

# MARION COUNTY CORONER'S OFFICE



## 2021 ANNUAL REPORT



## MISSION

The mission of the Marion County Coroner's Office (MCCO) is to provide competent, quality, and efficient service in determining the cause and manner of death in unusual circumstances. The MCCO serves all those who die in Marion County, their families, and other associated agencies in the investigation of unusual and unexplained deaths. The office provides accurate completion of the coroner's verdict and death certificates. The MCCO is committed to providing public education, support, compassion, and confidentiality in all matters.



MAIN OFFICE  
521 W. McCarty Street  
Indianapolis, IN 46225  
o. (317) 327-4744  
f. (317) 327-4563

### Hours

Administration: Mon to Fri 8:00 AM to 4:00 PM  
Investigations: 24 hours per day, 365 days a year  
Pathology: Mon to Fri 8:00 AM to 4:00 PM, Sat 8:00 AM to 12:00 PM

[www.indy.gov/agency/marion-county-coroners-office](http://www.indy.gov/agency/marion-county-coroners-office)



**AGENCY LEADERSHIP**

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MARION COUNTY CORONER

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BUDGET AND QUALITY ASSURANCE ANALYST

DEPUTY CORONER

*Any use or recreation of data presented within the MCCO annual report requires approval from the Marion County Coroner.*

*All activities and functions of the MCCO are guided under Indiana state law: IC 36-2 Chapter 14. County Coroner*



## TABLE OF CONTENTS

The data presented within this report represents deaths occurring exclusively within Marion County. The data does not represent ALL deaths of Marion County residents. The decedent’s place of residence or location of the injury may be outside of the county. The analysis does not separate the deaths of those who have residency in Marion County and those who reside outside of the county. As a result, the final analysis is not an accurate representation of the demographics of the citizens of Marion County.

Executive Summary.....	5
Duties and Function.....	6
Office Overview.....	7
Services and Collaborations.....	8
Budget.....	9
2022 Initiatives.....	10
2021 Deaths Overview.....	11
2021 Deaths: Summary by Manner.....	14
Total Deaths .....	15
1. Accidental Deaths .....	19
2. Homicide Deaths .....	24
3. Natural Deaths .....	27
4. Suicide Deaths .....	29
5. Undetermined Deaths .....	31
Special Report: COVID-19 Deaths .....	34
Special Report: Homicide Firearm Deaths .....	37
Special Report: Infant Deaths .....	39
Special Report: Drug Intoxication Deaths .....	41
Office Achievements.....	45



Figure 1: Taggart Memorial Amphitheater at Riverside Park. Photo provided by Indy Parks



## EXECUTIVE SUMMARY

The Annual Report covers data that resulted from the 2,918 deaths that were investigated in Marion County during the calendar year (CY) 2021. The report also presents key agency accomplishments and other agency information, such as investigation criteria description, department functions, organ/tissue donation participation, unclaimed decedent remains, educational endeavors, office budget impact and changes, and community involvement. The MCCO hopes the information contained in the report will be useful to community leaders and the public at large. The data presented within this report represents deaths occurring within Marion County for which the MCCO has jurisdiction. The data does not represent ALL deaths of Marion County residents.

### Our Values:

**INTEGRITY.** The MCCO shows integrity through an office culture founded on pride and peer accountability, where members will maintain the highest ethical standards.

**COMPASSIONATE SERVICE.** MCCO employees are committed to building an effective team to serve the local community as the advocate for the deceased and their families in times of need and sorrow. Our employees are committed to providing law enforcement professionals with the tools needed to prosecute offenders and protect the community.

**EXCELLENCE.** The MCCO is a proud, professional organization with an emphasis on continuous personal and professional improvement.

The office of the Marion County Coroner has a dual role in providing both Public Safety and Public Health:

As a **Public Safety Agency**, the MCCO conducts death investigations in an independent manner and without bias. MCCO medico-legal investigators and forensic pathologists work with the law enforcement agency to determine if a death was caused by a criminal act. The MCCO medico-legal investigators ensure that positive identification and notification of legal next-of-kin occur as quickly as possible.

As a **Public Health Agency**, the MCCO provides information on the state of health of the residents of Marion County and alerts appropriate agencies of deaths that may present an immediate threat to its population. The MCCO conducts epidemiological research and partners with multiple agencies for detecting, investigating, and notification of novel illnesses and predicting trends to better support at-risk populations.

