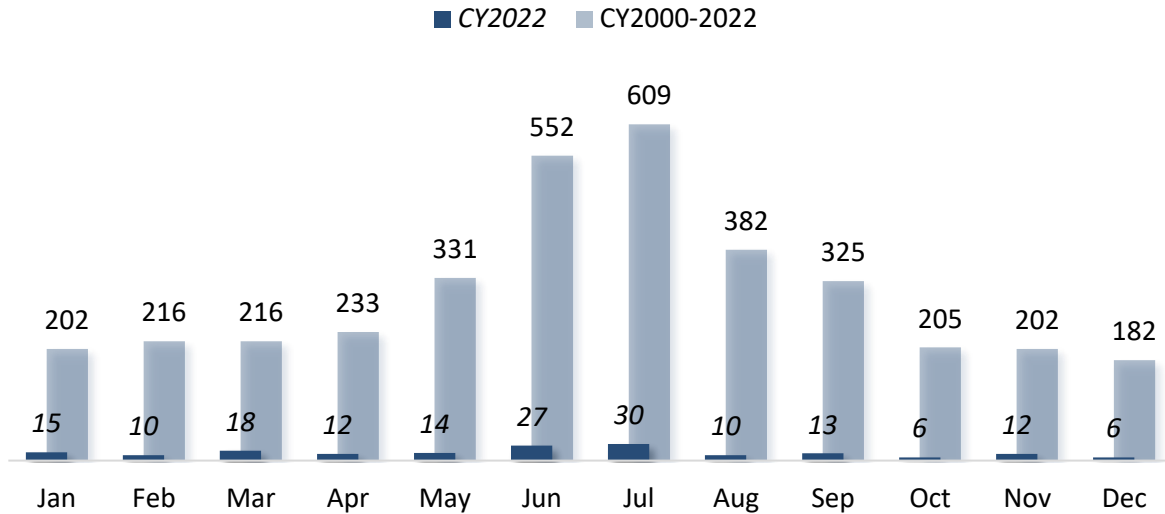
The term 'Undocumented Border Crosser' (UBC) refers to foreign nationals who die attempting to cross the southern Arizona desert without permission from the United States government. Since January 1, 2000, to December 31, 2022, the PCOME has received 3,655 recovered remains of suspected UBCs, averaging 159 recoveries per calendar year (CY). To date, the highest number of UBC recoveries recorded in a CY was in 2010 (222). While there was a decrease in UBC recoveries in CY2022 compared to the two years prior, total recoveries (173) exceed the annual average for the third year in a row. In terms of Federal fiscal years (FY), FY2021 (Oct 1, 2020 – Sept 30, 2021) saw the highest number of UBC recoveries in a FY (225). **The number of UBC recoveries per year are adjusted annually to account for the association of remains found months or years apart, which are later discovered to be remains of the same individual (i.e., subsumed cases).**

**UBC Recoveries by Year
2000 - 2022**



On average, the months of June and July record the highest number of UBC recoveries in a given calendar year. In CY2022, the highest number of recovered UBC remains was in the month of July (30), followed by June (27); combined, these two months represent a third of total UBC recoveries for the year.

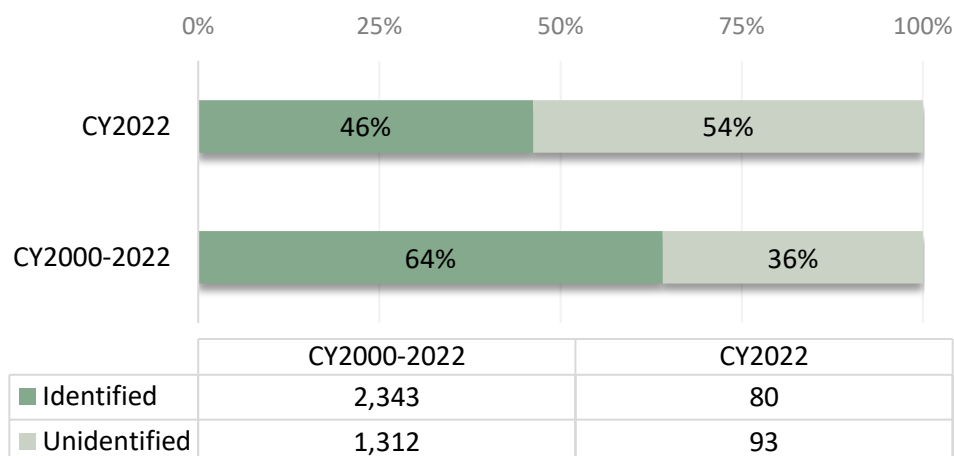
UBC Recoveries by Month



Identification Status

At the time of this report, 46% percent of recovered UBC remains in CY2022 were identified. Of the 3,655 decedents recovered since CY2000, two-thirds have been identified. As of December 31, 2022, 1,312 decedents (36%) remain unidentified.

UBC Recoveries by Identification Status



The table below displays the identification status of UBC recoveries by calendar year and primary method used for identification. The majority of identified UBCs recovered in 2022 were confirmed through fingerprint analysis (80%).

Calendar Year	Identification Status				Method of Identification					
	Total UBCs	Unidentified	Identified	% Identified	Visual	Circumst.	Fingerprint	DNA	Dental	Radiological
2000	74	13	61	82%	20	28	12	1	0	0
2001	77	18	59	77%	22	30	4	3	0	0
2002	147	26	121	82%	68	29	19	3	2	0
2003	155	34	121	78%	46	36	22	16	0	1
2004	169	36	133	79%	51	37	25	16	2	2
2005	195	44	151	77%	56	34	42	18	1	0
2006	168	53	115	68%	51	23	25	16	0	0
2007	214	56	158	74%	71	31	31	20	2	3
2008	162	44	118	73%	57	20	16	24	0	1
2009	190	58	132	69%	68	14	22	27	1	0
2010	222	68	154	69%	63	14	19	56	1	1
2011	178	73	105	59%	21	17	28	39	0	0
2012	154	59	95	62%	21	10	29	32	3	0
2013	165	61	104	63%	31	8	13	49	2	1
2014	127	65	62	49%	12	6	8	36	0	0
2015	135	55	80	59%	13	9	19	38	0	1
2016	147	65	82	56%	12	3	44	23	0	0
2017	117	62	55	47%	5	0	22	27	1	0
2018	121	52	69	57%	7	3	33	26	0	0
2019	136	60	76	56%	4	5	34	33	0	0
2020	215	119	96	45%	10	15	47	23	1	0
2021	214	98	116	54%	6	6	89	12	1	2
2022	173	93	80	46%	4	8	64	2	1	1

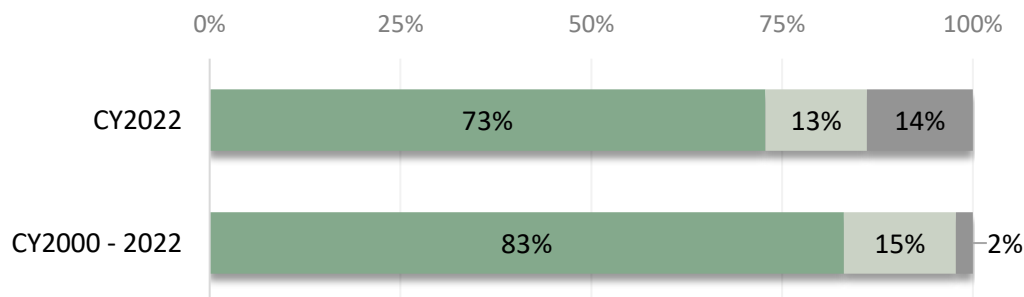
Demographics

The table below displays the age and sex of recovered UBC remains in CY2022 (173 total). Out of 173 cases, 93 decedents remain unidentified and decedent sex was not yet determined in 24 cases. Of the 80 identified decedents in CY2022, the majority were male (83%). The largest proportion of identified decedents were 20-29 years old (36%), followed by decedents in their thirties (30%). For all recovered UBC remains in CY2022, regardless of identification status, males outnumber females at a ratio of 5:1.

Demographics of CY2022 UBC Recoveries by Identification Status
n (%)

Characteristic	Identified (N=80)	Unidentified (N=93)
Sex		
Male	66 (83%)	60 (64%)
Female	14 (17%)	9 (10%)
Unsure	-	24 (26%)
Age		
13-19	6 (7%)	-
20-29	29 (36%)	-
30-39	24 (30%)	-
40-49	18 (23%)	-
50-59	2 (3%)	-
60-69	1 (1%)	-
Unknown	-	93 (100%)

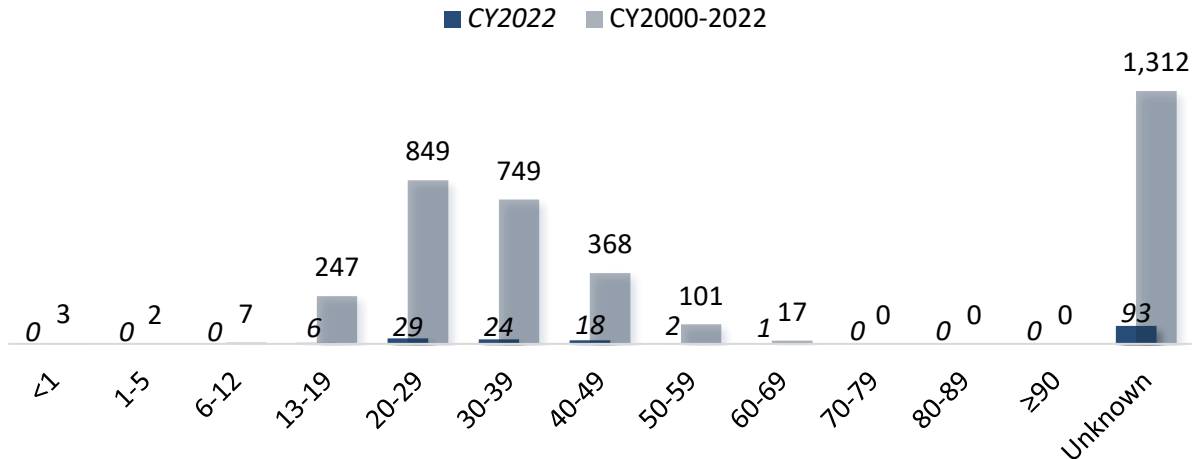
UBC Recoveries by Sex



	CY2000 - 2022	CY2022
Male	3,038	126
Female	536	23
Unsure	81	24

Since CY2000, unidentified decedents (i.e., of unknown age) represent the largest portion of all age groups (36%). Of the 2,343 identified UBCs since CY2000, decedents in their twenties and thirties make up the majority of cases (68%).

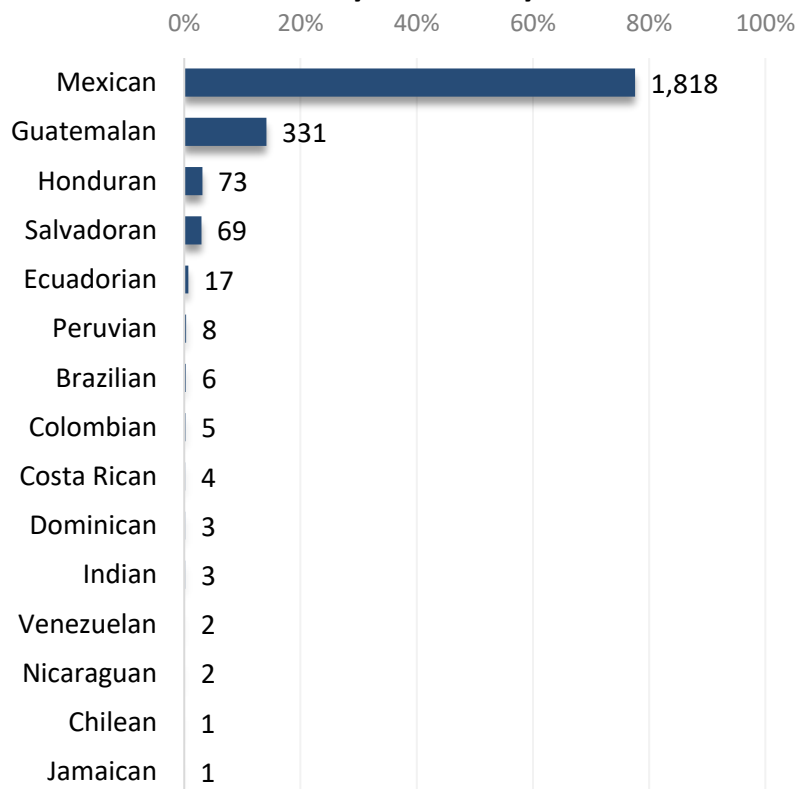
UBC Recoveries by Age Group



Nationality of Identified UBCs

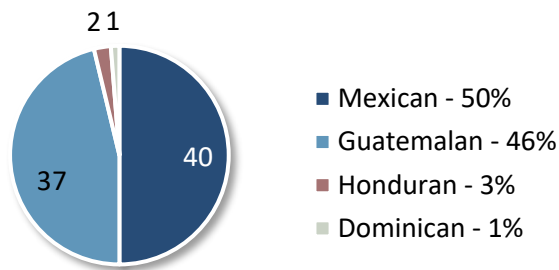
Seventy-eight percent of decedents identified since CY2000 were of Mexican nationality (1,818). Decedents of 14 other nationalities, displayed in the chart below, comprise the other 22% (525).

UBC Recoveries by Nationality, CY2000 - 2022



In CY2022, identified UBCs were largely of Mexican nationality (50%) and Guatemalan nationality (46%).

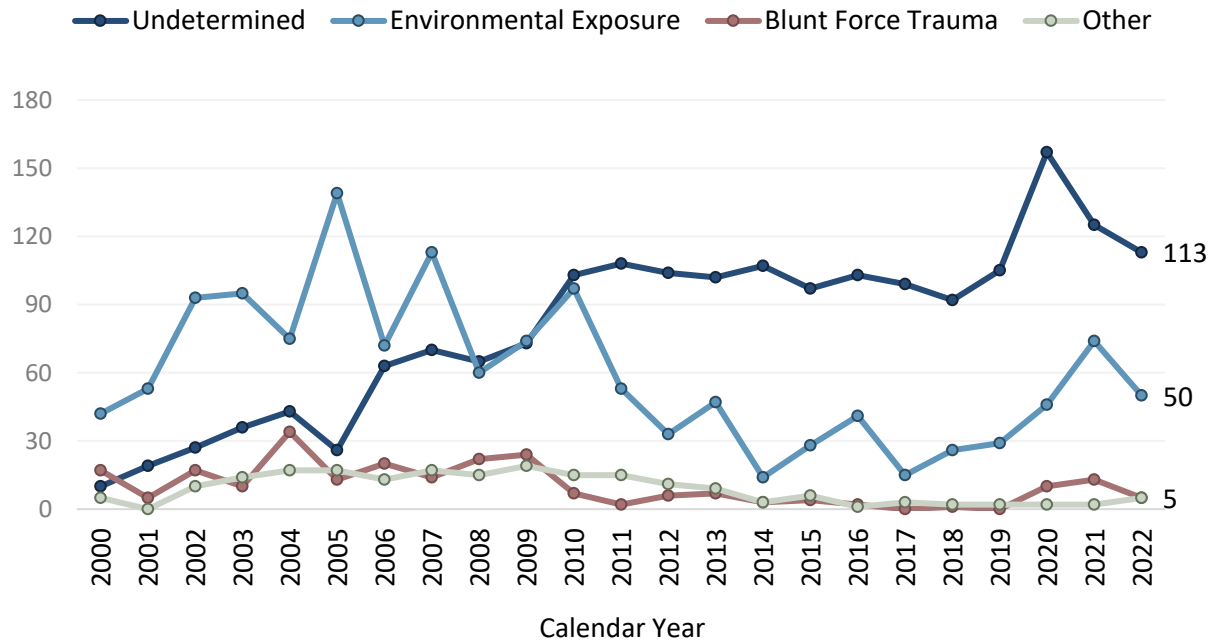
CY2022 Identified UBC Recoveries by Nationality



Manner and Cause of Death

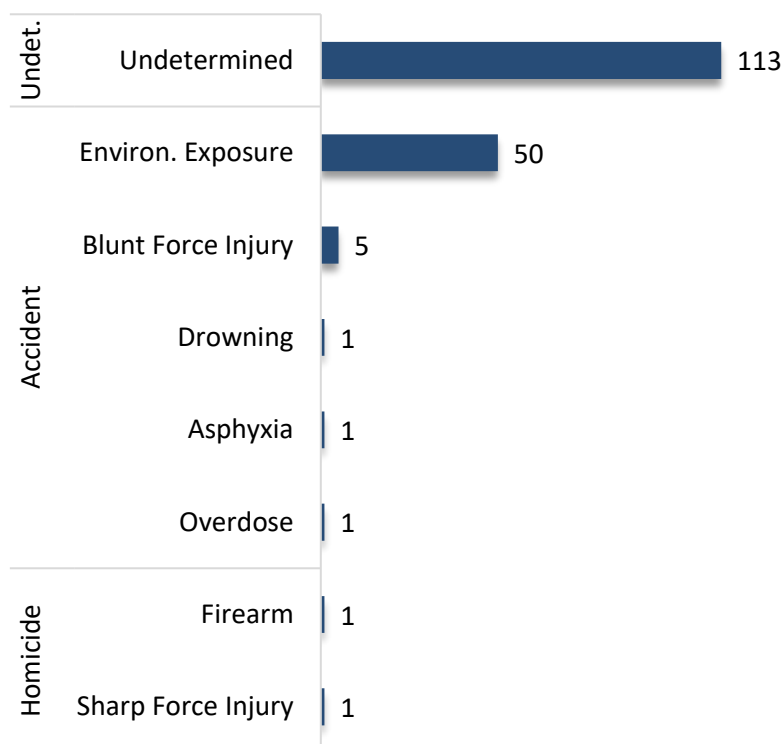
Since CY2010, the most frequent cause of death (COD) in UBC recoveries has been undetermined, followed by environmental exposure. An undetermined cause is primarily due to limitations of the examination of decomposed and skeletal remains. Environmental exposure includes deaths related to extreme heat, cold, or dehydration. Blunt force trauma deaths involve blunt force injuries from falls, motor vehicle accidents, and other transportation-related accidents. Other causes of death outside of these categories are combined in the category of 'other' in the graph below (e.g., overdose, natural causes, firearms, hanging, and drowning).

UBC Recoveries by Cause of Death



In CY2022, 113 UBC deaths were certified with an undetermined manner and cause (65%), 58 deaths were accidents (34%), and two deaths were homicides (1%). Environmental exposure was the predominant cause of accidental deaths (n=50, 86%), with hyperthermia contributing to 46 deaths and hypothermia contributing to four deaths.

CY2022 UBC Recoveries by Manner and Cause of Death



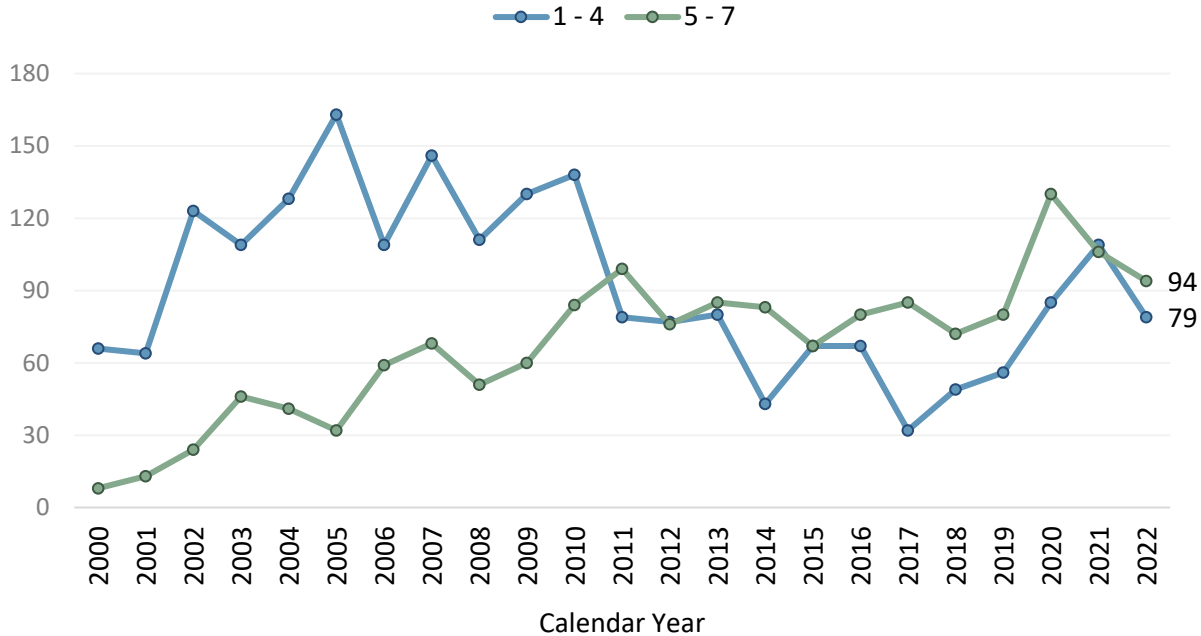
Postmortem Body Condition

Because the exact date and time of death of found remains are often unknown, PCOME staff determine a 'postmortem interval' (PMI), which is an assessment of time elapsed from death to recovery of the remains. A body condition scale comprised of eight categories was developed in 2013 to provide a more objective measure of the PMI. *The PMI is an estimate and therefore subject to error.* The PMI scores (1-8) with respective body condition categories and PMIs are:

1. Fully fleshed (PMI < 1 day)
2. Decomposed (PMI < week)
3. Decomposition with focal skeletonization (PMI < 3 weeks)
4. Mummification with skeletonization (PMI < 5 weeks)
5. Skeletonization with articulation/ligamentous attachments (PMI < 3 months)
6. Complete skeletonization with disarticulation (PMI < 6-8 months)
7. Complete skeletonization with bone degradation (PMI > 6-8 months)
8. Other

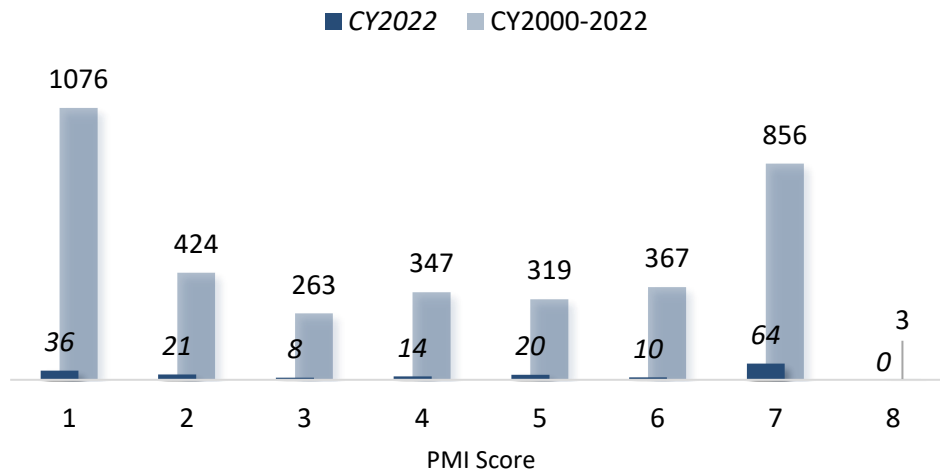
PMI scores 1-4 represent not fully skeletal remains with a likely PMI \leq 3 months. PMI scores 5-7 represent fully skeletal remains with a likely PMI \geq 3 months. Since 2011, the majority of recovered UBC remains per year have an estimated PMI \geq 3 months, with the exception of 2012, 2015, and 2021.

Pooled Body Conditions of Recovered UBC Remains



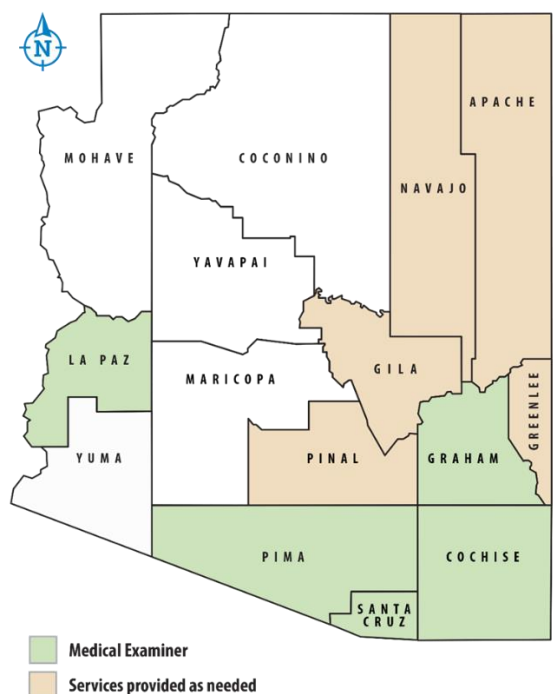
In CY2022, over half of recovered remains (54%) had an estimated PMI \geq 3 months (PMI scores 5-7). A quarter of remains were estimated to be found within a few days up to less than five weeks from death (PMI scores 2-4). Remains estimated to be found within one day of death (PMI score 1) represent 21% of total recoveries for the calendar year.

Recovered UBC Remains by Body Condition



DEATHS BY COUNTY: MEDICAL EXAMINER COUNTIES

Medical Examiner Counties are those counties which the PCOME serves as the appointed Medical Examiner (i.e., Pima, Cochise, Graham, La Paz, and Santa Cruz County).

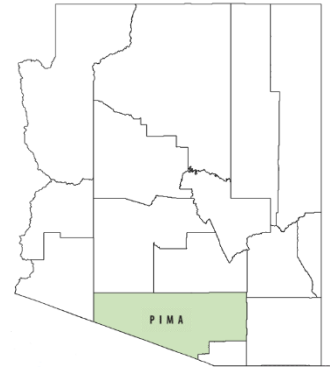


Cochise, Graham, and La Paz Counties contract with the PCOME to certify deaths that fall under the jurisdiction of the medical examiner in their respective County. They do not maintain an in-county Medical Examiner's office to conduct death scene investigations, transport remains, or triage deaths reportable to the medical examiner. These Counties provide third party transportation services, local law enforcement death scene investigation, and archival support for examinations that occurred prior to their contract date. The PCOME works closely with each County's law enforcement agencies, public fiduciary office, and funeral homes to facilitate investigations, disposition of remains, and transportation, respectively. The PCOME is available as needed with mass fatality planning, fatality review panels, or other medical examiner related issues in these Counties.

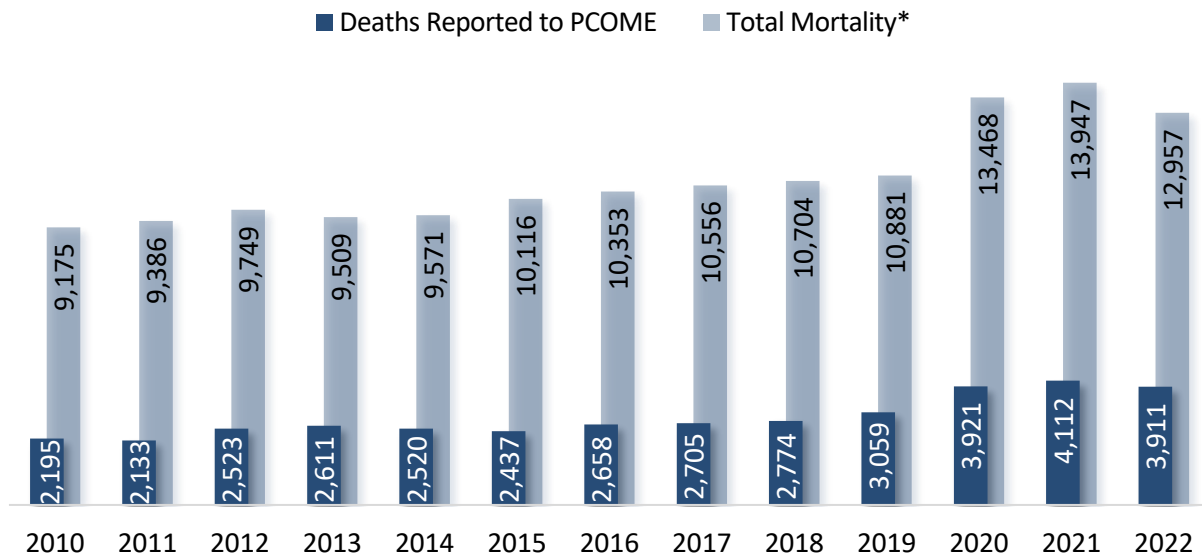
Santa Cruz County does not maintain an in-county Medical Examiner's office to conduct death scene investigations, transport or examine remains, or certify deaths reportable to the medical examiner. Nor does Santa Cruz County appoint or contract with an Alternate Medical Examiner (AME). The PCOME acts as the de-facto appointed ME for Santa Cruz County. When deaths occur in Santa Cruz County pursuant to A.R.S. §11-593, Santa Cruz County law enforcement agencies investigate the circumstances of the death and notify the PCOME as necessary.

Pima County

In 2022, there were 12,957 total registered deaths in Pima County (residents and non-residents); of these, 3,911 deaths (30%) were reported to the office for investigation. The PCOME accepted jurisdiction of 54% of deaths reported (2,109 cases), representing 16% of Pima County total mortality. Six cases were reported to the PCOME for anthropologic or pathologic examination only, without certification of the death by the PCOME (these are not included in the jurisdictional disposition graph below).

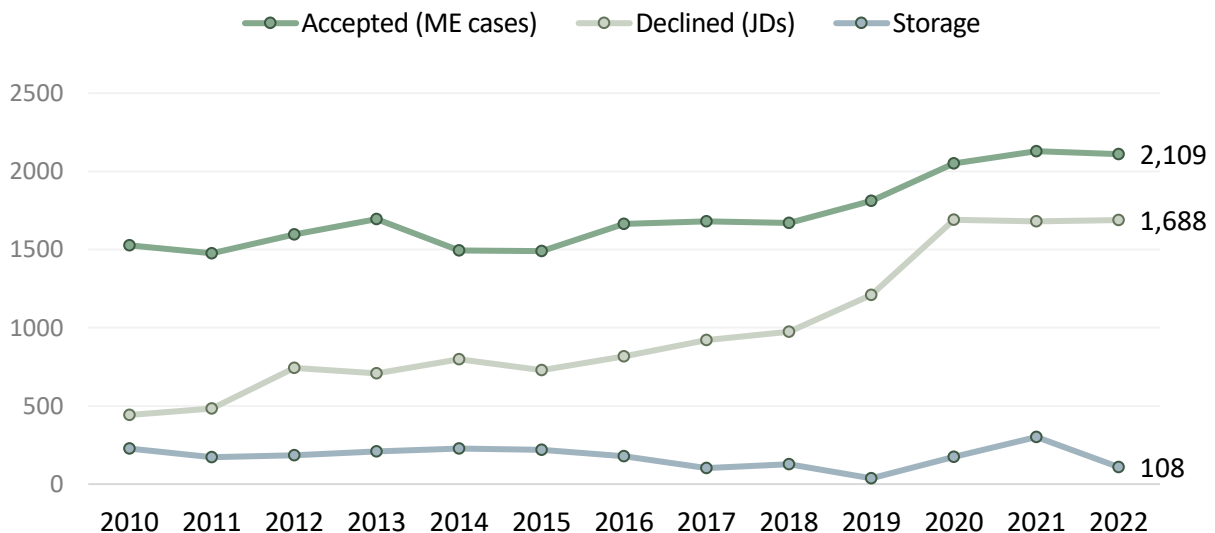


Pima County Total Mortality and Reported Deaths



*Pima County total mortality data from the Arizona Department of Health Services as of 3/21/2023

Jurisdictional Disposition of Pima County Reported Deaths

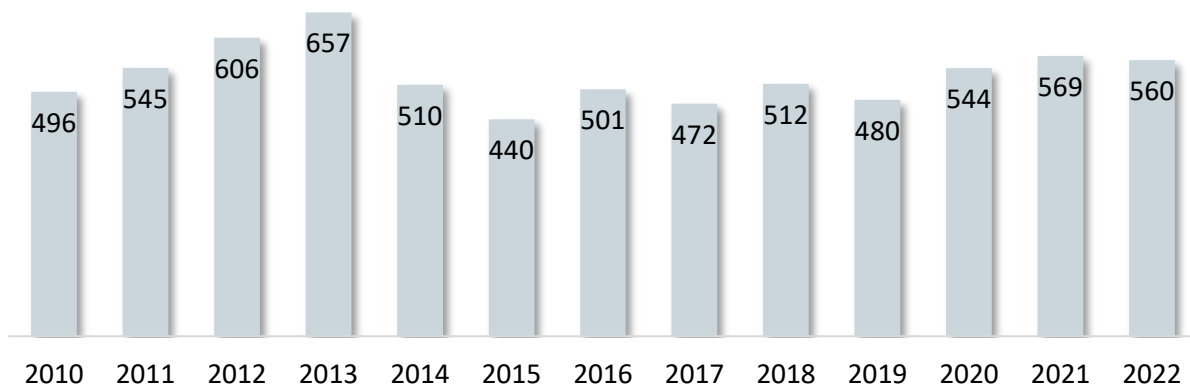


Natural Deaths

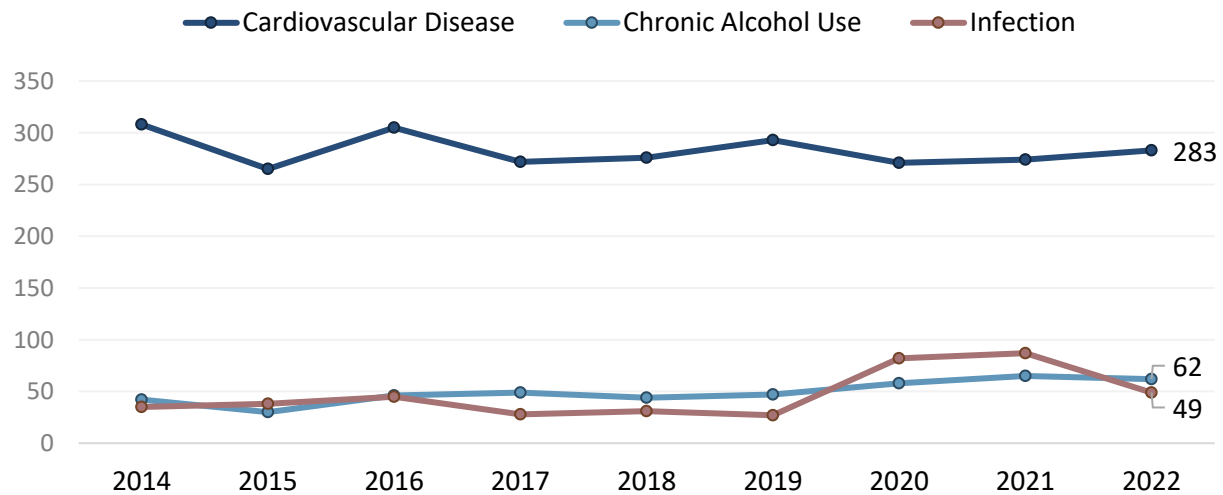
Natural death data in this report is limited to deaths certified by the PCOME (ME cases) and does not reflect the total number of natural deaths in Pima County. Most natural deaths that occur in a county do not fall under the jurisdiction of a medical examiner and instead, are certified by a decedent's healthcare provider. The PCOME accepts jurisdiction of cases that appear to be natural deaths if the decedent is not in the care of a healthcare provider, dies while in custody, is unidentified, and/or a previously healthy individual dies suddenly/unexpectedly, as determined by the PCOME. Natural death data should be interpreted with caution as the PCOME is not aware of the number of natural deaths certified by physicians in the community.

A total of 560 Pima County deaths were certified as natural by the PCOME in 2022 (27% of Pima County ME cases). Each year, around 50-60% of PCOME-certified natural deaths are due to cardiovascular disease.

Pima County Natural Deaths Certified by the PCOME



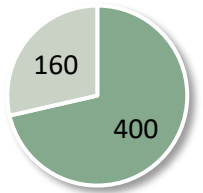
Pima County Natural Deaths by Cause of Death (Top 3)



Male decedents comprised 71% of Pima County natural deaths certified by the PCOME. Decedents age 60-to-69 years old accounted for the largest portion of natural deaths of any age group (28%). Non-Hispanic Whites made up the largest percentage of deaths among all racial groups (65%). Cardiovascular disease was the most common cause of death (51%), followed by chronic alcohol use (11%), and infection (9%).

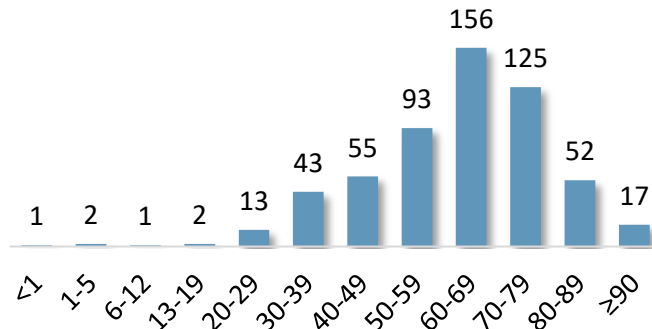
2022 Pima County Natural Deaths (ME Cases Only)

Decedent Sex

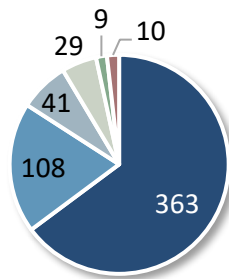


■ Male - 71%
■ Female - 29%

Decedent Age Group

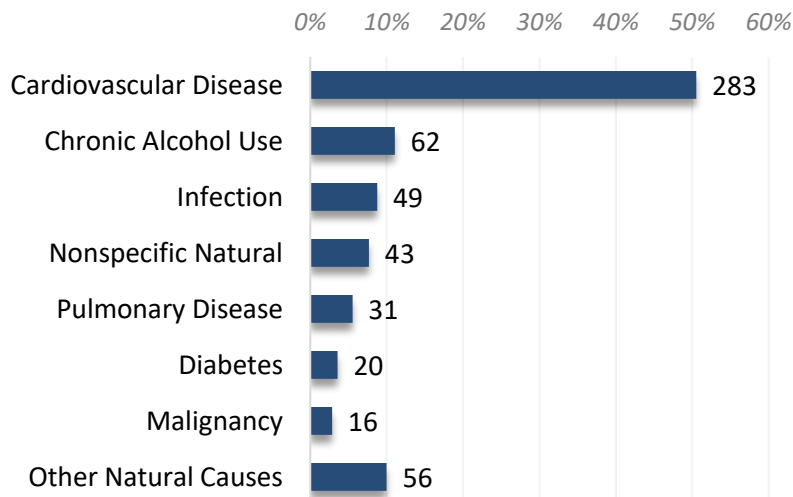


Decedent Race/Ethnicity



■ White - 65%
■ Hispanic - 19%
■ Black/African American - 7%
■ American Indian/Alaska Native - 5%
■ Asian/Pacific Islander - 2%
■ Unknown - 2%

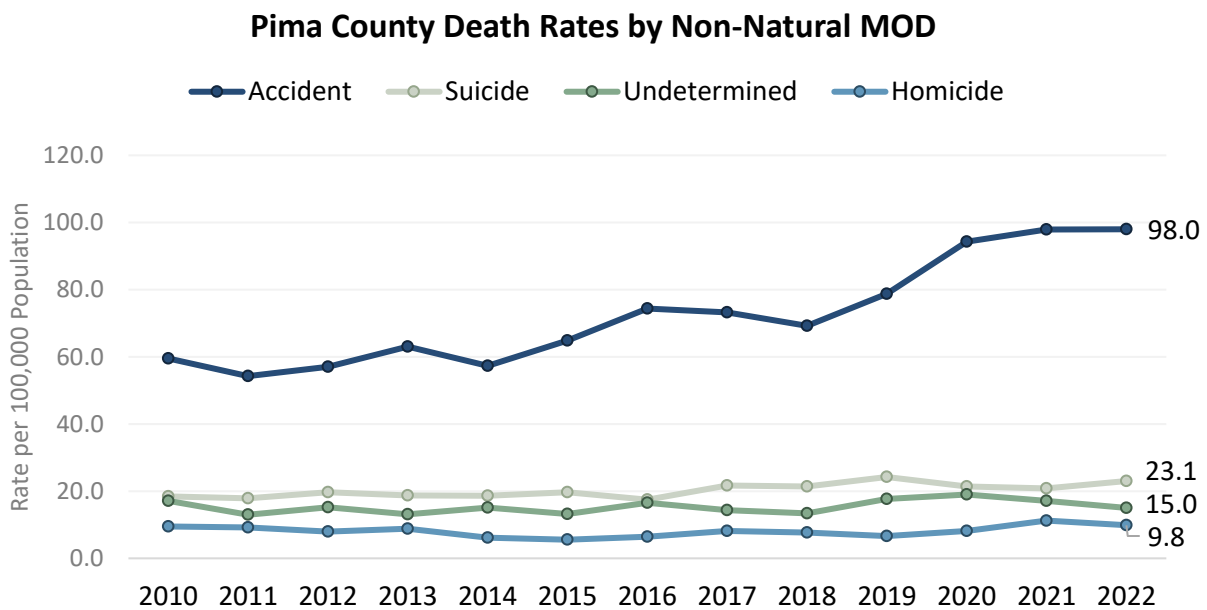
Cause of Death



Non-Natural Manner Deaths

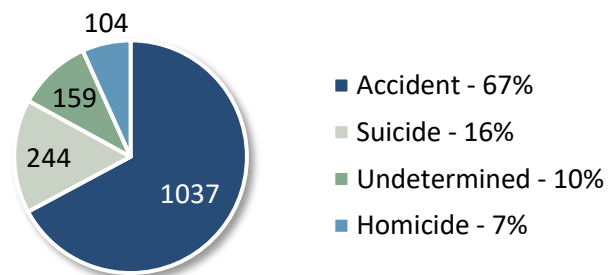
Non-natural manner of death (MOD) classifications include accident, homicide, suicide, and undetermined. The graph below displays Pima County crude death rates by non-natural MOD from 2010 to 2022. Pima County MOD rates presented below are a ratio of the number of deaths that occurred in Pima County for each MOD category regardless of the decedent's county of residence, relative to the population size of Pima County that year. At the time this report was written, Arizona Department of Health Services (ADHS) had not yet released Pima County population statistics for 2022. Therefore, **2022 death rates were calculated using 2021 population size and are subject to change.**

Over the past decade, the accident death rate in Pima County has gradually risen, reaching a high of 98.0 deaths per 100,000 persons in 2022. Homicide and undetermined manner death rates both decreased from 2021 to 2022 (by 13% and 12%, respectively). In contrast, the suicide rate in 2022 increased from the prior year (by 11%), after being on a downward trend between 2019 and 2021.



