

St. Johns County Medical Examiner District 23



DISTRICT 23 MEDICAL EXAMINER'S OFFICE
Serving St. Johns, Flagler, and Putnam Counties

2023 Annual Report

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Introduction

The District 23 Medical Examiner's Office (D23MEO) is located at 4501 Avenue A in St. Augustine, Florida. We are responsible for determining the cause and manner of death in people who die in the counties of St. Johns, Flagler, and Putman that fulfill the criteria of Florida Statue 406.11. This statute empowers the Medical Examiner to perform investigations and examinations deemed necessary based on the following criteria:

When any person dies in the state:

1. Of criminal violence
2. By accident
3. By suicide
4. Suddenly, when in apparent good health
5. Unattended by a practicing physician or other recognized practitioner
6. In any prison or penal institution
7. In police custody
8. In any suspicious or unusual circumstances
9. By criminal abortion
10. By poison
11. By disease constituting a threat to public health
12. By disease, injury or toxic agent resulting from employment

(a) When a dead body is brought into the state without proper medical certification

(b) When a body is to be cremated, dissected, or buried at sea

While our facility is open from Monday to Friday during normal business hours, medicolegal death investigations are carried out 24 hours a day, every day of the year. Our mission is to comply with our mandate in a compassionate, respectful, and timely manner, and to provide accurate information to all stakeholders.

The office consists of an administrative building and a separate building that houses the autopsy suite. The office has twelve employees including a chief medical examiner, an associate medical examiner, an operations manager, two administrative staff, four medicolegal death investigators, and three forensic technicians. We comply with national standards, Florida administrative code, and Florida Association of Medical Examiner guidelines and are proud to say that we maintain accreditation by the National Association of Medical Examiners. The Medical Examiners are board certified by the American Board of Pathology and three investigators are certified by the American Board of Medicolegal Death Investigators.

County Demographics

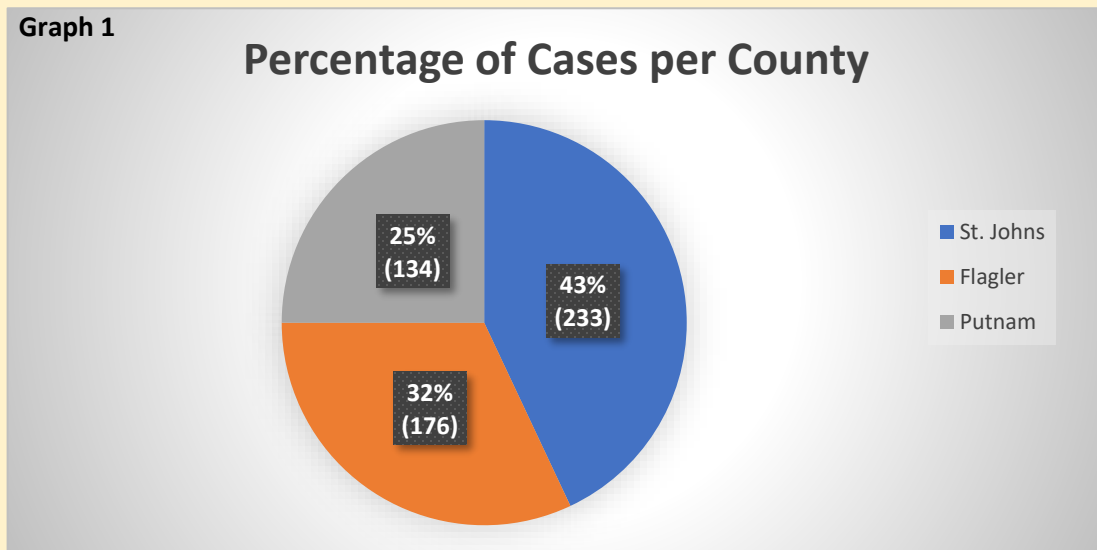
According to the United States Census Bureau the combined population in 2023 of the three counties the D23MEO serves was estimated at 527,504, with St. Johns County accounting for the largest population of the three counties.

The separate population estimates are as follows:

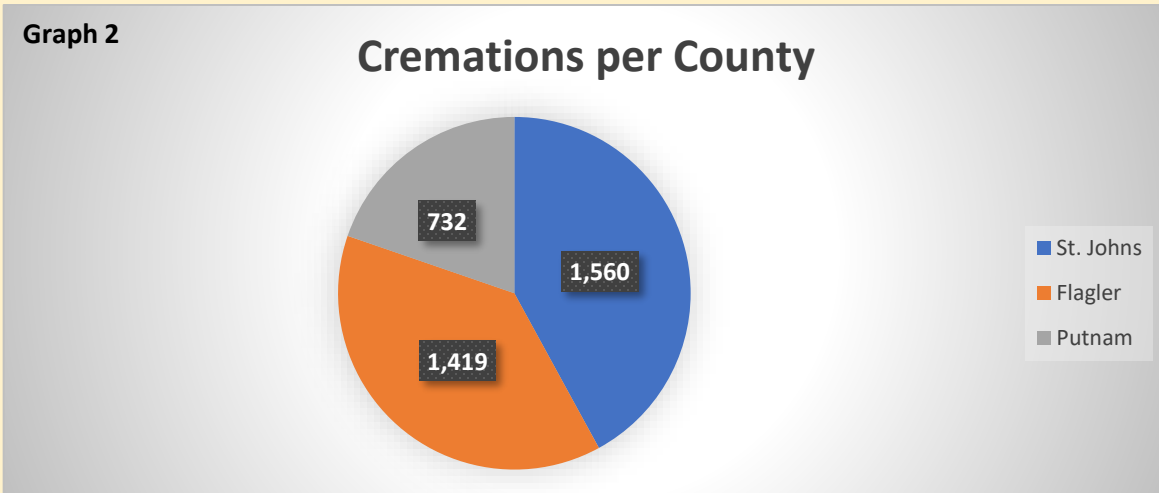
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| St. Johns County | 320,110 |
| Flagler County | 131,439 |
| Putnam County | 75,955 |

Workload

In 2023 a total of 1,000 cases were reported to the D23MEO. Out of these 266 were immediately declined as they did not meet criteria for jurisdiction. Seven hundred and thirty-four were investigated. Out of those 8 cases were deemed to be non-human remains, 1 case was deemed to be archaeological in nature, and 183 cases were further determined to not fulfill the criteria established by F.S. 406.11; the latter cases are known as declined jurisdiction. Jurisdiction was assumed in 543 cases, as such approximately .01% of the total population of the counties served became Medical Examiner’s cases. The number and percentage of cases by county is depicted in **Graph 1**.