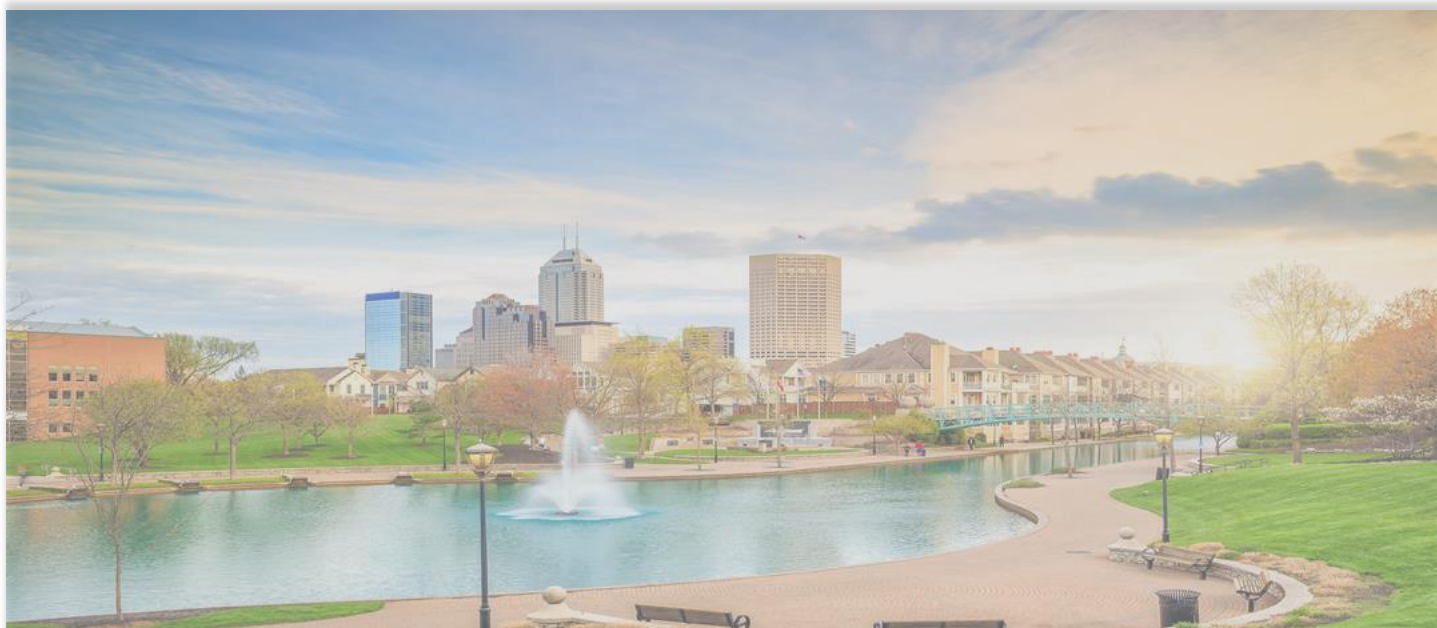
Figure 2: Chief Deputy Coroner Alfarena McGinty at press conference



## DUTIES AND FUNCTION

The MCCO is governed under Indiana Code § 36-2-14 and is charged with investigating deaths when/of: (1) sudden death of a healthy child, (2) physician is unable to state a cause of death, after careful review of the medical chart, or the deceased does not have a physician, (3) known or suspected homicide, (4) known or suspected suicide, (5) related to or following known suspected self-induced or criminal abortion, (6) following an accident or injury primary or contributory, either old or recent, (7) accidental poisoning (food, chemical, drug, therapeutic agents), (8) occupational disease or hazard, (9) all deaths of unidentified persons, (10) person in the custody of the state (incarcerated, foster care, adult protective services), (11) has died by casualty.

The MCCO is comprised of three divisions dedicated to serving the Marion County community: (1) Investigations, (2) Administration, and (3) Forensic Pathology. During a death investigation, a medicolegal death investigator (Deputy Coroner) will respond to the scene, gather pertinent information (medical and social), conduct a thorough scene investigation, including an examination of the decedent, and arrange for the removal of the body if a forensic examination is necessary to determine the exact cause and manner of death. A certified forensic pathologist performs the post-mortem physical exam. If needed, fluids/tissues may be sent for lab analysis such as toxicology or histology. The MCCO does not possess the capability of performing toxicology or histology analysis within the agency. As a result, samples are sent to the Indiana State Police lab or a separate contracted lab for analysis. Autopsies, or forensic exams, are performed mainly to determine the medical cause of death and/or to gather evidence for court. The forensic pathologist will complete a comprehensive autopsy report identifying the cause and manner of death.



## OVERVIEW

The MCCO has a legal obligation to positively identify any decedent accepted as a case. An identification card cannot be used as a legal method of positive identification. The MCCO will employ various methods to positively identify an individual, including: (1) visually by a family member on scene, (2) digital photograph, (3) fingerprint analysis, (4) dental records, or (5) DNA. Due to legal and health reasons, a decedent cannot be viewed at the MCCO. As a result, digital photographs are used by MCCO as a viewing method for positive identification. The MCCO staff will work with legal next-of-kin to set up an appointment to perform positive identification in the office.

If a decedent is unable to be positively identified, the decedent will remain in the custody of the MCCO until the individual can be positively identified. If no legal next-of-kin can be identified, an individual becomes an unclaimed decedent. If the decedent is not claimed, they are cremated at the expense of the county. The MCCO works closely with the federal government to ensure any unclaimed decedent receives the appropriate military honors and respect for final disposition.