In total, the PCOME certified 1,544 deaths in Pima County with a non-natural manner in 2022. Accident deaths made up the largest proportion (67%). Data on each MOD is presented in greater detail in the next four sections.

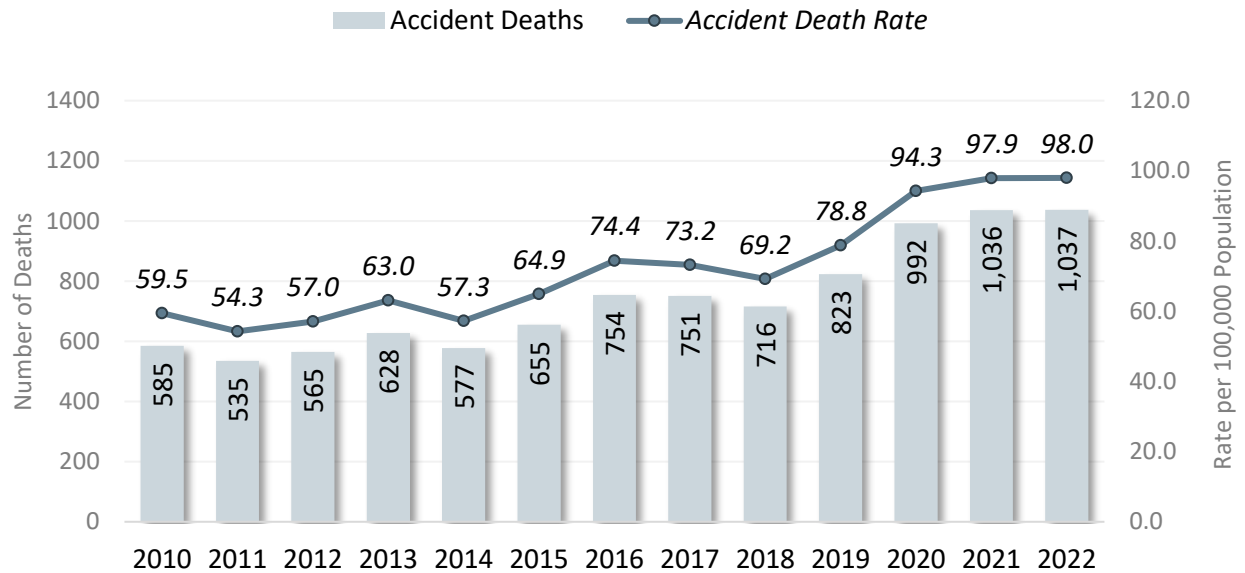
2022 Pima County Non-Natural Manner Deaths



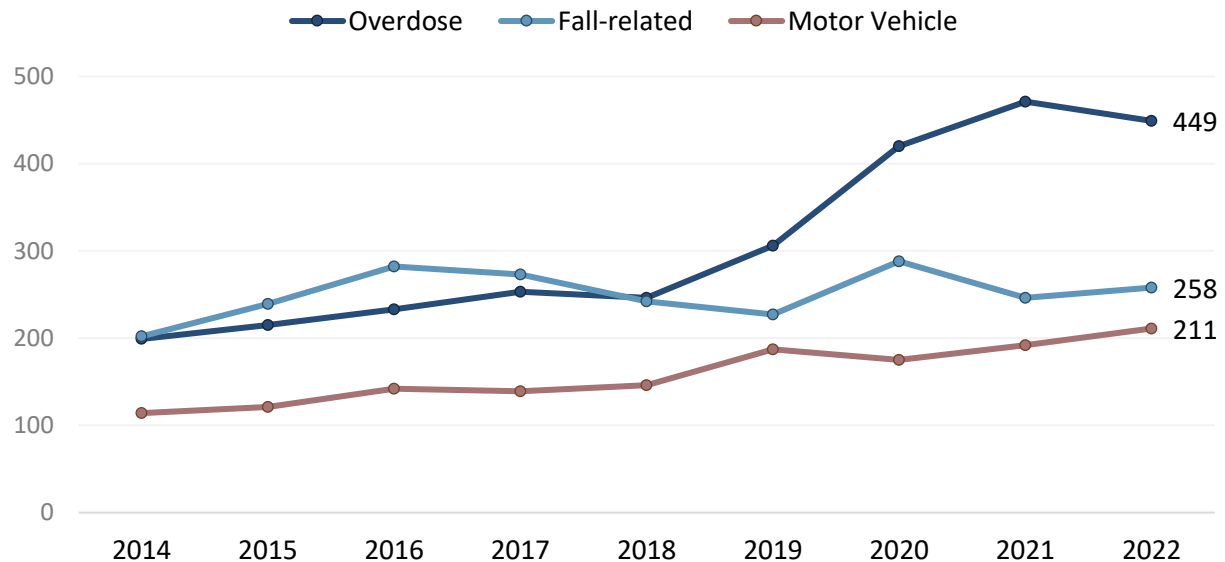
Accident

Pima County deaths certified as accidents totaled 1,037 in 2022, nearly identical to the year before. Overdose is the leading cause of accident deaths in Pima County for the fifth year in a row. Since 2018, fall-related deaths have been the second most frequent cause of accident deaths in Pima County. Injuries from motor vehicle-related accidents are the third most common cause of Pima County accident deaths.

Number and Rate of Accident Deaths in Pima County



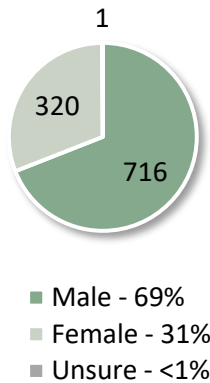
Pima County Accident Deaths by Cause of Death (Top 3)



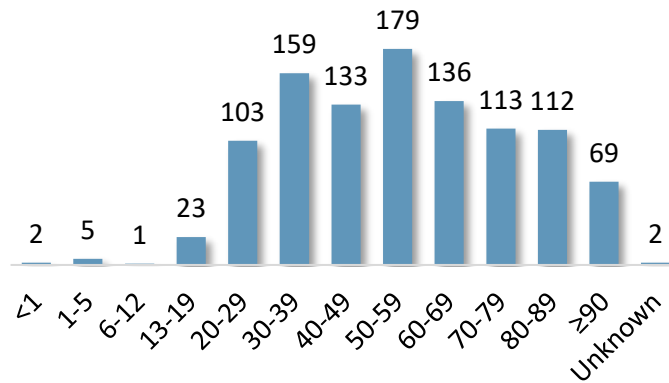
Male decedents comprised 69% of Pima County accident deaths in 2022. Decedents age 50-to-59 years old accounted for the largest portion of accident deaths of any age group (17%). Non-Hispanic Whites made up the largest percentage of deaths among all racial groups (65%). Overdose was the most common cause of death (43%), followed by blunt force injuries (25%), and motor vehicle-related injuries (20%).

2022 Pima County Accident Deaths

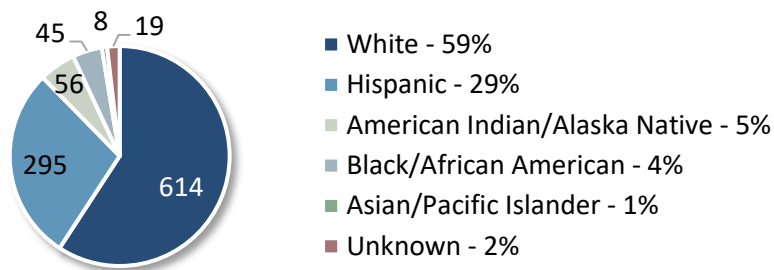
Decedent Sex



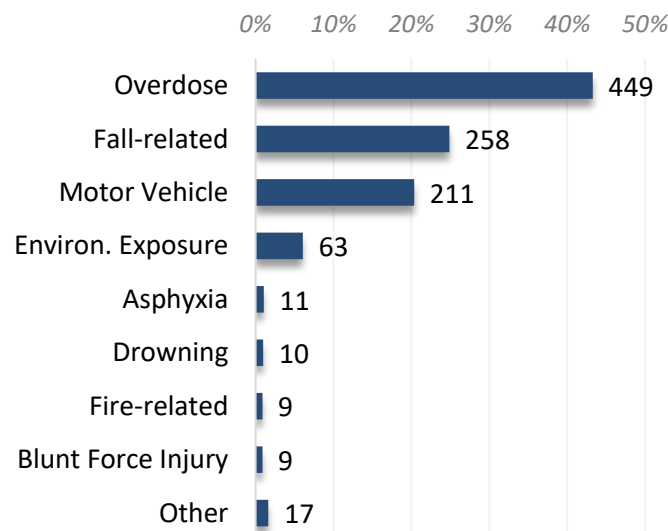
Decedent Age Group



Decedent Race/Ethnicity



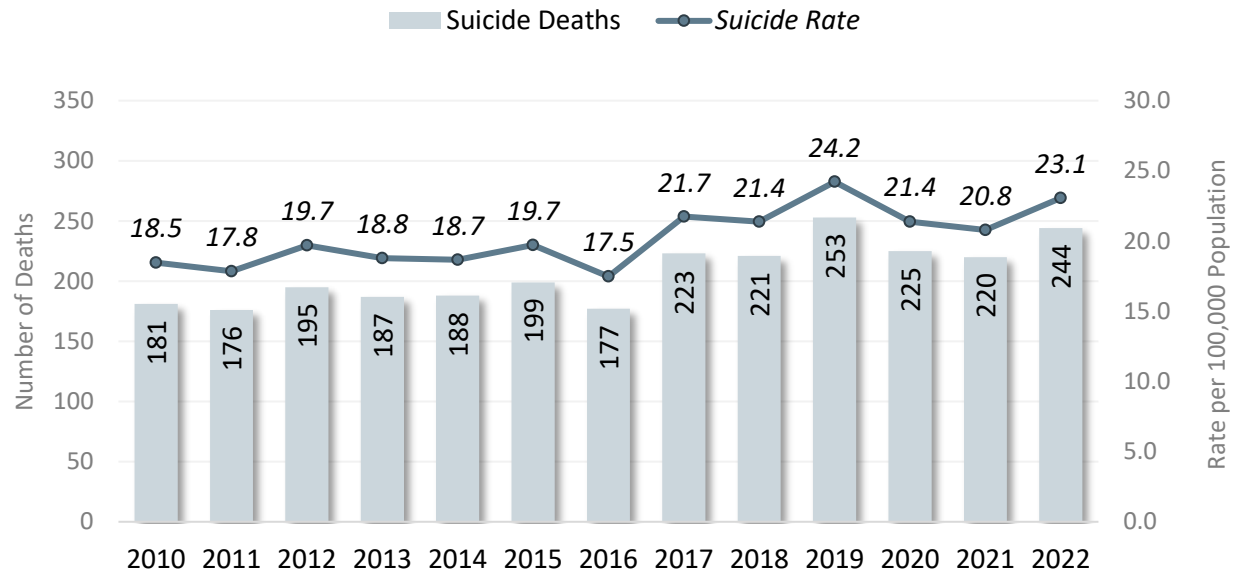
Cause of Death



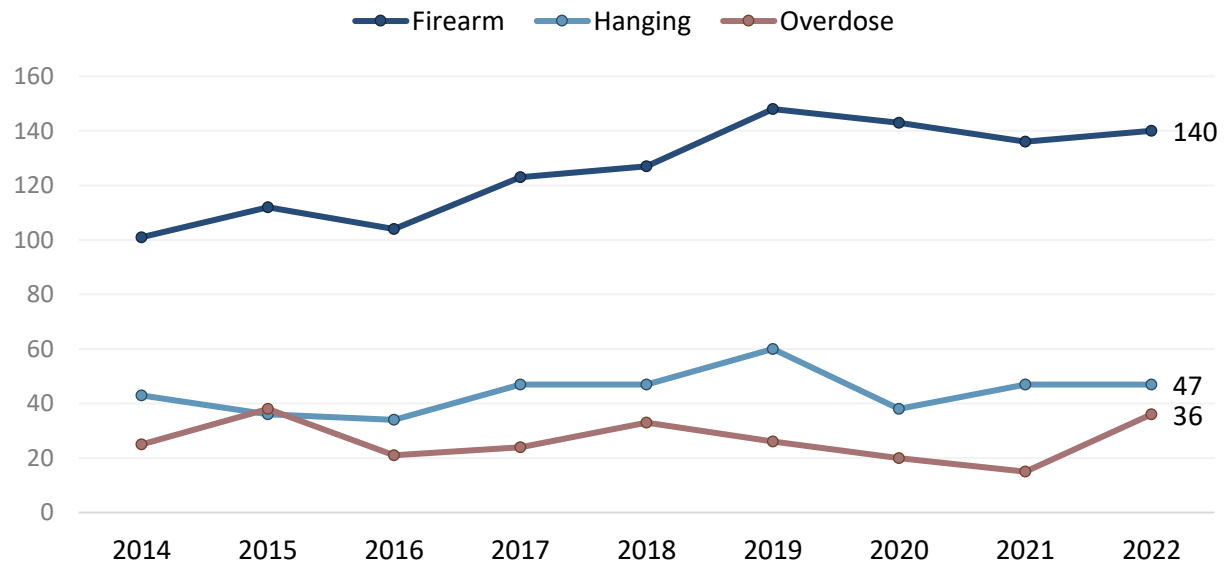
Suicide

Pima County deaths certified as suicides totaled 244 in 2022, an 11% increase from the year prior. Firearms continue to be the most common means of Pima County suicide deaths. Between 2018 and 2021, suicides by overdose gradually decreased, reaching a low of 15 deaths in 2021. However, in 2022, suicides by overdose more than doubled that of the previous year.

Number and Rate of Suicides in Pima County



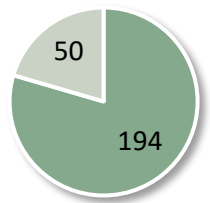
Pima County Suicides by Cause of Death (Top 3)



Individuals who died by suicide in Pima County in 2022 were most frequently male (80%); between 20-29 years of age (18%); and non-Hispanic White (71%). In 2022, the number of suicides by firearm (140) was three times higher than suicides by hanging (47) and nearly four times the number of suicides by overdose (36).

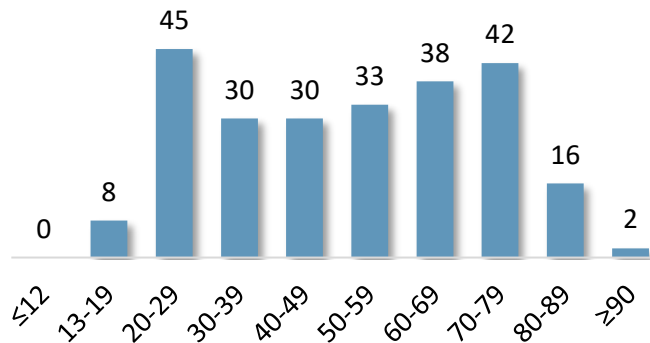
2022 Pima County Suicides

Decedent Sex

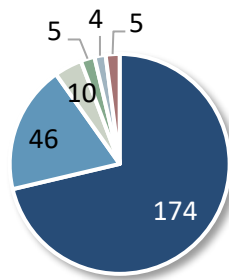


■ Male - 80%
■ Female - 20%

Decedent Age Group

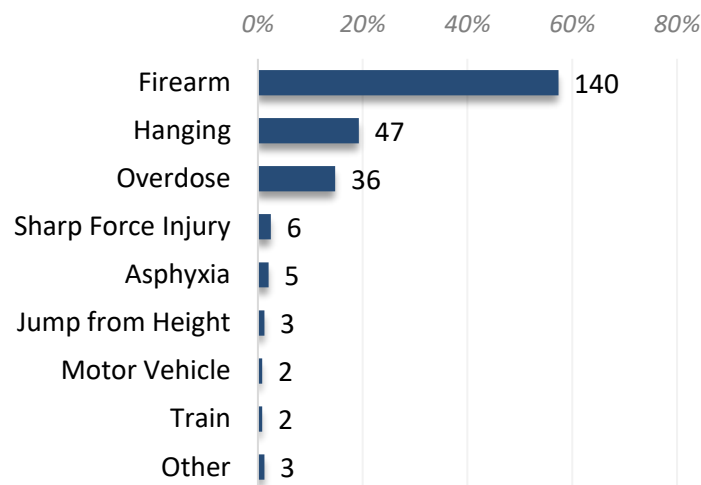


Decedent Race/Ethnicity



■ White - 71%
■ Hispanic - 19%
■ American Indian/Alaska Native - 4%
■ Asian/Pacific Islander - 2%
■ Black/African American - 2%
■ Unknown - 2%

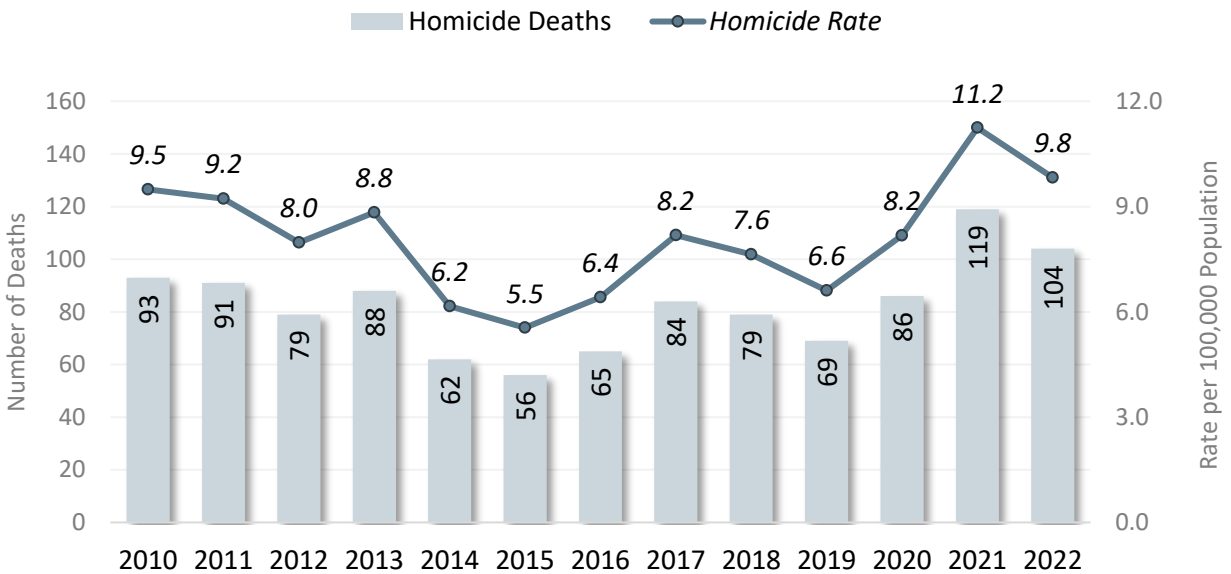
Cause of Death



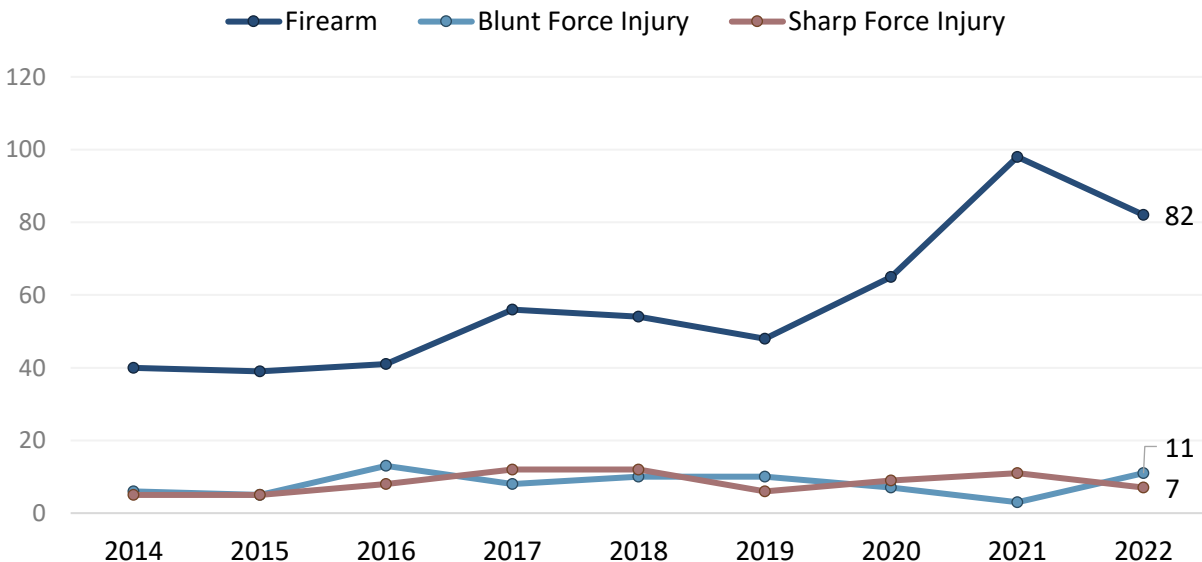
Homicide

A total of 104 deaths from Pima County were certified as homicides in 2022, down 13% from the previous year's record high (119). Most homicide deaths in Pima County each year are a result of firearms. The number and portion of firearm homicides has gradually increased from 2014 to 2021, dropping slightly in 2022. Meanwhile, other causes of homicide deaths remain relatively unchanged (e.g., sharp force injury and blunt force injury).

Number and Rate of Homicides in Pima County



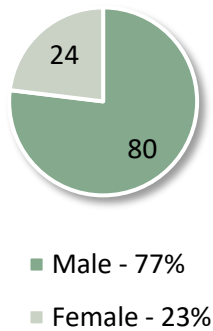
Pima County Homicides by Cause of Death (Top 3)



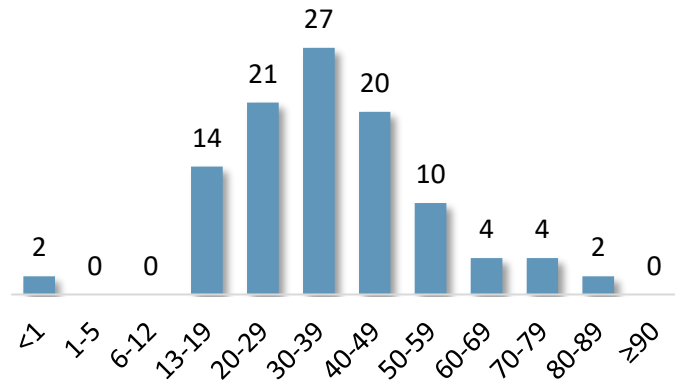
Individuals who died by homicide in Pima County in 2022 were most frequently male (77%); between 30-39 years of age (26%); and Hispanic (38%). Seventy-nine percent of homicide deaths were a result of firearms. The other 21% of deaths resulted from blunt force injuries (11%), sharp force injuries (7%), physical altercation (1%), strangulation (1%), poisoning (1%), and an undetermined cause (1%).

2022 Pima County Homicides

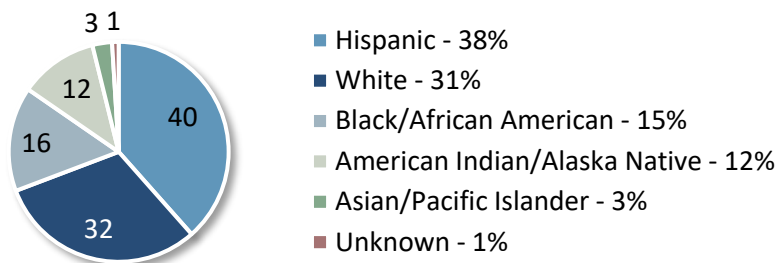
Decedent Sex



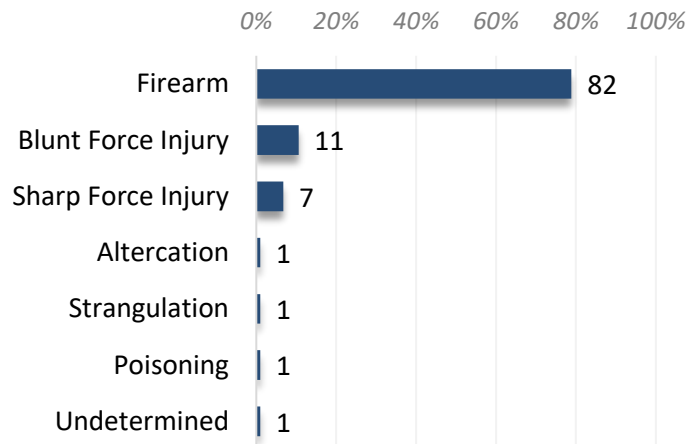
Decedent Age Group



Decedent Race/Ethnicity



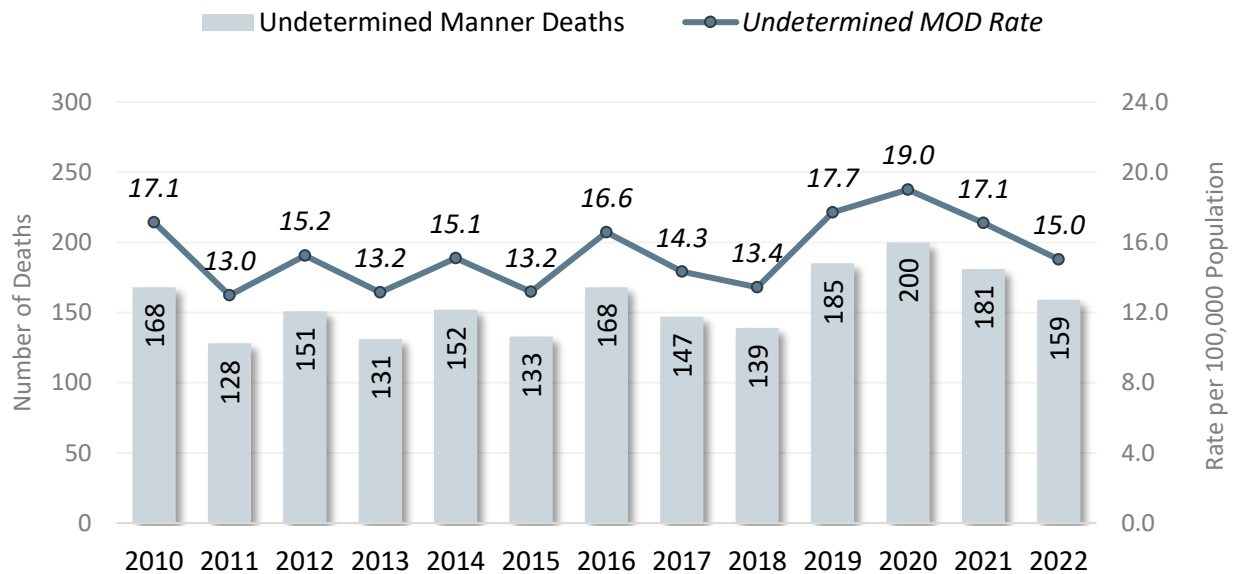
Cause of Death



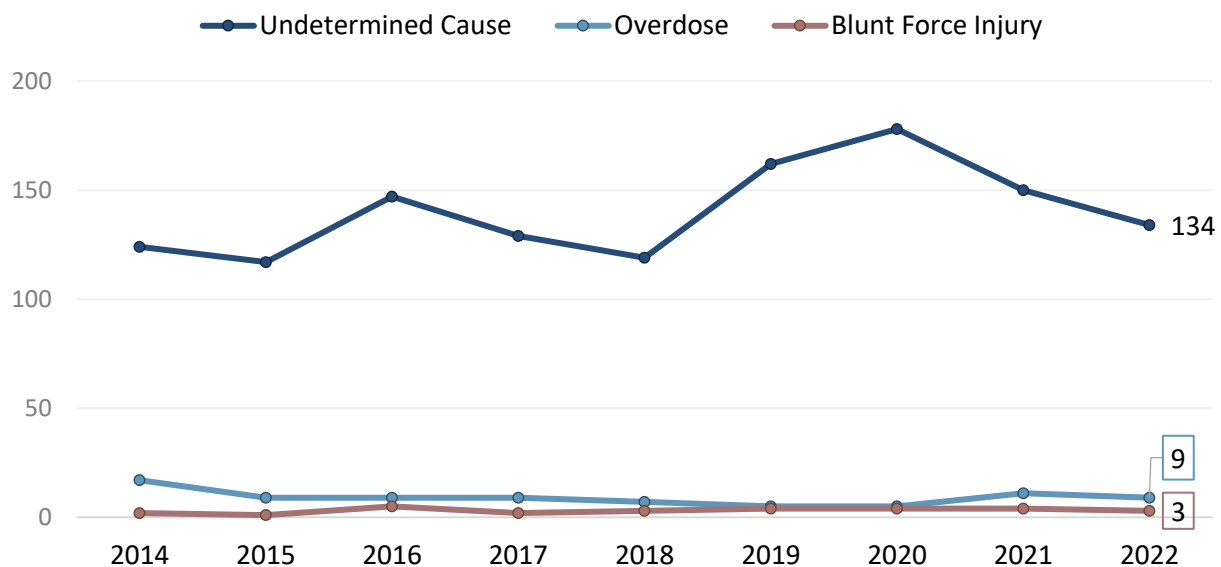
Undetermined

In a small number of cases each year, the manner of death is certified as undetermined. Pima County deaths certified by the PCOME with an undetermined manner totaled 159 in 2021. Undetermined manner deaths certified by the PCOME are most frequently certified with an undetermined cause, mainly due to exam limitations of decomposed/skeletal remains. Of the 134 cases with an undetermined manner and cause in 2022, 100 (75%) were decomposed or skeletal remains.

Number and Rate of Undetermined Manner Deaths in Pima County



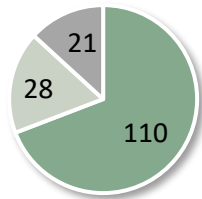
Pima County Undetermined Manner Deaths by Cause (Top 3)



Male decedents comprised 69% of Pima County undetermined manner deaths in 2022. A total of 85 decedents with an undetermined MOD remain unidentified at the time of reporting. As a result, decedents with an unknown age represent the largest portion of undetermined manner deaths of any age group (53%). Similarly, decedents with an unknown race/ethnicity made up the largest percentage of deaths among racial groups (55%). An undetermined cause of death was most common (84%).

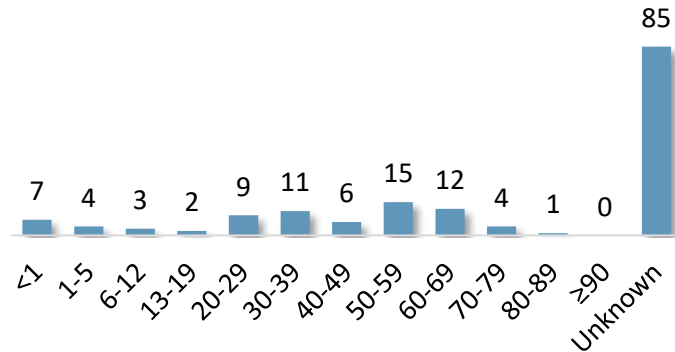
2022 Pima County Undetermined Manner Deaths

Decedent Sex

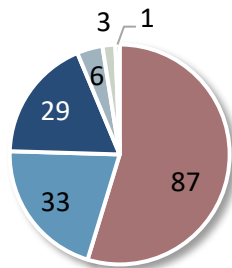


■ Male - 69%
■ Female - 18%
■ Unsure - 13%

Decedent Age Group

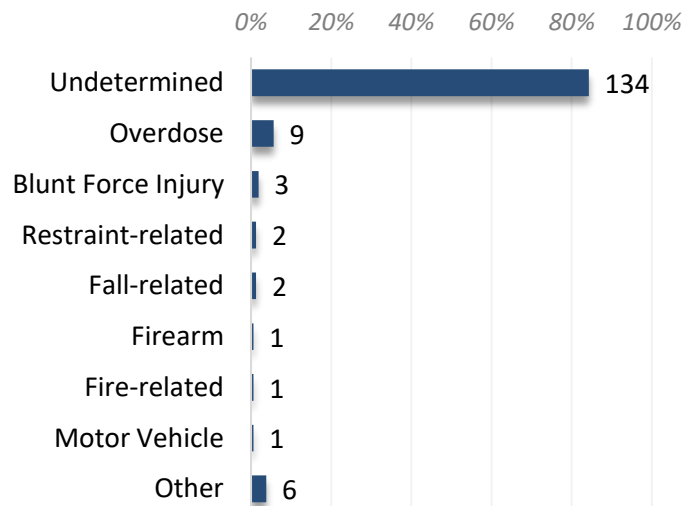


Decedent Race/Ethnicity



■ Unknown - 55%
■ Hispanic - 21%
■ White - 18%
■ Black/African American - 4%
■ American Indian/Alaska Native - 2%
■ Asian/Pacific Islander - 1%

Cause of Death



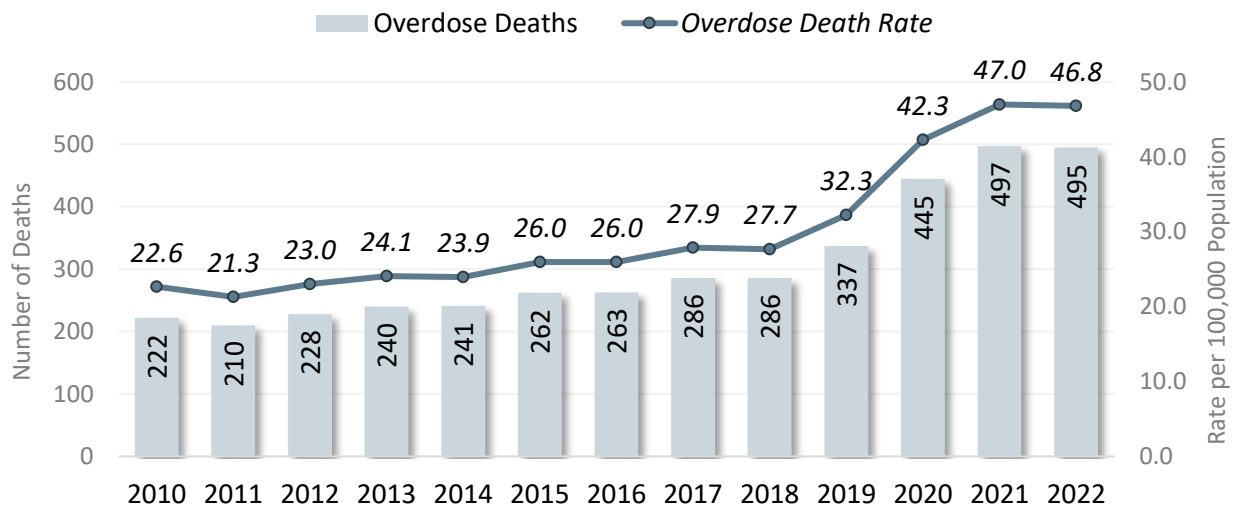
Cause-Specific Deaths

The leading causes of death for Pima County cases certified with a non-natural manner (i.e., accident, homicide, suicide, and undetermined) are presented in this section. Other causes of interest (e.g., pedestrian deaths and heat-caused deaths) are also included. In 2022, the PCOME certified 1,544 Pima County deaths with a non-natural manner. Of those, the most common causes of death were overdose (n=495, 32%), falls (n=260, 17%), firearms (n=226, 15%), and motor vehicle-related injuries (n=214, 14%).

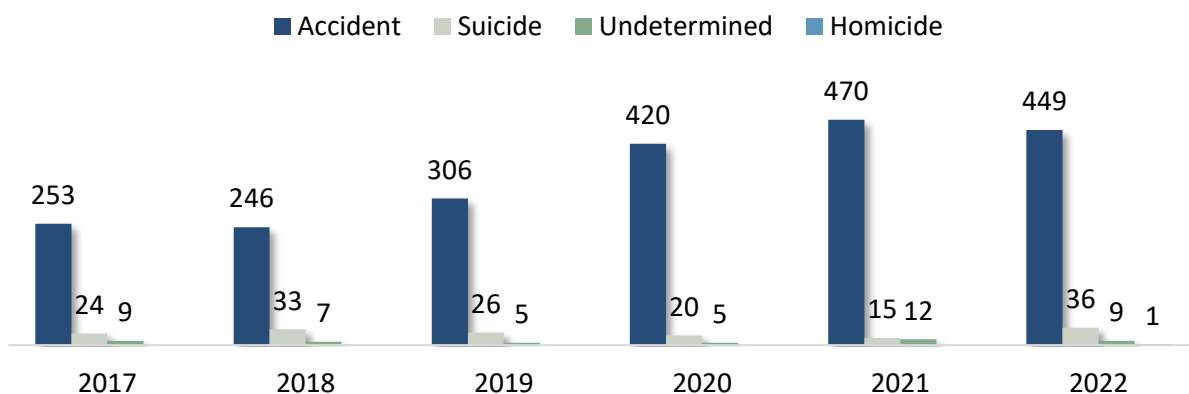
Overdose

Prior to 2019, annual increases in overdose deaths in Pima County were consistent, increasing an average of 3% per year from 2010 to 2018. In more recent years, overdose deaths have increased markedly, hitting record highs on an annual basis up through 2021; rises in accidental overdose deaths are largely responsible. Overdose deaths certified as accidents nearly doubled from 2017 to 2021. However, in 2022, accidental overdose deaths decreased slightly from the year prior. Oppositely, suicides by overdose more than doubled from 2021 to 2022, resulting in nearly identical total overdose death numbers (497 in 2021 and 495 in 2022). Of the 495 overdose deaths in Pima County in 2022, 91% were accidents, 7% were suicides, 2% were certified with an undetermined manner, and less than 1% were homicides.

Number and Rate of Overdose Deaths in Pima County

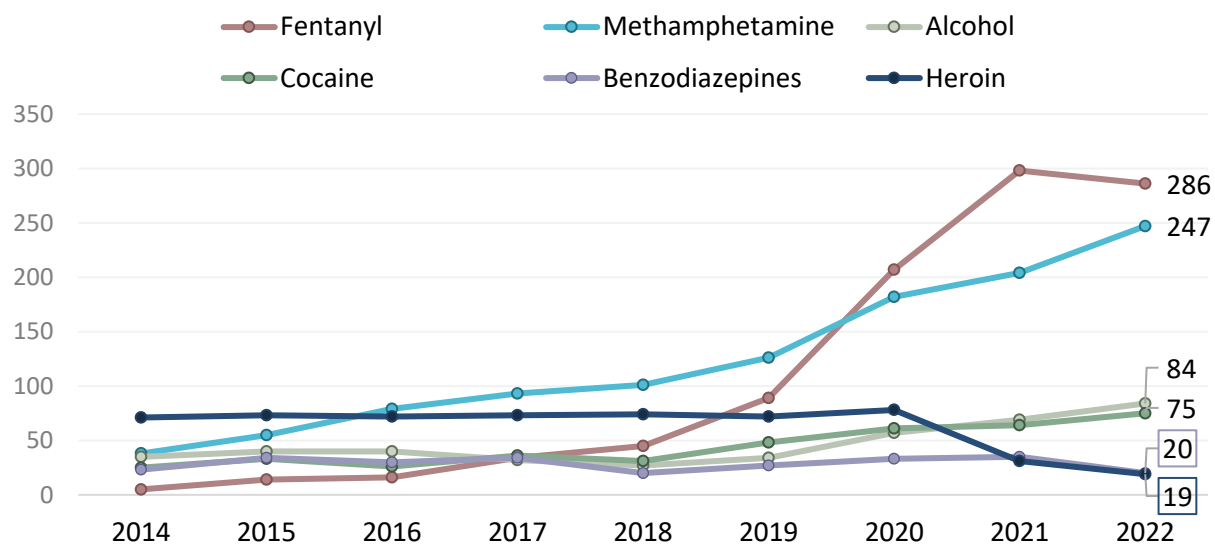


Pima County Overdose Deaths by MOD

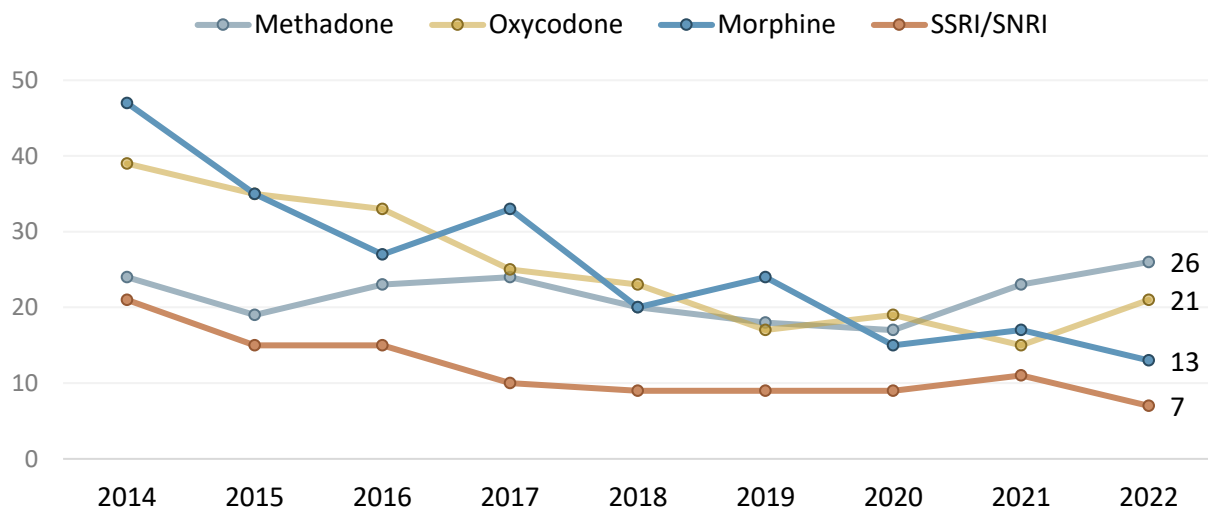


The two graphs below show overdose deaths involving select drugs over time. For the third year in a row, fentanyl contributed to the greatest number of overdose deaths in Pima County of any single drug. Methamphetamine was the second most used drug contributing to death in 2022, increasing to levels near that of fentanyl deaths. Alcohol and cocaine-involved overdose deaths have increased annually since 2018. Heroin deaths were static for many years, but in 2022 dropped to a quarter of the number of heroin deaths recorded in 2020. It is important to note that heroin deaths are likely underreported each year as heroin is rapidly metabolized to morphine by the body; if the metabolite indicative for heroin, 6-monoacetylmorphine, is not present on the toxicology report, the cause of death may be classified as morphine intoxication or opiate (unspecified) intoxication. Nonetheless, deaths involving morphine have been on an overall downward trend for years and heroin deaths have decreased 76% from 2020 to 2022.