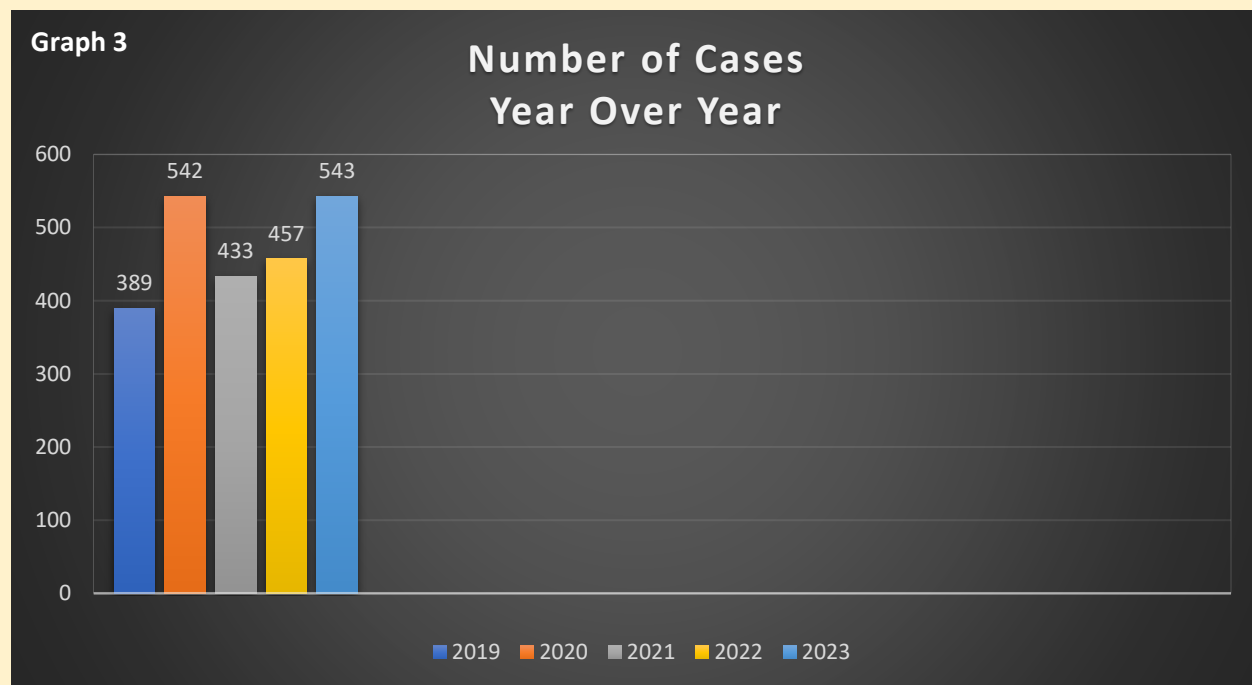


In addition, the D23MEO reviewed the death certificates of 3,711 decedents that were to be cremated, dissected, or buried at sea to determine if any of those fulfilled the criteria of F.S. 406.11. Of the reviewed cases 15 (0.01%) were identified as meeting criteria for medical examiner jurisdiction and their death certificates were certified with the appropriate cause and manner of death. The number of cremations by county is depicted in **Graph 2**.



Year over Year

As expected, the rapid growth in population within our district in the last five years translated to a rapid increase in case load. The accelerated rate of cases in 2020 was partly due to the COVID-19 pandemic, however, most of the increase was secondary to drug overdoses. The upward trend in cases is expected to continue into year 2024. **Graph 3** depicts the number of ME cases for the last five years.

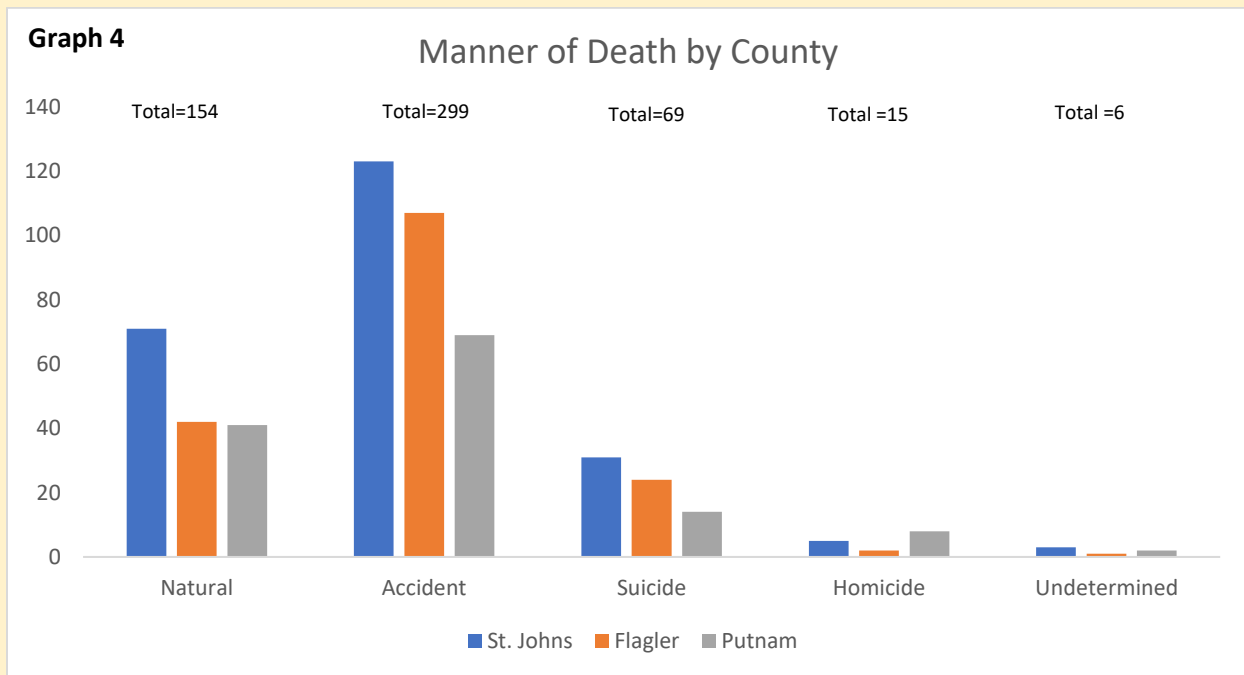


It is important to note, that not all cases in which the D23MEO assume jurisdiction are transported to the Medical Examiner's Office. Additionally, not all cases transported to the office are to be autopsied. Decedents not brought to the office include mostly those who suffered falls, complications of a fall, and were under medical care at the time of their death; in those cases the cause of death is adjudicated based

on investigative findings and review of medical records. In 2023 out of 543 cases brought through the office, 348 (64%) were autopsied while the remainder underwent external examinations.

Cause and Manner of Death

Each certificate of death must include a cause and a manner of death. The cause of death is the initiating disease or condition that starts a physiologic pathway culminating in death. The manner of death is how the death came about. The assignment of a manner of death is for public health purposes, although agencies like the State Attorney’s Office and insurance companies may use this determination for their own purposes. The manner of deaths are natural, accident, suicide, homicide, and undetermined. If a person dies from a natural disease or diseases then the manner is natural. If death is secondary to injury or drug toxicity without evidence that there was intent to harm or cause death, then the manner is accident. Suicides result from injury or drug toxicity that results from an act intended to cause self-harm or death. Homicides are deaths that result from a volitional act committed by another person with the intention to cause fear, harm, or death. In cases in which the manner of death cannot be determined because there is more than one reasonable choice or if there is a high degree of uncertainty, then the manner of death is best listed as undetermined. **Graph 4** shows the proportion of manner of death in 2023 by counties.

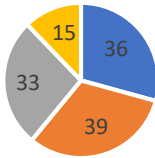


Accidents

In 2023 accident was the most common manner of death certified at the D23MEO. Accidents include motor vehicle related deaths, drug toxicity, falls, drownings, and other modalities. Drug overdoses are the most common type of accident seen at the D23MEO overall accounting for 35% of the accidental cases. This is closely followed by falls which typically arise in the context of the elderly population. **Graph 5** shows the distribution of accidental manner of death per county.

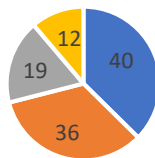
Graph 5

Accidents in St. Johns County



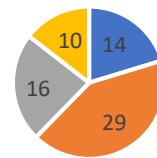
- Falls
- Drug overdose
- Motor vehicle
- Other

Accidents in Flagler County



- Falls
- Drug overdose
- Motor vehicle
- Other

Accidents in Putnam County



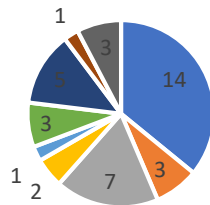
- Falls
- Drug overdose
- Motor vehicle
- Other

Drug Overdoses

In 2023 the D23MEO certified a total of 104 drug overdoses. By far, the most common drug causing accidental deaths is non-prescribed (illicitly obtained) fentanyl mostly in combination with stimulants. The most used stimulant in all counties is methamphetamine. Acetyl fentanyl is the most common fentanyl analog used. Xylazine, a tranquilizer not approved for human use was present in twelve of the cases. Mitragynine (Kratom) was deemed to cause death in conjunction with other drugs in nine cases. Alcohol mixed with other drugs was deemed to cause death in fifteen of the cases, and marijuana or its metabolites were present in twenty-four of the cases. **Graphs 6, 7, and 8** show the distribution of drugs within each county.