The MCCO will retrieve property from a scene and inventory the property at the office. A decedent's property can then be turned over to the legal next-of-kin. Property removed by office staff and deemed as evidence in a criminal investigation will not be released without law enforcement approval. Legal next-of-kin can contact MCCO to schedule a time to retrieve their loved one's property.

After the MCCO accepts a case and the decedent must be transported to the office, the family is encouraged to select a funeral home. A funeral director can further coordinate arrangements with the office and help the family prepare for final disposition.

The legal next-of-kin can obtain a copy of death certificates from the Marion County Health Department or by contacting the funeral home. Death certificates are certified after an official cause and manner of death are determined. Though the MCCO works to close cases as quickly as possible, this process can take a couple of days up to several weeks to complete. Once a death certificate is certified by the Marion County Coroner, the legal next-of-kin can request a copy of the autopsy report by contacting the MCCO. An autopsy report can be physically collected or mailed to the legal next-of-kin upon request. Due to the volume of cases the MCCO processes within a Calendar Year, it is unable to send autopsy reports without prior request from the legal next-of-kin.





## SERVICES AND COLLABORATIONS

**ORGAN/TISSUE DONATION:** The MCCO works diligently with all organ and tissue donation organizations to ensure that donations can occur. Unless prevented due to criminal investigations, a representative from the Indiana Donation Alliance will work closely with the decedent's families and the MCCO to coordinate organ and/or tissue donations. Organ/tissue donations will not delay the funeral or memorial services and will still allow for open casket viewing if desired.

**UNCLAIMED INFANT FUNERAL SERVICES:** The MCCO works with *He Knows Your Name Ministries* to make sure any unclaimed infant receives a proper burial if no known family is available to do so.

**CONSULTATIONS:** The MCCO routinely works with the following agencies for further assistance in active death investigations: (1) IU School of Dentistry, (2) Human Identification Center at the University of Indianapolis, and (3) Indiana State Police Crime Lab.

**INTERNSHIPS:** The MCCO regularly provides internships for the spring, summer, and fall semesters to current college students. Interns participate in a full training program, rotation through each department, and the opportunity to participate in community events.

**FELLOWSHIP:** The MCCO offers one ACGME-accredited Forensic Pathology Fellowship in partnership with the Indiana University School of Medicine's Pathology Department per year. The training program fulfills the eligibility requirements for board certification. Fellows perform approximately 250 autopsies, participate in death scene investigations, handle questions from family members and police officers, and testify in court.

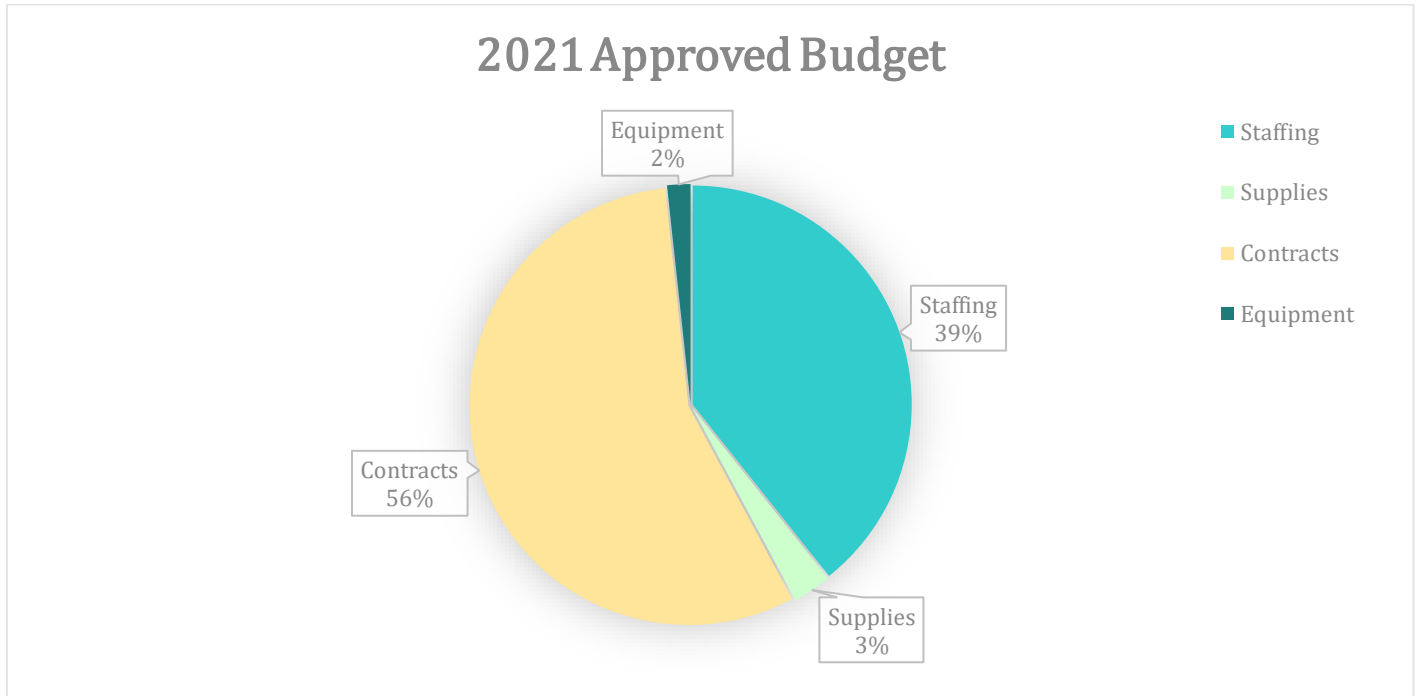
**MEDICAL EDUCATION:** The MCCO has agreements with the IU School of Medicine in which medical students and residents participate in a rotation to observe pathologists conducting examinations, including autopsies to determine the cause and manner of death.