Pima County Overdose Deaths involving Select Drugs

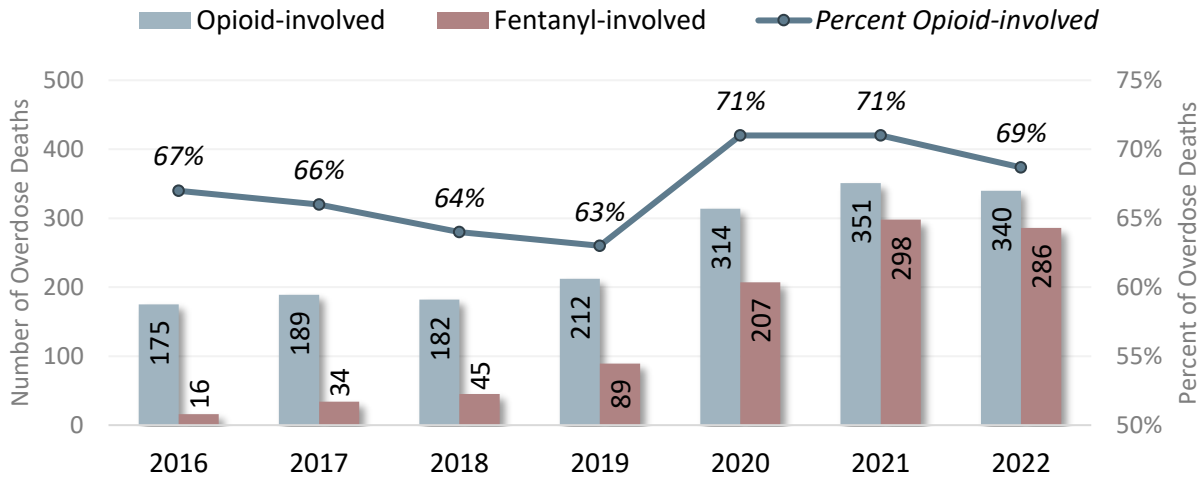


Pima County Overdose Deaths involving Select Drugs



The impact of opioids (e.g., oxycodone, heroin, fentanyl, etc.) on overdose deaths is of significant interest both locally and nationally. In Pima County, the number and percent of opioid-involved overdose deaths has increased in recent years, largely due to fentanyl. An opioid contributed to death, either as a single drug or as a component of a polydrug overdose, in 69% of Pima County overdose deaths in 2022.

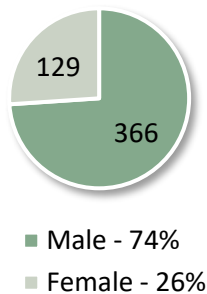
Pima County Overdose Deaths Involving Opioids



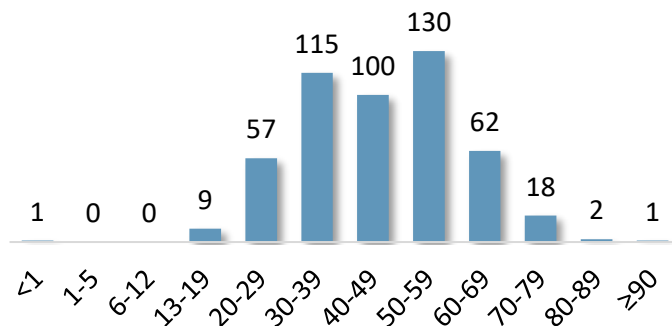
In 2022, male decedents comprised 74% of Pima County overdose deaths. Decedents age 50-to-59 years old accounted for the largest portion of overdose deaths of any age group (26%). Non-Hispanic Whites made up the largest percentage of overdose deaths among all racial groups (52%).

2022 Pima County Overdose Deaths

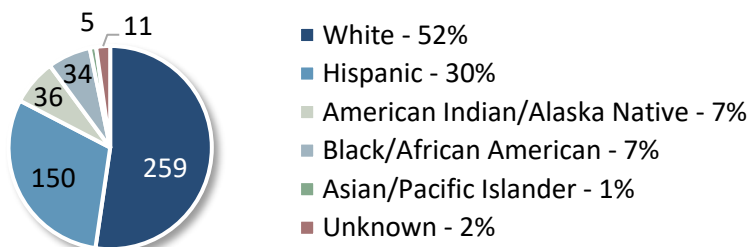
Decedent Sex



Decedent Age Group

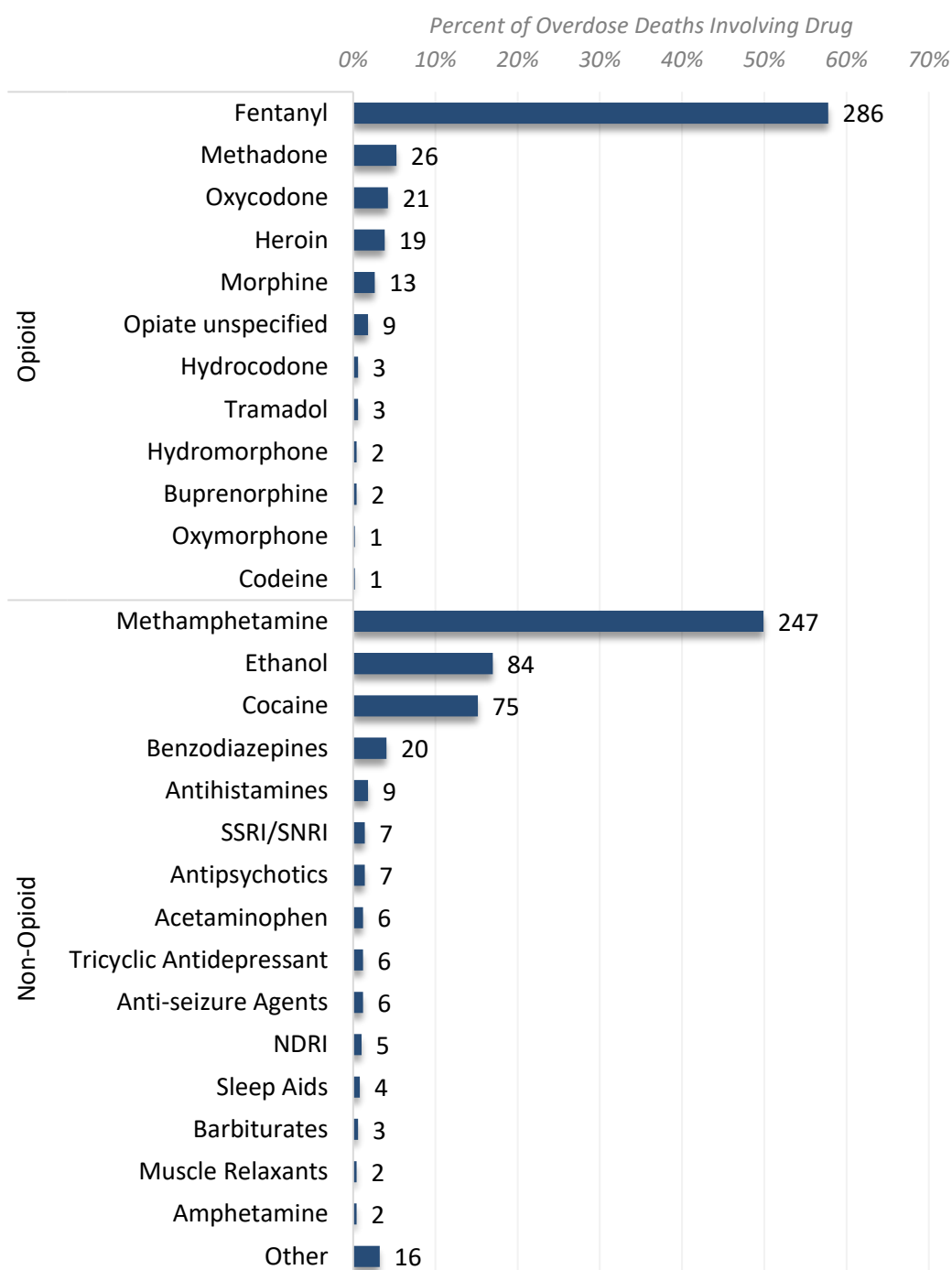


Decedent Race/Ethnicity



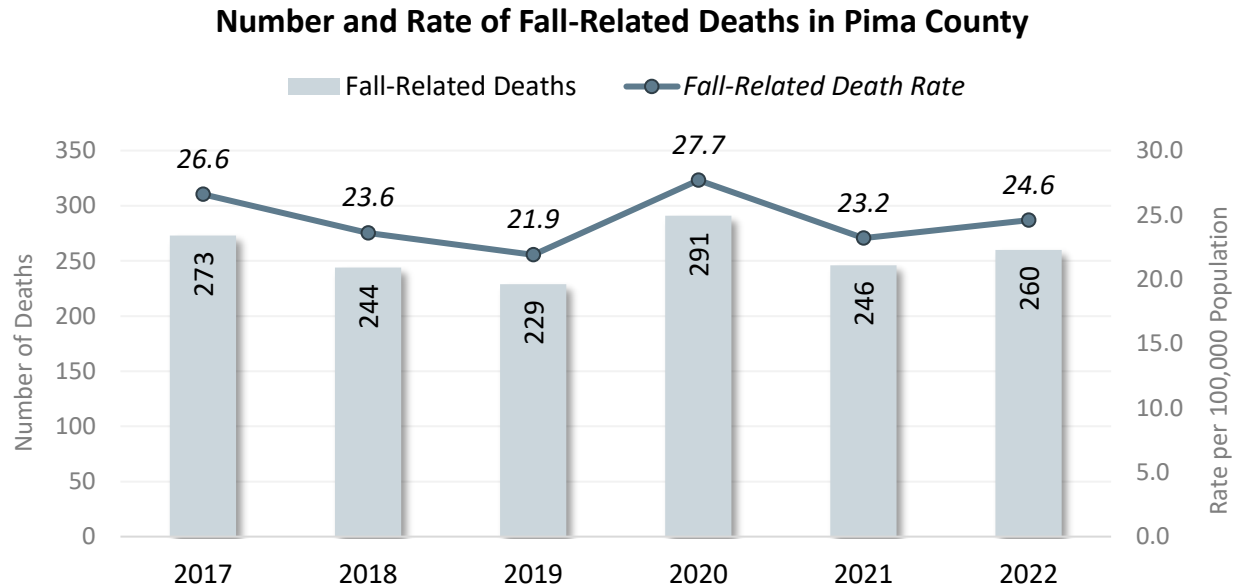
A single drug contributed to an overdose death in 208 Pima County cases (42%) and a combination of drugs contributed to death in 287 cases (58%). Fentanyl was the most frequently found drug in Pima County overdose deaths, contributing to 58% of 2022 overdoses, followed by methamphetamine (50%), alcohol (17%), cocaine (15%), and methadone (5%). An overdose death may involve more than one drug, therefore the sum of drugs contributing exceeds the sum of total overdose deaths for the year.

Frequency of Drugs Contributing to Pima County Overdose Deaths, 2022



Falls

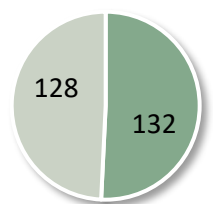
Fall-related deaths in Pima County have fluctuated over the past six years, ranging from a low of 229 deaths in 2019 to a high of 291 in 2020. In 2022, a total of 260 deaths were certified as fall-related by the PCOME, a 6% increase from the year prior. Nearly all fall-related deaths are certified as accident deaths; a small number are certified with an undetermined manner. Of the 260 fall-related deaths in 2022, 258 were certified as accidents (99%) and 2 were certified with an undetermined manner (1%).



In 2022, the ratio of male to female decedents of fall-related deaths was nearly 1:1. Decedents age 80 and older comprise the majority of fall-related deaths (59%). Non-Hispanic Whites made up the largest percentage among all racial groups (82%).

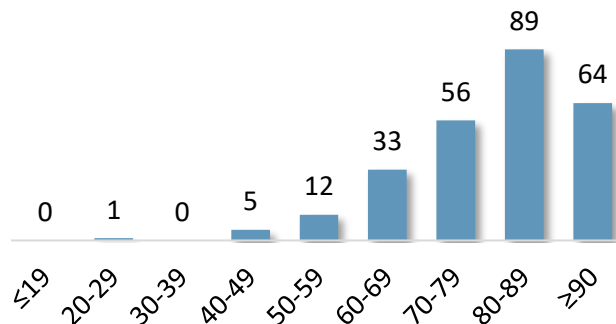
2022 Pima County Fall-Related Deaths

Decedent Sex

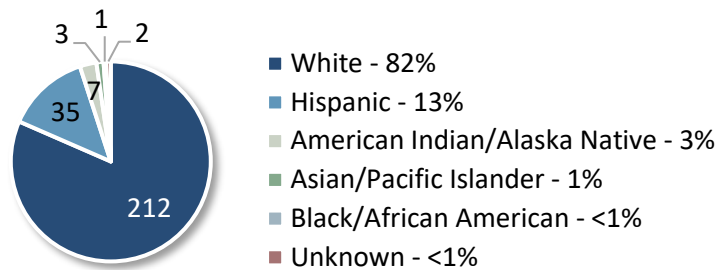


- Male - 51%
- Female - 49%

Decedent Age Group



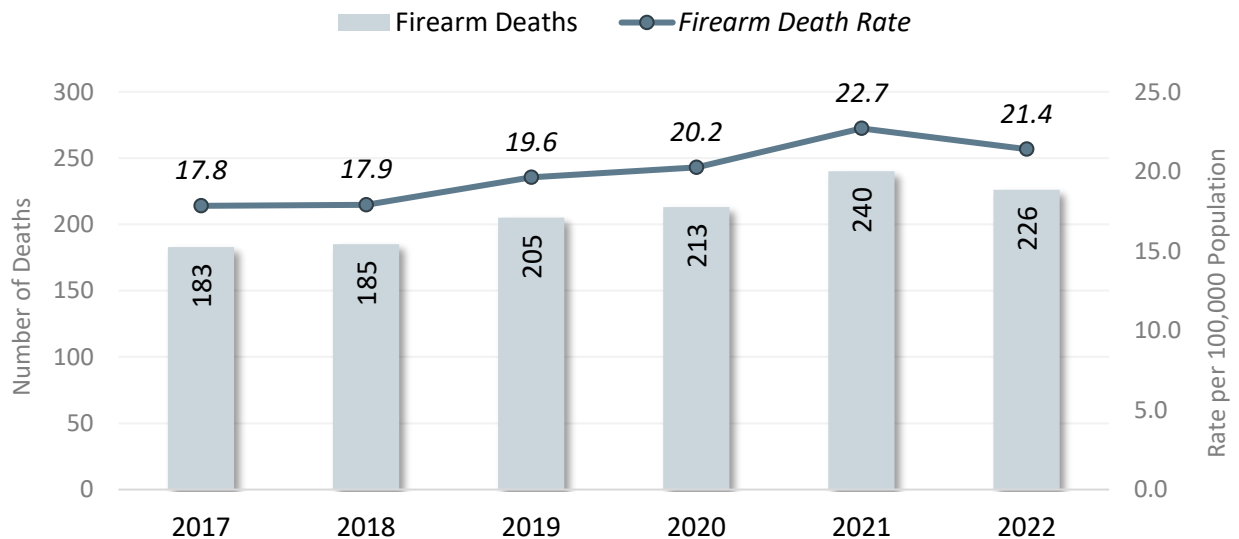
Decedent Race/Ethnicity



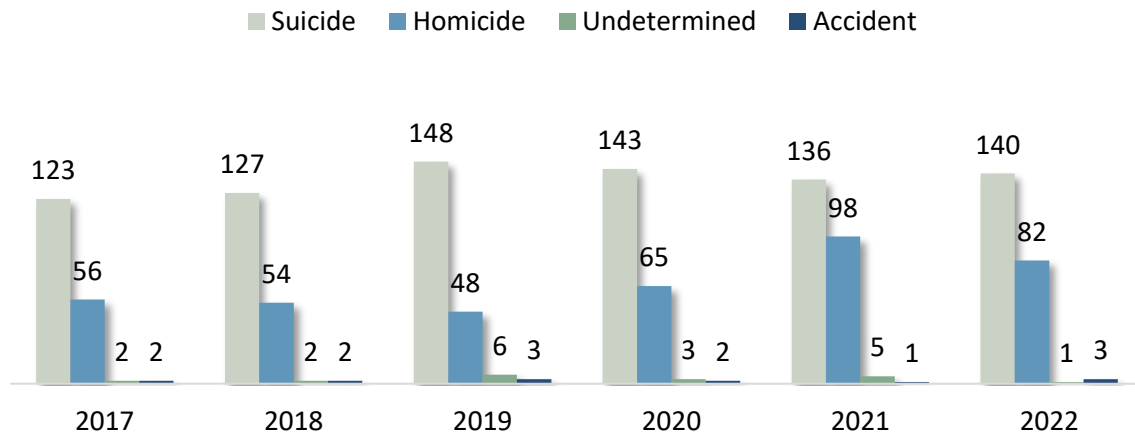
Firearms

Between 2017 and 2021, firearm deaths in Pima County increased 31%, reaching a high of 240 deaths in 2021. In 2022, for the first time in five years, firearm deaths decreased compared to the previous year, by 6%. The majority of firearm deaths each year are suicides. Of 226 firearm deaths in Pima County in 2022, 62% were suicides, 36% were homicides, 1% were accidents, and less than 1% were certified with an undetermined manner.

Number and Rate of Firearm Deaths in Pima County



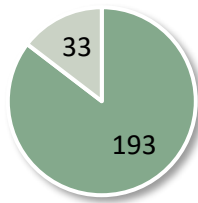
Pima County Firearm Deaths by MOD



Male decedents comprised 85% of firearm deaths in Pima County in 2022. The largest proportion of firearm deaths of any age group were decedents aged 20-29 years old (21%). Non-Hispanic Whites made up the largest percentage among racial groups (55%).

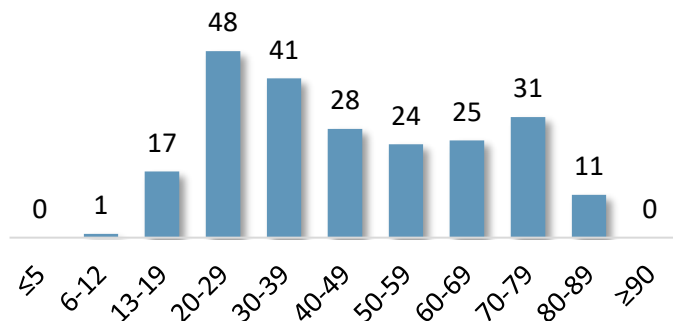
2022 Pima County Firearm Deaths

Decedent Sex

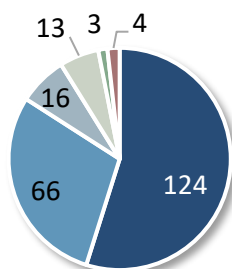


- Male - 85%
- Female - 15%

Decedent Age Group



Decedent Race/Ethnicity

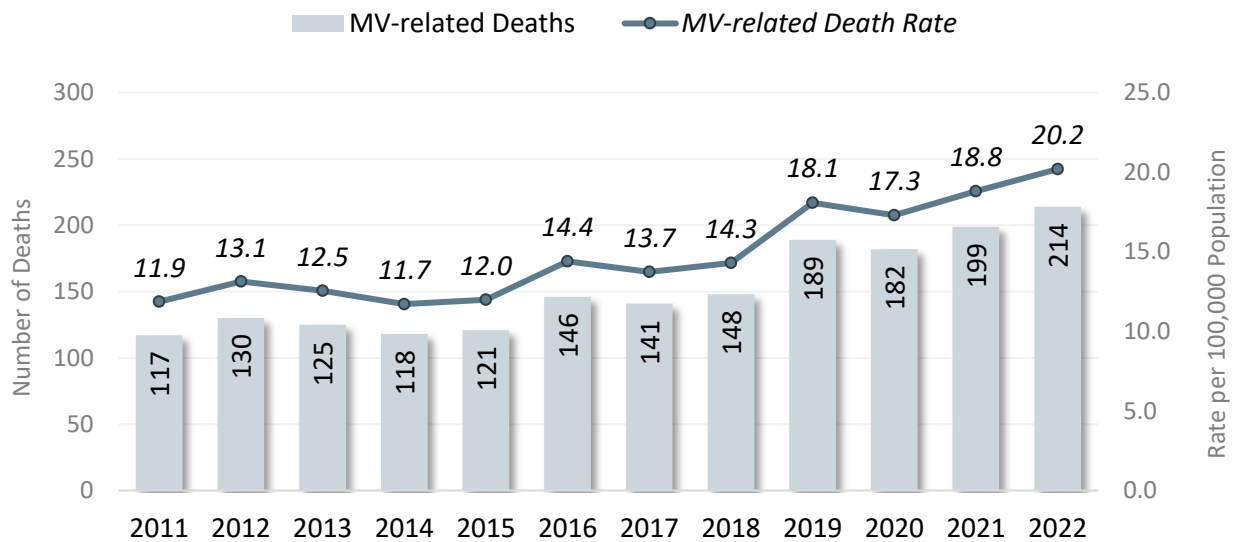


- White - 55%
- Hispanic - 29%
- Black/African American - 7%
- American Indian/Alaska Native - 6%
- Asian/Pacific Islander - 1%
- Unknown - 2%

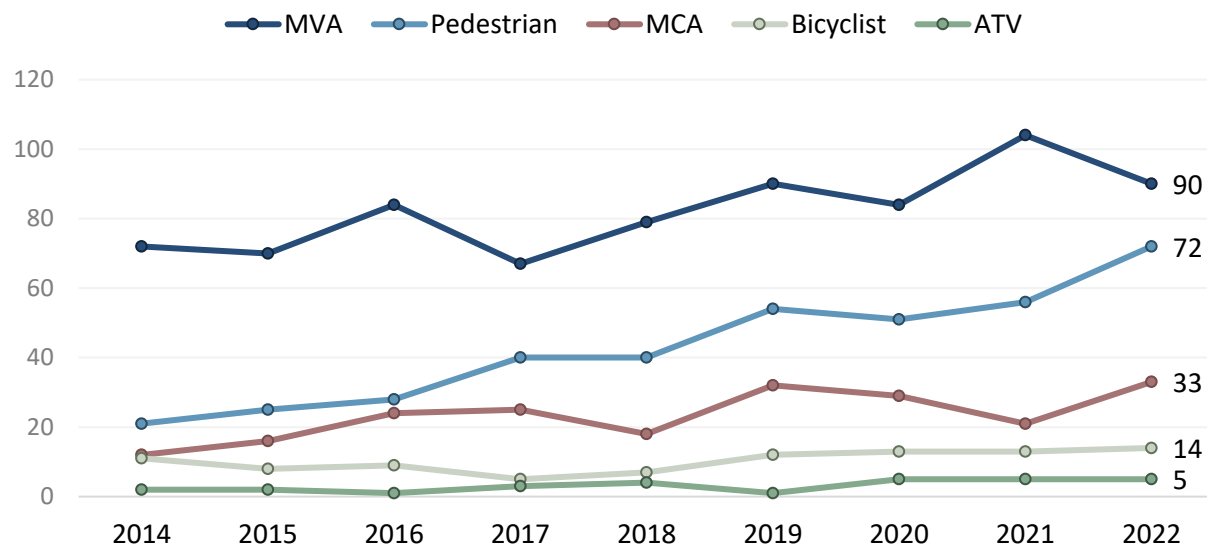
Motor Vehicle-Related

Motor vehicle-related (MV-related) deaths accounted for 214 deaths in Pima County in 2022, the highest number certified by our office to date. Most MV-related deaths in Pima County each year are occupants (i.e., driver or passenger) of a motor vehicle involved in an accident (MVA), followed by pedestrians struck by vehicles. A smaller portion consist of motorcycle riders involved in an accident (MCA), bicyclists struck by vehicles, occupants involved in all-terrain vehicle accidents (ATV), and other. In the line graph below, “other” has been removed due to low numbers (1 in 2017). Of all incident types, pedestrian deaths in Pima County exhibit the greatest change over time, a 243% increase from 2014 to 2022. As such, additional data on pedestrian deaths has been included in this year’s report following this section.

Number and Rate of MV-Related Deaths in Pima County



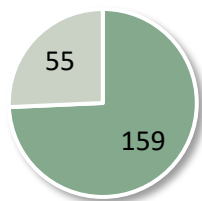
Pima County MV-Related Deaths by Incident Type



Of 214 MV-related deaths in Pima County in 2022, 211 were certified as accidents (99%), two were suicides (1%), and one case was certified with an undetermined manner (<1%); most decedents were male (74%). Decedents age 60-to-69 years old accounted for the largest portion of overdose deaths of any age group (18%). Non-Hispanic Whites made up the largest percentage of MV-related deaths among racial groups (58%). Forty-two percent of decedents involved in motor vehicle-related fatalities were occupants of a MVA (i.e., driver or passenger), 34% were pedestrians, 15% were motorcycle riders, and the remaining 9% were either bicyclists or occupants of an ATV.

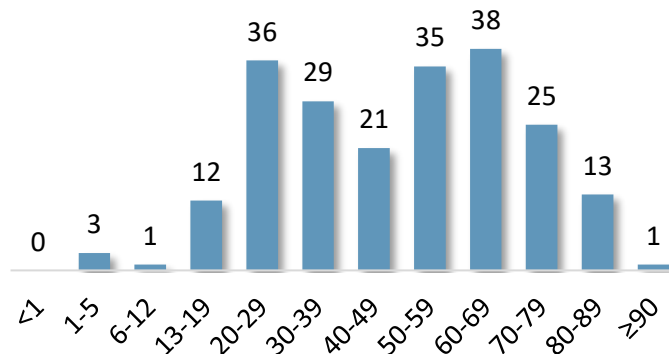
2022 Pima County Motor Vehicle-Related Deaths

Decedent Sex

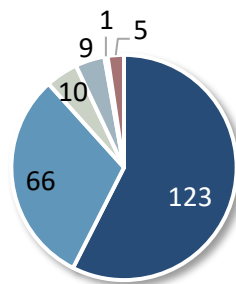


■ Male - 74%
■ Female - 26%

Decedent Age Group

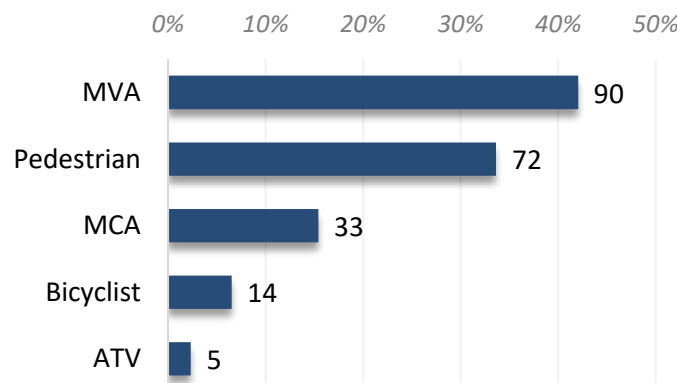


Decedent Race/Ethnicity



■ White - 58%
■ Hispanic - 31%
■ American Indian/Alaska Native - 5%
■ Black/African American - 4%
■ Asian/Pacific Islander - <1%
■ Unknown - 2%

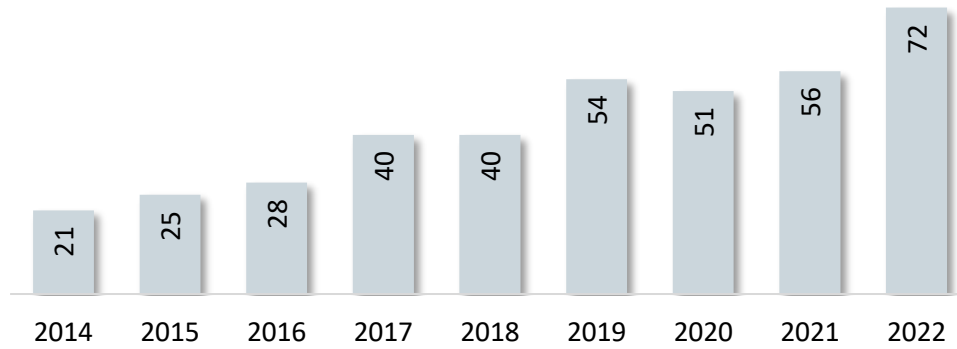
Incident Type



Pedestrian Struck by Vehicle

In 2022, 72 Pima County pedestrian deaths were certified by the PCOME, a 29% increase from 2021. Of these, 70 deaths were certified as accidents (97%), one was a suicide (1.5%), and one was certified with an undetermined manner (1.5%).

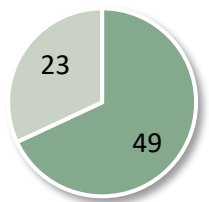
Pedestrian Deaths in Pima County



Male decedents comprised 68% of Pima County pedestrian deaths in 2022. Decedents age 60-to-69 years old accounted for the largest portion of overdose deaths of any age group (26%). Non-Hispanic Whites made up the largest percentage of pedestrian deaths among racial groups (56%). Individuals experiencing homelessness at the time of death represent 29% of 2022 pedestrian deaths. Most pedestrian deaths occurred in a roadway not in a crosswalk (74%).

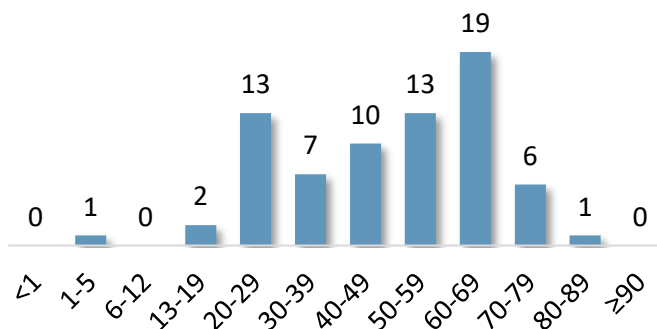
2022 Pima County Pedestrian Deaths

Decedent Sex

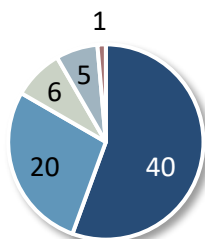


■ Male - 68%
■ Female - 32%

Decedent Age Group

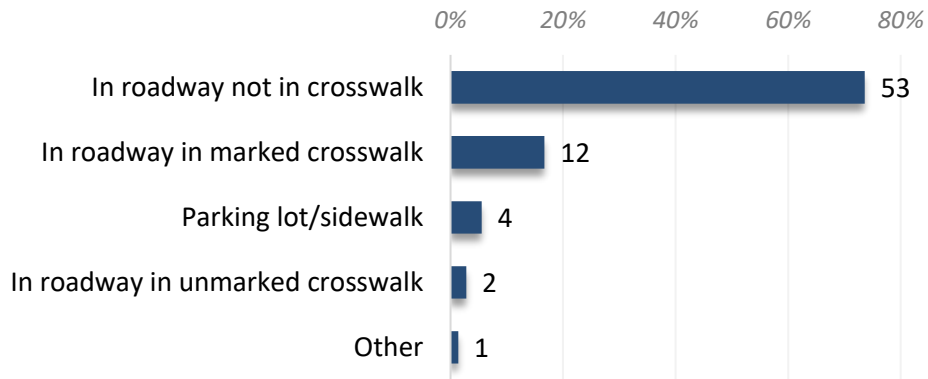


Decedent Race/Ethnicity



■ White - 56%
■ Hispanic - 28%
■ American Indian/Alaska Native - 8%
■ Black/African American - 7%
■ Unknown - 1%

Pedestrian Circumstance

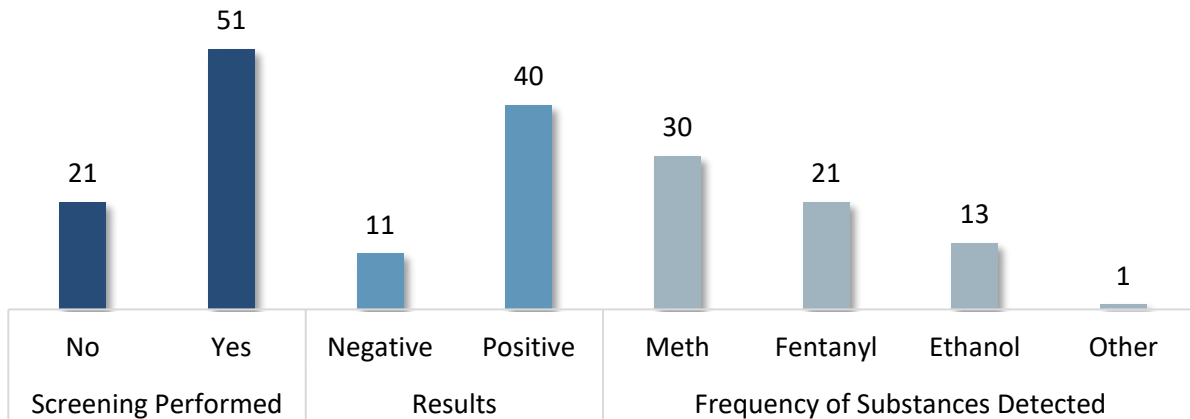


Decedent Experiencing Homelessness at Time of Death



Toxicology data for pedestrian deaths is limited to cases in which the PCOME was able to perform perimortem toxicology testing. In 2022, 71% of Pima County pedestrian deaths received toxicology screening. A positive toxicology result indicated the decedent tested positive for methamphetamine, fentanyl, ethanol ($\geq 0.08\%$ blood alcohol content), and/or another drug of significant interest. THC is excluded as a positive result. Of 51 decedents with toxicology screening, 78% had a positive toxicology result. Methamphetamine was the most frequently found substance detected (30 cases, 59% of pedestrian deaths with toxicology screening), followed by fentanyl (21 cases, 41% of pedestrian deaths with toxicology screening).

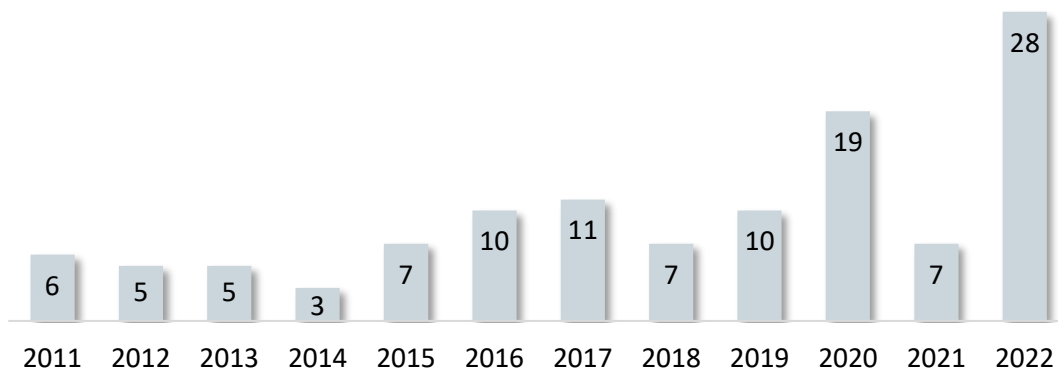
Toxicology Screening and Results



Heat

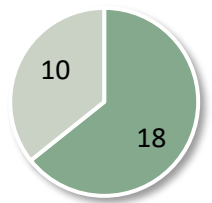
Heat-caused deaths in this dataset are deaths due to exposure to extreme heat or dehydration; heat-caused deaths in undocumented border crossers (UBCs) are excluded. For environmental deaths involving UBCs, please reference the [UBC section](#) of this report. In 2022, there were 28 heat-caused deaths in Pima County. Decedents of heat-caused deaths were most frequently male (64%); 80-89 years old (32%); and non-Hispanic White (61%). All heat-caused deaths in 2022 were certified with an accidental manner of death.

Pima County Heat-Caused Deaths (excluding UBCs)



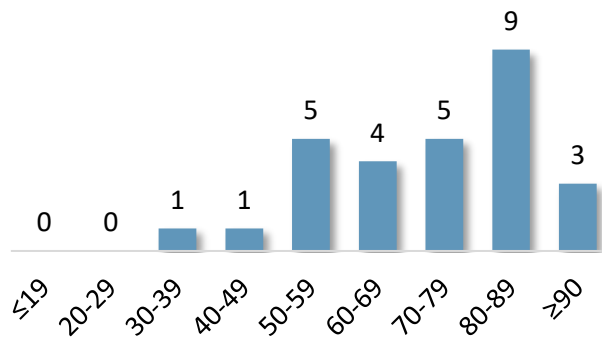
2022 Pima County Heat-Caused Deaths

Decedent Sex

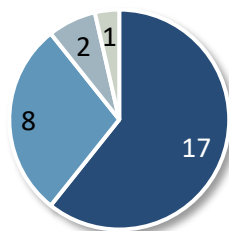


■ Male - 64%
■ Female - 36%

Decedent Age Group



Decedent Race/Ethnicity



■ White - 61%
■ Hispanic - 29%
■ Black/African American - 7%
■ American Indian/Alaska Native - 4%

Special Populations

Individuals Experiencing Homelessness

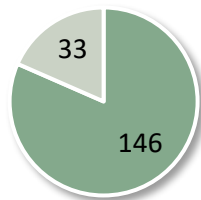
Caveats concerning the interpretation of decedents experiencing homelessness at time of death:

- These figures are not inclusive of all deaths of individuals experiencing homelessness in Pima County. Data is limited to deaths certified by the PCOME. Homelessness, in and of itself, is not an OME reporting criteria (see [Jurisdiction](#) section of this report).
- During an initial death report to the PCOME, a death investigator will populate a “yes” or “no” in the homeless data field in our electronic case management system based upon the information provided by law enforcement and/or the reporting agency. Starting in 2022, additional data sources were used by PCOME staff to confirm homelessness (e.g., next of kin, medical records, death certificate data) and enhance the accuracy of homelessness data. Data should be interpreted with caution, particularly comparisons between 2022 data and previous years.
- Homelessness in this data set is defined as living in a place not meant for human habitation, in an emergency shelter, or residing in a hotel/motel (for days to months).

Of 2,109 Pima County ME cases in 2022, a total of 179 decedents (8%) were identified as experiencing homelessness at time of death. Decedents within this population were more frequently male (82%); age 50-to-59 years old (28%); and non-Hispanic White (54%).