Graph 6

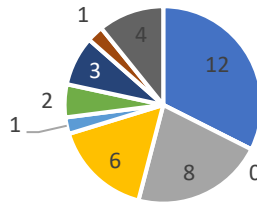
Accidental Drug Overdoses in St. Johns County



- Fentanyl + stimulants (methamphetamine)
- Fentanyl + fentanyl analog + stimulants
- Fentanyl + other drugs
- Fentanyl alone
- Fentanyl + opiate
- Opiates +/- other drugs
- Other single drug or drug combinations
- Cocaine +/- other drugs
- Novel psychoactive substances plus other

Graph 7

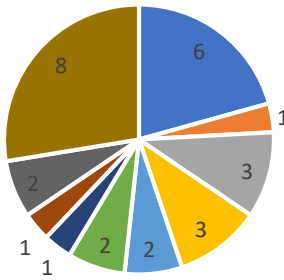
Accidental Drug Overdoses in Flagler County



- Fentanyl + stimulants (methamphetamine)
- Fentanyl + other drugs
- Fentanyl + opiate
- Opiates +/- other drugs
- Other single drug or drug combinations
- Fentanyl + fentanyl analog + stimulants
- Fentanyl alone
- Cocaine +/- other drugs
- Novel psychoactive substances + other drugs

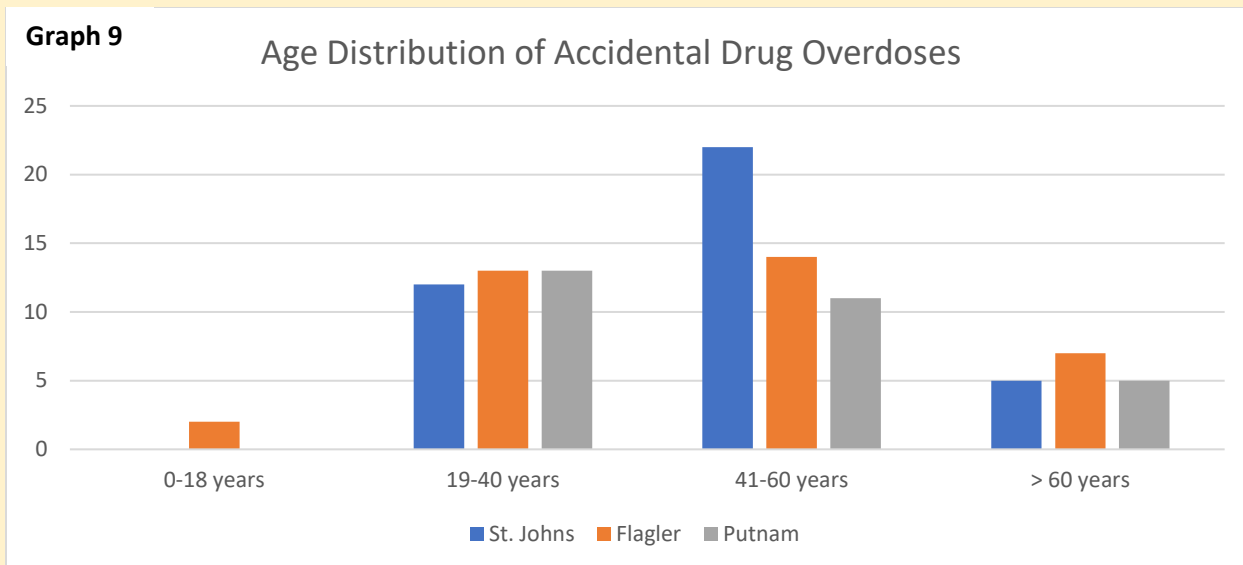
Graph 8

Accidental Drug Overdoses in Putnam County



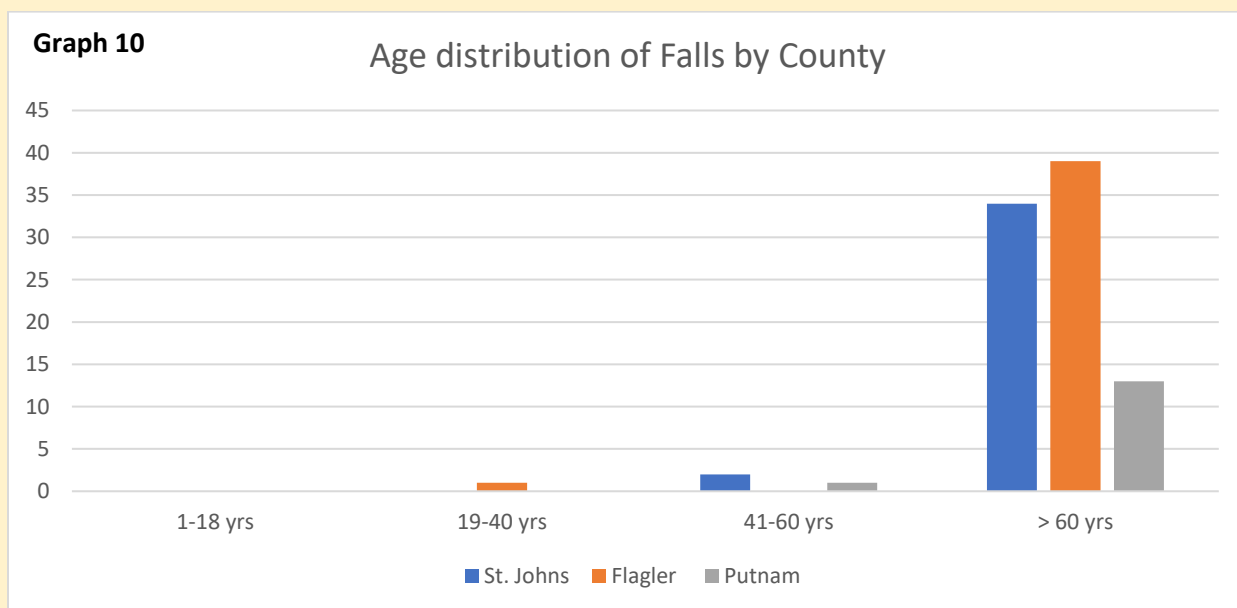
- Fentanyl + stimulants (methamphetamine)
- Fentanyl + other drugs
- Fentanyl + opiate
- Cocaine +/- other drugs
- Other single drug or drug combinations
- Fentanyl + fentanyl analog
- Fentanyl alone
- Fentanyl + novel psychoactives
- Opiates +/- other drugs
- Methamphetamine +/- non-fentanyl drugs

Graph 9 depicts the age distribution for accidental drug overdoses.