**COMMUNITY EDUCATION:** One of the goals of the MCCO is to bring educational opportunities to the community, especially youth education. Deputy Coroners perform presentations at local high schools and universities on the field of Forensic Science. The MCCO agency leadership also contributes to community presentations by answering questions from the public on the role and function of the coroner's office in Marion County.



## MARION COUNTY CORONER'S OFFICE: BUDGET

The MCCO worked extensively on the overall agency budget for CY21. The main objectives for the 2021 budget included: an increase in staffing to handle the increasing caseload, an increase for supplies to perform forensic death investigations, an increase to staff wages, and to add additional forensic pathologists to assist with the increasing need for forensic exams. The MCCO experienced an increase of 12% to the accepted caseload in CY21. Forensic exams also increased by 9%. The increase in caseloads across all manners of death directly impacts the needs in all aspects of the budget.



The MCCO received an 11% increase in the overall budget for CY21 from the previous year. The additional funds were spread across staffing needs, supplies, and contractor costs. Due to the increase in violence-related deaths and drug overdoses, the MCCO did have to obtain additional appropriations at the conclusion of the fiscal year for supply and contractor costs. The MCCO was also awarded additional federal support funds for the ongoing public health crisis, as well as for homicide and drug overdose-related deaths.

The CY21 budget was used to support: (7) administrative staff, (16) investigative staff, (7) pathology staff, and (14) contractors. Contractors for the MCCO include Forensic Pathologists, decedent transportation, and toxicological services.

Figure 3: Garfield Park Conservatory. Photo provided by Indy Parks



## MARION COUNTY CORONER'S OFFICE: 2022 INITIATIVES

The community is experiencing traumatic loss from homicides, overdoses, and unexpected death at a very high rate. Usually, no one is available to follow up with the families or with the communities to address their needs and identify areas of support. No counseling is offered, and no guidance on outreach resources are presented to the families impacted or to the communities where the incidences are occurring at high-frequency rates. This causes the community to experience PTSD. MCCO is working to create a follow-up service to provide outreach and mental health guidance not only to those that are directly impacted by the violence, but to those that are in the community that sees and experiences the non-fatal incidences that have long-term effects on the neighborhoods and communities.

### Initiatives for CY 2022

1. Use a trauma-informed care approach in the field to work with families and provide follow-up with families that have lost a loved one in a violent/traumatic way and provide resources to combat the issue of lack of guidance after death.
2. Train communities on trauma-informed care, particularly those who are trusted in the community as a specific resource for those who are trusted to provide care directly in the space where the community feels safe.
3. Become educated on the subject of Trauma-informed care and train community leaders on trauma-informed care for them to be a resource in our local communities.
4. Train the community on Mental health First Aid in partnership with IMPD
5. Provide outreach and support service resources to families and communities who have suffered the loss of a loved one due to homicidal violence and/or drug overdose deaths.

# OVERVIEW OF CASES REPORTED AND INVESTIGATED

DURING THE CALENDAR YEAR (CY) 2021, 4,799 DEATHS WERE REPORTED TO AND INVESTIGATED BY THE MARION COUNTY CORONER'S OFFICE. OVERALL, THE NUMBER OF DEATHS REPORTED TO MCCO INCREASED OVER CY 2020 BY 18%. HOWEVER, THE PERCENTAGE OF ACCEPTED CASES IN 2021 INCREASED BY 12% OVER 2020. THE MCCO ACCEPTED JURISDICTION OF 61% OF REPORTED DEATHS IN CY21.

## MCCO Caseload

**Accepted Cases** - The MCCO accepted jurisdiction of 2,918 decedent cases, of which 1,812 were autopsied.

**Declined Cases** - The MCCO declined jurisdiction of 1,881 decedent cases, of which 43 became Storage Requests.

**Storage Requests** - The MCCO will transport a decedent for storage under unique circumstances either from scenes, nursing homes, hospices, and similar facilities when legal next-of-kin is not available at time of death to make final disposition decisions. A total of 176 decedents, 43 of which were "declined" cases, were transported to MCCO for temporary storage. The number of storage requests in CY21 increased 13% over CY20.

**Unclaimed Decedents** - The MCCO takes custody of decedents where legal next-of-kin is not present or cannot be immediately notified of the death to make final disposition decisions. If no legal next-of-kin can be identified, the MCCO designates the decedent to be "unclaimed." There were 81 unclaimed decedents in CY21. This is an 80% increase over CY20.