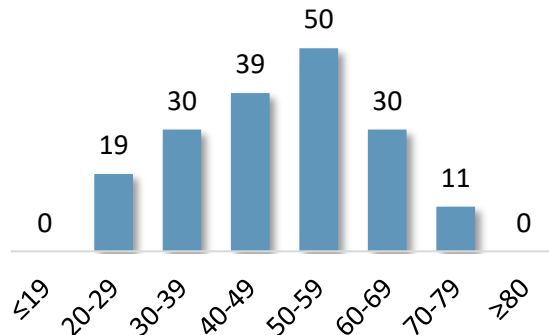
2022 Pima County Deaths in Individuals Experiencing Homelessness

Decedent Sex

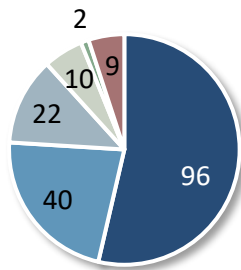


■ Male - 82%
■ Female - 18%

Decedent Age Group



Decedent Race/Ethnicity



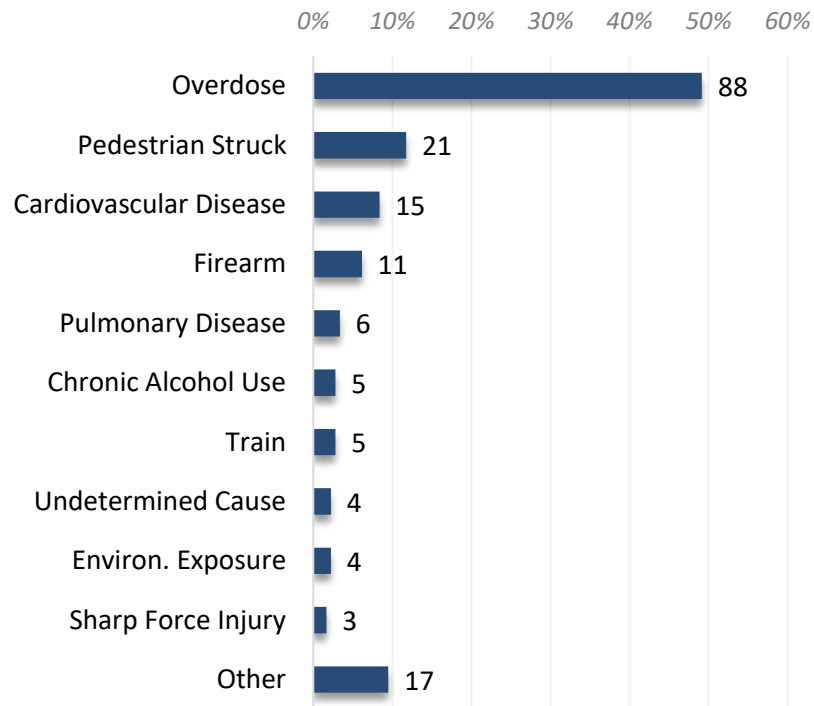
■ White - 54%
■ Hispanic - 22%
■ Black/African American - 12%
■ American Indian/Alaska Native - 6%
■ Asian/Pacific Islander - 1%
■ Unknown - 5%

More deaths of individuals experiencing homelessness were certified as accidents (67%) than any other manner. The most common cause/circumstance of death in this population was overdose (49%), followed by pedestrians struck by a vehicle (12%), cardiovascular disease (8%), and firearms (6%).

Manner of Death



Cause/Circumstance of Death

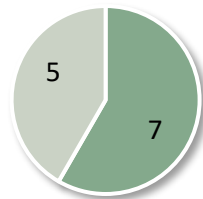


Infants

The PCOME certified 12 infant deaths (less than one year old, excludes fetal deaths) in Pima County in 2022: seven undetermined manner deaths (58%), 2 accidents (17%), 2 homicides (17%), and 1 natural death (8%). Demographic data and cause of death for infant deaths are detailed below.

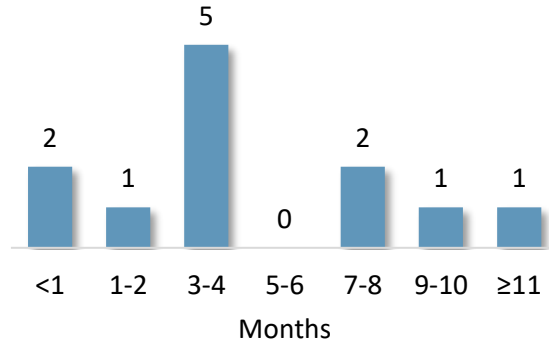
2022 Pima County Infant Deaths

Decedent Sex

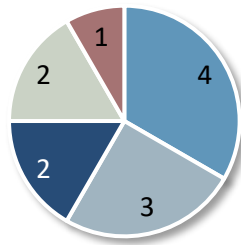


- Male - 58%
- Female - 42%

Decedent Age (in months)

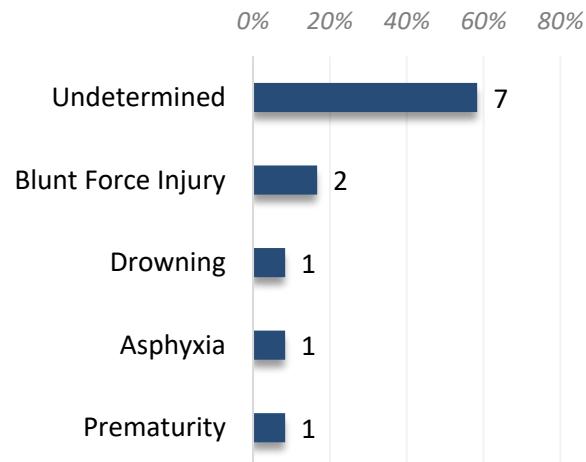


Decedent Race/Ethnicity



- Hispanic - 33%
- Black/African American - 25%
- White - 17%
- American Indian/Alaska Native - 17%
- Unknown - 8%

Cause of Death



Indigent Interment Program

Legal responsibility for interment (final disposition) of a decedent rest with the next of kin (NOK) as determined pursuant to [A.R.S. §36-831](#). In Pima County, if NOK are financially unable to pay for arrangements or the decedent is unclaimed or abandoned, Pima County may provide interment services through the Indigent Interment Program (IIP). In general, IIP applications can be divided into those that are approved for County assistance and those that are disapproved. The PCOME has served as the appointed administrator of Pima County's IIP and Pima County Cemetery (PCC) since September 2018; the County Public Fiduciary's Office was the appointed administrator prior to the PCOME.

In 2022, the PCOME IIP Coordinator processed 740 applications for IIP consideration (736 applications for decedents in Pima County and 4 applications for decedents in other counties). Applications for decedents who died outside of Pima County and are not Pima County residents (e.g., a Cochise County resident who dies in Cochise County) do not qualify for the Pima County IIP and were disapproved (4 applications).

Key terms used for the IIP:

- **Approval Status**
 - **Approved:** The interment of the decedent's remains was funded by the County.
 - **Disapproved:** The interment of the decedent's remains was not funded by the County and family, guardians, or local assistance groups assume responsibility for the disposition of the remains.
- **IIP Qualifying Conditions**
 - **Abandonment:** The decedent's NOK are known but fail or refuse to make interment arrangements for the decedent.
 - **Met poverty standard:** The decedent's NOK are known and meet current federal poverty guidelines as promulgated by the U.S. Department of Health & Human Services; therefore, NOK qualify for government interment assistance.
 - **No NOK:** A search is conducted for family for a decedent in an effort to locate any known NOK who might make interment arrangements, but no NOK are found.
 - **Unidentified:** The identity of the decedent is unknown and therefore NOK and financial status is unknown.
- **Final Disposition of the Remains**
 - **Burial:** The decedent is interred either at the PCC or other cemetery as buried remains (not cremated or otherwise altered).
 - **Cremation:** The decedent is interred as cremains in one of four columbaria at the PCC, a columbarium at another cemetery, or released to NOK for their retention.

Each of the four columbaria at the PCC has 660 cremation urn locations, for a total capacity of 2,640 cremains. At the end of 2022, columbaria inventory stood at 2,040 cremains with 600 cremation urn locations available. In addition, 106 burial plots remain available at the PCC.

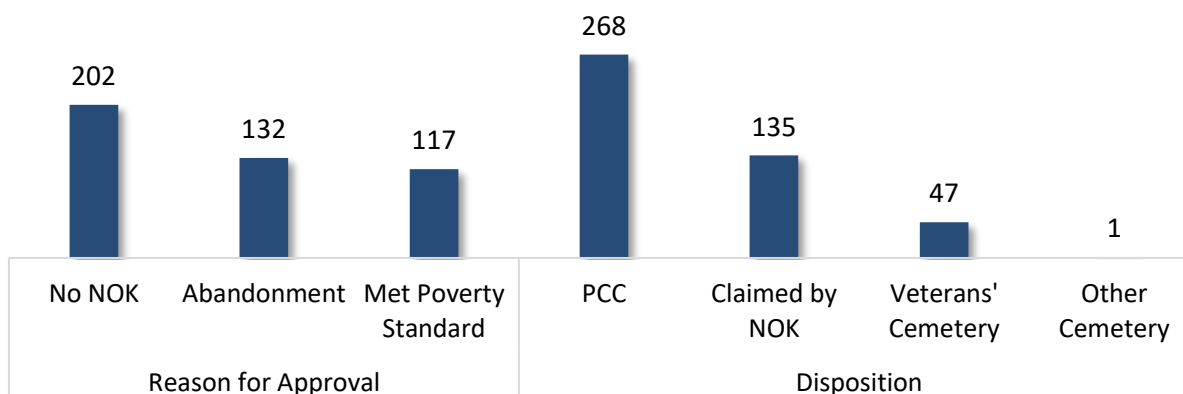
IIP applications for Pima County totaled 736 in 2022, approximately 6% of the total deaths in Pima County (residents and non-residents, 12,957). Of these applications, 61% were approved for County assistance (451). The most common reason for IIP approvals was no NOK (202, 45%). All applications approved in 2022 resulted in cremation as the final disposition of the remains; most are interred at the PCC (268, 62%). Data on approved applications for special interest groups (i.e., veterans and individuals experiencing homelessness) is provided in the table below.

2022 Pima County IIP Applications

Application Status



Approvals by Qualifying Condition and Final Disposition

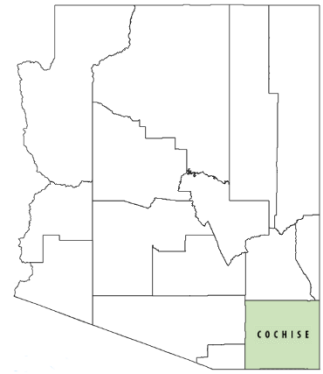


2022 Pima County Approved IIP Applications for Special Interest Groups

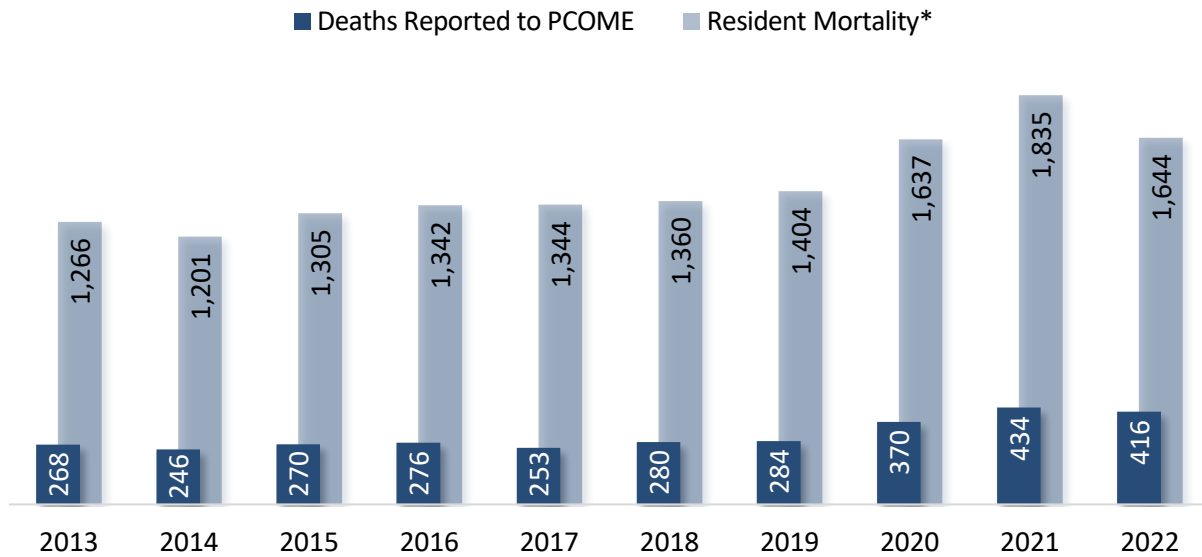
IIP Approval Details	Veterans (N=60)	Homeless (N=75)
Reason for IIP Approval		
No NOK	31 (52%)	42 (56%)
Abandonment	18 (30%)	19 (25%)
Met Poverty Standard	11 (18%)	14 (19%)
Disposition		
Pima County Cemetery	2 (3.3%)	50 (67%)
Claimed by NOK	11 (18.3%)	18 (24%)
Veterans' Memorial Cemetery	47 (78.3%)	7 (9%)

Cochise County

Beginning July 1, 2012, Cochise County contracts with the PCOME to certify deaths that fall under the jurisdiction of the medical examiner in Cochise County. In 2022, there were 1,644 total deaths of Cochise County residents; 416 deaths (25%) were reported to the PCOME for investigation. The PCOME accepted jurisdiction of 241 cases (58% of deaths reported), representing 15% of Cochise County resident mortality in 2022.

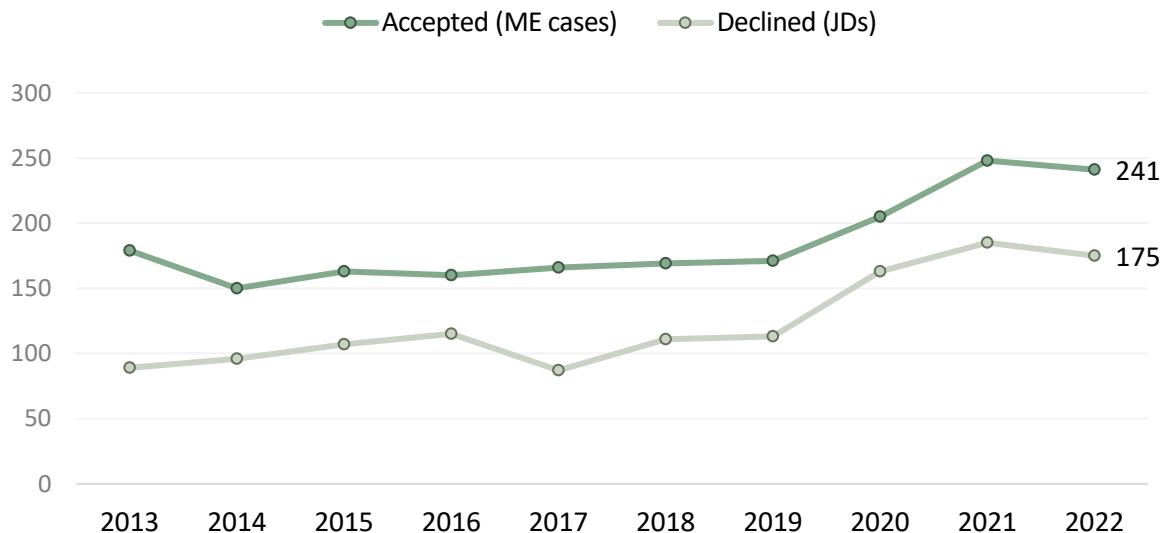


Cochise County Resident Mortality and Reported Deaths



*Cochise County resident mortality from Arizona Department of Health Services Vital Statistics as of 3/8/2023

Jurisdictional Disposition of Cochise County Reported Deaths

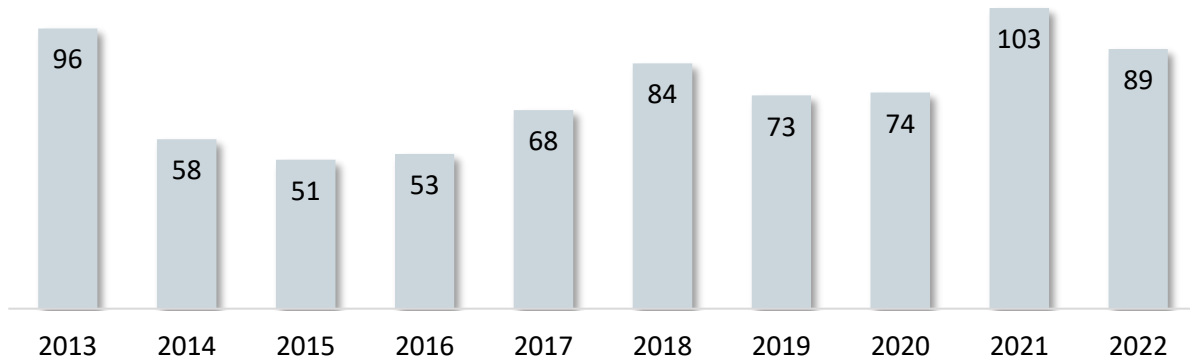


Natural Deaths

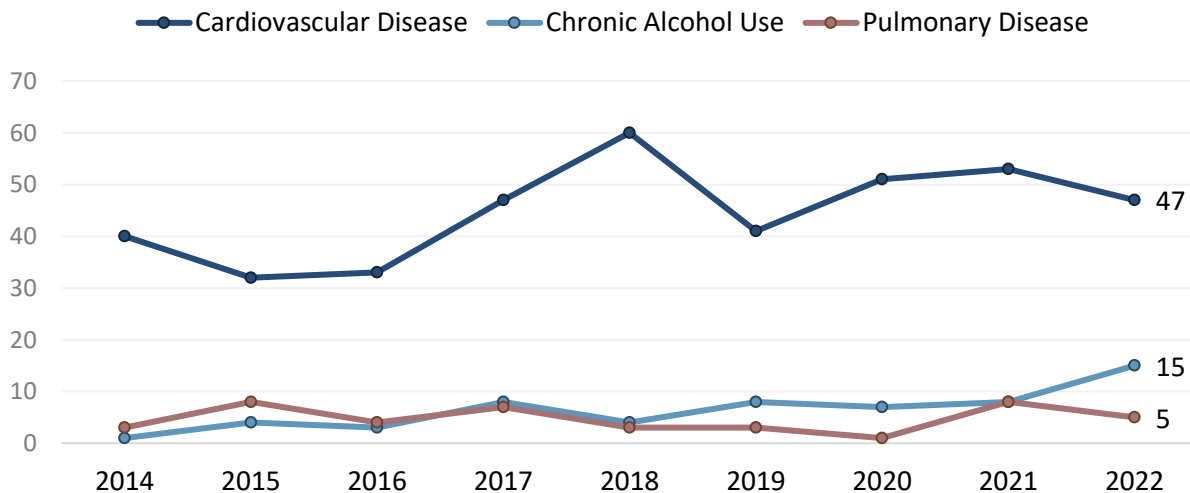
Natural death data in this report is limited to deaths certified by the PCOME (ME cases) and does not reflect the total number of natural deaths in Cochise County. Most natural deaths that occur in a county do not fall under the jurisdiction of a medical examiner and instead, are certified by a decedent's healthcare provider. The PCOME accepts jurisdiction of cases that appear to be natural deaths if the decedent is not in the care of a healthcare provider, dies while in custody, is unidentified, and/or a previously healthy individual dies suddenly/unexpectedly, as determined by the PCOME. Natural death data should be interpreted with caution as the PCOME is not aware of the number of natural deaths certified by physicians in the community.

A total of 89 Cochise County deaths were certified as natural by the PCOME in 2022 (37% of Cochise County ME cases). On average, two-thirds of PCOME-certified natural deaths in Cochise County are due to cardiovascular disease.

Cochise County Natural Deaths Certified by the PCOME



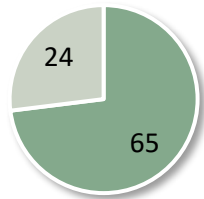
Cochise County Natural Deaths by Cause of Death (Top 3)



Male decedents comprised 73% of Cochise County natural deaths certified by the PCOME. Decedents age 60-to-69 years old accounted for the largest portion of natural deaths of any age group (36%). Non-Hispanic Whites made up the largest percentage of deaths among all racial groups (70%). Cardiovascular disease was the most common cause of death (53%), followed by chronic alcohol use (17%), pulmonary disease (6%), and nonspecific natural causes (6%).

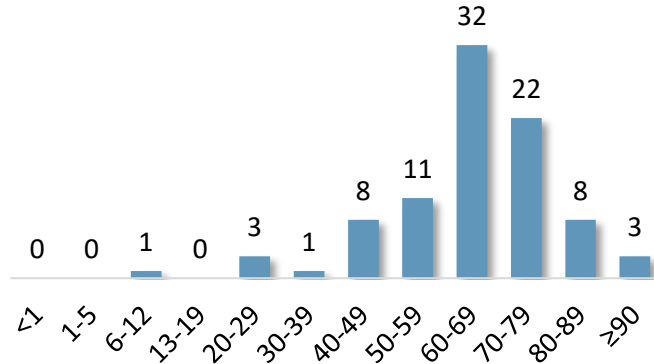
2022 Cochise County Natural Deaths (ME Cases Only)

Decedent Sex

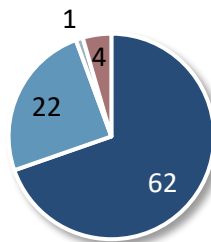


■ Male - 73%
■ Female - 27%

Decedent Age Group

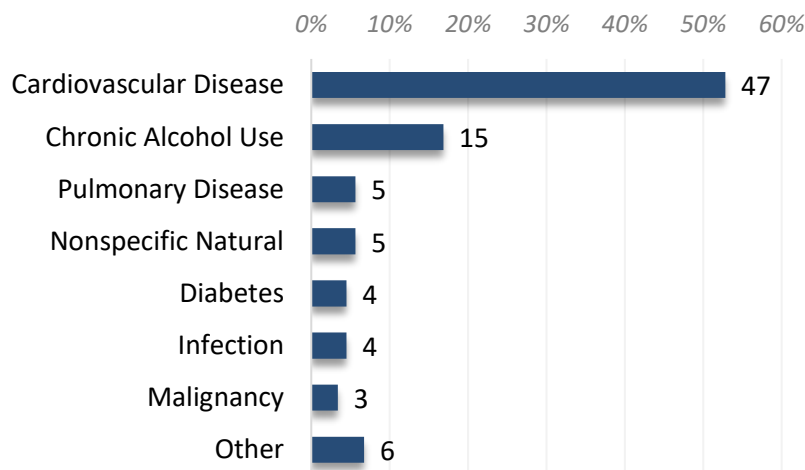


Decedent Race/Ethnicity



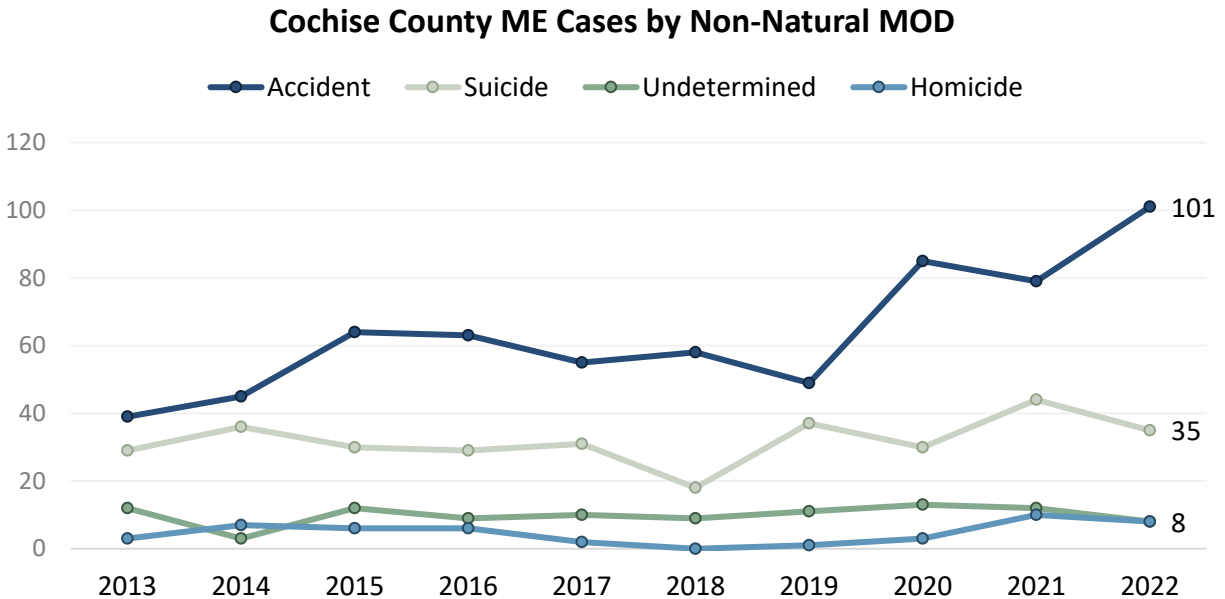
■ White - 70%
■ Hispanic - 25%
■ Black/African American - 1%
■ Unknown - 4%

Cause of Death



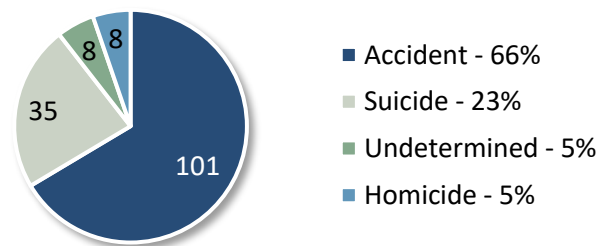
Non-Natural Manner Deaths

Non-natural manner of death (MOD) classifications include accident, homicide, suicide, and undetermined. The graph below displays Cochise County ME Cases by non-natural MOD from 2013 to 2022. Accidental deaths have shown the greatest increase in recent years, doubling from 2019 to 2022 (49 to 101 cases, respectively). Suicides in Cochise County have fluctuated over the past five years while homicides and undetermined manner deaths have remained relatively unchanged year to year.



In total, the PCOME certified 152 deaths in Cochise County with a non-natural manner in 2022; accident deaths made up the largest proportion (66%); the other 44% were comprised of suicides (23%), homicides (5%), and undetermined manner deaths (5%).

2022 Cochise County Non-Natural Manner Deaths

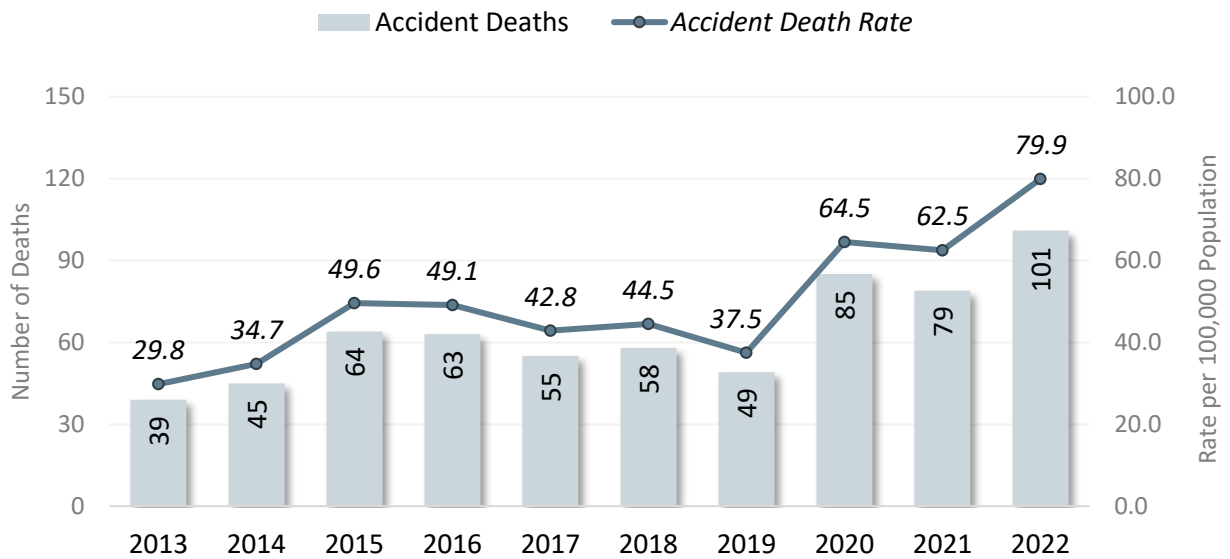


Accident

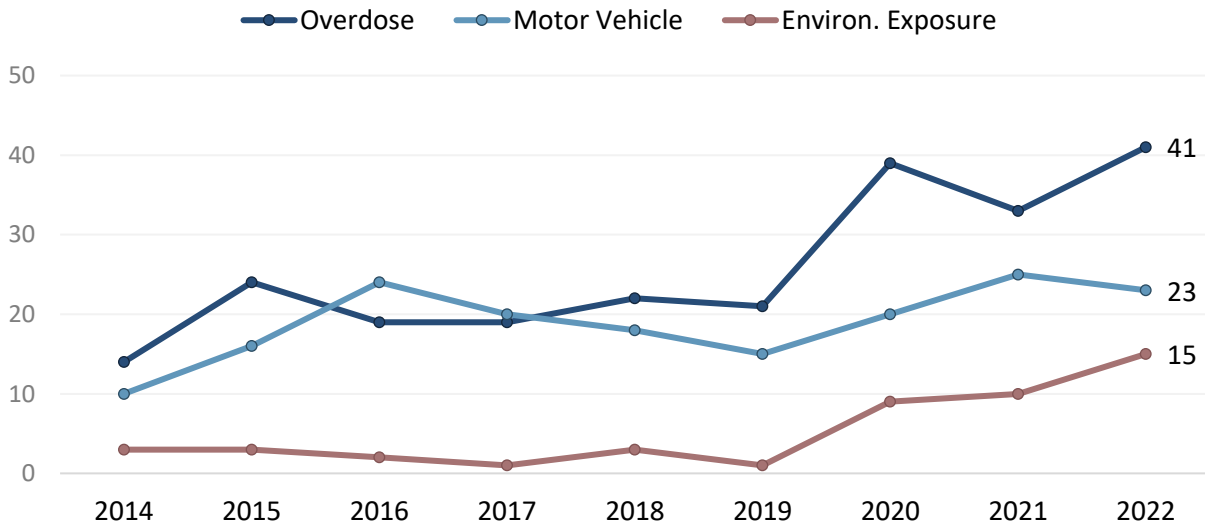
Cochise County deaths certified as accidents in 2022 (101 cases) represent the highest number certified by the PCOME to date. From 2021 to 2022, accident deaths in Cochise County increased 28%. For the fifth year in a row, overdose is the most frequent cause of accident deaths in Cochise County.

Please note that at the time this report was written, Arizona Department of Health Services (ADHS) had not yet released population statistics for 2022. Therefore, **2022 death rates were calculated using 2021 population size and are subject to change.**

Number and Rate of Accident Deaths in Cochise County



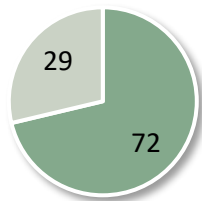
Cochise County Accident Deaths by Cause of Death (Top 3)



Male decedents comprised 71% of Cochise County accident deaths in 2022. Decedents age 60-to-69 years old accounted for the largest portion of accident deaths of any age group (23%). Non-Hispanic Whites made up the largest percentage of deaths among all racial groups (54%). Overdose was the most common cause of death (41%), followed by motor vehicle-related injuries (23%), and environmental exposure (15%).

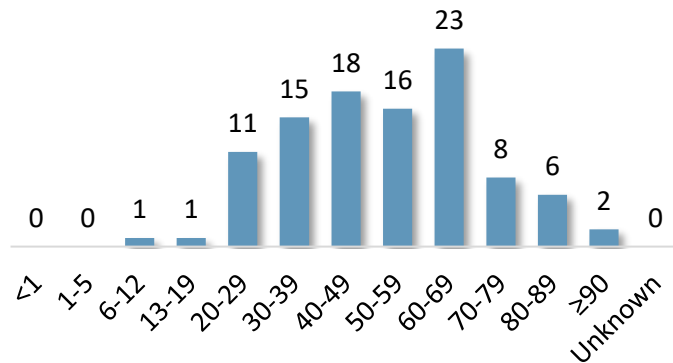
2022 Cochise County Accident Deaths

Decedent Sex

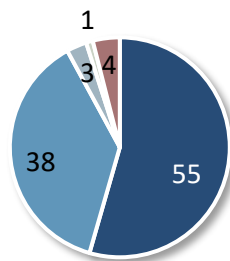


■ Male - 71%
■ Female - 29%

Decedent Age Group

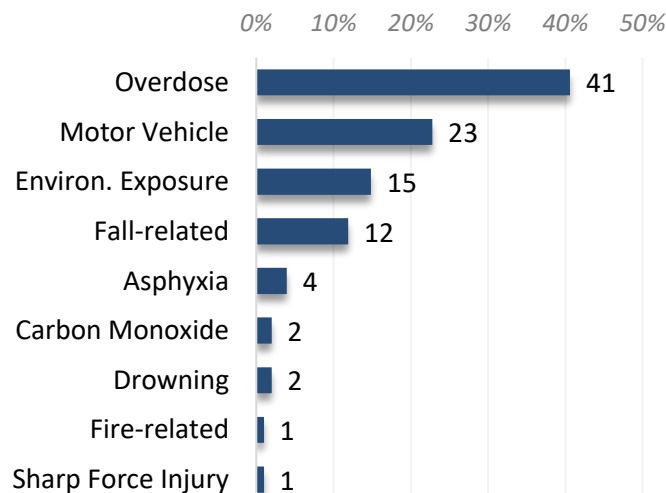


Decedent Race/Ethnicity



■ White - 54%
■ Hispanic - 38%
■ Black/African American - 3%
■ American Indian/Alaska Native - 1%
■ Unknown - 4%

Cause of Death

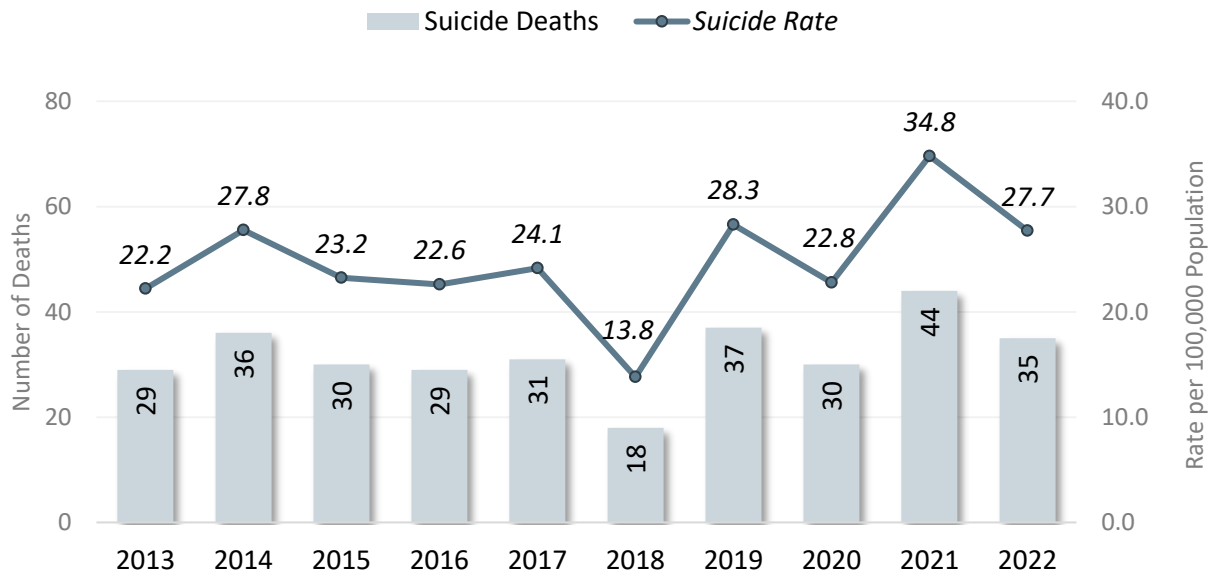


Suicide

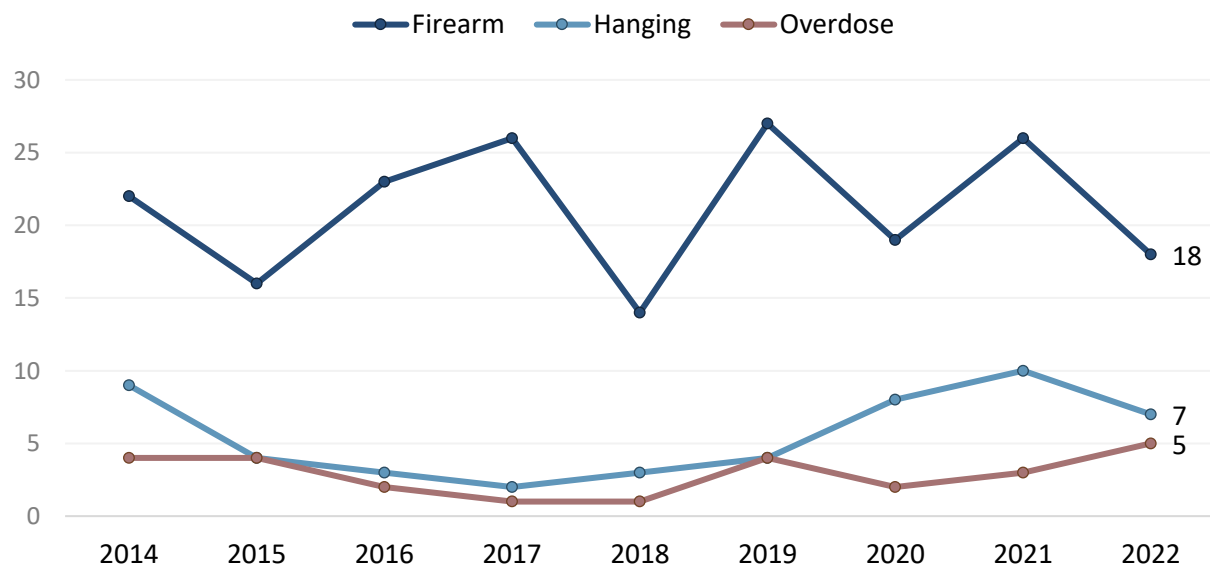
In 2022, 35 deaths were certified as suicides by the PCOME, a 20% decrease from the year prior. Firearms continue to be the most common means of Cochise County suicide deaths investigated by the PCOME.

Please note that at the time this report was written, Arizona Department of Health Services (ADHS) had not yet released population statistics for 2022. Therefore, **2022 death rates were calculated using 2021 population size and are subject to change.**

Number and Rate of Suicides in Cochise County



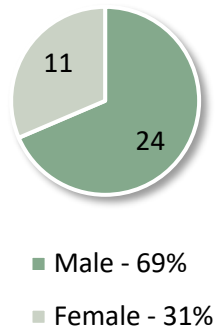
Cochise County Suicides by Cause of Death (Top 3)



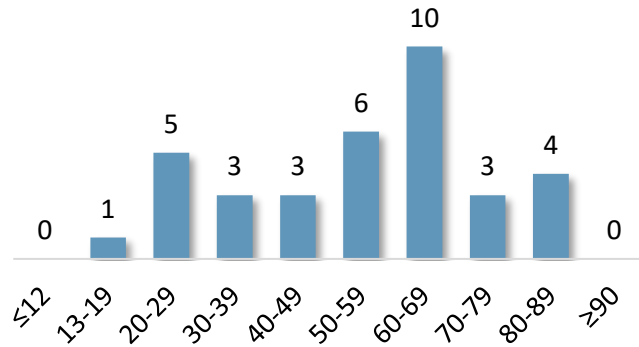
Individuals who died by suicide in Cochise County in 2022 were most frequently male (69%); between 60-69 years of age (29%); and non-Hispanic White (74%). In 2022, the number of suicides by firearm (n=18, 51%) was 2.5 times higher than the next leading cause, suicides by hanging (n=7, 20%).