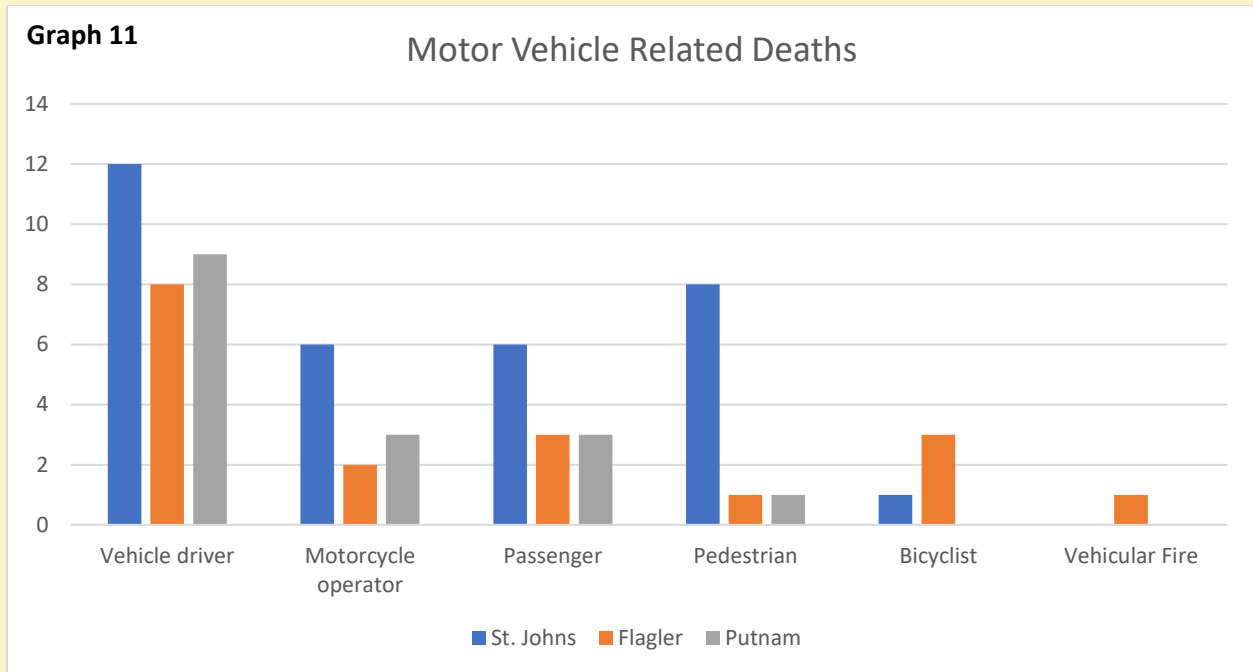
Falls

The medical examiner office certified 90 deaths secondary to falls in 2023 with 67 of these cases occurring over the age of 80 years. The cause of death on these cases are typically designated as blunt trauma and include intracranial hemorrhages and hip fractures in the elderly population resulting from ground level falls, falls from bed, or falls from wheelchairs. **Graph 10** depicts the age ranges for falls.



Motor Vehicle Related Deaths

Motor vehicle fatalities include deaths from blunt trauma, traumatic asphyxia, drowning, and vehicular fire; the latter two as complications of the crash. In 2023 fifty-eight deaths were recorded in all three counties. The distribution of motor vehicle related death by county is depicted in **Graph 11**.



Out of the forty vehicle drivers and operators twenty-one (over 50%) were found to have presence of one or more drugs in their system to include alcohol, cannabinoids, fentanyl, and cocaine.

Other Accidental Deaths

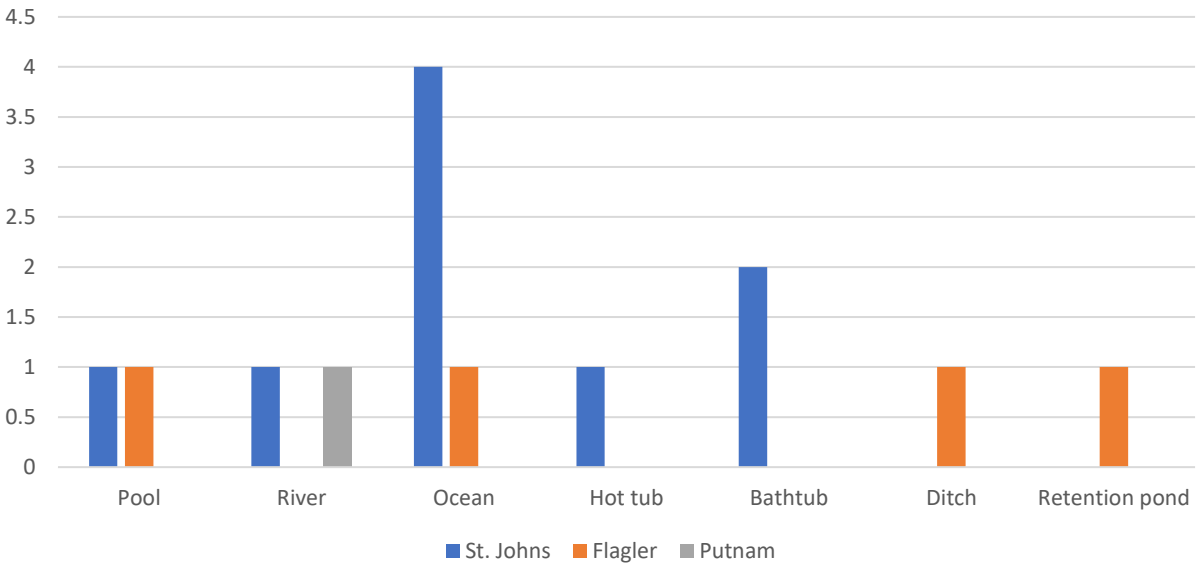
Other accidental deaths accounted for 12% of the total accidental. Included amongst those deaths are fire-related deaths, drownings, choking, and other types of asphyxia deaths.

Drownings

There were 14 drownings in 2023, accounting for 4.6% of total accidental deaths. Drownings occurred most often in the ocean. **Graph 12** depicts the locations of the drownings; one of the drownings resulted as a complication of a vehicular crash. Three of the fourteen drownings occurred in children. Two infants drowned in a pool and bathtub respectively, and a 17-year-old drowned in a ditch as a complication of a vehicular crash.

Graph 12

Location of Drownings

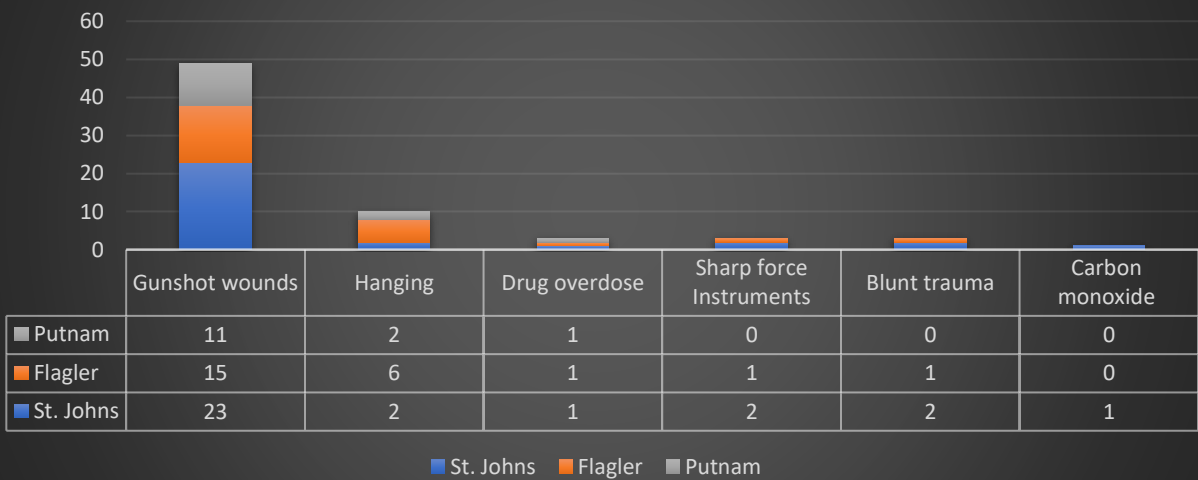


Suicides

In 2023 the D23MEO certified 69 deaths with a suicidal manner. Guns exceeded hanging and drugs as the preferred mean to kill oneself. **Graphs 13 and 14** show the distribution of suicides by county, modality, and age. The male to female suicide ratio was approximately 5:1. The age of female suicides ranged from 25 years to 66 years and the male suicide ranged from 11 years to 90 years.