**Scene Visits and Body Transport** - The MCCO medicolegal investigative staff reported to 2,490 scenes. The MCCO transported 1,992 decedents to the office for either storage or forensic exam. A 3% increase occurred in the number of scenes visited and an 8% increase occurred in the number of decedents transported to the MCCO for temporary storage or a forensic exam from CY20 to CY21.

**Organ/Tissue Donation** - There were 1,061 organ or tissue donation referrals during CY21, with 27 accepted for tissue donation and 9 accepted for corneal donation.

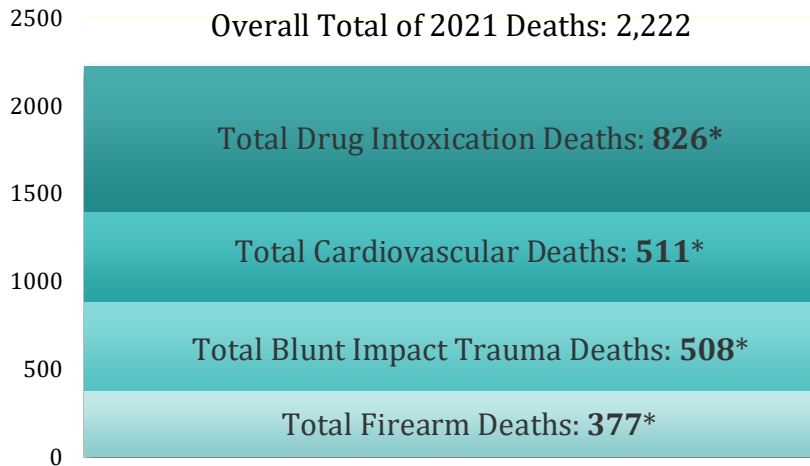
## 2021 Coroner Cases by Manner of Death

Manner	Full Autopsy	Partial Autopsy	External Autopsy	Medical Record Review Only	Total
Accident	414	23	512	430	1,379
Homicide	291	0	2	1	294
Natural	159	13	166	654	992
Suicide	31	32	109	16	188
Undetermined	46	1	9	3	59
Pending	4	0	0	2	6
<b>Total</b>	<b>945</b>	<b>69</b>	<b>798</b>	<b>1,106</b>	<b>2,918</b>



## Most Prevalent Causes of Death in CY 2021

\*The counts below include ALL manners



### Cause of Death

The CY21 Annual Report shows a continued trend in the top causes of death. Drug intoxication deaths surpassed cardiovascular deaths for the 2<sup>nd</sup> year as the top cause of death in all accepted cases in CY21. Drug intoxication deaths increased by 24% over CY20, accounting for 28% of total deaths in CY21. Cardiovascular deaths decreased by 1% - accounting for only 18% of total deaths in CY21. Both Blunt Impact Trauma and Firearm related deaths saw an increase of 38% and 5% respectively. The top four causes of death in CY21 accounted for 76% of total deaths in accepted cases.

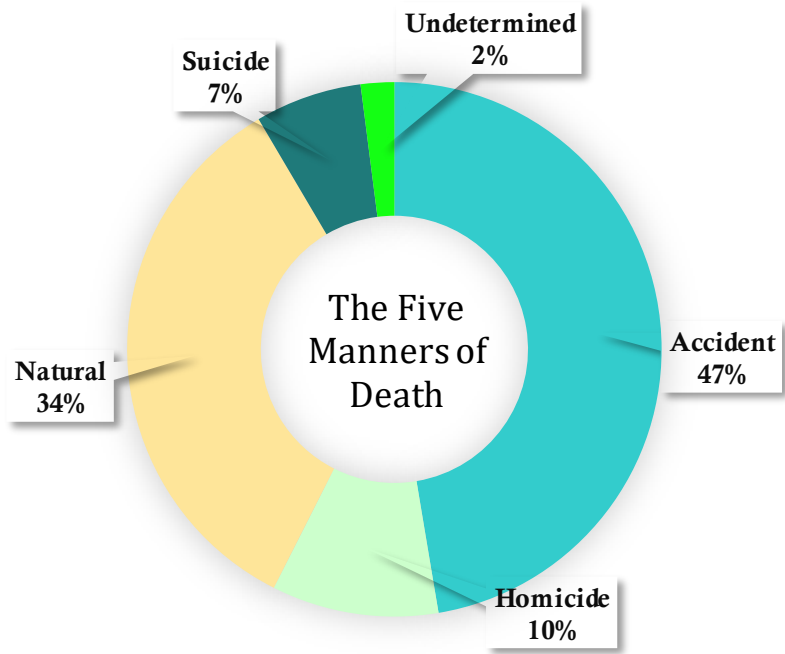
### Gender and Age Distribution

The CY21 Annual Report shows there are no significant changes in gender distribution across all deaths from CY20. The prevalence of female decedents increased in CY21 by approx. 2.34%. The most impacted age groups shifted slightly from CY20. In the prior year there were only three top age groups. In CY21, the most impacted age groups for decedents are now: (1) 30 to 39 & 50 to 59, (2) 60 to 69, and (3) 40 to 49.