2022 Cochise County Suicides

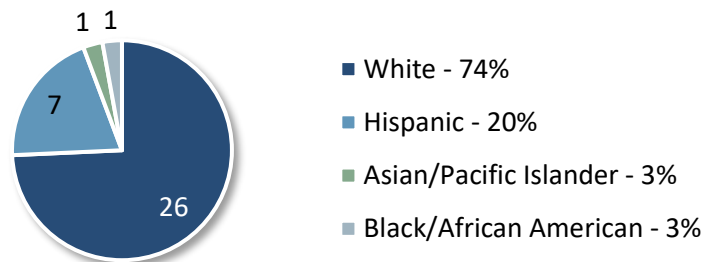
Decedent Sex



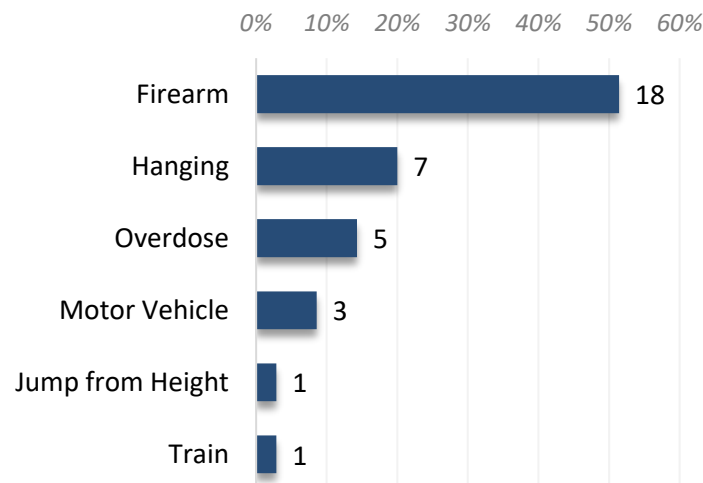
Decedent Age Group



Decedent Race/Ethnicity



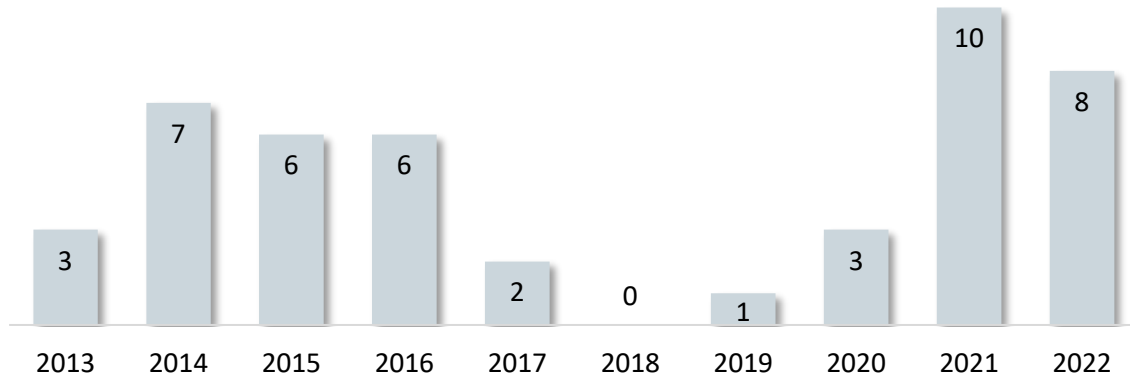
Cause of Death



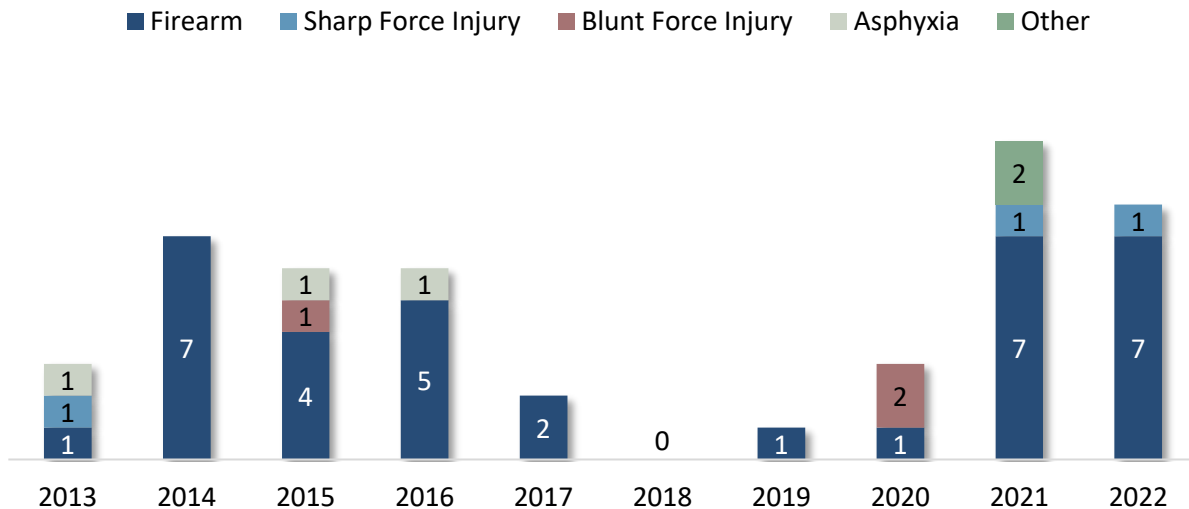
Homicide

A total of 8 deaths from Cochise County were certified as homicides in 2022. Most homicide deaths in Cochise County each year are a result of firearms. Since 2013, 76% of homicides in Cochise County have involved firearms (35 deaths).

Homicides in Cochise County



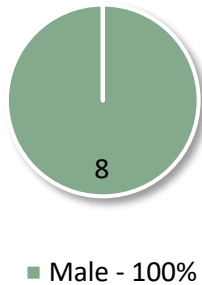
Cochise County Homicides by Cause of Death



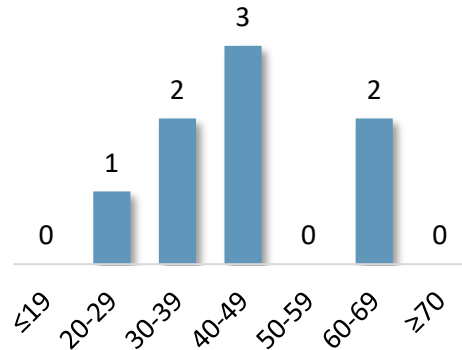
Of the eight homicide deaths in Cochise County in 2022, all decedents were male. Decedents age 40-to-49 years old accounted for the largest portion of homicide deaths of any age group (38%). Half of decedents were Hispanic and half were non-Hispanic White. Seven out of eight homicide deaths were a result of firearms (88%).

2022 Cochise County Homicides

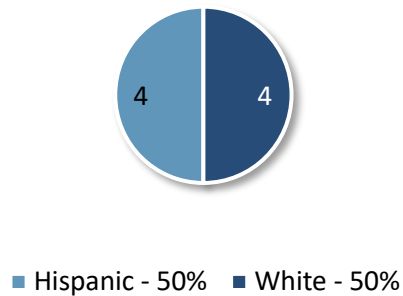
Decedent Sex



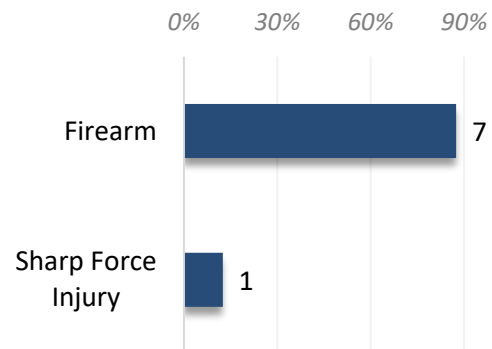
Decedent Age Group



Decedent Race/Ethnicity



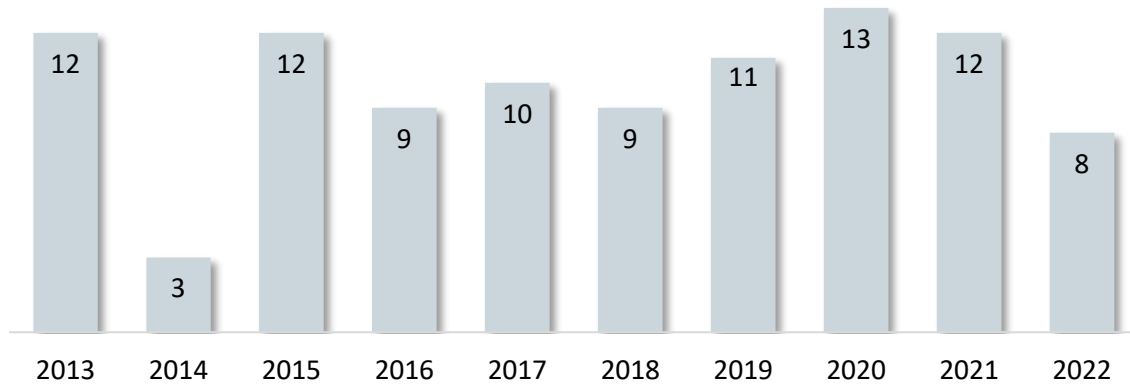
Cause of Death



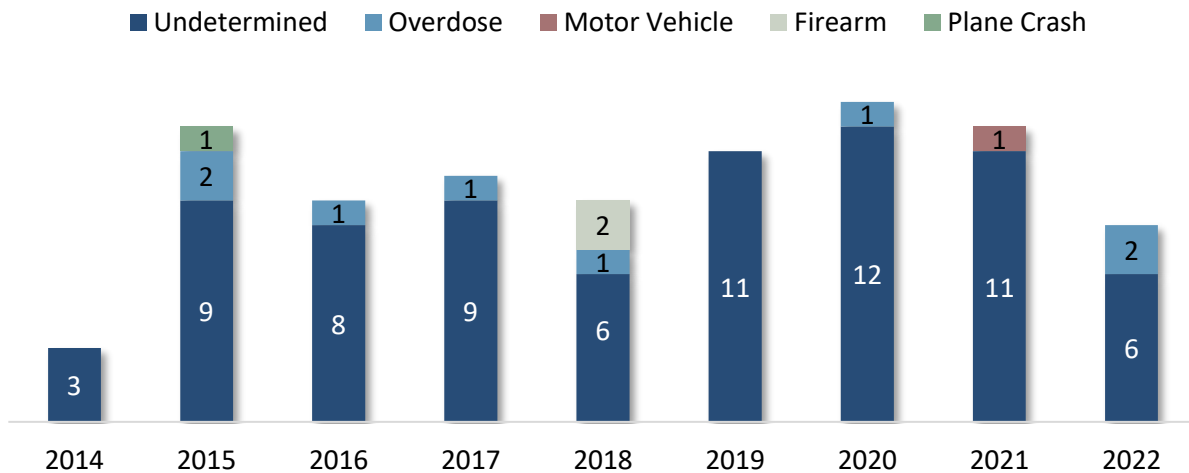
Undetermined

In a small number of cases each year, the manner of death is certified as undetermined. Cochise County deaths certified by the PCOME with an undetermined manner totaled 8 in 2022. Undetermined manner deaths certified by the PCOME are most frequently certified with an undetermined cause, mainly due to exam limitations of decomposed/skeletal remains. Of the 87 Cochise County deaths certified with an undetermined manner since 2014, 86% had an undetermined cause.

Undetermined Manner Deaths in Cochise County



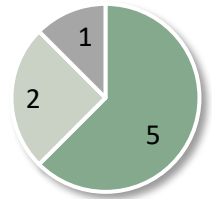
Cochise County Undetermined MOD Cases by Cause of Death



Male decedents comprised 63% of Cochise County undetermined manner deaths in 2022. One decedent with an undetermined MOD remains unidentified at the time of reporting (i.e., the PCOME is unable to confirm demographic information). Seventy-five percent of deaths with an undetermined manner were certified with an undetermined cause of death.

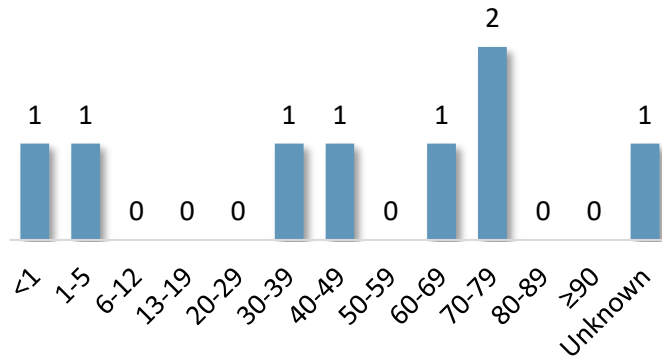
2022 Cochise County Undetermined Manner Deaths

Decedent Sex

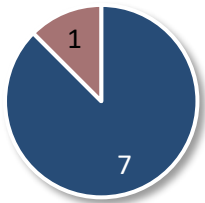


■ Male - 63%
 ■ Female - 25%
 ■ Unsure - 12%

Decedent Age Group

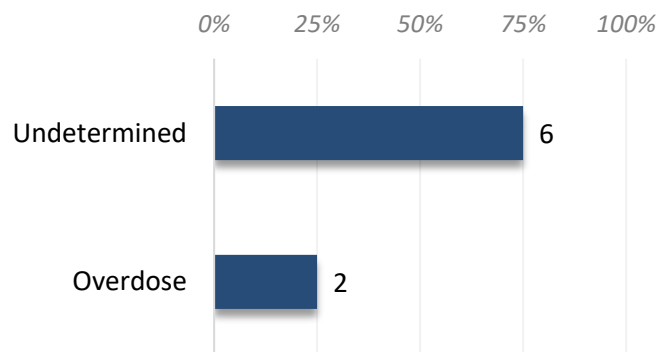


Decedent Race/Ethnicity



■ White - 88%
 ■ Unknown - 12%

Cause of Death



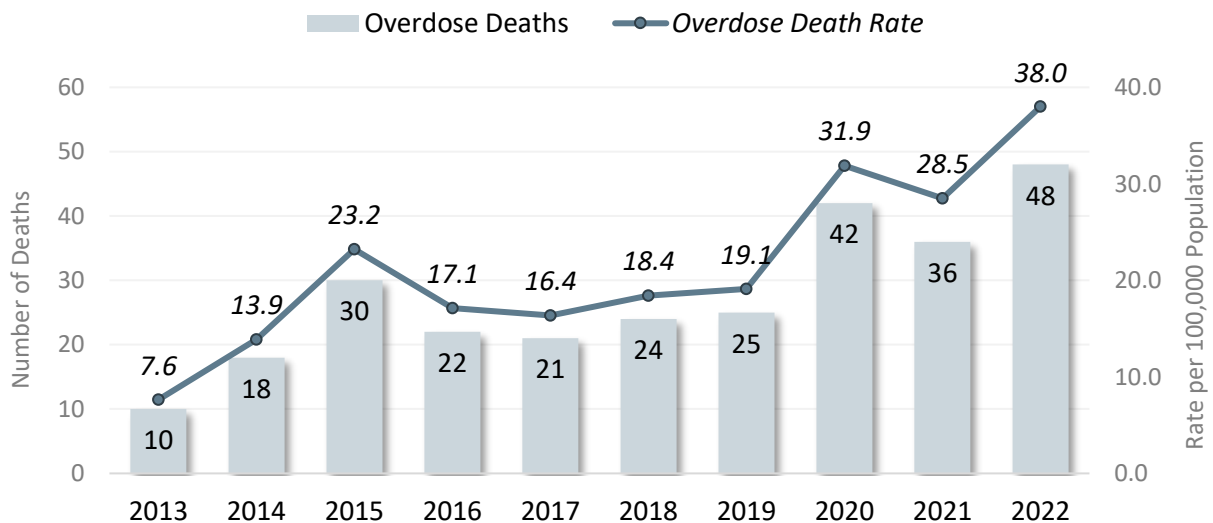
Cause-Specific Deaths

The leading causes of death for Cochise County cases certified with a non-natural manner (i.e., accidents, homicides, suicides, and undetermined manner deaths) are presented in this section. Of the 152 Cochise County deaths certified by the PCOME with a non-natural manner in 2022, the most common cause of death was overdose (n=48, 32%), followed by motor vehicle-related injuries (n=26, 17%).

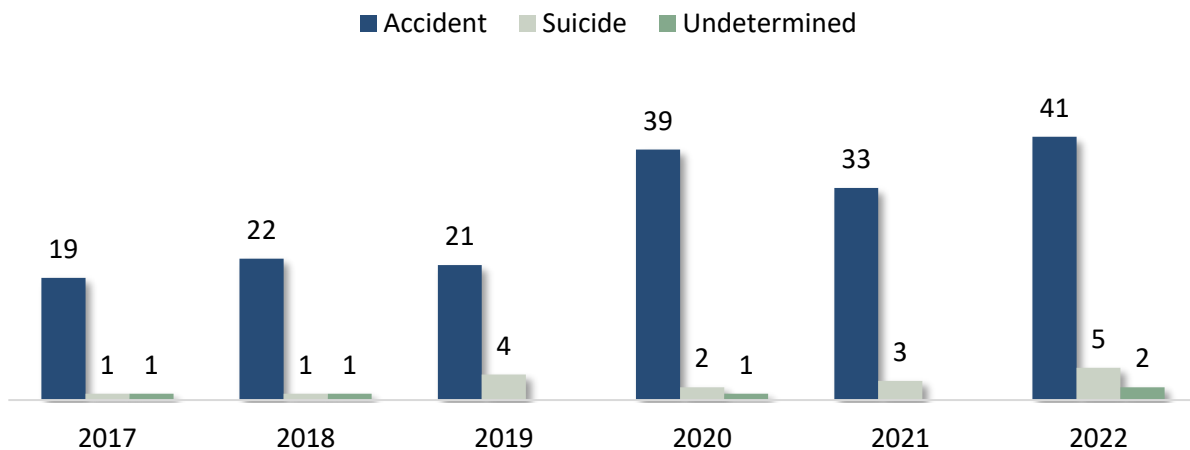
Overdose

In 2022, overdose was the leading cause of non-natural manner deaths in Cochise County. A total of 48 deaths were attributed to an overdose, the highest number certified by the PCOME to date. The increase in overdose deaths in recent years is largely due to rises in accidental overdose deaths. Of the 48 overdose deaths in Cochise County in 2022, 85% were accidents, 10% were suicides, and 4% were certified with an undetermined manner.

Number and Rate of Overdose Deaths in Cochise County

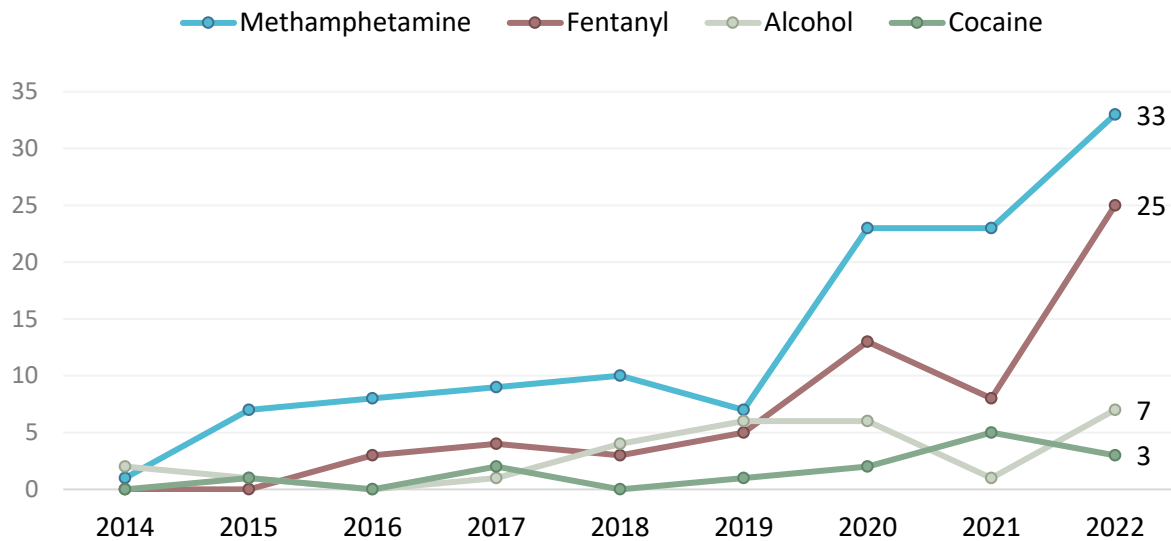


Cochise County Overdose Deaths by MOD

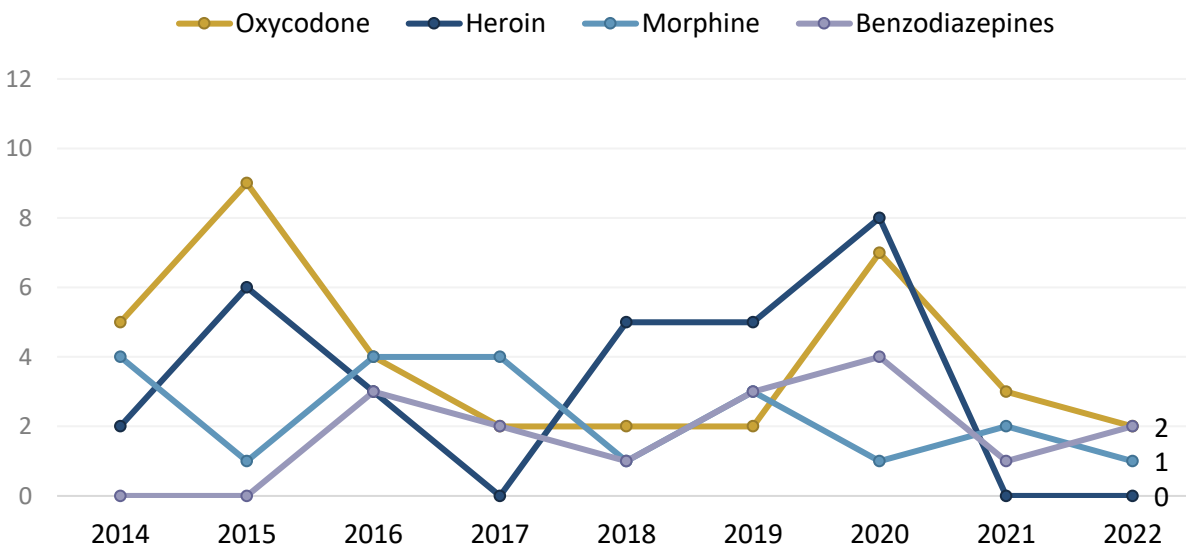


The two graphs below show overdose deaths involving select drugs over time. Prior to 2016, oxycodone contributed to the most overdose deaths in Cochise County. From 2016 to 2022, methamphetamine has contributed to the greatest number of overdose deaths each year. Notably, fentanyl deaths tripled from 2021 to 2022 (8 deaths and 25 deaths, respectively), rising to levels near that of methamphetamine (33 deaths). Heroin deaths have fluctuated in Cochise County over the past decade but have dropped from a high of eight in 2020 to zero in both 2021 and 2022. It is important to note that heroin deaths are likely underreported each year as heroin is rapidly metabolized to morphine by the body; if the metabolite indicative for heroin, 6-monoacetylmorphine, is not present on the toxicology report, the cause of death may be classified as morphine intoxication or opiate (unspecified) intoxication.

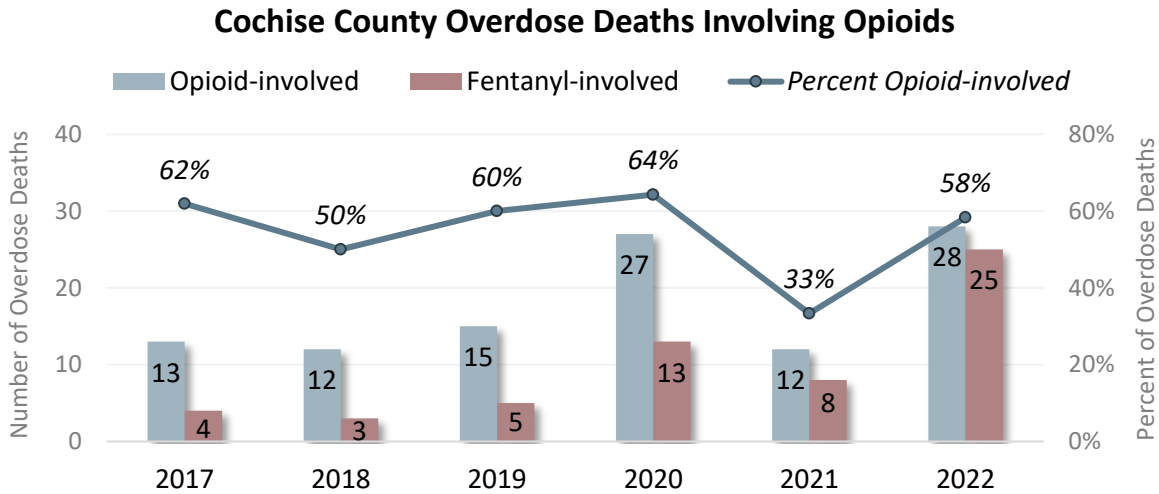
Cochise County Overdose Deaths involving Select Drugs



Cochise County Overdose Deaths involving Select Drugs



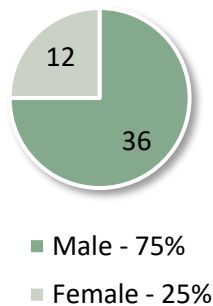
The impact of opioid compounds (e.g., heroin, oxycodone, methadone, fentanyl) on overdose deaths is of significant interest. In Cochise County, opioid-involved overdose deaths have fluctuated over the past several years. 2020 and 2022 recorded the two highest opioid-involved overdose death numbers. Fentanyl contributed to 48% of 2020 opioid-involved deaths and 89% of 2022 opioid-involved deaths. Overall, an opioid contributed to death, either as a single drug or as a component of a polydrug overdose, in 58% of 2022 Cochise County overdose deaths.



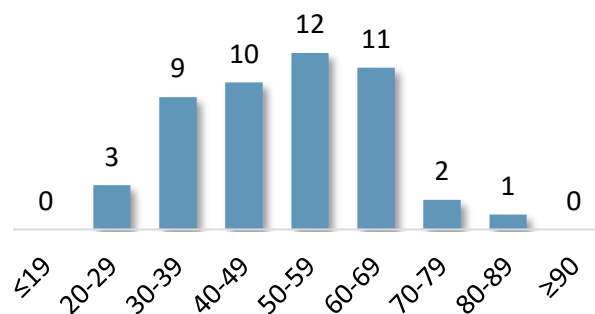
In 2022, male decedents comprised 75% of Cochise County overdose deaths. Decedents age 50-to-59 years old accounted for the largest portion of overdose deaths of any age group (25%). Non-Hispanic Whites made up the largest percentage of overdose deaths among all racial groups (54%).

2022 Cochise County Overdose Deaths

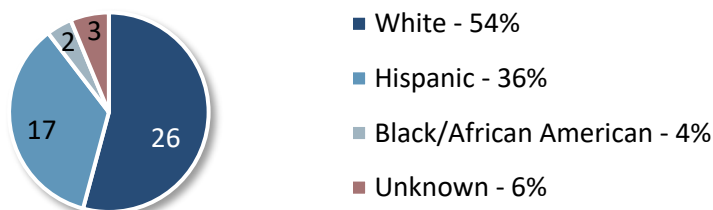
Decedent Sex



Decedent Age Group

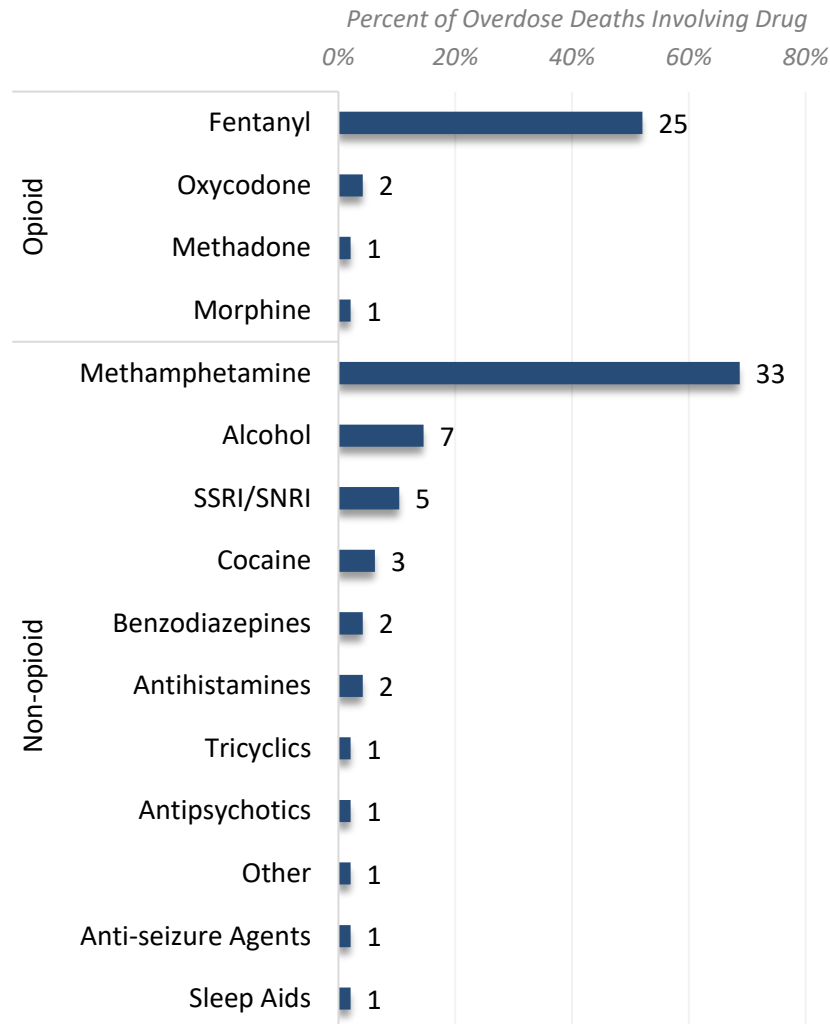


Decedent Race/Ethnicity



In 2022, a single drug contributed to an overdose death in 22 cases (46%) and a combination of drugs contributed to death in 26 cases (54%). Methamphetamine was the most frequently found drug in overdose deaths, contributing to 69% of overdoses, followed by fentanyl (52%), and alcohol (15%). An overdose death may involve more than one drug, therefore the sum of drugs contributing exceeds the sum of total overdose deaths for the year.

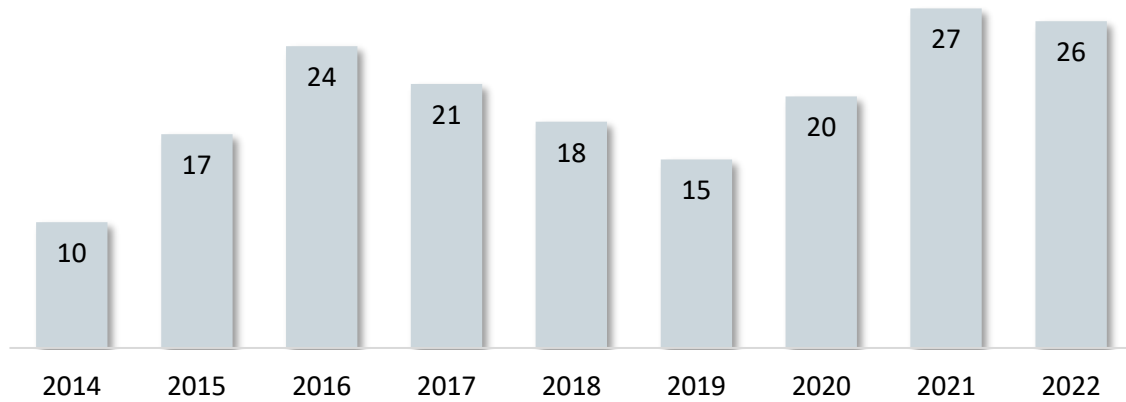
Frequency of Drugs Contributing to Cochise County Overdose Deaths, 2022



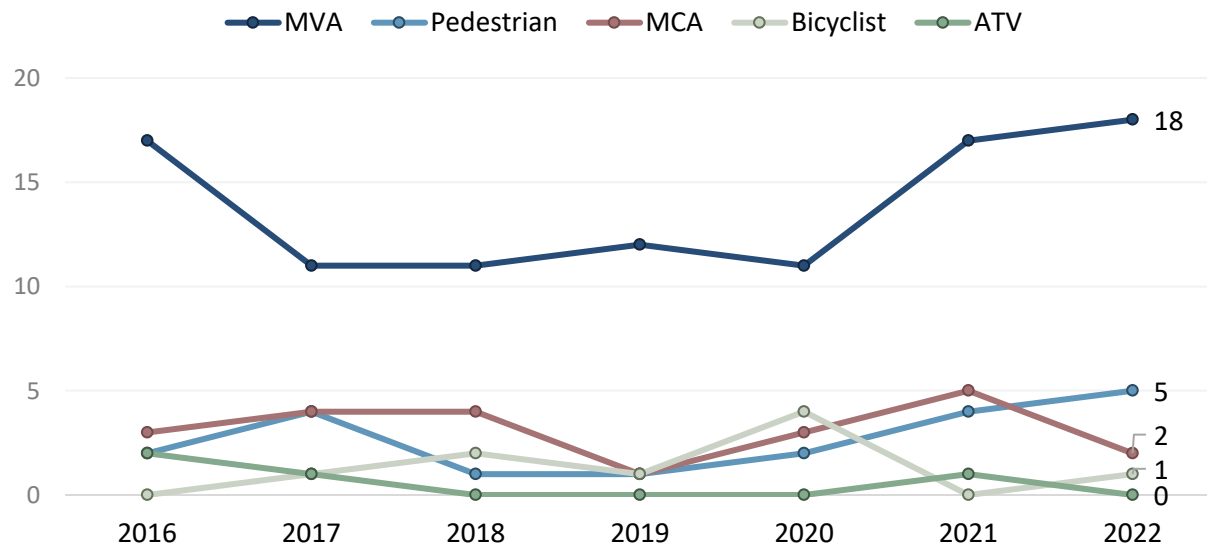
Motor Vehicle-Related

Motor vehicle-related (MV-related) injuries were the second leading cause of non-natural manner deaths in Cochise County in 2022 (26 deaths). Most MV-related deaths in Cochise County each year are occupants (i.e., driver or passenger) of a motor vehicle involved in an accident (MVA). A smaller portion consist of pedestrians struck by vehicles, motorcycle riders involved in an accident (MCA), bicyclists struck by vehicles, and occupants involved in an all-terrain vehicle (ATV) accident.

MV-Related Deaths in Cochise County



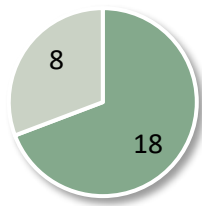
Cochise County MV-Related Deaths by Incident Type



Of 26 MV-related deaths in Cochise County in 2022, 23 were certified as accidents (88%) and three were suicides (12%). Most decedents were male (69%). Decedents age 60-to-69 years old accounted for the largest portion of MV-related deaths of any age group (42%). Non-Hispanic Whites made up the largest percentage of MV-related deaths among all racial groups (61%). Sixty-nine percent of decedents were occupants of a MVA (i.e., driver or passenger), 19% were pedestrians, 8% were motorcycle riders, and 1% were bicyclists.

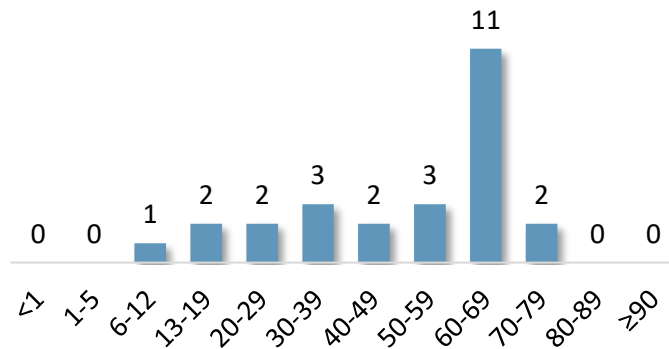
2022 Cochise County Motor Vehicle-Related Deaths

Decedent Sex

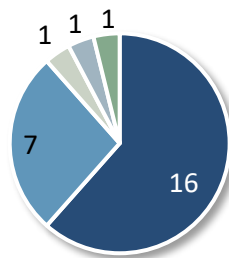


■ Male - 69%
■ Female - 31%

Decedent Age Group

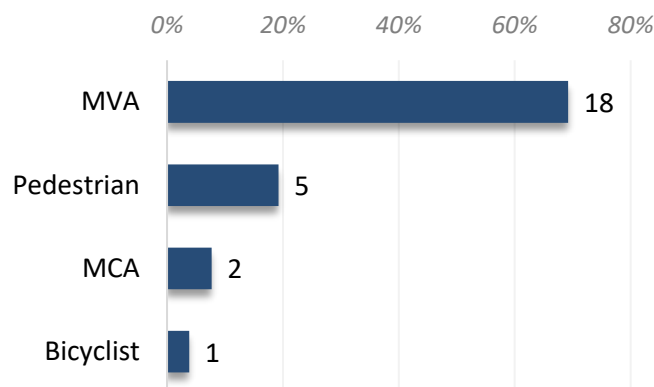


Decedent Race/Ethnicity



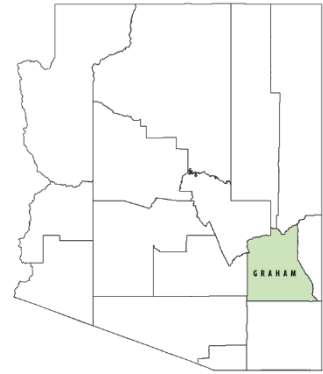
■ White - 61%
■ Hispanic - 27%
■ American Indian/Alaska Native - 4%
■ Black/African American - 4%
■ Asian/Pacific Islander - 4%

Incident Type

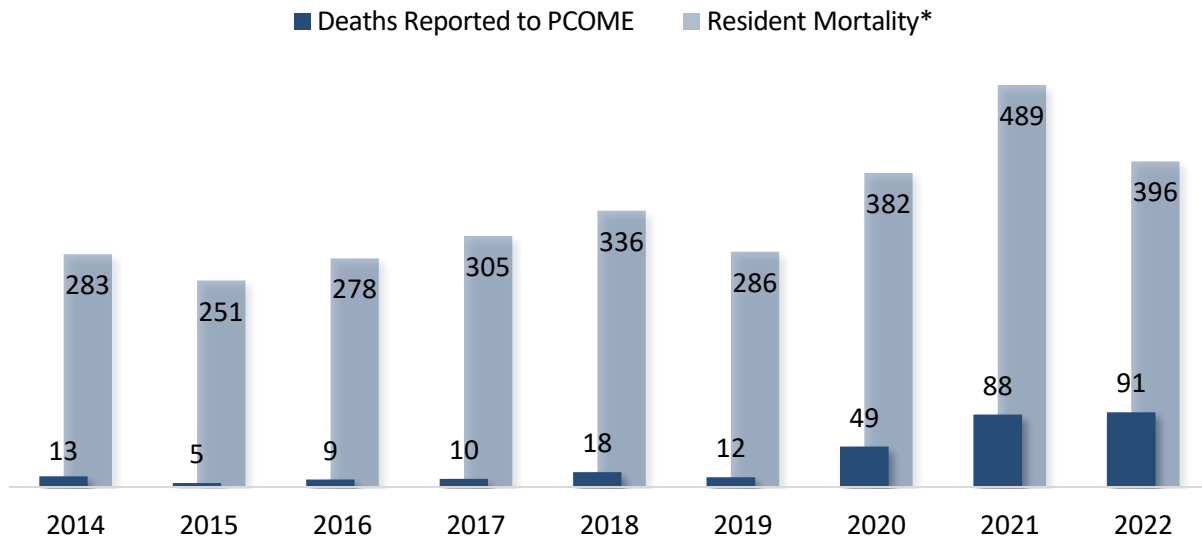


Graham County

Beginning July 1, 2020, Graham County contracts with the PCOME to certify deaths that fall under the jurisdiction of the medical examiner in Graham County. In 2022, there were 396 total deaths in Graham County residents; 91 deaths (23%) were reported to the PCOME for investigation. The PCOME accepted jurisdiction of 65 cases (71% of deaths reported), representing 16% of Graham County resident mortality in 2022.

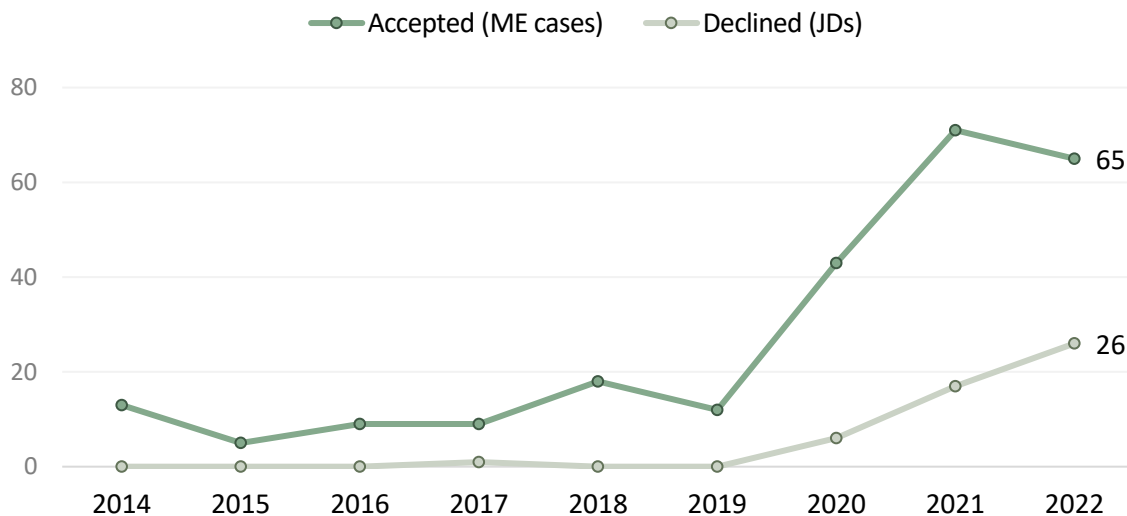


Graham County Resident Mortality and Reported Deaths



*Graham County resident mortality from Arizona Department of Health Services Vital Statistics as of 3/8/2023

Jurisdictional Disposition of Graham County Reported Deaths

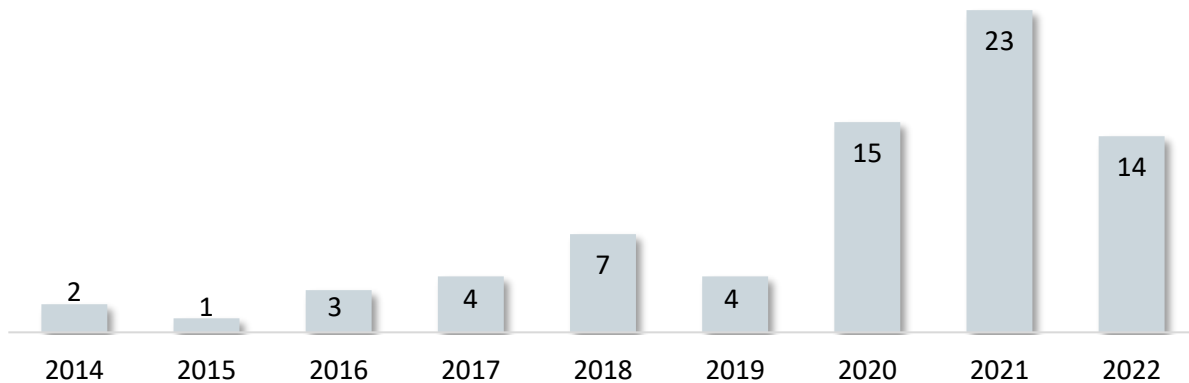


Natural Deaths

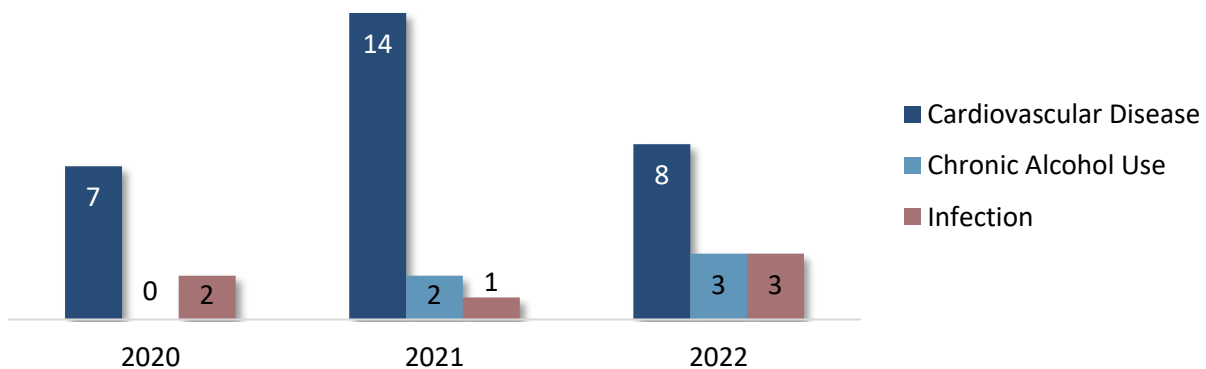
Natural death data in this report is limited to deaths certified by the PCOME (ME cases) and does not reflect the total number of natural deaths in Graham County. Most natural deaths that occur in a county do not fall under the jurisdiction of a medical examiner and instead, are certified by a decedent's healthcare provider. The PCOME accepts jurisdiction of cases that appear to be natural deaths if the decedent is not in the care of a healthcare provider, dies while in custody, is unidentified, and/or a previously healthy individual dies suddenly/unexpectedly, as determined by the PCOME. Natural death data should be interpreted with caution as the PCOME is not aware of the number of natural deaths certified by physicians in the community.