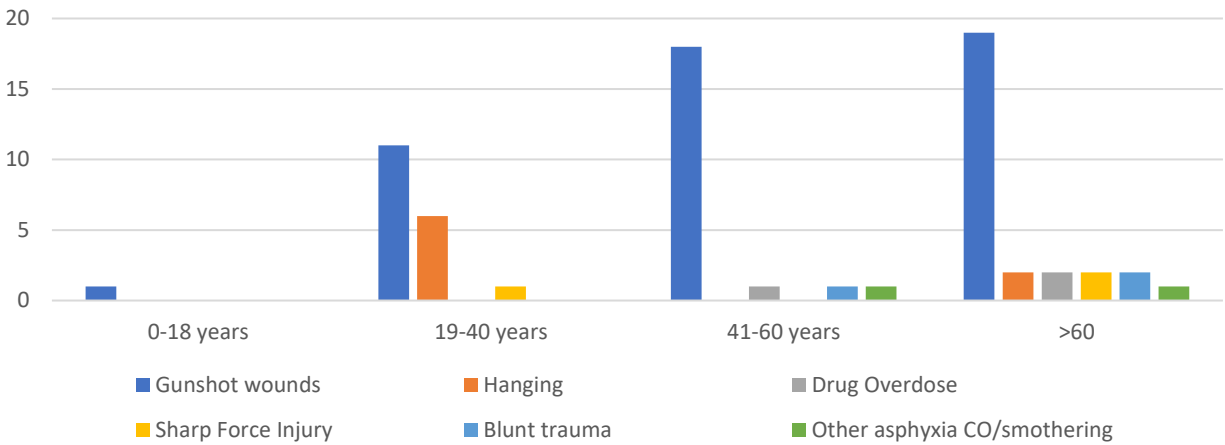
Graph 13

Suicide Modalities



Graph 14

Suicide Age Distribution

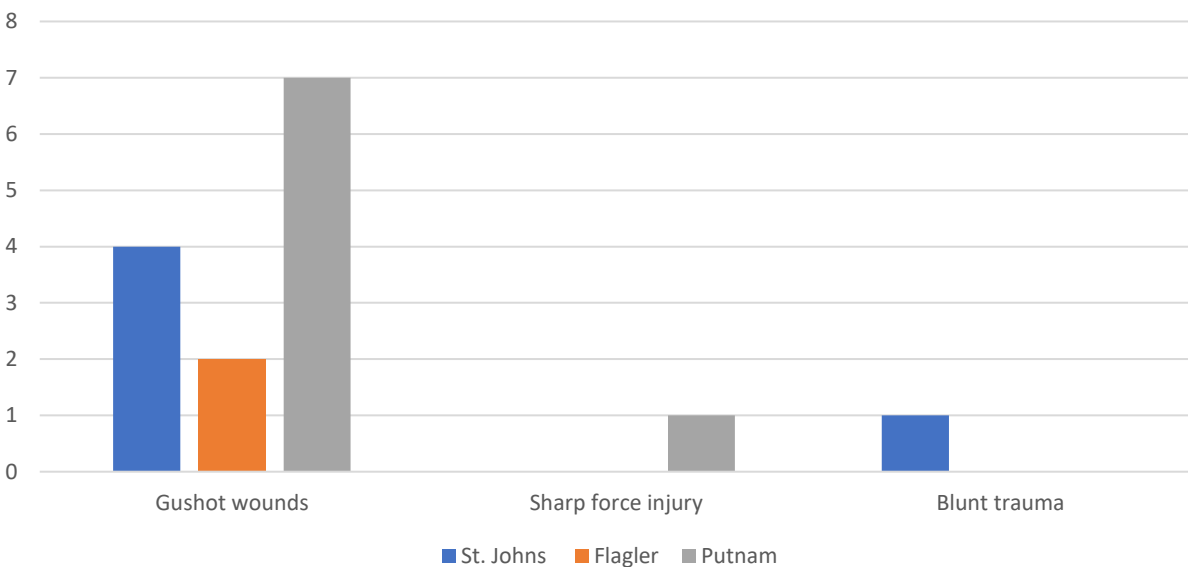


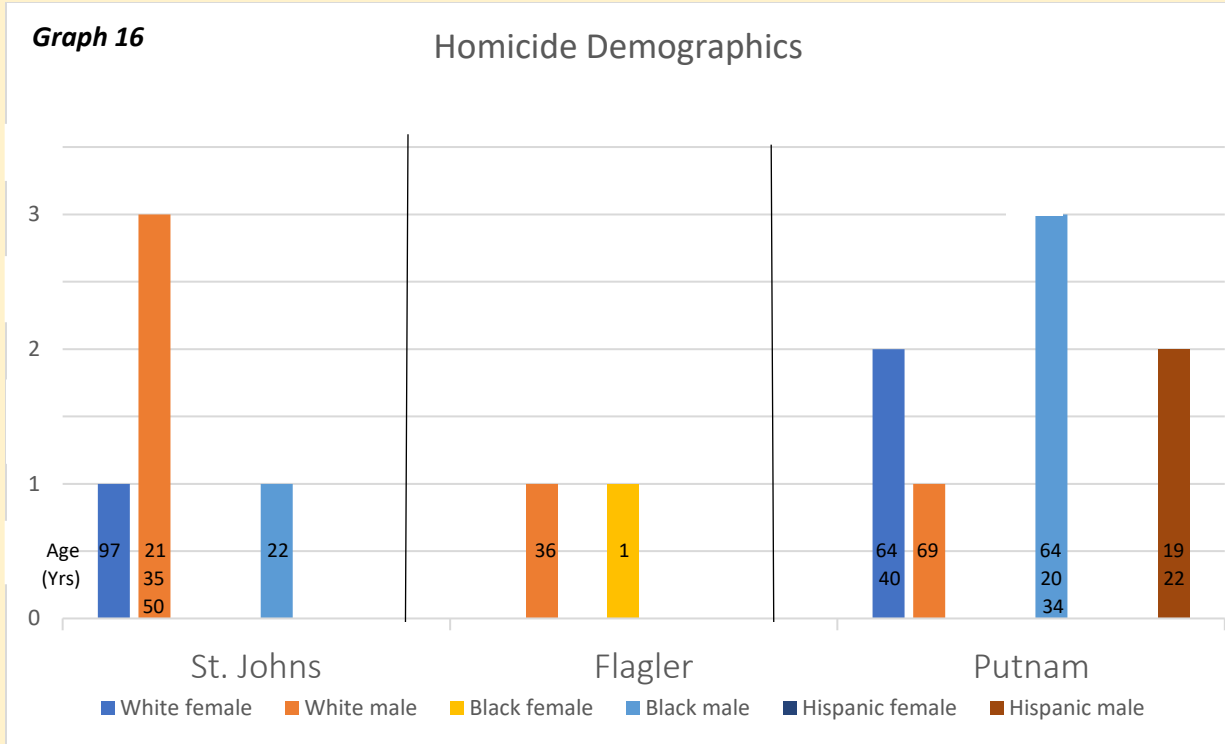
Homicides

Year 2023 yielded 15 homicides, a slight increase from the previous year. Like suicides, firearms far exceeded other modalities. **Graph 15** depicts the number of homicides by county and **Graph 16** depicts the homicide demographics by age, ethnicity, and gender. Firearms are the most common modality accounting for 86% of all homicides.