### DEMOGRAPHICS OF DECEDENTS OF CY 2020 ACROSS ALL MANNERS OF DEATH

Age Group	Male	Female	Total	Percent of Ages
< 1	23	20	43	1%
1 to 12	13	13	26	1%
13 to 19	69	27	96	3%
20 to 29	278	88	366	13%
30 to 39	346	137	483	17%
40 to 49	300	152	452	15%
50 to 59	332	151	483	17%
60 to 69	338	125	463	16%
70 to 79	173	113	286	10%
80 to 89	75	74	149	5%
90 +	34	37	71	2%
<b>Total</b>	<b>1,981</b>	<b>937</b>	<b>2,918</b>	<b>100%</b>
<b>Percent of Gender/Sex</b>	<b>68%</b>	<b>32%</b>		

In CY21, Accidental deaths increased in prevalence by 6% while Natural deaths declined by 5%. All other manners remained at the same percentage distribution as the prior year.



\*Chart does not include pending cases accounting for less than 1%

**DEMOGRAPHICS OF DECEDENTS OF CY21  
ACROSS ALL MANNERS OF DEATH BY RACE AND GENDER**

Race	Male	Female	Total	Percent of Race
Asian	16	8	24	1%
Asian Indian	7	6	13	0.4%
Black	693	283	976	33%
American Indian	0	3	3	0.1%
Other	3	4	7	0.2%
Unknown	1	0	1	0.03%
White	1,261	633	1,894	64.91%
<b>Total</b>	<b>1,981</b>	<b>937</b>	<b>2,918</b>	<b>100%</b>

**Demographics by Race and Gender**

The CY21 data shows a similar trend in the distribution of race among decedents, not separated by manner of death compared to CY20. White males remained the majority demographic of decedents for age and race from CY20 to CY21. However, the race demographic changed slightly with White decedents decreasing by approximately 1%.

# SUMMARY OF FINDINGS FOR MANNER OF DEATH

**HOMICIDES:** The MCCO investigated **294** homicides in CY21. This report shows homicides increased from the previous year by 4% but continued to be more prevalent among Black males and in persons between the ages of 20-29 than any other metric. The most common weapon causing death was firearms, accounting for 89% of all homicides. The peak month for homicides during CY21 was July.

**SUICIDES:** The MCCO investigated **188** suicides in CY21. This report shows suicides increased from the previous year by 5% and were more prevalent in White males and among persons between the ages of 20-29. There was no change from the previous year with the most impacted age range in CY21. Firearms were the most common cause of death, followed by ligature/hanging which is consistent from year to year. Peak incidents changed from July and December in CY20 to March and July in CY21.

**ACCIDENTS:** The MCCO investigated **1,379** deaths that were classified as accidental in CY21. This report shows accidental deaths increased by 29%. Accidental deaths remained the highest category for deaths investigated and saw the largest increase among the other manners of death for CY21. Of the **1,379** cases investigated, the most prevalent causes of death were as follows: 799 were the result of accidental drug intoxication, 484 were the result of blunt force traumatic injuries, 18 were the result of thermal/fire-related injuries, 17 were the result of accidental drowning, and 14 were the result of environmental exposure. Accidental deaths can encompass the following circumstances: accidental falls, motor vehicle accidents, drug overdoses, etc. The specifics on the method of injury are further discussed in the data section of the report dedicated to accidental deaths. The most common age and race group impact by accidental deaths remained consistent from CY20 to CY21 in White males and between the ages of 30-39. Peak incidents for accidental deaths decreased to two months with the highest incidents occurring in August and September.

**NATURAL DEATHS:** The MCCO investigated **992** natural deaths in CY21. The report shows the number of natural deaths investigated decreased by 2% from CY20 and the leading cause of death in natural cases was cardiovascular disease with 511 deaths, followed by respiratory illness at 101 then COVID-19 at 81. The most impacted demographic remained consistent from CY20 as White males. The most impacted age group was 60- to 69-year-old. The peak month for natural death investigations was December, followed by September. COVID-19 related investigations accounted for 8% of natural deaths in accepted cases.

**UNDETERMINED:** The MCCO investigated **59** cases where the manner of death was unable to be determined. An Undetermined manner of death is a result of inconclusive evidence as to the circumstances of the death at the time and/or inconclusive examination results. The MCCO can alter or update a manner of death if new information is received at any time by recertifying the death certificate. Infant deaths that are ruled as Sudden Unexpected Infant Deaths (SUID) can be classified as undetermined. The number of undetermined deaths increased by 11% from CY20 to CY21. The peak month was identified as January with 11 investigations ultimately ruled as an undetermined for the manner of death. The more prevalent age group changed from CY20. In CY21, the new prevalent age group for undetermined deaths was persons aged 30 to 39, followed by persons under 12 months.