Since contracting with the PCOME in 2020, natural deaths have made up the second largest proportion of Graham County ME Cases each year. In 2022, 14 Graham County cases were certified as natural deaths. Cardiovascular disease is the most common cause of natural deaths certified by the PCOME.

Graham County Natural Deaths Certified by the PCOME



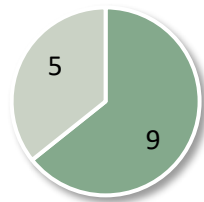
Graham County Natural Deaths by Cause of Death (Top 3)



Male decedents comprised 64% of Graham County natural deaths certified by the PCOME. Decedents age 70-to-79 years old accounted for the largest portion of natural deaths of any age group (29%). American Indians/Alaska Natives made up the largest percentage of deaths among all racial groups (43%). Cardiovascular disease was the most common cause of death (57%).

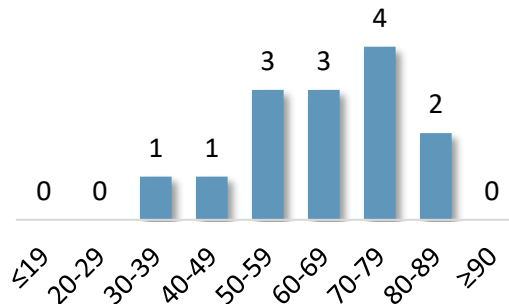
2022 Graham County Natural Deaths (ME Cases Only)

Decedent Sex

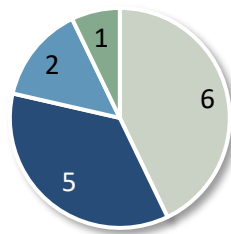


■ Male - 64%
■ Female - 36%

Decedent Age Group

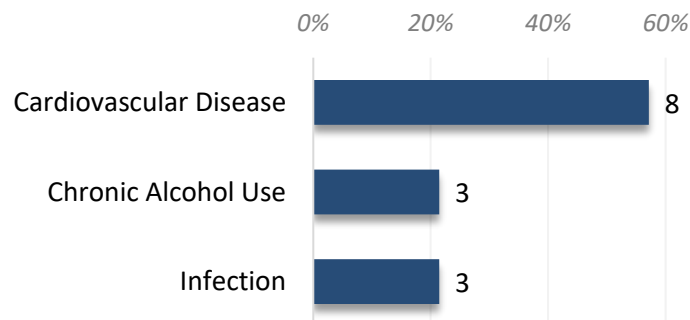


Decedent Race/Ethnicity



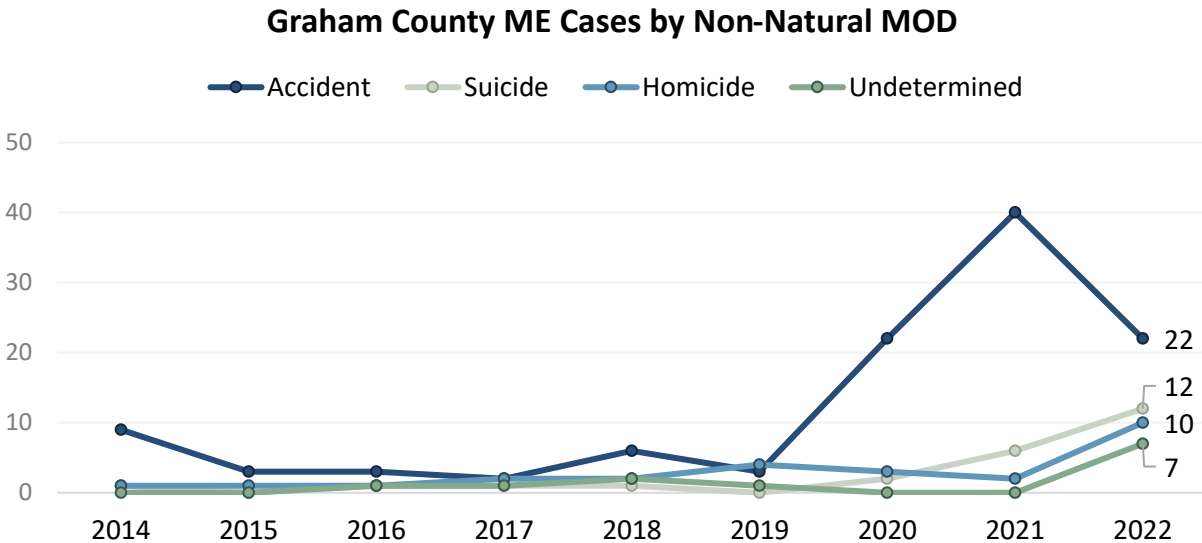
■ American Indian/Alaska Native - 43%
■ White - 36%
■ Hispanic - 14%
■ Asian/Pacific Islander - 7%

Cause of Death



Non-Natural Manner Deaths

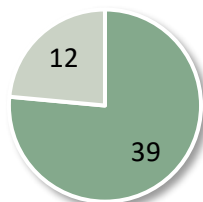
Non-natural manner of death (MOD) classifications include accident, homicide, suicide, and undetermined. The graph below displays Graham County ME Cases by non-natural MOD from 2014 to 2022. Since contracting with the PCOME in 2020, accidental deaths have made up the largest portion of Graham County cases. Between 2021 and 2022, suicides, homicides, and undetermined manner deaths all increased whereas accidents decreased.



In total, the PCOME certified 51 deaths in Graham County with a non-natural manner in 2022. Male decedents comprised 76% of Graham County non-natural manner deaths. Decedents age 30-to-39 years old accounted for the largest portion of deaths of any age group (24%). Non-Hispanic Whites accounted for the largest percentage of non-natural manner deaths among all racial groups (37%). Demographic data by non-natural MOD is presented in the table on the following page.

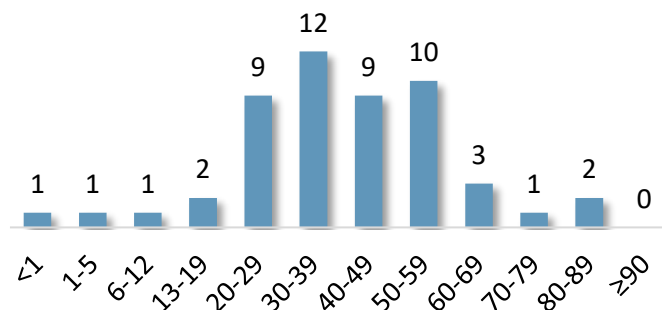
2022 Graham County Non-Natural MOD Cases by Demographics

Decedent Sex

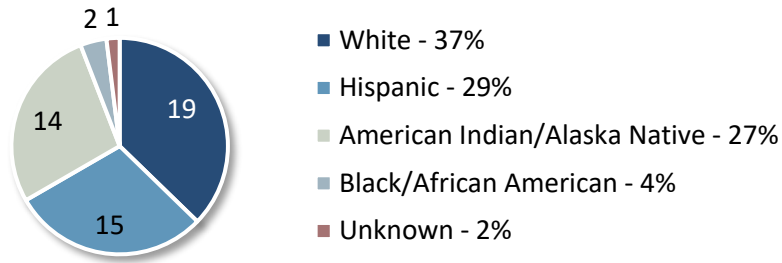


■ Male - 76%
■ Female - 24%

Decedent Age Group



Decedent Race/Ethnicity



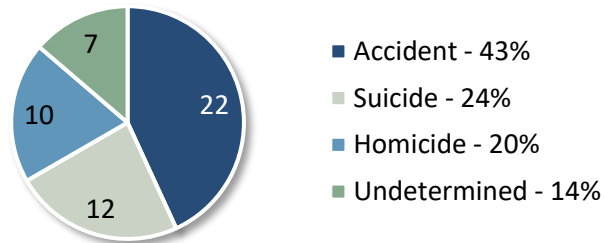
2022 Graham County ME Case Demographics by Non-Natural MOD n (%)

Characteristic	Accident (N=22)	Suicide (N=12)	Homicide (N=10)	Undeterm. (N=7)
Sex				
Male	15 (68%)	11 (92%)	9 (90%)	4 (57%)
Female	7 (32%)	1 (8%)	1 (10%)	3 (43%)
Age				
<1	-	-	-	1 (14.3%)
1-5	1 (5%)	-	-	-
6-12	-	-	-	1 (14.3%)
13-19	1 (4.5%)	-	1 (10%)	-
20-29	4 (18%)	2 (17%)	2 (20%)	1 (14.3%)
30-39	6 (27%)	4 (33%)	1 (10%)	1 (14.3%)
40-49	4 (18%)	1 (8.3%)	3 (30%)	1 (14.3%)
50-59	3 (14%)	3 (25%)	3 (30%)	1 (14.3%)
60-69	2 (9%)	-	-	1 (14.3%)
70-79	-	1 (8.3%)	-	-
80-89	1 (4.5%)	1 (8.3%)	-	-
Race/Ethnicity				
White	8 (36%)	6 (50%)	1 (10%)	4 (57%)
Hispanic	8 (36%)	3 (25%)	2 (20%)	2 (29%)
American Indian/Alaska Native	3 (14%)	3 (25%)	7 (70%)	1 (14%)
Black/African American	2 (9%)	-	-	-
Asian/Pacific Islander	-	-	-	-
Unknown	1 (5%)	-	-	-

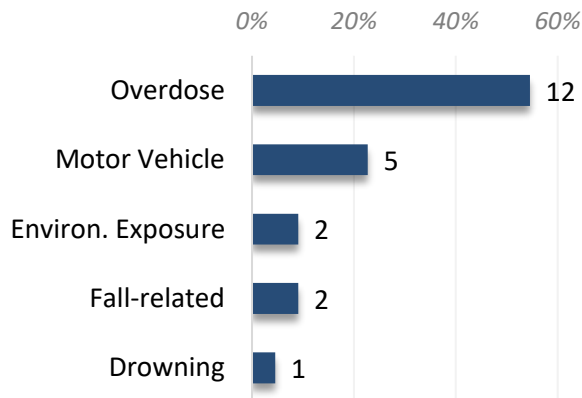
Accident deaths made up the largest proportion of non-natural manner deaths certified in Graham County in 2022 (43%). Cause of death by manner is displayed in the bar graphs below. Overdose was the most frequent cause of accidental deaths (55%). Hanging was the most common means of suicide deaths (42%). Most homicide deaths were a result of firearms (70%). Lastly, the majority of undetermined manner deaths were certified with an undetermined cause (57%).

2022 Graham County Non-Natural MOD Cases by Manner and Cause of Death

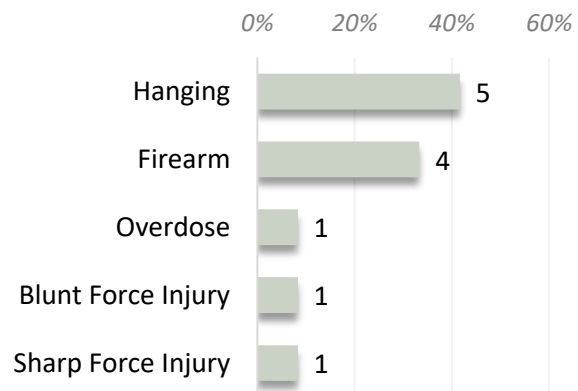
Manner of Death



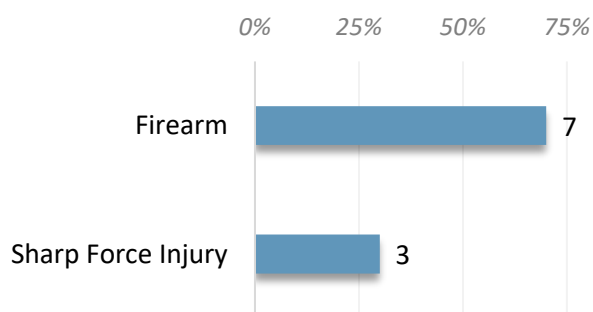
Accident



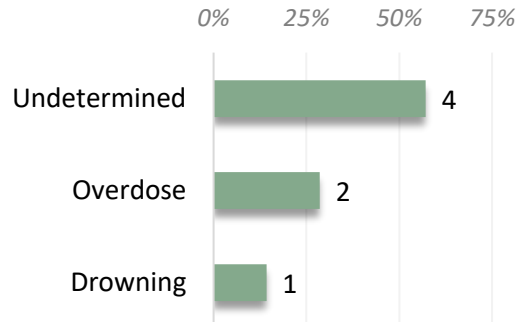
Suicide



Homicide



Undetermined



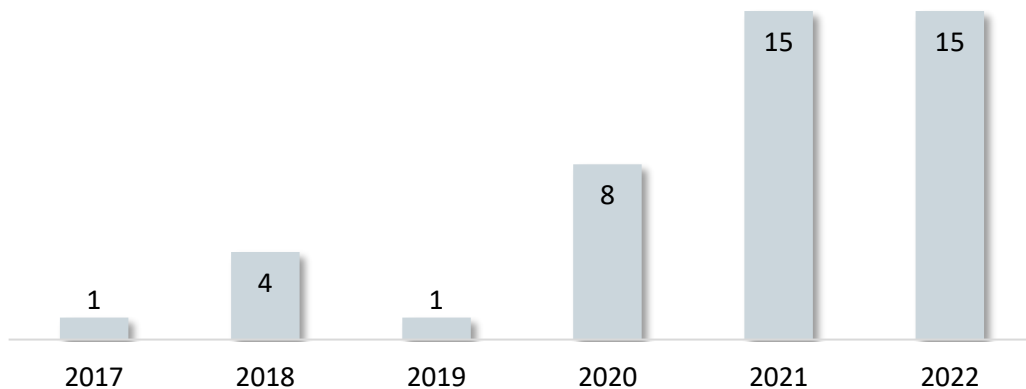
Cause-Specific Deaths

The leading causes of death for Graham County cases certified with a non-natural manner (i.e., accidents, homicides, suicides, and undetermined manner deaths) are presented in this section. Of 51 Graham County deaths certified by the PCOME with a non-natural manner in 2022, the most common cause of death was overdose (n= 15, 29%), followed by firearms (n=11, 22%). Data on these two cause-specific deaths are detailed in this section.

Overdose

In 2022, overdose was the leading cause of non-natural manner deaths in Graham County. A total of 15 deaths were attributed to an overdose, the same as the year prior. Unlike 2021, not all overdose deaths in 2022 were accidents; 12 out of 15 overdose deaths were certified as accidents (80%), two were undetermined manner deaths (13%), and one overdose was a suicide (7%).

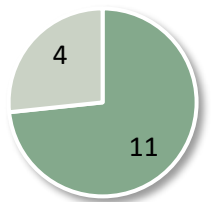
Graham County Overdose Deaths Certified by the PCOME



In 2022, male decedents comprised 73% of Graham County overdose deaths. Decedents age 30-to-39 years old accounted for the largest portion of overdose deaths of any age group (33%). Non-Hispanic Whites and Hispanics equally made up the largest percentage of overdose deaths among racial groups (40% each).

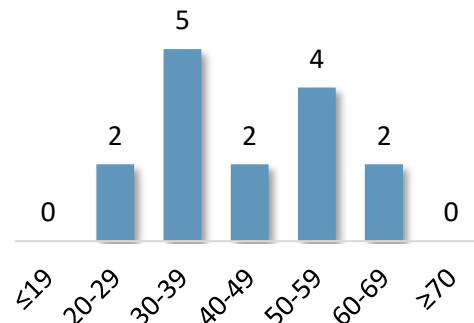
2022 Graham County Overdose Deaths

Decedent Sex

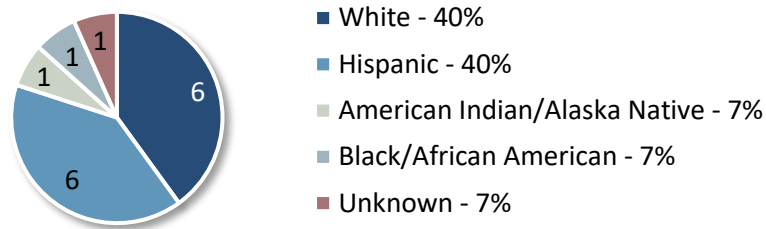


■ Male - 73%
■ Female - 27%

Decedent Age Group

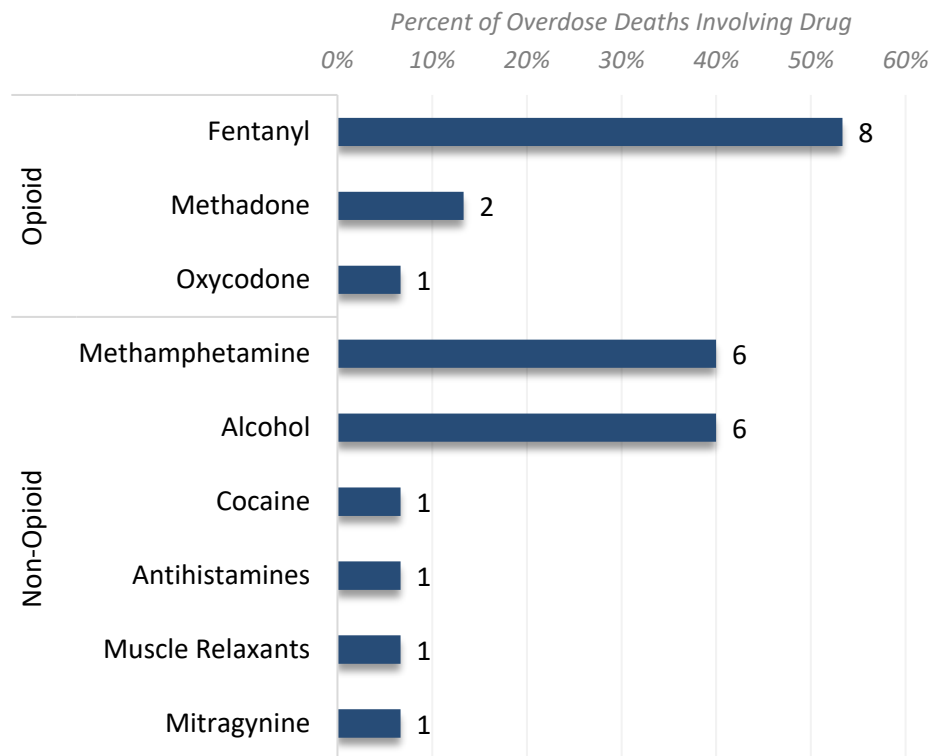


Decedent Race/Ethnicity



A single drug contributed to an overdose death in 6 cases (40%) and a combination of drugs contributed to death in 9 cases (60%). In two-thirds of cases, an opioid contributed to death either as a single drug or as a component of a polydrug overdose (10 cases). Fentanyl was the most frequently found drug in overdose deaths for a second year in a row, contributing to 53% of Graham County overdose deaths. Methamphetamine and alcohol were the next most frequently found drug, involved in 40% of overdose deaths each. An overdose death may involve more than one drug, therefore the sum of drugs contributing exceeds the sum of total overdose deaths for the year.

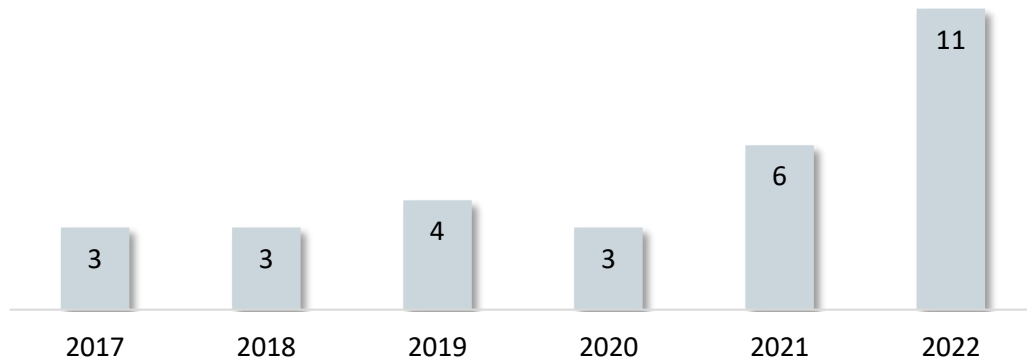
Frequency of Drugs Contributing to Graham County Overdose Deaths, 2022



Firearms

Firearm deaths were the second most common cause of non-natural manner deaths in Graham County in 2022. A total of 11 deaths were a result of firearms: seven homicides (64%) and four suicides (36%).

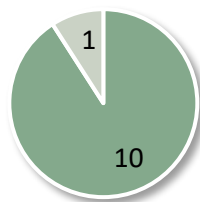
Graham County Firearm Deaths Certified by the PCOME



In 2022, male decedents comprised 91% of Graham County firearm deaths. Decedents age 50-to-59 years old accounted for the largest portion of deaths of any age group (27%). American Indians/Alaska Natives made up the largest percentage of deaths among racial groups (45%).

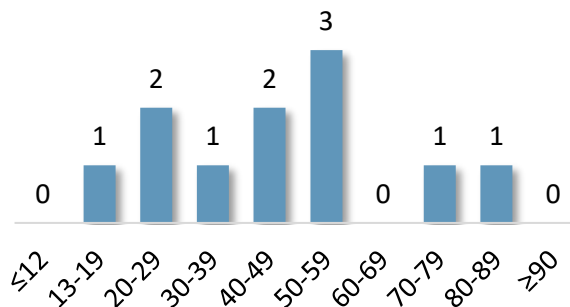
2022 Graham County Firearm Deaths

Decedent Sex

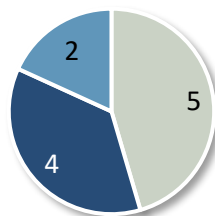


- Male - 91%
- Female - 9%

Decedent Age Group



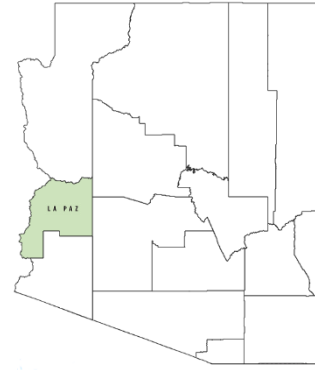
Decedent Race/Ethnicity



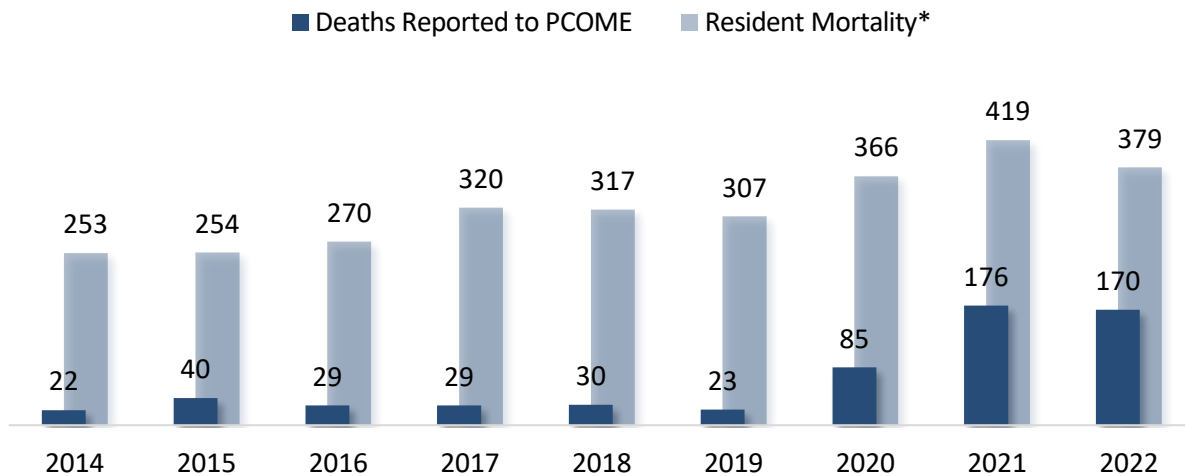
- American Indian/Alaska Native - 45%
- White - 36%
- Hispanic - 18%

La Paz County

Beginning July 1, 2020, La Paz County contracts with the PCOME to certify deaths that fall under the jurisdiction of the medical examiner (ME) in La Paz County. Prior to this, cases were referred to the PCOME by La Paz County's Alternate Medical Examiner on an as-needed basis for examinations and death certifications. Data for 2021 and 2022 represent the first full calendar years that the PCOME has served as the appointed ME to La Paz County. The number of deaths in La Paz County reported to the PCOME and cases accepted were comparable for both years. The PCOME accepted jurisdiction of 64% of deaths reported in 2022 (108 cases), representing 28% of La Paz County resident mortality*.

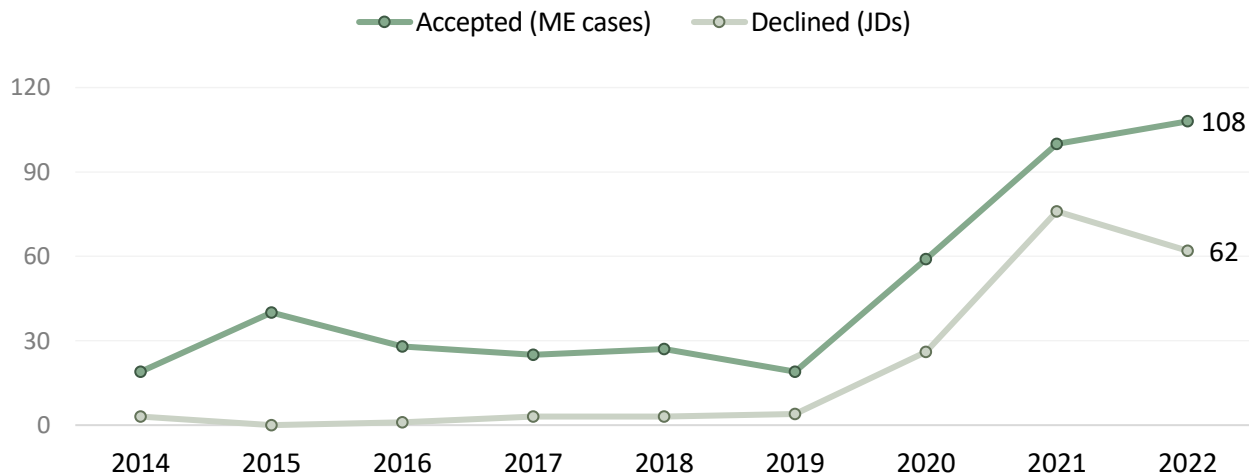


La Paz County Resident Mortality and Reported Deaths



*La Paz County resident mortality from Arizona Department of Health Services Vital Statistics as of 3/8/2023

Jurisdictional Disposition of La Paz County Reported Deaths

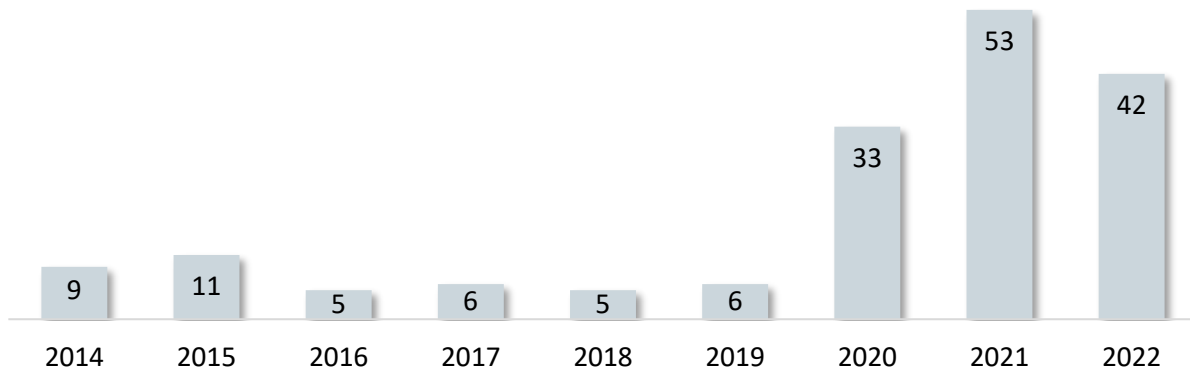


Natural Deaths

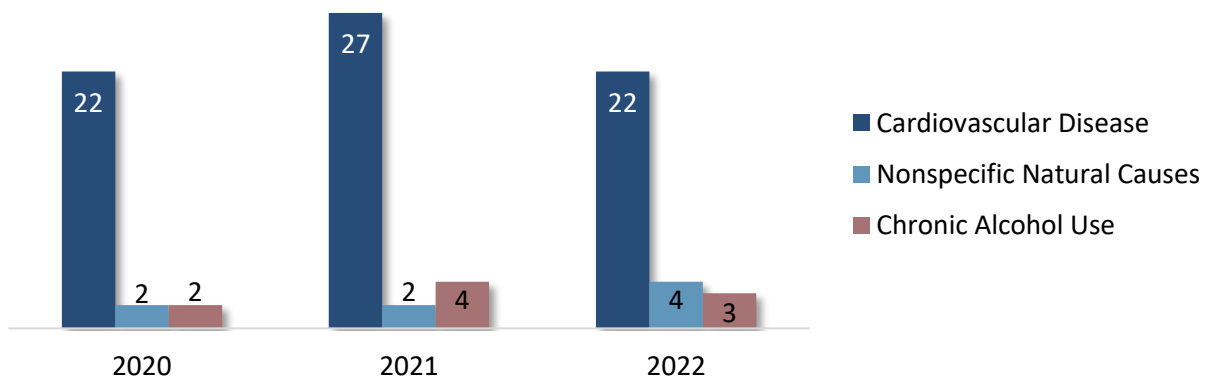
Natural death data in this report is limited to deaths certified by the PCOME (ME cases) and does not reflect the total number of natural deaths in La Paz County. Most natural deaths that occur in a county do not fall under the jurisdiction of a medical examiner and instead, are certified by a decedent's healthcare provider. The PCOME accepts jurisdiction of cases that appear to be natural deaths if the decedent is not in the care of a healthcare provider, dies while in custody, is unidentified, and/or a previously healthy individual dies suddenly/unexpectedly, as determined by the PCOME. Natural death data should be interpreted with caution as the PCOME is not aware of the number of natural deaths certified by physicians in the community.

Since contracting with the PCOME in 2020, natural deaths have made up the largest proportion of La Paz County ME Cases each year (average of 49% of ME Cases). In 2022, the PCOME certified 42 La Paz County cases as natural deaths, a 21% decrease from 2021. Cardiovascular disease is the most common cause of natural deaths certified by the PCOME.

La Paz County Natural Deaths Certified by the PCOME



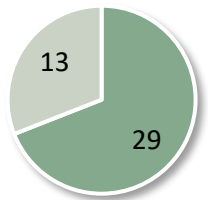
La Paz County Natural Deaths by Cause of Death (Top 3)



Male decedents comprised 69% of La Paz County natural deaths (ME cases only). Decedents age 60-to-69 years old accounted for the largest portion of natural deaths of any age group (36%). Non-Hispanic Whites made up the largest percentage of deaths among all racial groups (86%). Cardiovascular disease was the most common cause of natural deaths (52%).

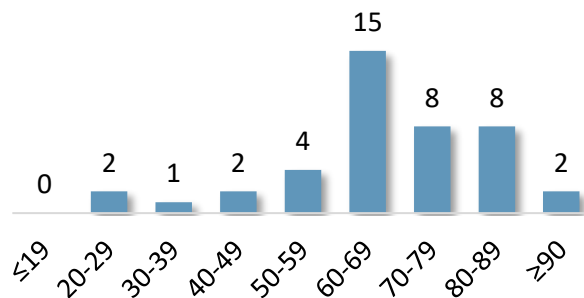
2022 La Paz County Natural Deaths (ME Cases Only)

Decedent Sex

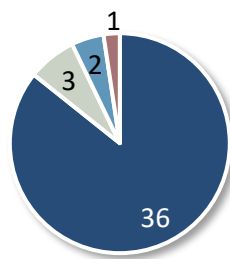


■ Male - 69%
■ Female - 31%

Decedent Age Group

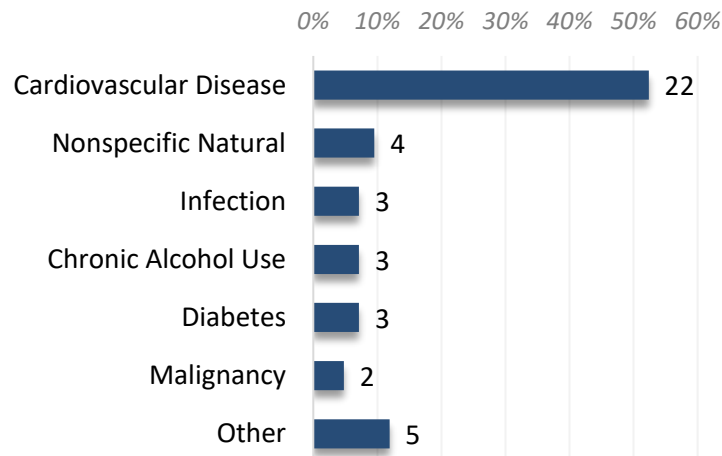


Decedent Race/Ethnicity



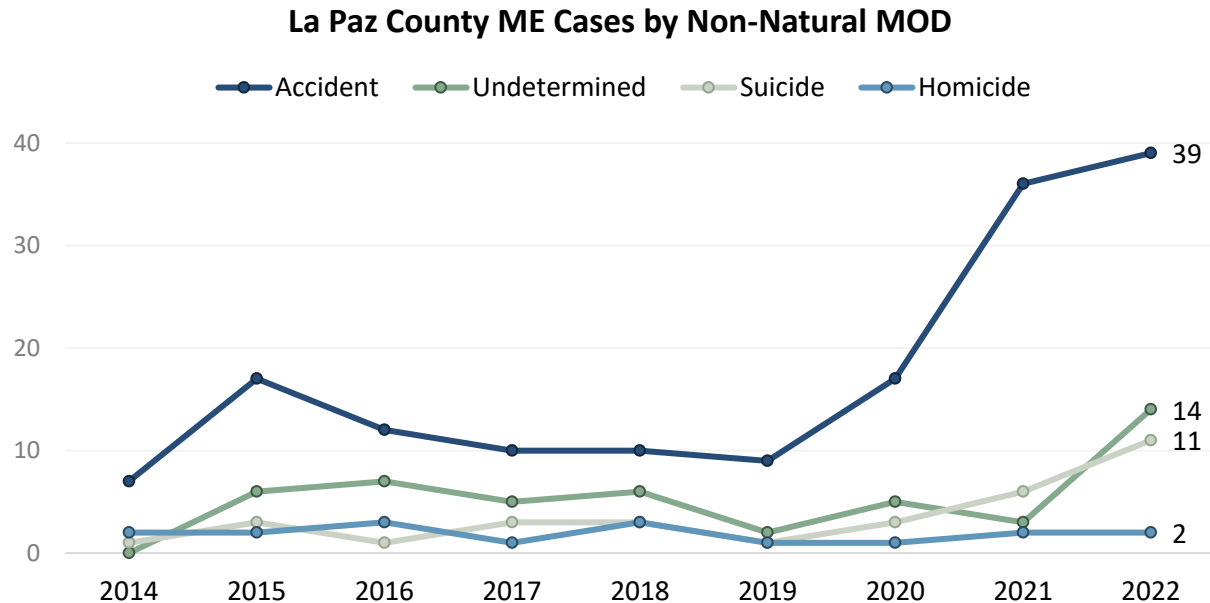
■ White - 86%
■ American Indian/Alaska Native - 7%
■ Hispanic - 5%
■ Unknown - 2%

Cause of Death



Non-Natural Manner Deaths

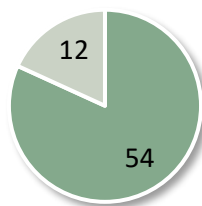
Non-natural manner of death (MOD) classifications include accident, homicide, suicide, and undetermined. The graph below displays La Paz County ME Cases by non-natural MOD from 2014 to 2022. Data comparison is best made between calendar years 2021 and 2022, after La Paz county's contract with the PCOME began. Accidents, suicides, and undetermined manner deaths increased in this time frame while homicides were unchanged.



In total, the PCOME certified 66 deaths in La Paz County with a non-natural manner in 2022. Male decedents comprised 82% of La Paz County non-natural manner deaths. Decedents age 60-to-69 years old accounted for the largest portion of deaths of any age group (17%). Non-Hispanic Whites accounted for the largest percentage of non-natural manner deaths among all racial groups (65%). Demographic data by MOD is presented in the table on the following page.

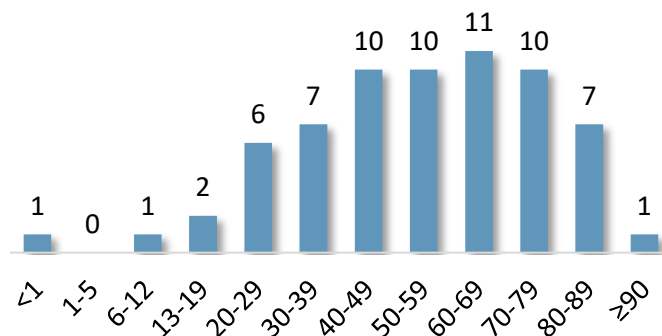
2022 La Paz County Non-Natural MOD Cases by Demographics

Decedent Sex

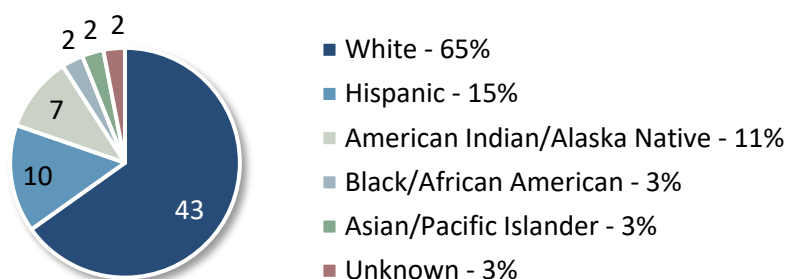


■ Male - 82%
■ Female - 18%

Decedent Age Group



Decedent Race/Ethnicity



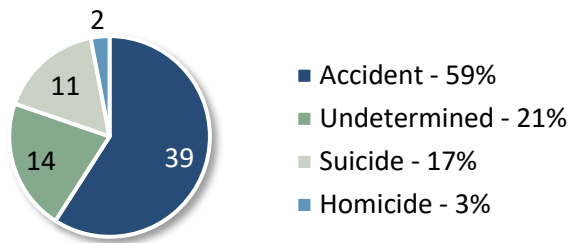
2022 La Paz County ME Cases
Decedent Demographics by Non-Natural Manner of Death, n (%)

Characteristic	Accident N=39	Undeterm. N=14	Suicide N=11	Homicide N=2
Sex				
Male	32 (82%)	10 (71%)	11 (100%)	1 (50%)
Female	7 (18%)	4 (29%)	-	1 (50%)
Age Group				
<1	-	1 (7%)	-	-
1-5	-	-	-	-
6-12	1 (3%)	-	-	-
13-19	-	-	2 (18.2%)	-
20-29	6 (15.5%)	-	-	-
30-39	4 (10%)	1 (7%)	1 (9.1%)	1 (50%)
40-49	6 (15.5%)	2 (14%)	2 (18.2%)	-
50-59	4 (10%)	4 (29%)	2 (18.2%)	-
60-69	7 (18%)	3 (22%)	1 (9.1%)	-
70-79	7 (18%)	-	2 (18.2%)	1 (50%)
80-89	4 (10%)	2 (14%)	1 (9.1%)	-
≥90	-	1 (7%)	-	-
Race/Ethnicity				
White	23 (59%)	11 (78%)	8 (73%)	1 (50%)
Hispanic	7 (18%)	1 (7%)	1 (9%)	1 (50%)
American Indian/Alaska Native	5 (13%)	-	2 (18%)	-
Black/African American	1 (2.5%)	1 (7%)	-	-
Asian/Pacific Islander	2 (5%)	-	-	-
Unknown	1 (2.5%)	1 (7%)	-	-

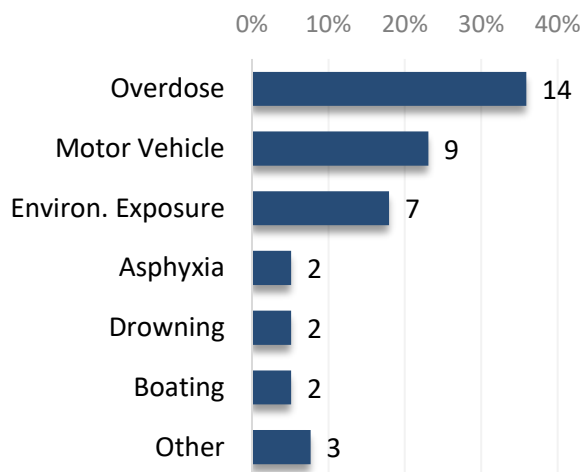
Accident deaths made up the largest proportion of La Paz County non-natural manner deaths (59%). The bar graphs below, separated by MOD, display the number and ratio of 2022 La Paz County ME cases by cause/mechanism of death. In 2022, overdose was the leading cause of accident deaths in La Paz County (36%). Most undetermined manner deaths were certified with an undetermined cause of death (71%). Firearms were the most common means of suicide (73%). There were two homicides, one caused by firearms and the other by sharp force injury.