Graph 15

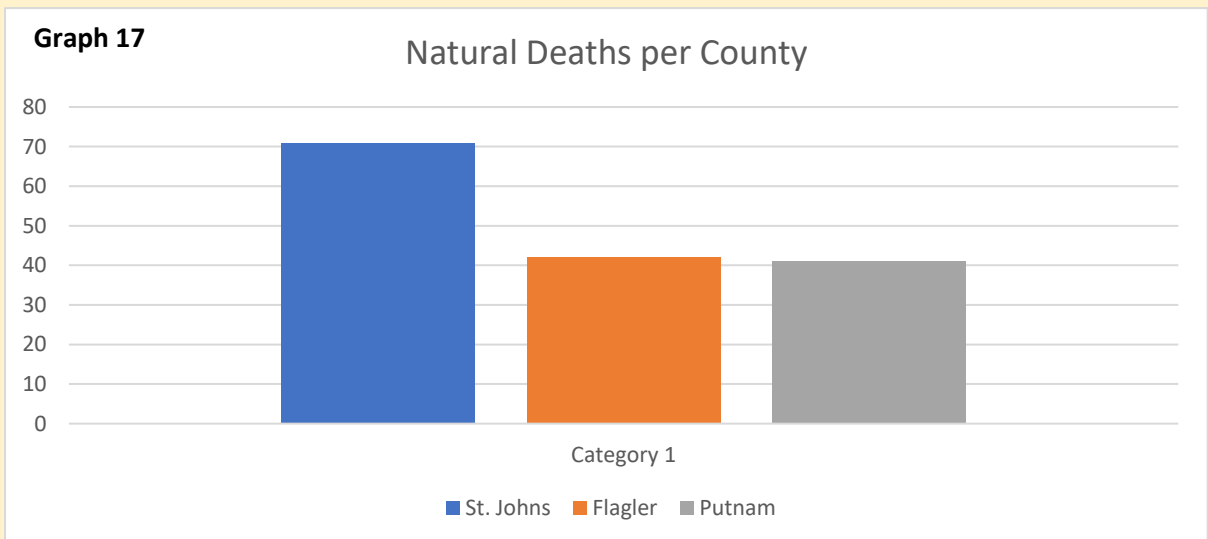
Homicides by County





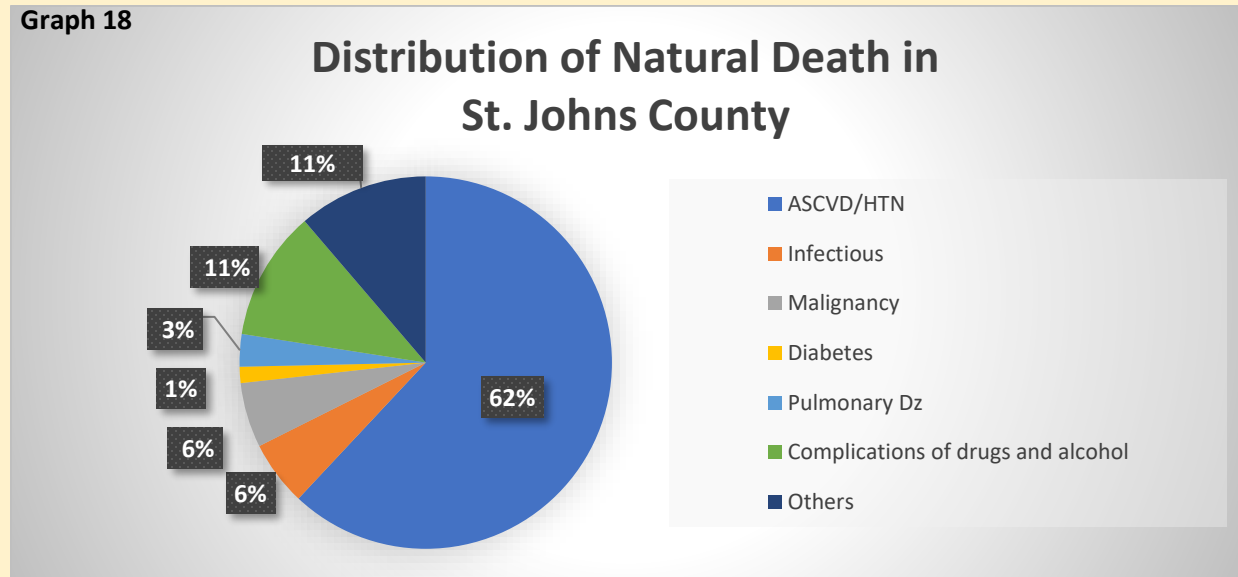
Natural Deaths

Per Florida Statute if a person dies while they are not under the care of a medical professional during the 12 months preceding the death, then the medical examiner must take jurisdiction for the purpose of certifying the death. The D23MEO certified a total of 154 natural deaths in 2023. The number of natural deaths per County is depicted on **Graph 17**.

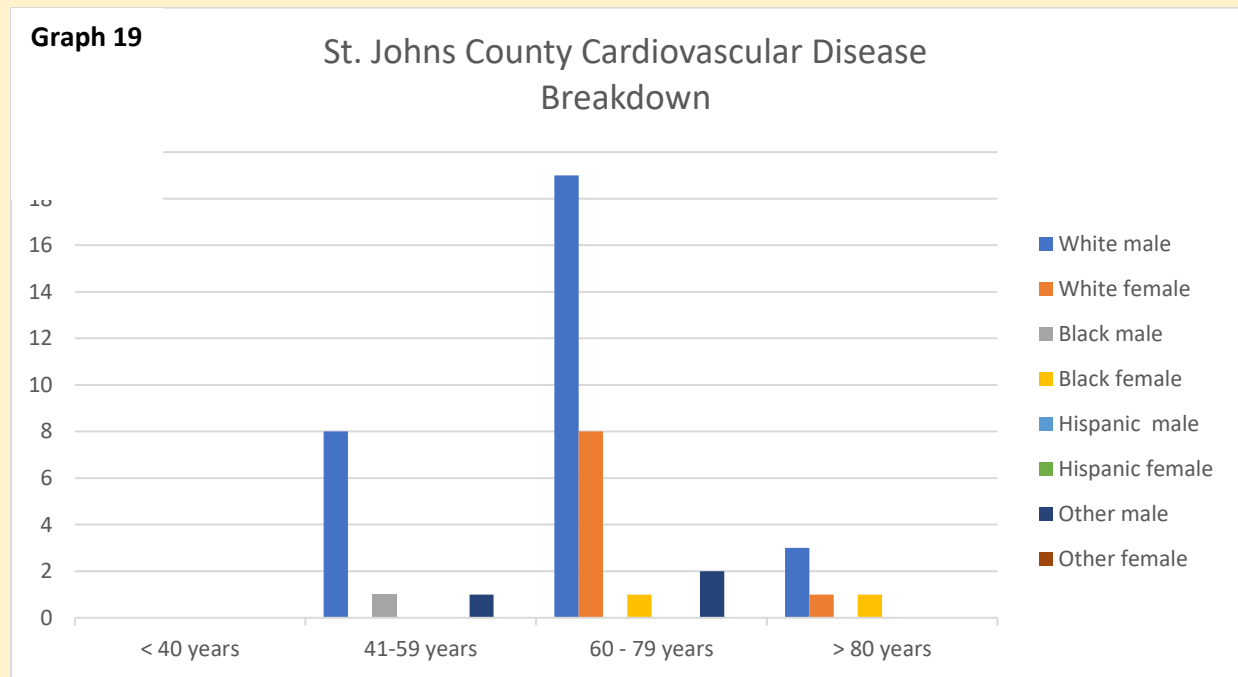


By far the most common natural diagnosis in all counties was related to cardiovascular conditions which includes atherosclerotic cardiovascular disease, hypertension, valvular disease, congestive heart failure, and cerebrovascular accidents.

In St. John’s county natural deaths accounted for 30% of the total case load of this county (70 out of 233 cases). The types and percentages of natural deaths are depicted in **Graph 18**.