## 2021 Annual Report: Total Deaths

<b>Total Number of Cases Reported and Investigated by the MCCO</b>	<b>4,799</b>
Total Number of Declined Cases	1,881
<b>Total Number of Cases Accepted for Further Investigation</b>	<b>2,918</b>
<i>Percent of Accepted Cases</i>	61%
<b>Total Number of Autopsies</b>	<b>1,812</b>
<i>Percent of Accepted Cases Autopsied</i>	62%
Number of Scene Visits by a Medicolegal Investigator	2,490
<b>Total Number of Bodies Transported to MCCO</b>	<b>1,992</b>
<i>Percent of Bodies Transported</i>	68%
Total Number of Organ/Tissue Donations	36

### Definition of Unfamiliar Exam Type

\*Medical Record Review are cases where the body is not available, or a forensic exam is not necessary, to determine the cause and manner of death.

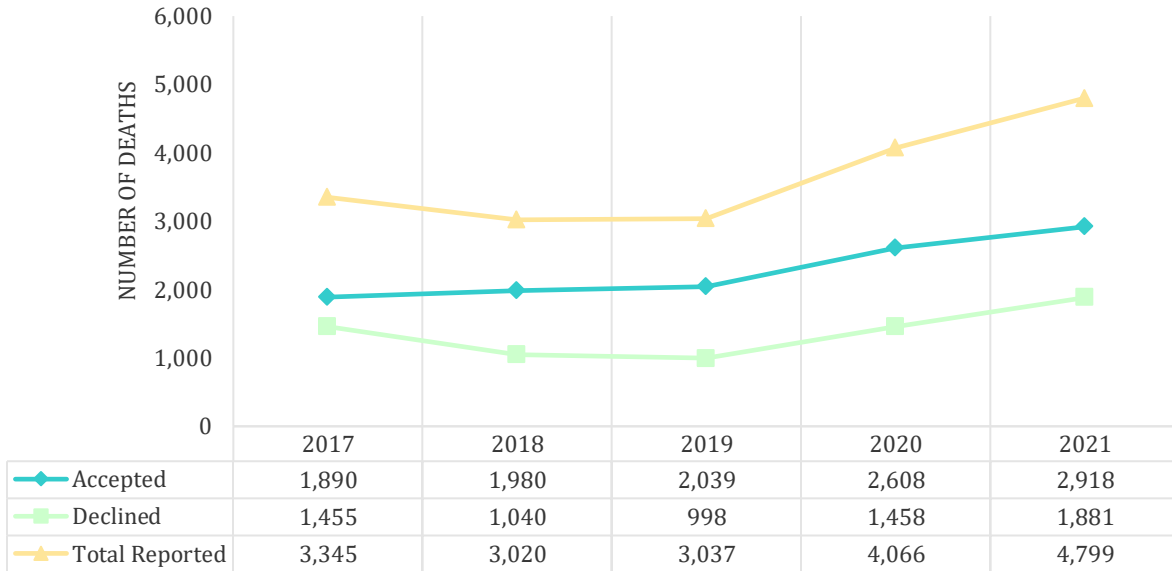
### BREAKDOWN OF ACCEPTED CASES BY EXAM TYPE

Total Number of Cases Accepted for Further Investigation	2,918
<b>Total Number of Autopsies</b>	<b>1,812</b>
Percent of Cases Accepted Autopsied	62%
<b>Number of Medical Record Review*</b>	<b>1,106</b>
<i>Percent of Medical Record Review</i>	38%
<b>Number of Full Examinations</b>	<b>945</b>
<i>Percent of Full Examinations</i>	52%
<b>Number of Partial Examinations</b>	<b>69</b>
<i>Percent of Partial Examinations</i>	3%
<b>Number of External Examinations</b>	<b>798</b>
<i>Percent of External Examinations</i>	44%