2022 La Paz County Non-Natural MOD Cases by Manner and Cause of Death

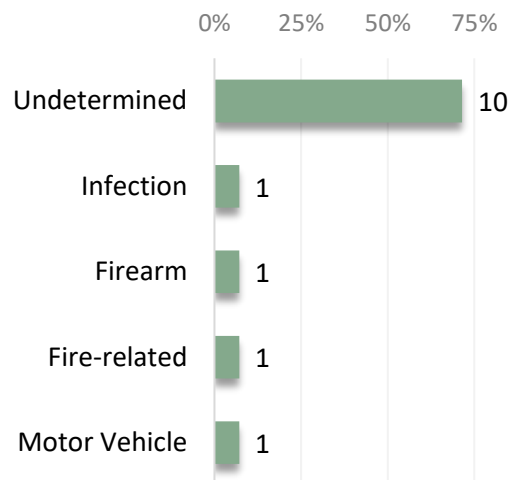
Manner of Death



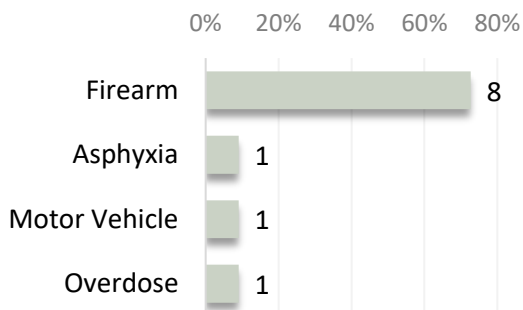
Accident



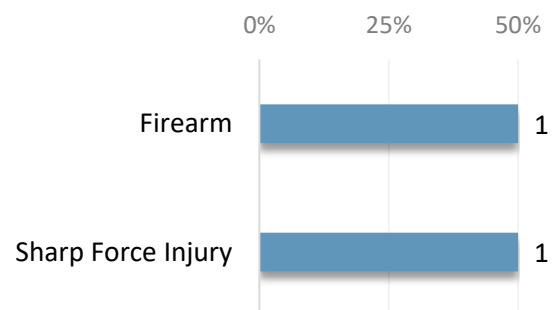
Undetermined



Suicide



Homicide



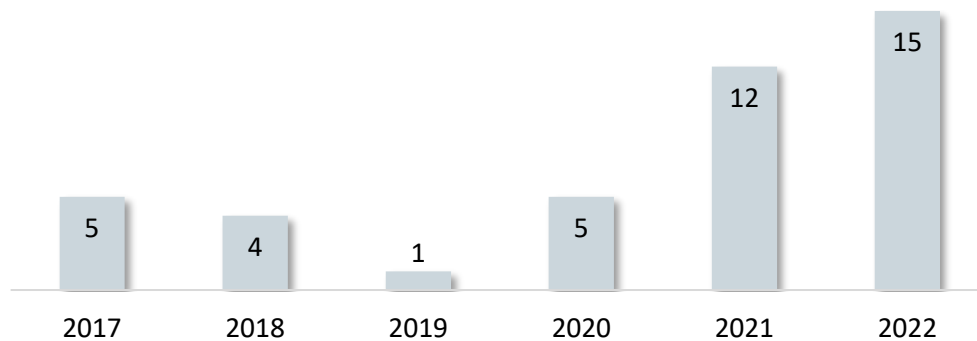
Cause-Specific Deaths

The leading causes of death for La Paz County cases certified with a non-natural manner (i.e., accidents, homicides, suicides, and undetermined manner deaths) are presented in this section. Of 66 La Paz County deaths certified by the PCOME with a non-natural manner in 2022, the most common cause was overdose (n=15, 23%), followed by motor vehicle-related injuries (n=11, 17%).

Overdose

Overdose was the leading cause of non-natural manner deaths in La Paz County in 2022. A total of 15 La Paz County deaths were attributed to an overdose: 14 accidental deaths (93%) and one suicide (7%).

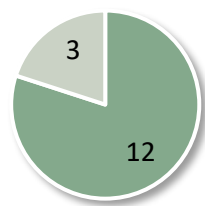
La Paz County Overdose Deaths Certified by the PCOME



Decedents of a drug overdose in La Paz County in 2022 were most frequently male (80%); between 40-49 years old (40%); and non-Hispanic White (47%).

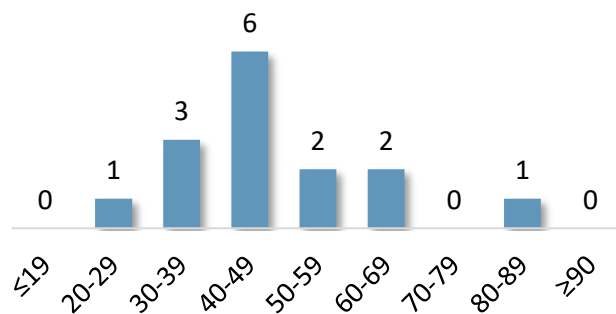
2022 La Paz County Overdose Deaths

Decedent Sex

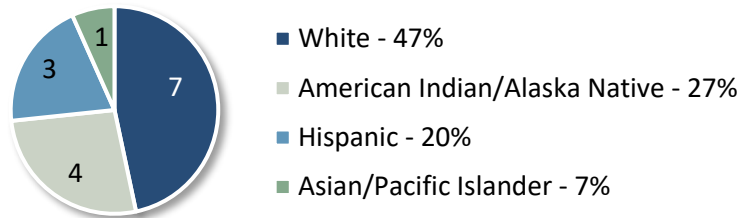


- Male - 80%
- Female - 20%

Decedent Age Group

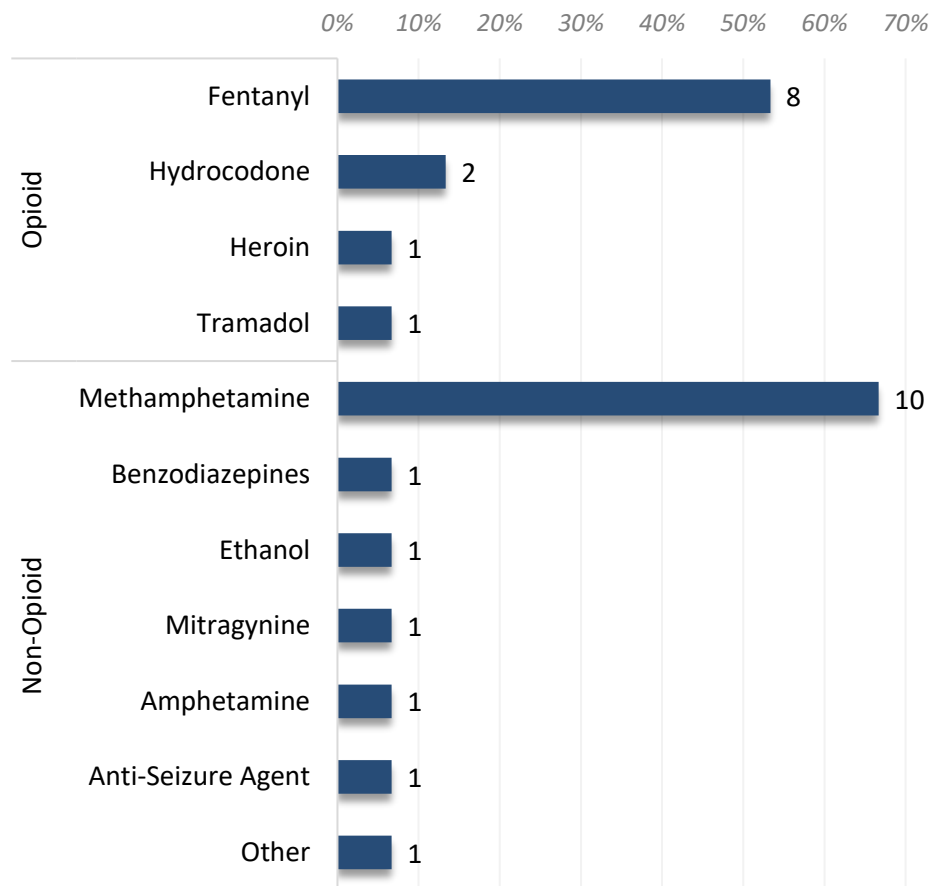


Decedent Race/Ethnicity



At a ratio of three to two, overdose due to a single drug was more common than polydrug deaths. An opioid was involved in 60% of all La Paz County overdose deaths in 2022, either as a single drug or as a component of a polydrug overdose. Methamphetamine remained the most frequently found drug, contributing to 67% of La Paz County overdose deaths. Second to methamphetamine was fentanyl, which contributed to 53% of overdose deaths. Notably, fentanyl contributed to eight out of nine opioid-involved overdose deaths.

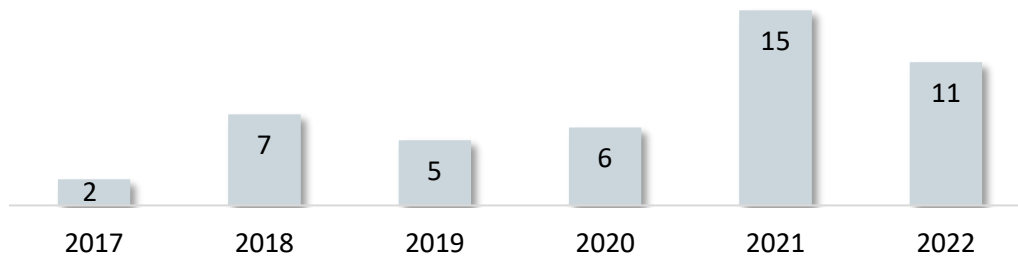
Frequency of Drugs Contributing to La Paz County Overdose Deaths, 2022



Motor Vehicle-Related

Motor vehicle-related (MV-related) injuries were the second leading cause of non-natural manner deaths in La Paz County in 2022 (11 deaths). Of these, nine deaths were certified as accidents (82%), one was a suicide (9%), and one was certified with an undetermined manner (9%).

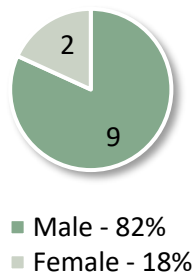
La Paz County MV-Related Deaths Certified by the PCOME



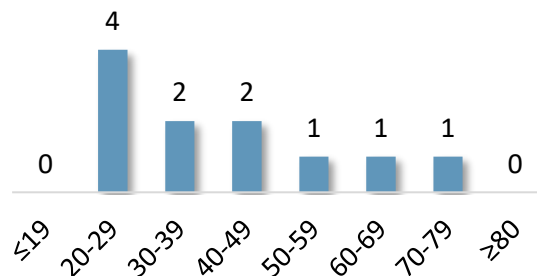
Decedents were predominantly male (82%); in their twenties (36%); and non-Hispanic White (45%). MV-related cases were comprised of occupants (i.e., driver or passenger) of a motor vehicle involved in an accident (n=7, 64%), pedestrians struck by a vehicle (n=3, 27%), and a motorcyclist involved in an accident (n=1, 9%).

2022 La Paz County Motor Vehicle-Related Deaths

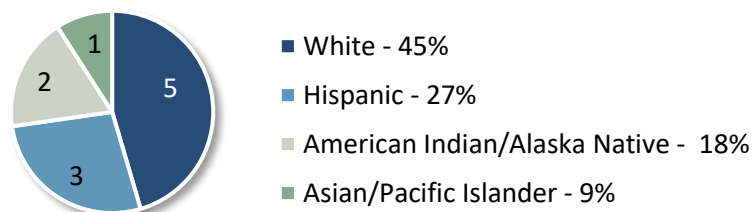
Decedent Sex



Decedent Age Group

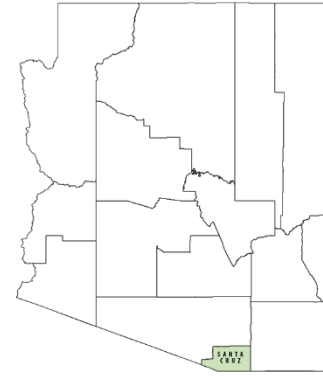


Decedent Race/Ethnicity

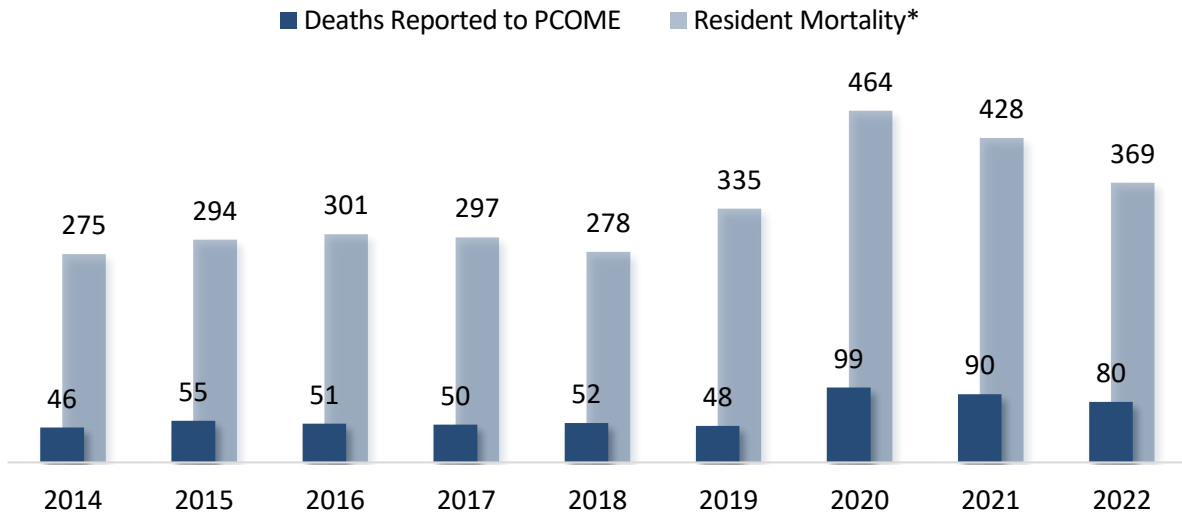


Santa Cruz County

The number of Santa Cruz County deaths reported to the PCOME each year represents between 15-20% of Santa Cruz County resident mortality. In 2022, 80 deaths in Santa Cruz County were reported to the PCOME for investigation (22% of resident mortality). Of cases reported in a year, roughly three quarters are accepted under the PCOME jurisdiction (59 in 2022, 74% of reported). Cases accepted and certified by the PCOME in 2022 represent 16% of Santa Cruz County resident mortality.

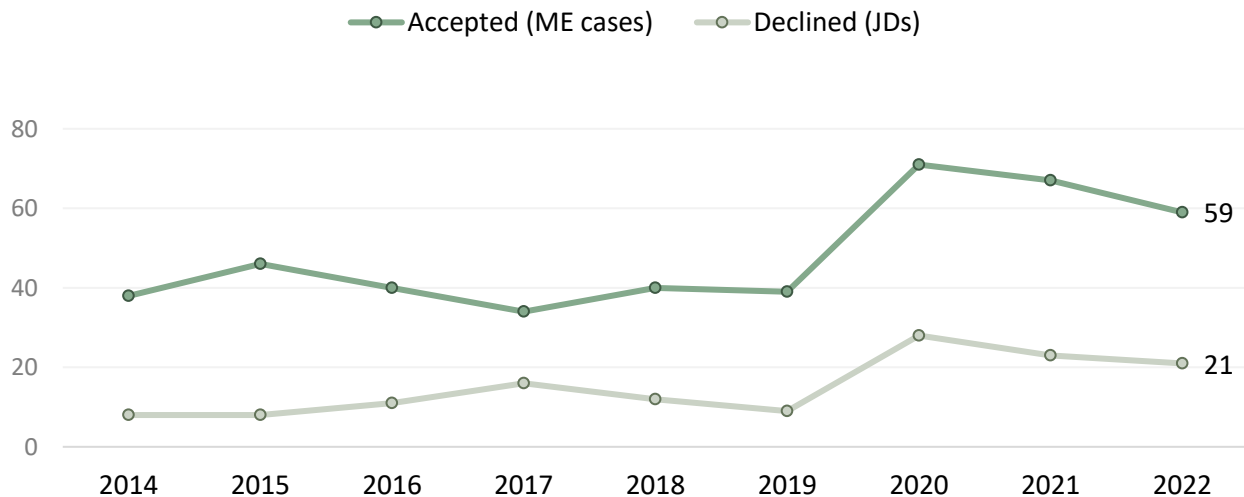


Santa Cruz County Resident Mortality and Reported Deaths



*Santa Cruz County resident mortality from Arizona Department of Health Services Vital Statistics as of 3/8/2023

Jurisdictional Disposition of Santa Cruz County Reported Deaths

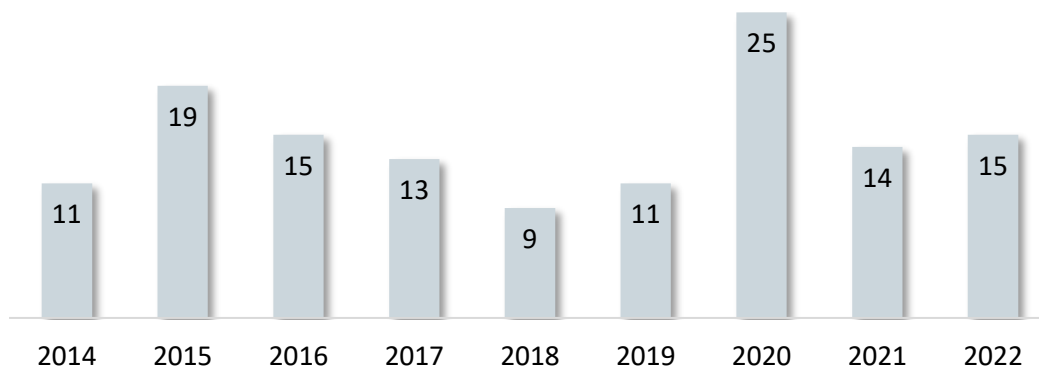


Natural Deaths

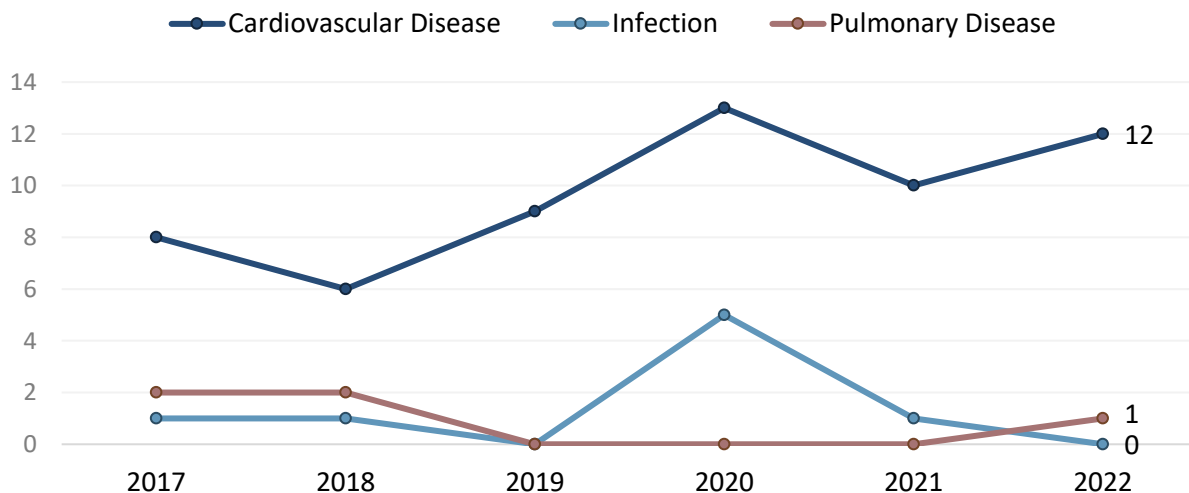
Natural death data in this report is limited to deaths certified by the PCOME (ME cases) and does not reflect the total number of natural deaths in Santa Cruz County. Most natural deaths that occur in a county do not fall under the jurisdiction of a medical examiner and instead, are certified by a decedent's healthcare provider. The PCOME accepts jurisdiction of cases that appear to be natural deaths if the decedent is not in the care of a healthcare provider, dies while in custody, is unidentified, and/or a previously healthy individual dies suddenly/unexpectedly, as determined by the PCOME. Natural death data should be interpreted with caution as the PCOME is not aware of the number of natural deaths certified by physicians in the community.

A quarter of Santa Cruz County deaths certified by the PCOME in 2022 were certified as natural deaths (15 cases); cardiovascular disease continues to be the most common cause of death.

Santa Cruz County Natural Deaths Certified by the PCOME



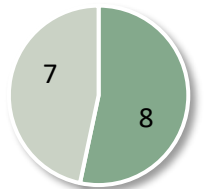
Santa Cruz County Natural Deaths by Cause of Death (Top 3)



In 2022, male decedents comprised 53% of Santa Cruz County natural deaths (ME cases only). Decedents age 70-to-79 years old accounted for the largest portion of natural deaths of any age group (40%). Fifty-three percent of decedents were non-Hispanic White and 47% were Hispanic. Cardiovascular disease was the most common cause of natural deaths certified by the PCOME (80%).

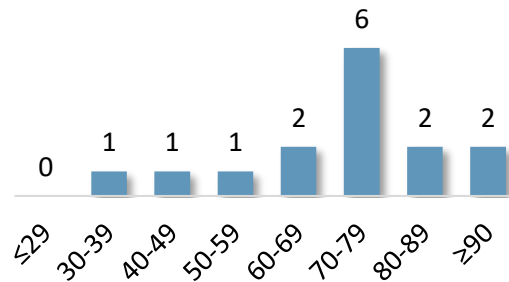
2022 Santa Cruz County Natural Deaths (ME Cases Only)

Decedent Sex

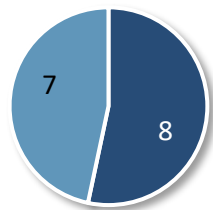


■ Male - 53%
■ Female - 47%

Decedent Age Group

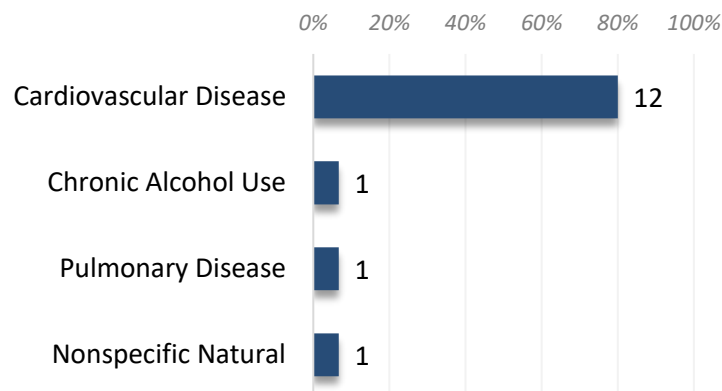


Decedent Race/Ethnicity



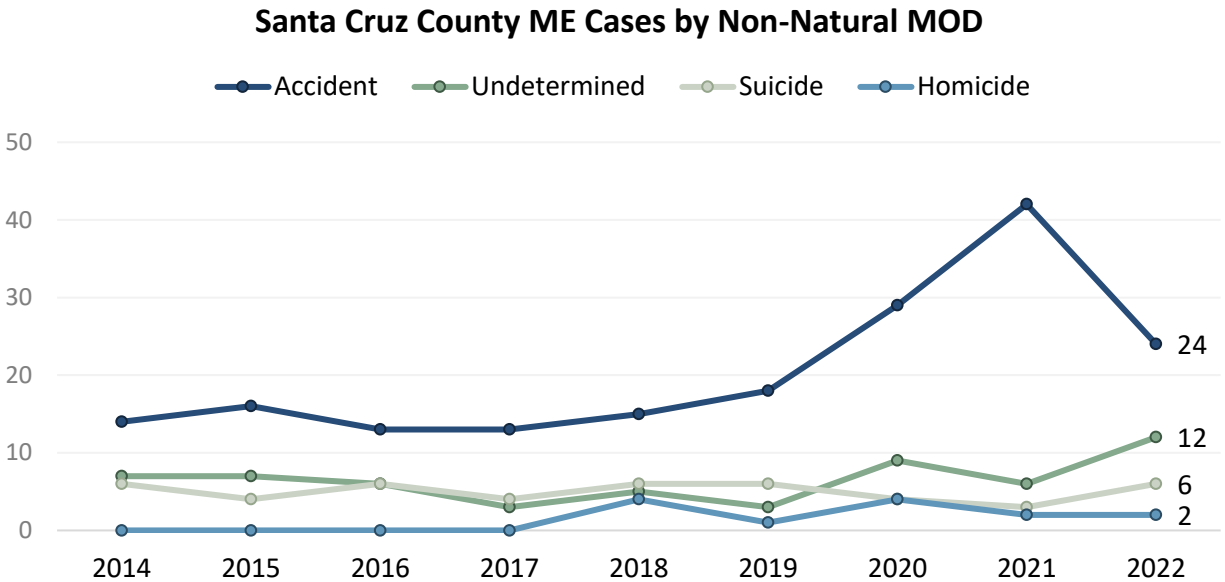
■ White - 53%
■ Hispanic - 47%

Cause of Death



Non-Natural Manner Deaths

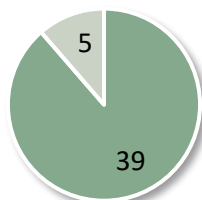
Non-natural MOD classifications include accident, homicide, suicide, and undetermined. Trends in Santa Cruz County ME cases with a non-natural MOD are displayed below. In 2022, deaths certified as accidents in Santa Cruz County decreased for the first time in several years. Both undetermined manner deaths and suicides increased slightly from 2021 to 2022. Homicides were consistent with the prior year.



A total of 44 Santa Cruz County deaths were certified with a non-natural manner in 2022. Male decedents comprised 89% of these cases. Decedents age 30-to-39 years old accounted for the largest portion of deaths of any age group (23%). Hispanics accounted for the largest percentage of non-natural manner deaths among all racial groups (61%). Demographic data by MOD is presented in the table on the following page.

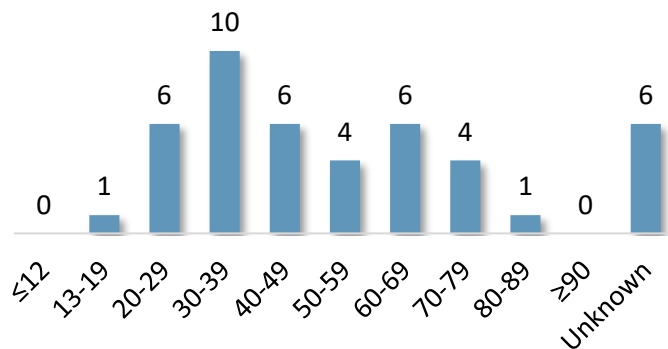
2022 Santa Cruz County Non-Natural MOD Cases by Demographics

Decedent Sex



■ Male - 89%
■ Female - 11%

Decedent Age Group



Decedent Race/Ethnicity



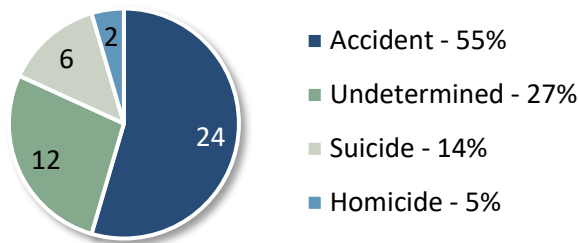
2022 Santa Cruz County ME Cases Decedent Demographics by Non-Natural Manner of Death, *n* (%)

Characteristic	Accident N=24	Undeterm. N=12	Suicide N=6	Homicide N=2
Sex				
Male	21 (88%)	11 (92%)	5 (83%)	2 (100%)
Female	3 (12%)	1 (8%)	1 (17%)	-
Age Group				
≤12	-	-	-	-
13-19	1 (4%)	-	-	-
20-29	4 (17%)	2 (16.7%)	-	-
30-39	7 (29%)	3 (25%)	-	-
40-49	2 (8%)	2 (16.7%)	1 (16.7%)	1 (50%)
50-59	3 (13%)	-	1 (16.7%)	-
60-69	3 (13%)	-	3 (50%)	-
70-79	2 (8%)	-	1 (16.7%)	1 (50%)
80-89	1 (4%)	-	-	-
≥90	-	-	-	-
Unknown	1 (4%)	5 (41.7%)	-	-
Race/Ethnicity				
Hispanic	18 (75%)	7 (58%)	-	2 (100%)
White	5 (21%)	-	6 (100%)	-
Unknown	1 (4%)	5 (42%)	-	-

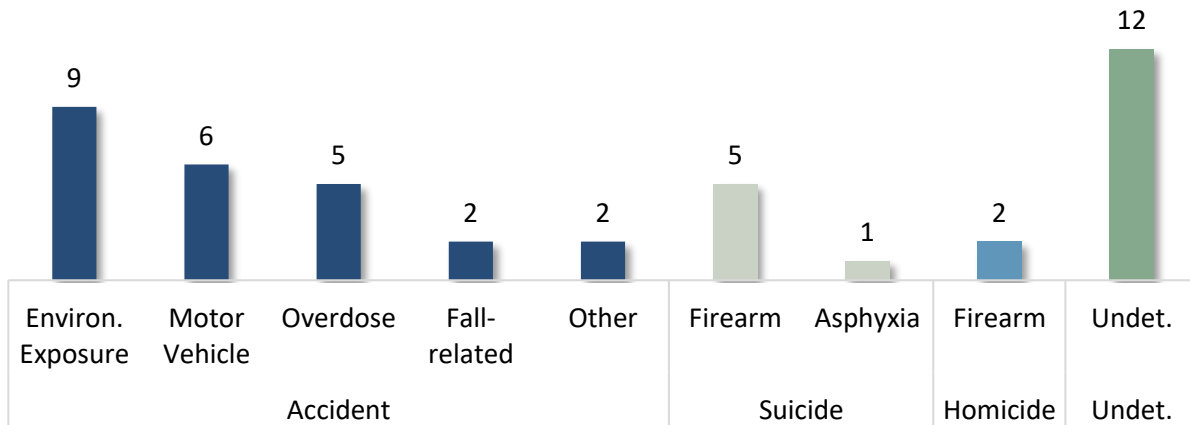
In 2022, accidents made up the largest proportion of non-natural manner deaths in Santa Cruz County (55%), followed by undetermined manner deaths (27%). The bar graph below displays the number of 2022 Santa Cruz County ME cases by manner and cause/mechanism of death. Environmental exposure (i.e., hyperthermia) was the most frequent cause of accidental deaths (38%). Firearms were the most common means of Santa Cruz County suicide deaths and the cause of both homicide deaths. All undetermined manner deaths were certified with an undetermined cause.

2022 Santa Cruz County Non-Natural MOD Cases by Manner and Cause

Manner of Death

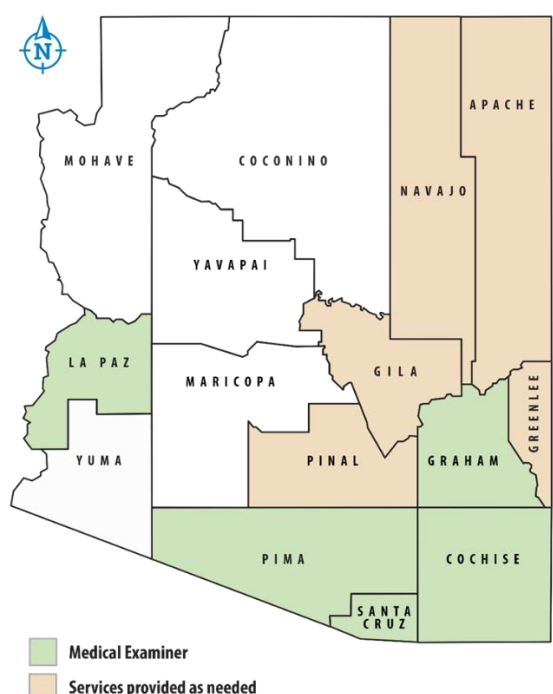


Cause of Death by Manner



DEATHS BY COUNTY: NON-MEDICAL EXAMINER COUNTIES

Non-Medical Examiner Counties are those counties which the PCOME performs examinations on a fee-for-service at the request of the County or Tribal organization triaging deaths in their jurisdiction (i.e., Apache, Gila, Greenlee, Navajo, and Pinal). Deaths on Native American tribal lands do not have to be reported through the respective death investigation system of that County and may be reported directly to the PCOME as necessary for the needs of the appropriate agency investigating that death (i.e., Bureau of Indian Affairs, FBI, or local tribal police departments).



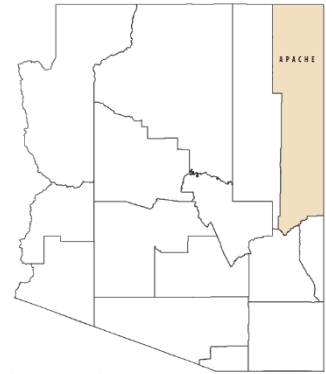
Apache, Greenlee, and Navajo County contracts with an appointed non-Forensic Pathologist physician(s), termed an Alternate Medical Examiner(s) (AME) (A.R.S. §11-591); who triages, investigates, and certifies deaths that fall under the jurisdiction of the medical examiner in their respective County. The AME does not perform autopsy examinations and if the AME deems an autopsy is necessary to certify the cause and manner of death, the decedent may be referred to the PCOME for an examination and death certification.

Pinal County appointed a Medical Examiner in December 2016 and maintains its own Medical Examiner's office staffed to conduct death scene investigations, transport remains, perform examinations, and triage deaths reportable to the ME, as stated in A.R.S §11-593 B. For Pinal County data prior to 2017, please refer to the [2016 PCOME Annual Report](#).

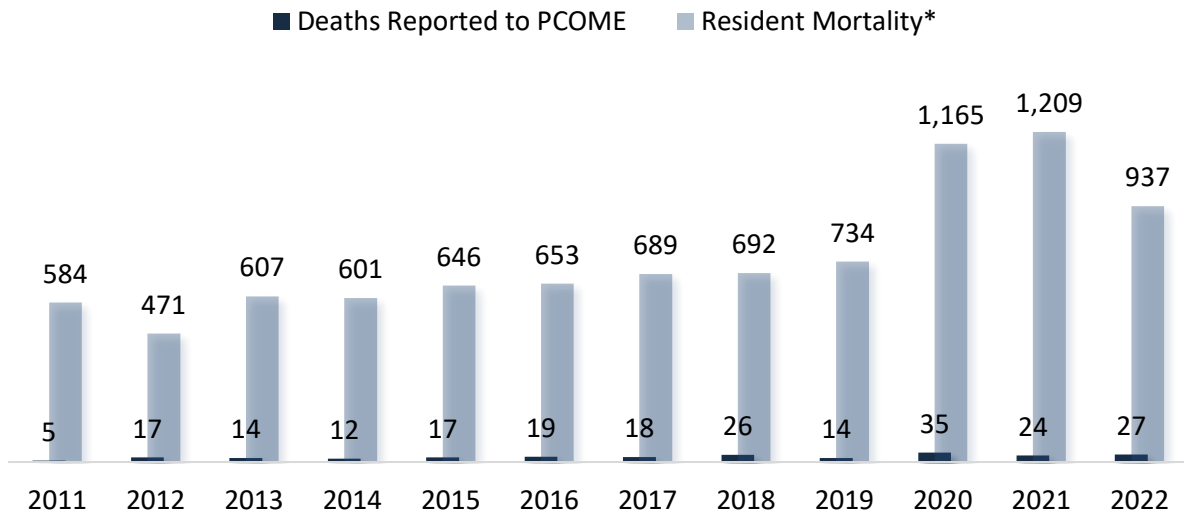
Gila County contracts with the Pinal County Office of the Medical Examiner, who triages, investigates, and certifies deaths that fall under the jurisdiction of the medical examiner (ME) in Gila County.

Apache County

The PCOME is not aware of how many deaths occurring in Apache County are reported to or certified by the Apache County AME. The PCOME only has a record of deaths reported to or referred for examination to Pima County. In 2022, there were 937 deaths in Apache County residents; of these, 27 deaths (3% of total resident mortality) were reported to the PCOME. Jurisdiction was accepted in 25 cases and declined in two cases.

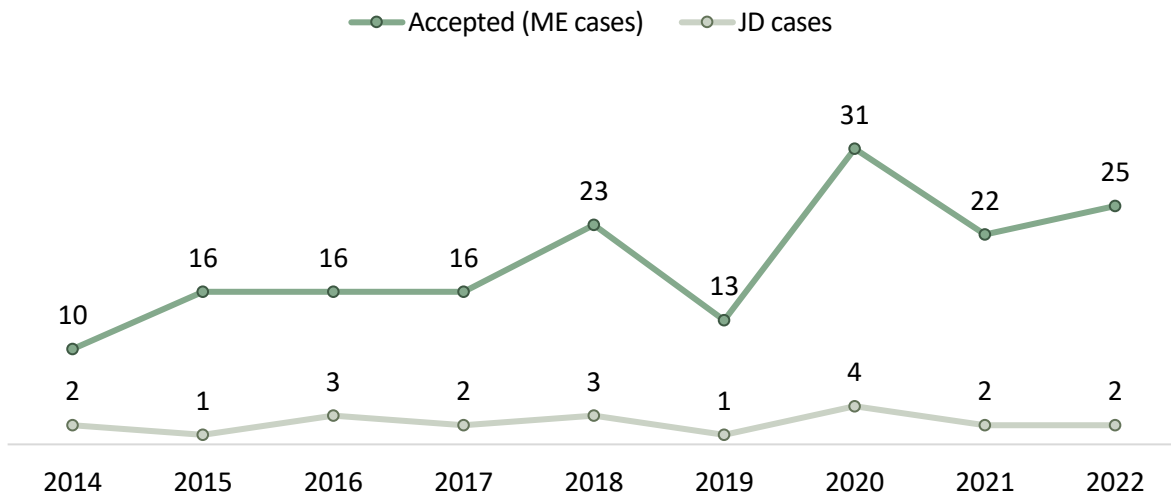


Apache County Resident Mortality and Reported Deaths



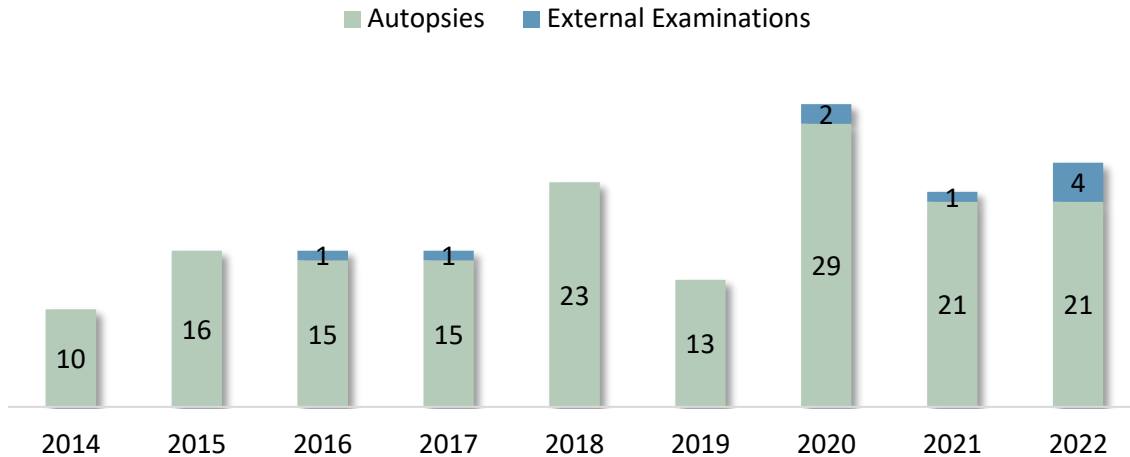
*Apache County resident mortality from Arizona Department of Health Services Vital Statistics as of 1/15/23

Jurisdictional Disposition of Apache County Reported Deaths



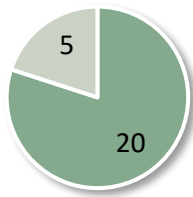
For a detailed description of ME cases and examination types, refer to [page 12](#). Out of the 25 Apache County cases accepted in 2022, the PCOME performed 21 autopsies (84%) and four external examinations (16%). Demographic data, MOD, and COD for ME cases are detailed below.