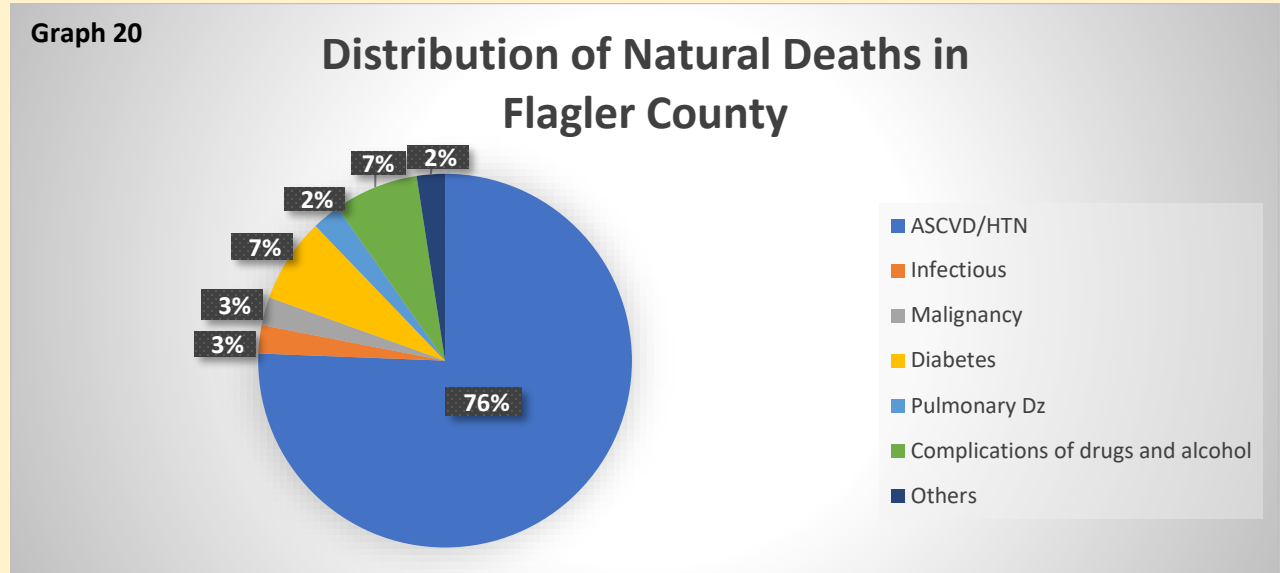
Most cases that died from cardiovascular conditions were between the ages of 60 and 79 years with a male to female ratio of 2.3:1 as depicted in **Graph 19**.



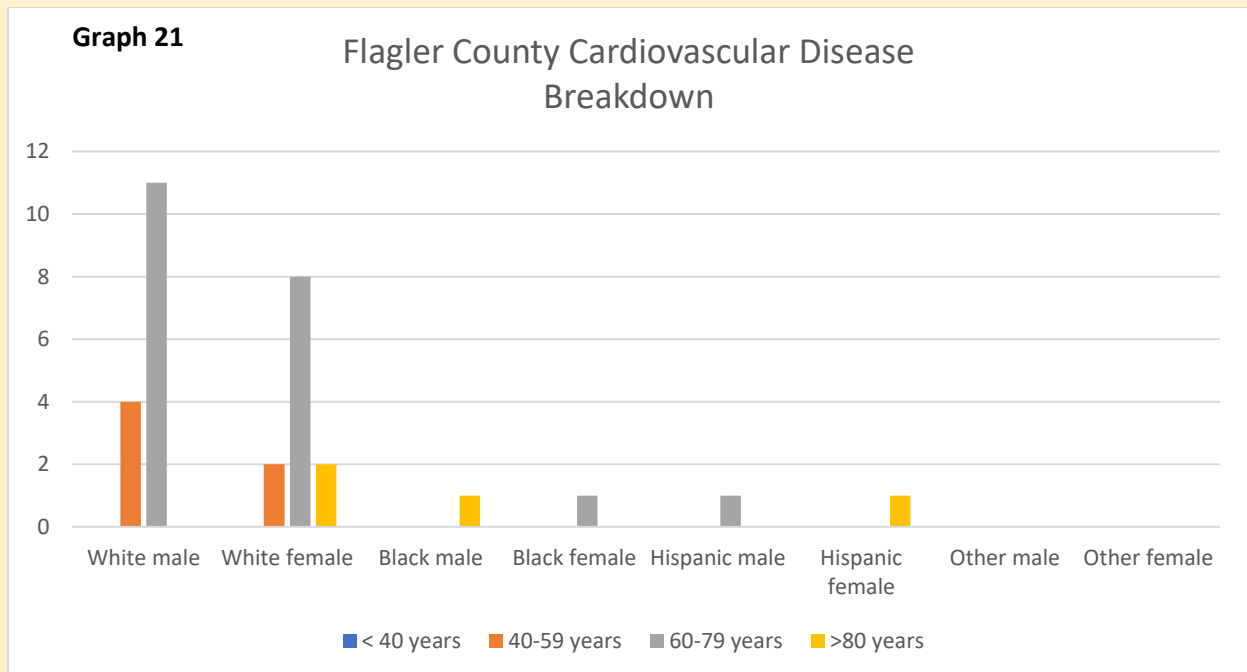
The second most common category of natural disease seen is complications of drugs and alcohol. These deaths include sequelae stemming from substance abuse and exclude acute drug toxicity. The age range

for this category is between 29 to 66 years, and the male to female ratio is 1:1. Seven decedents were white and one decedent was Hispanic. The other categories are haphazard in age, gender, and ethnicity.

In Flagler County natural deaths accounted for 24% of the total case load of this county (42 out of 176 cases). The types and percentages of natural deaths within the county are depicted in **Graph 20**.



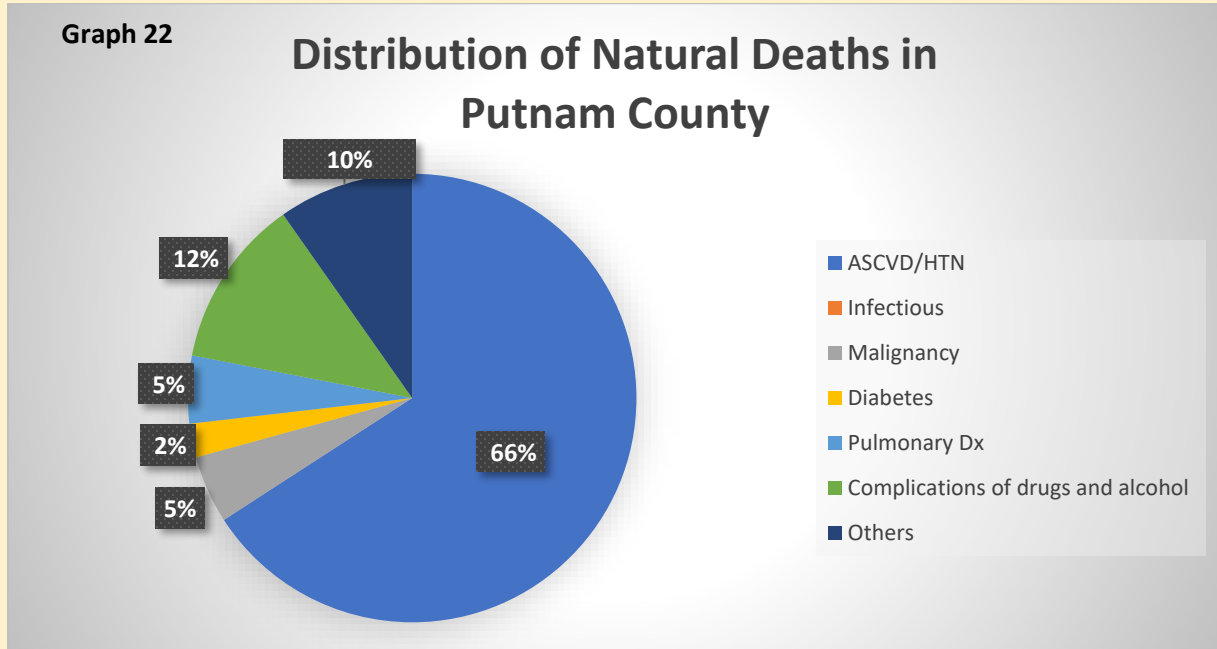
In Flagler County most of the cases that died from cardiovascular conditions were between the ages of 60 and 79 years with a male to female ratio of 1.2:1 as depicted in **Graph 21**.