Apache County ME Cases by Examination Type



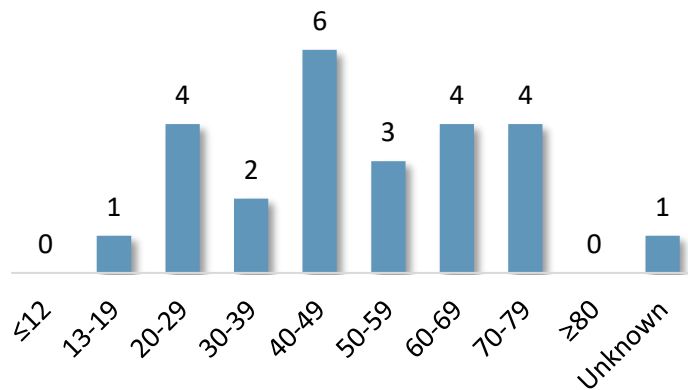
2022 Apache County ME Cases by Demographics

Decedent Sex



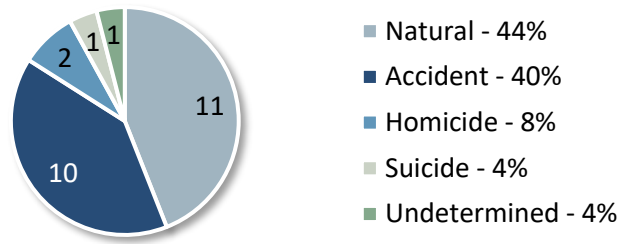
■ Male - 80%
■ Female - 20%

Decedent Age Group

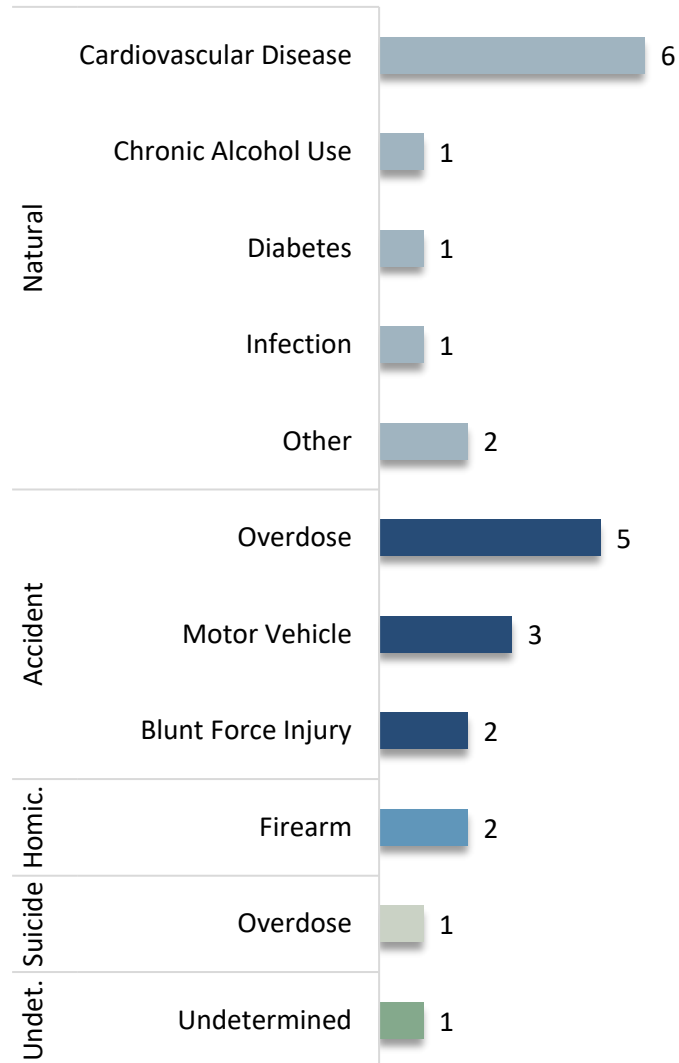


2022 Apache County ME Cases by Manner and Cause of Death

Manner of Death

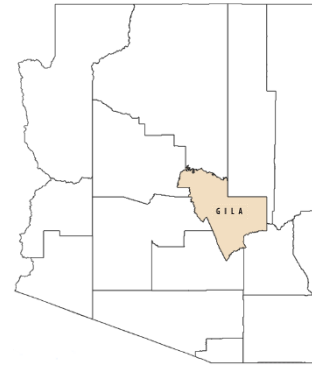


Cause of Death by Manner

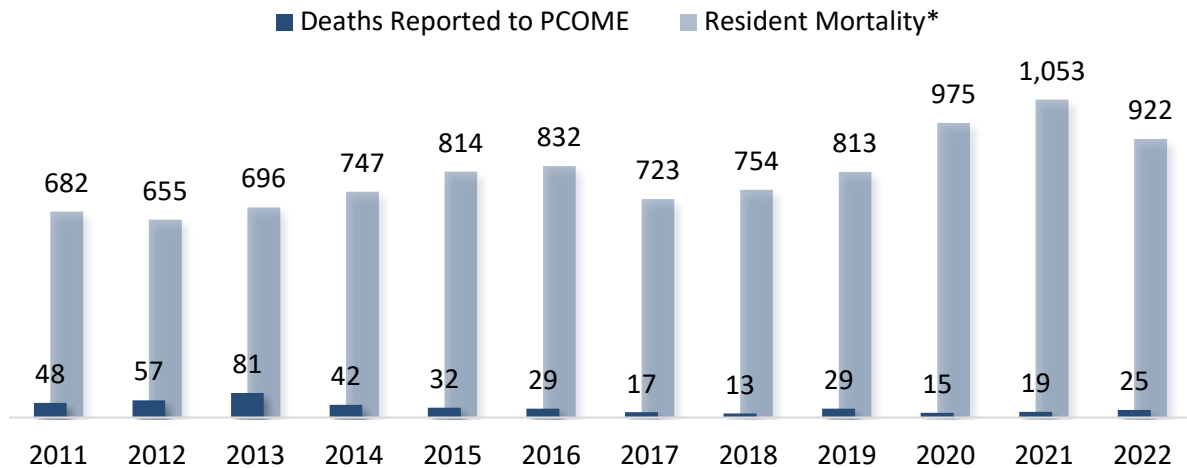


Gila County

The PCOME is not aware of how many deaths occurring in Gila County are reported to or certified by their appointed ME, the Pinal County OME. The PCOME only has a record of deaths reported to or referred for examination to Pima County. In 2022, there were 922 total deaths in Gila County residents; of these, 25 deaths (3% of total resident mortality) were reported to the PCOME for investigation. All but one case was accepted under the PCOME jurisdiction.

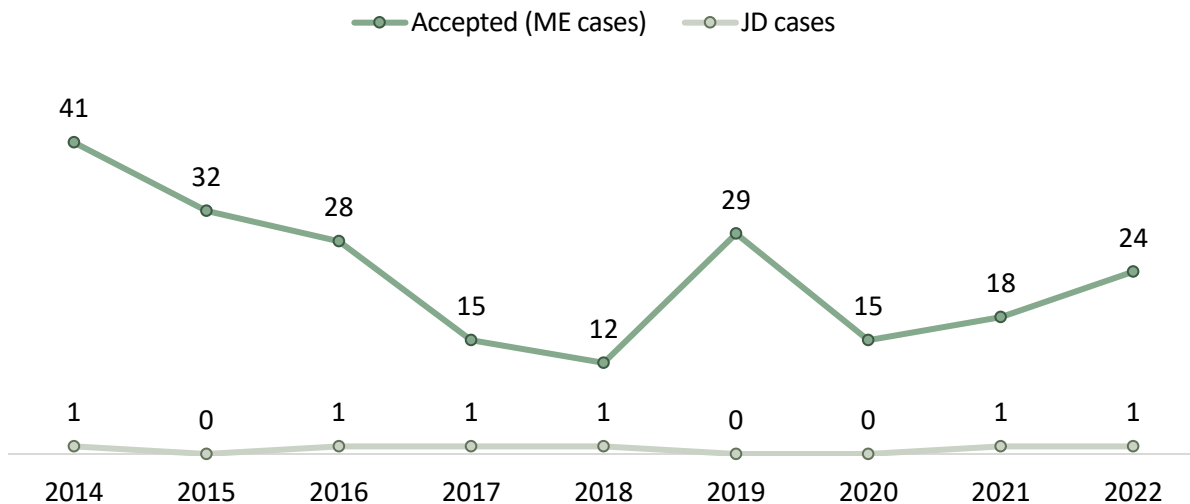


Gila County Resident Mortality and Reported Deaths



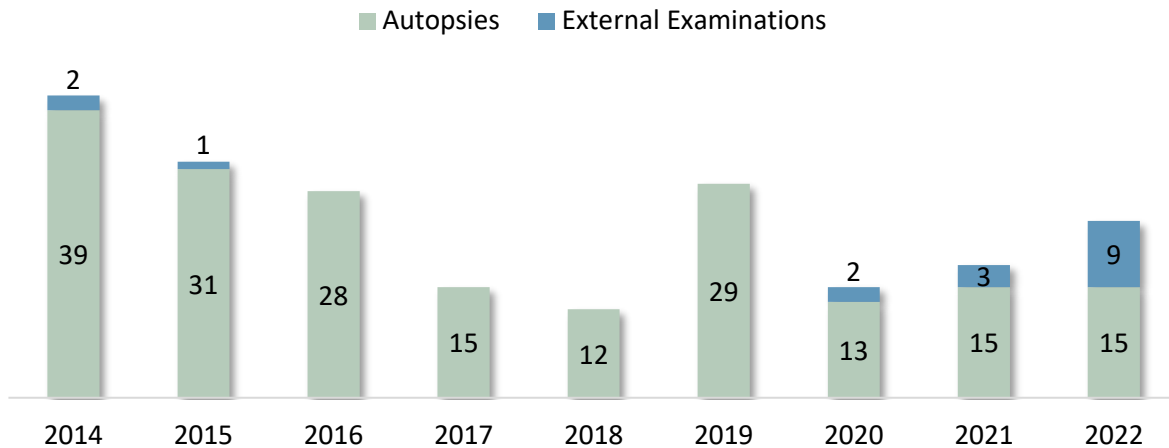
*Gila County resident mortality from Arizona Department of Health Services Vital Statistics as of 1/15/23

Jurisdictional Disposition of Gila County Reported Deaths



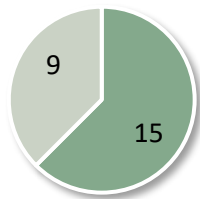
For a detailed description of ME cases and examination types, refer to [page 12](#). Out of the 24 Gila County cases accepted in 2022, the PCOME performed 15 autopsies (63%) and nine external examinations (37%). Demographic data, MOD, and COD for ME cases are detailed below.

Gila County ME Cases by Examination Type



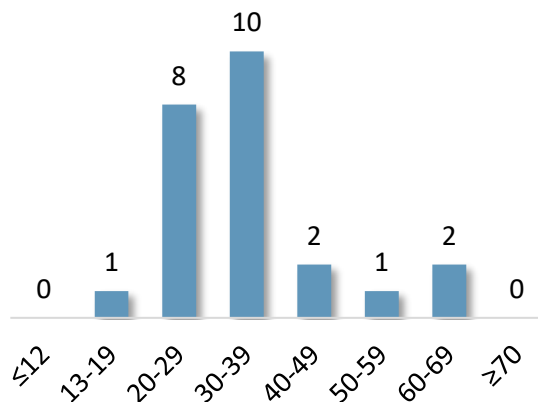
2022 Gila County ME Cases by Demographics

Decedent Sex



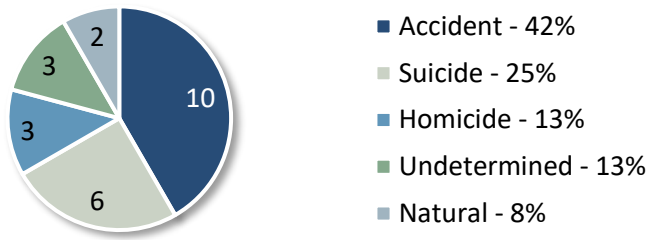
■ Male - 63%
■ Female - 38%

Decedent Age Group

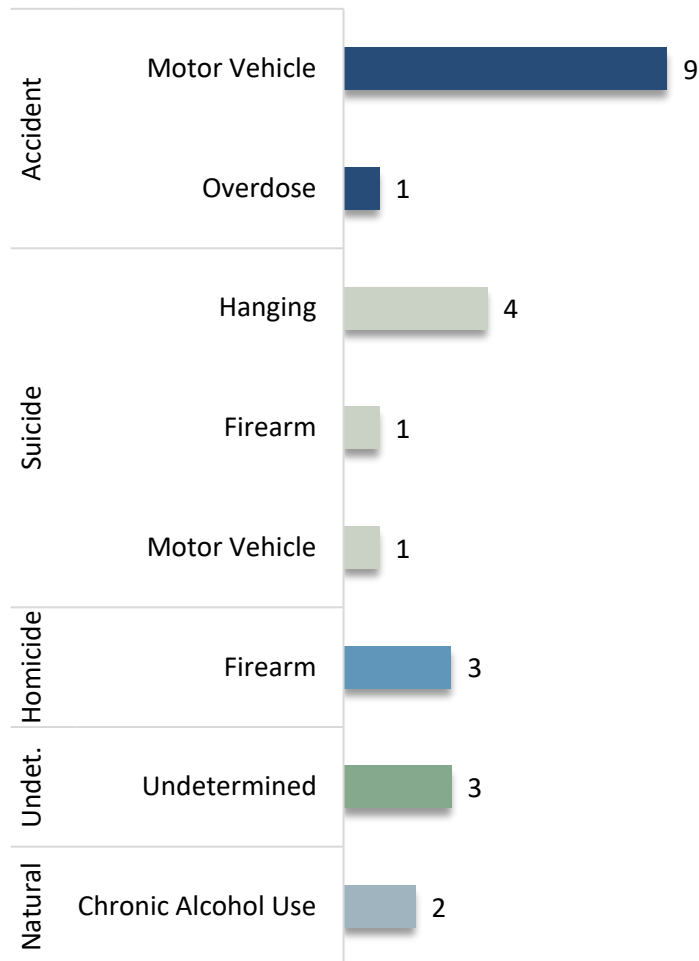


2022 Gila County ME Cases by Manner and Cause of Death

Manner of Death

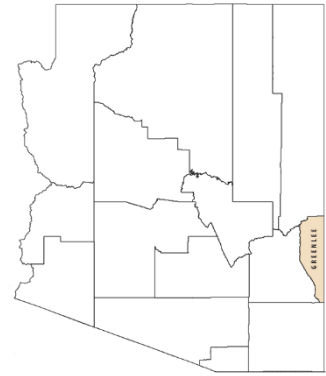


Cause of Death by Manner

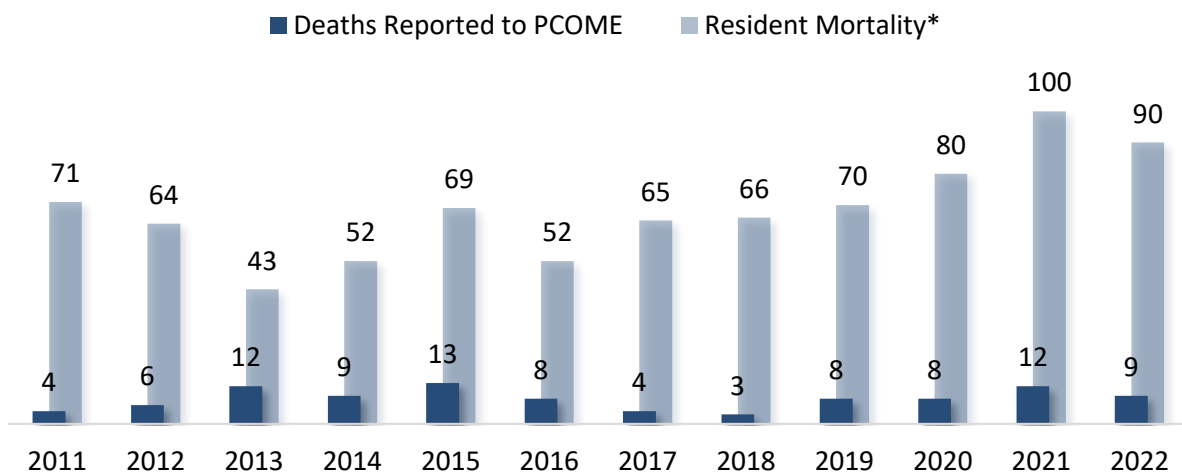


Greenlee County

The PCOME is not aware of how many deaths occurring in Greenlee County are reported to or certified by the Greenlee County AME. The PCOME only has a record of deaths reported to or referred for examination to Pima County. In 2022, there were 90 deaths in Greenlee County residents; of these, nine deaths (10% of total resident mortality) were reported to the PCOME for investigation. All reported cases were accepted under the PCOME jurisdiction.

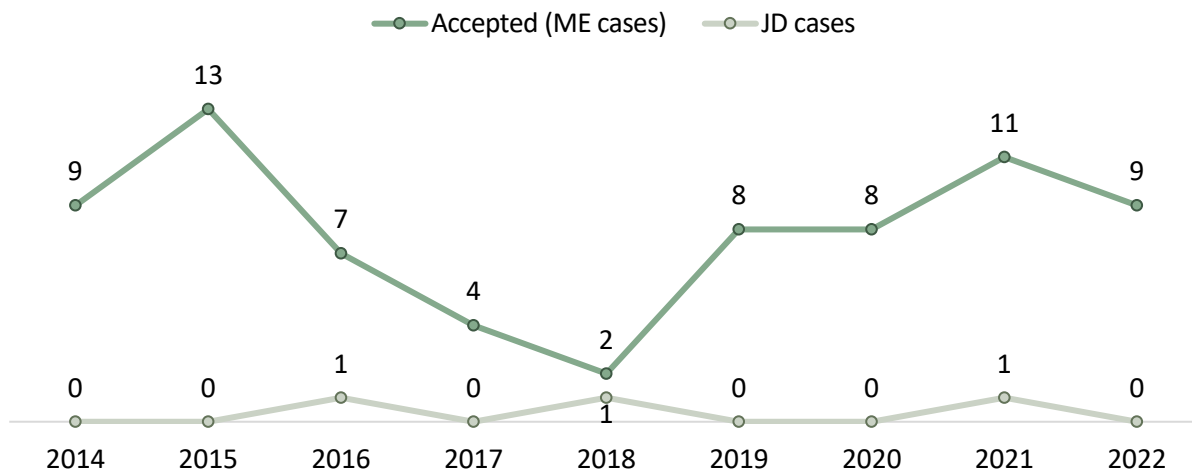


Greenlee County Resident Mortality and Reported Deaths



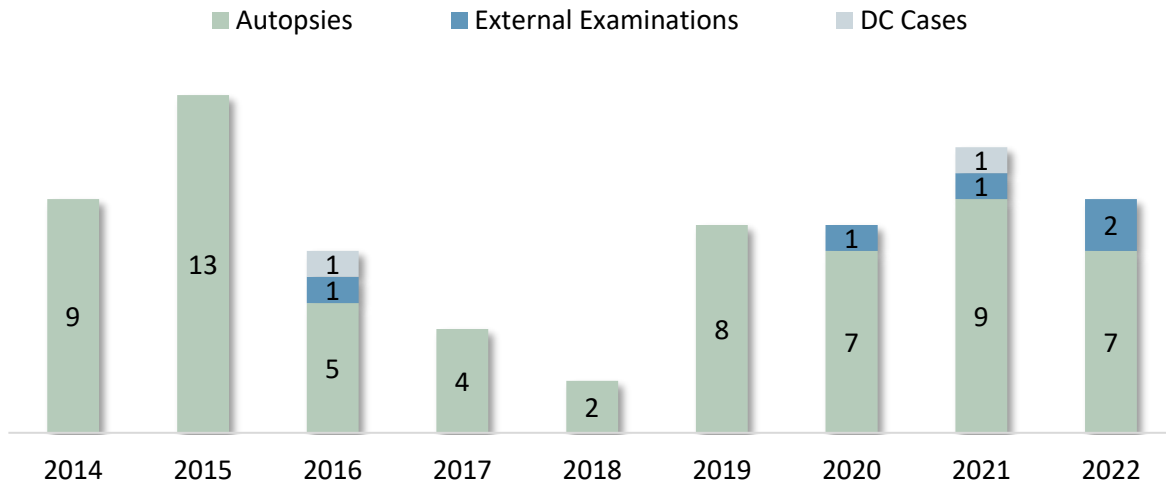
*Greenlee County resident mortality from Arizona Department of Health Services Vital Statistics as of 1/15/23

Jurisdictional Disposition of Greenlee County Reported Deaths



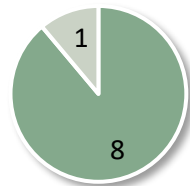
For a detailed description of ME cases and examination types, refer to [page 12](#). Seven autopsies and two external examinations were performed by the PCOME in 2022 (78% and 22% of Greenlee County ME cases, respectively). Demographic data, MOD, and COD for ME cases are detailed below.

Greenlee County ME Cases by Examination Type



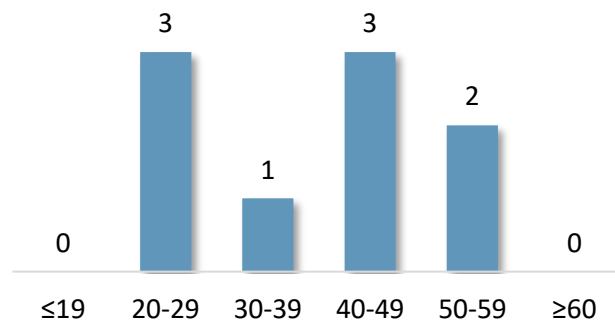
2022 Greenlee County ME Cases by Demographics

Decedent Sex



■ Male - 89%
■ Female - 11%

Decedent Age Group

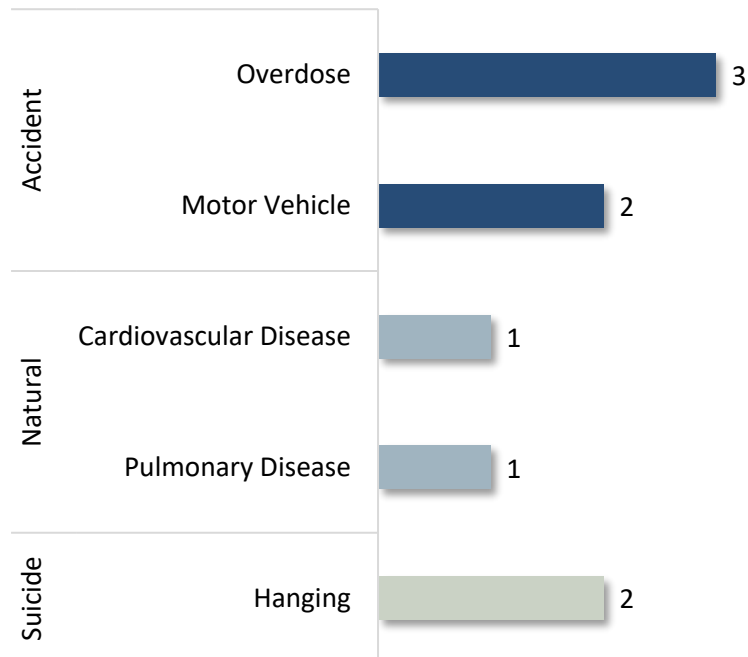


2022 Greenlee County ME Cases by Manner and Cause of Death

Manner of Death

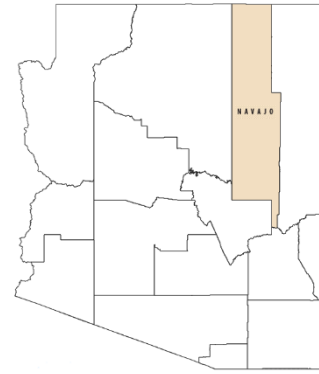


Cause of Death by Manner

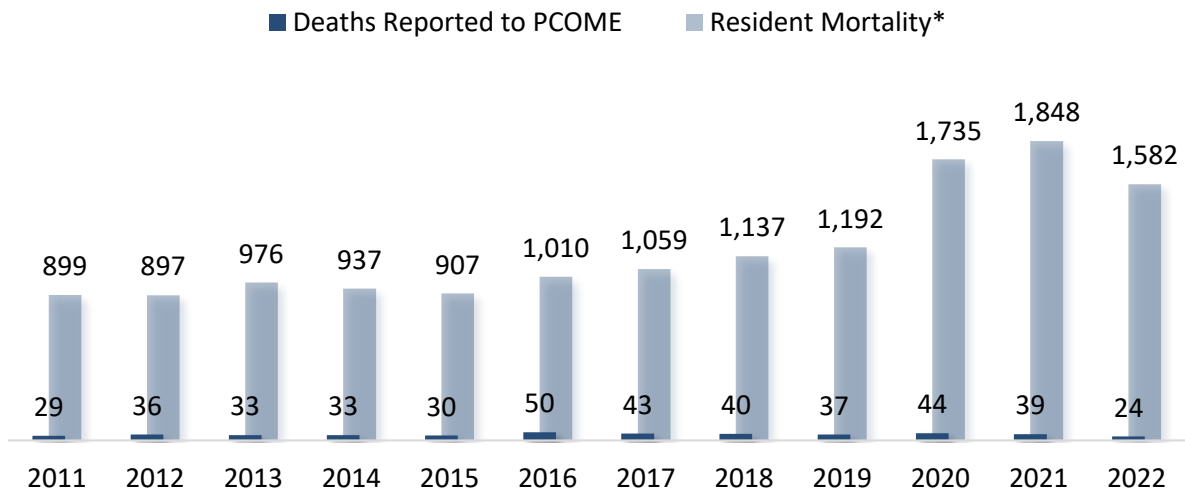


Navajo County

The PCOME is not aware of how many deaths occurring in Navajo County are reported to or certified by the Navajo County AME. The PCOME only has a record of deaths reported to or referred for examination to Pima County. In 2022, there were 1,582 total deaths in Navajo County residents; of these, 24 deaths (1.5% of total resident mortality) were reported to the PCOME for investigation. All but one case was accepted under the PCOME jurisdiction.

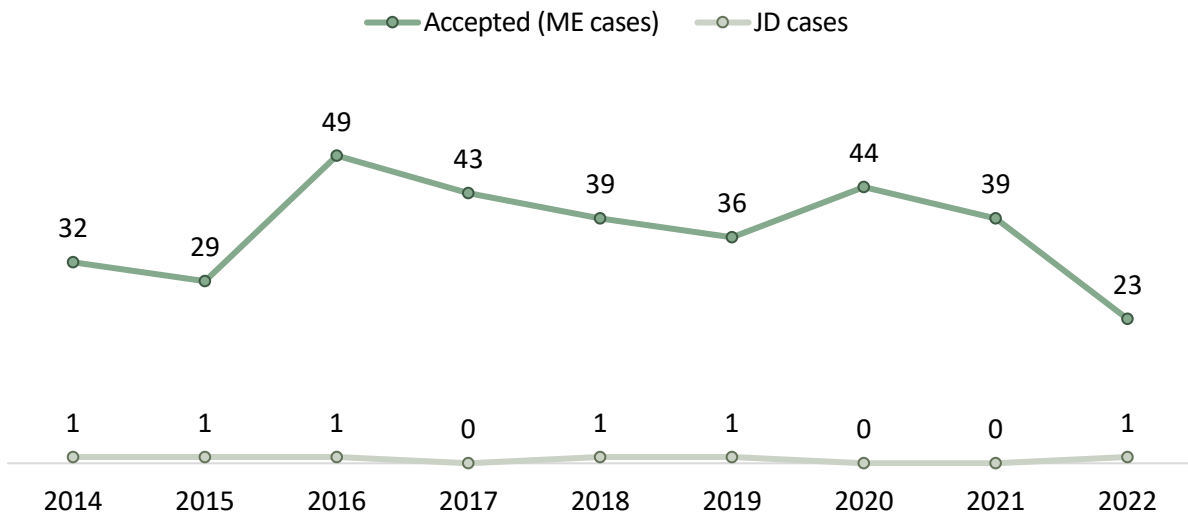


Navajo County Resident Mortality and Reported Deaths



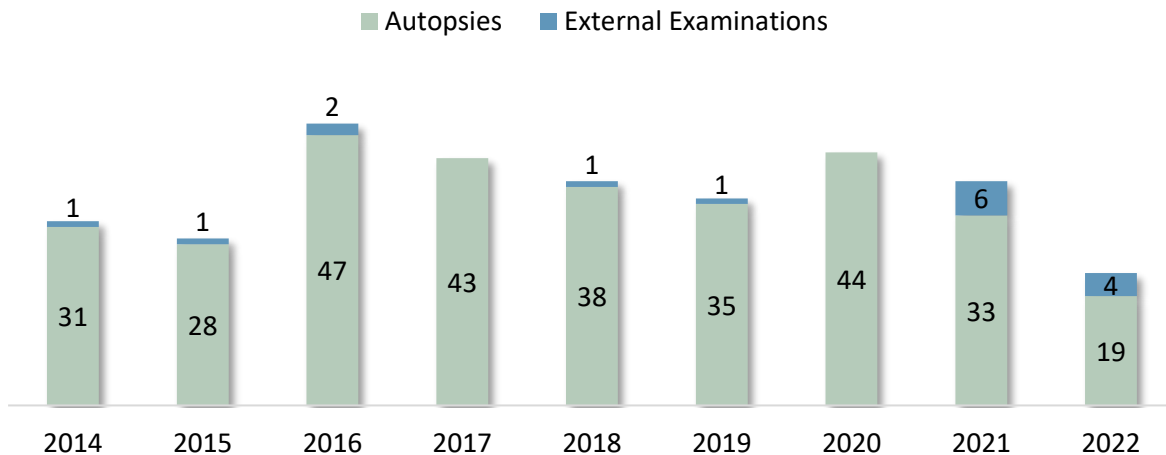
*Navajo County resident mortality from Arizona Department of Health Services Vital Statistics as of 1/15/23

Jurisdictional Disposition of Navajo County Reported Deaths



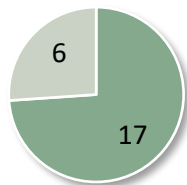
For a detailed description of ME cases and examination types, refer to [page 12](#). Out of the 23 Navajo County cases accepted in 2022, the PCOME performed 19 autopsies (83%) and 6 external examinations (17%). Demographic data, MOD, and COD for ME cases are detailed below.

Navajo County ME Cases by Examination Type



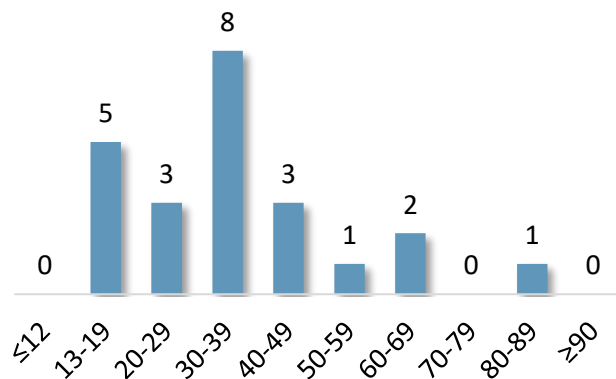
2022 Navajo County ME Cases by Demographics

Decedent Sex



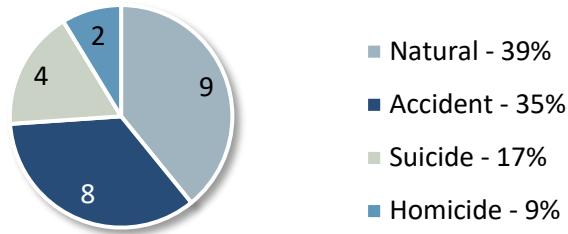
■ Male - 74%
■ Female - 26%

Decedent Age Group

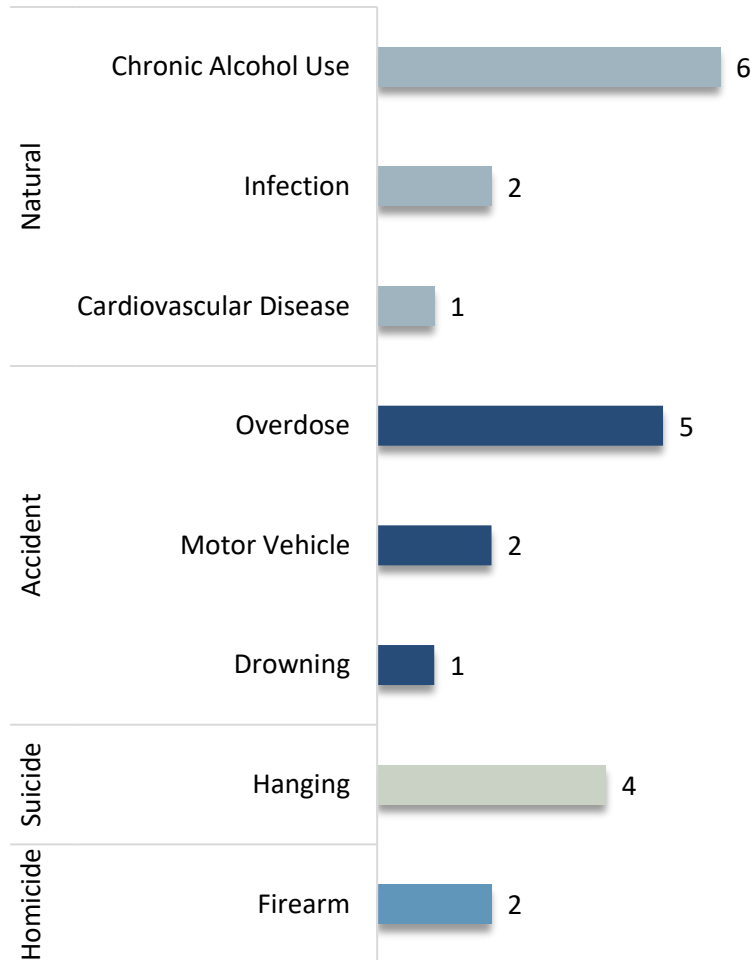


2022 Navajo County ME Cases by Manner and Cause of Death

Manner of Death

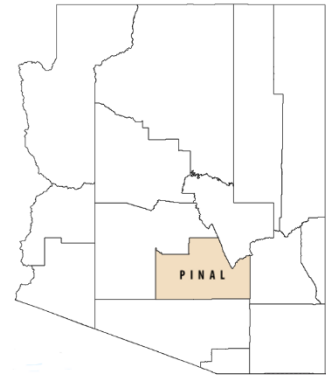


Cause of Death by Manner

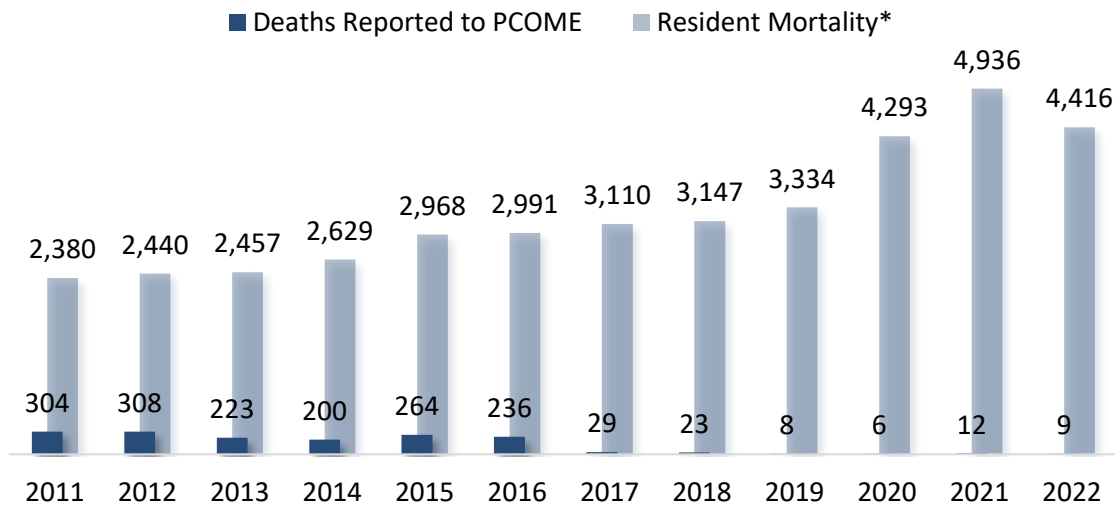


Pinal County

The PCOME is not aware of how many deaths occurring in Pinal County are reported to or certified by the Pinal County OME. The PCOME only has a record of deaths reported to or referred for examination to Pima County. In 2022, there were 4,416 total deaths in Pinal County residents; of these, 9 deaths (0.2% of total resident mortality) were reported to the PCOME for investigation. Jurisdiction was accepted in three cases and declined in six cases.

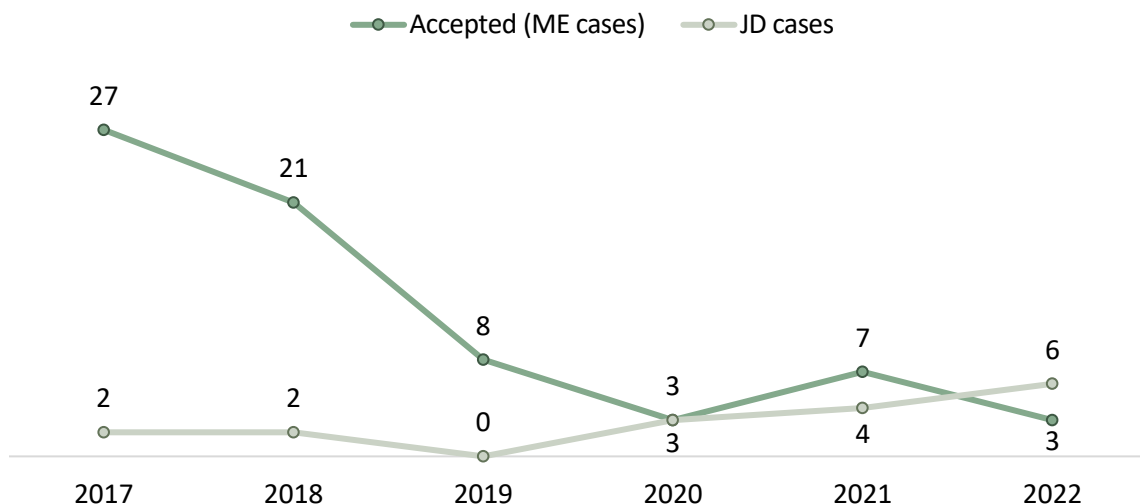


Pinal County Resident Mortality and Reported Deaths



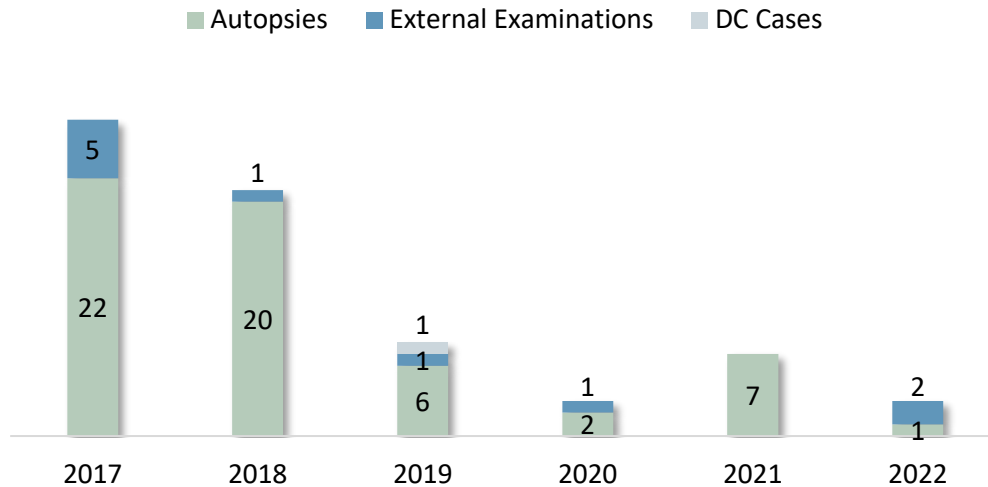
*Pinal County resident mortality from Arizona Department of Vital Statistics as of 1/15/23

Jurisdictional Disposition of Pinal County Reported Deaths



For a detailed description of ME cases and examination types, refer to [page 12](#). Of three Pinal County cases accepted in 2022, the PCOME performed one autopsy and two external examinations. Decedent demographics, MOD, and COD are detailed in the table below.

Pinal County ME Cases by Examination Type



2022 Pinal County ME Case Data *n (%)*

Characteristic	Case Count (N=3)
Decedent Sex	
Male	2 (67%)
Female	1 (33%)
Decedent Age	
30-39	2 (67%)
70-79	1 (33%)
Manner and Cause of Death	
Accident - Overdose	1 (33%)
Natural - Cardiovascular Disease	1 (33%)
Suicide - Hanging	1 (33%)

Other Counties

In 2022, seven cases from other counties outside of the aforementioned counties were reported to the PCOME:

- Maricopa County: Three Maricopa County cases were reported to the PCOME. Jurisdiction was declined in two cases. The third case was reported to and transported to the PCOME for holding; Maricopa County OME accepted jurisdiction of the case and the decedent was transported to their office for examination and death certification.
- Mohave County: Four cases were reported to the PCOME. Jurisdiction was declined in one case and three cases were transported to our office for an anthropologic examination.