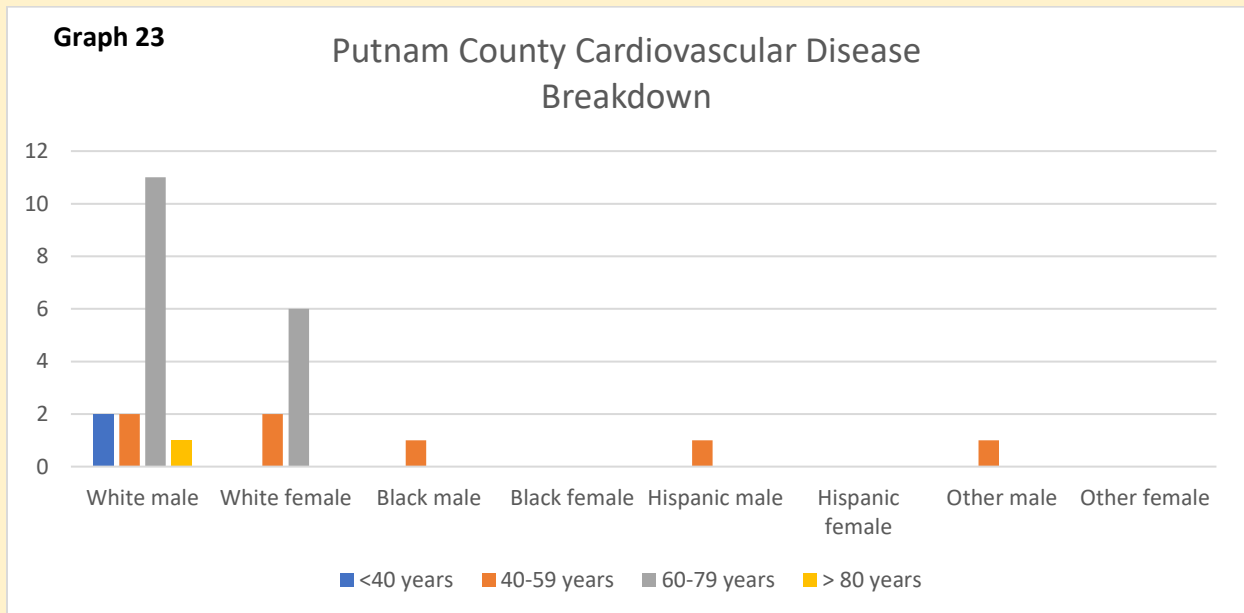
The second most common deaths in Flagler County were complications of drugs and alcohol tied by diabetes. The former excludes deaths secondary to acute drug toxicity. The age range of deaths due to diabetes (3 cases) is 34 to 65 years, and the female to male ratio is 2:1. The ages of the three cases dying

due to complications of drugs and alcohol is 42 to 63 years and the male to female ratio is 2:1. The other categories are haphazard in age, gender, and ethnicity.

In Putnam County natural deaths accounted for 31% of the total case load of this county (41 out of 134 cases). The types and percentages of natural deaths are depicted in **Graph 22**.



Consistent with St. Johns and Flagler Counties, in Putnam County most of the cases that died from cardiovascular conditions were between the ages of 60 and 79 years with a male to female ratio of 2.25:1 as depicted in **Graph 23**.



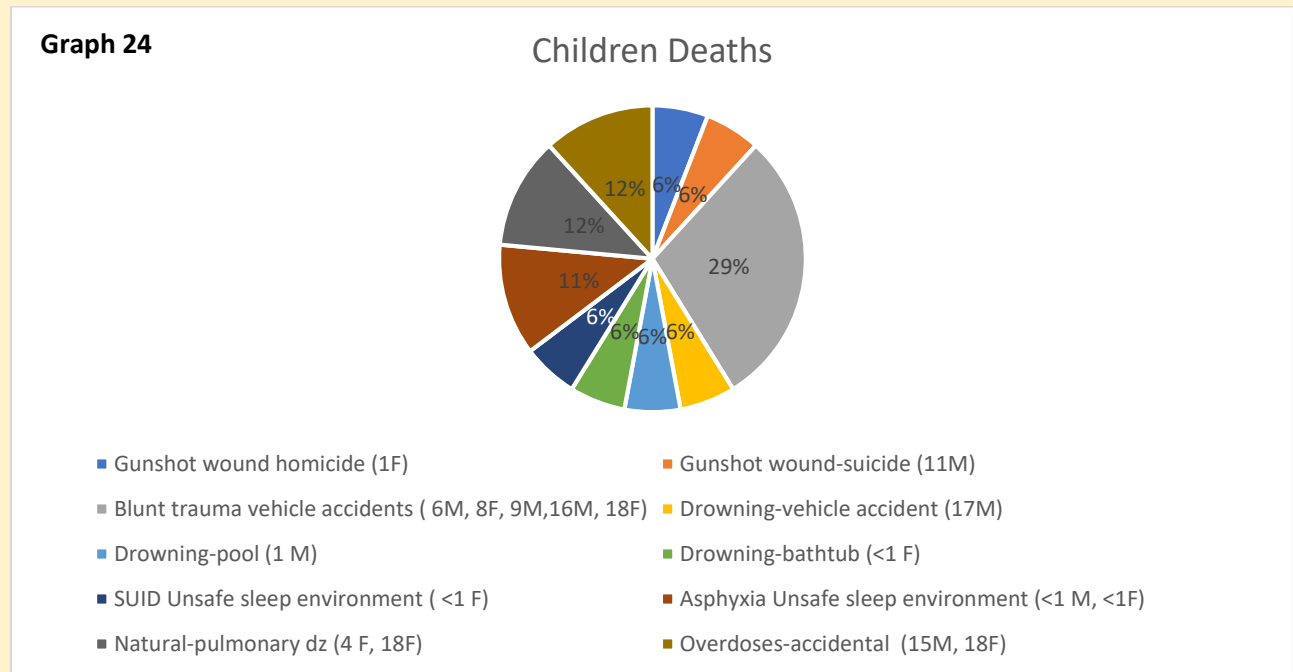
The second most common category of natural disease seen in Putnam County is complications of drugs and alcohol. These deaths include sequelae stemming from substance abuse and exclude acute drug toxicity. The age range for this category is between 32 to 65 years, and the male to female ratio is 1.5:1. Four decedents were white and one was Hispanic. The other categories are haphazard in age, gender, and ethnicity.

Undetermined

After thorough investigation and examination, 6 out of 543 cases remained as undetermined cause and/or manner of death. It is important to know that these cases may always be amended if additional information or circumstances come to light.

Children and Infants

For our purposes, a child death is greater than 1-year, but less than 18 years of age. An infant is less than 1 year of age. By these definitions, 17 child/infant deaths were investigated in 2023. There were 6 St. Johns, 6 Flagler, and 5 Putnam deaths investigated. Amongst the 17 deaths there was 1 homicide, 1 suicide, 6 accidental motor vehicle related deaths, 2 accidental drownings, 3 accidental deaths related to unsafe sleep environment and/or asphyxia, 1 natural death due pulmonary disease associated to obesity, and 1 overdose. **Graph 24** depicts all children deaths with their respective ages.



Death in Custody

Death in custody are of two broad categories; law enforcement involved and penal institution, as defined by the Florida Medical Examiner Commission. The D23MEO certified three deaths occurring in penal institutions. Two were from Flagler County one resulting from a suicidal hanging and another natural death resulting from sepsis due to bacteremia. St. Johns County had one law enforcement involved death resulting from an arrhythmia in association to atherosclerotic cardiovascular disease and physical strain.

Tissue Donation

The Medical Examiner Office cooperates with all tissue and organ procurement agencies in the area. In 2023 three cases stemming from Medical Examiner Jurisdiction became tissue donors.

Report prepared by: Dr. Wendolyn Sneed, Chief Medical Examiner
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