### BREAKDOWN OF ACCEPTED CASES AND AUTOPSIES BY MONTH

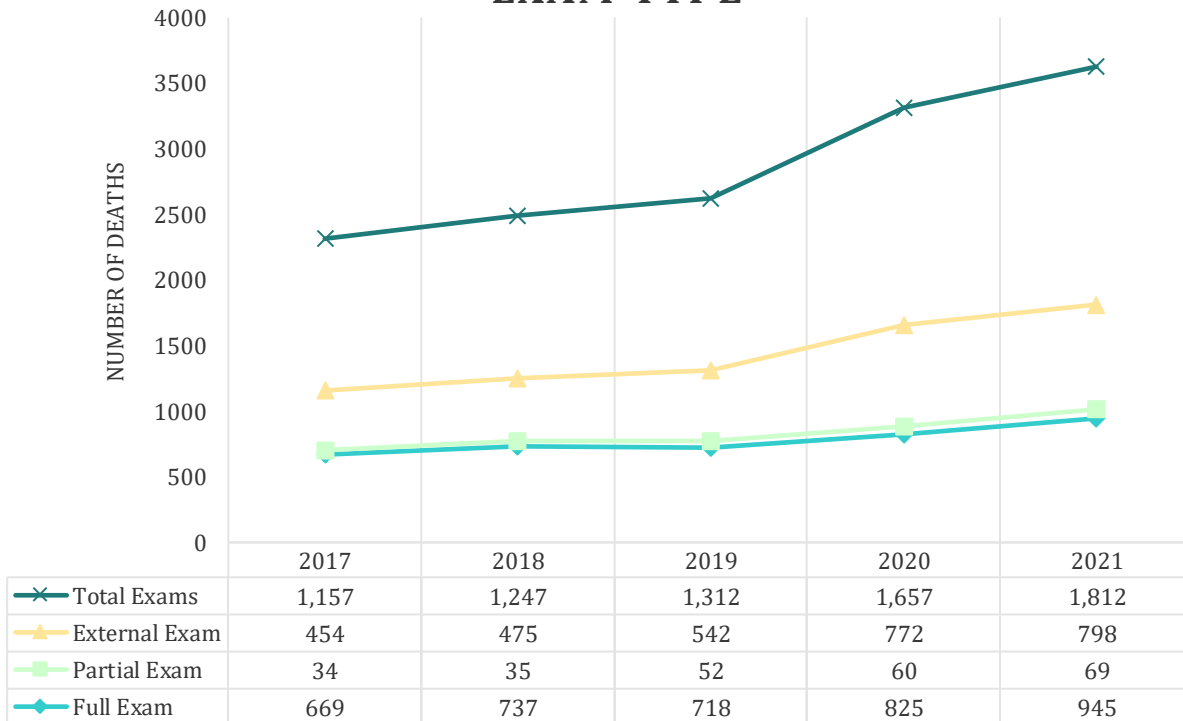
Month	Case Investigations	Autopsies (Full, Partial & External)
January	247	151
February	222	133
March	220	131
April	242	158
May	241	161
June	235	155
July	236	156
August	259	158
September	271	157
October	240	145
November	252	156
December	253	151
<b>Total</b>	<b>2,918</b>	<b>1,812</b>

### TRENDS IN DEATHS REPORTED TO MCCO



*\*\*Graph shows reported deaths for prior 5 years*

### TRENDS IN DEATHS INVESTIGATED BY EXAM TYPE

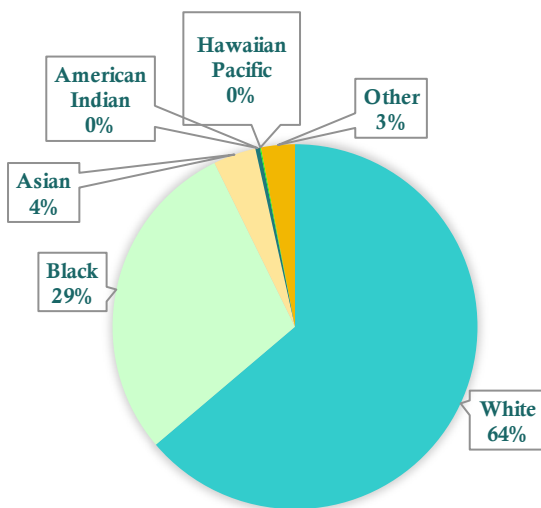


## 2021 Annual Report: Total Deaths

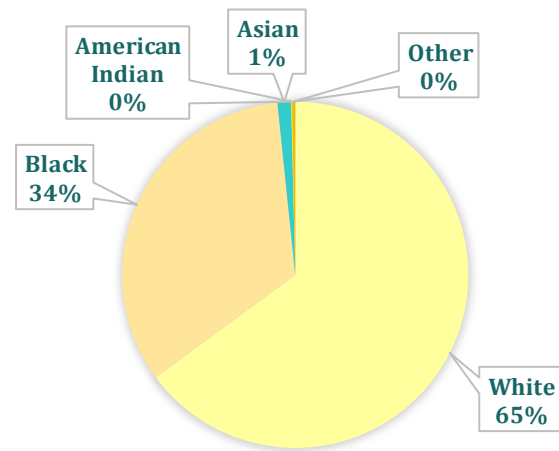
2021 MANNER OF DEATH BY RACE WITH 2020 CENSUS DATA					BY MANNER OF DEATH						
Race	2020 Census: Marion County Residents	% per 2020 Census	MCCO Cases: Marion County Residents	% of Marion Co. Residents	Total MCCO Cases	Acc.	Hom.	Nat.	Sui.	Und.	Pend
White	625,410	64%	1,421	60%	1,894	72%*	27%	63%	83%*	59%	100%
Black	283,389	29%	911	38.5%	976	27%	70%*	36%*	13%	37%*	0%
Asian	37,134	3.8%	27	1.14%	37	1%	3%	1%	4%*	2%	0%
American Indian	3,909	.4%	3	.13%	3	0%	0%	0%	0%	0%	0%
Hawaiian Pacific	977	.1%	0	0%	0	0%	0%	0%	0%	0%	0%
Other	29,316	2.9%	6	.25%	8	0%	0%	0%	1%	2%	0%
<b>Total</b>	<b>977,203</b>	<b>100%</b>	<b>2,368</b>	<b>100%</b>	<b>2,918</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

\*The figures in the Manner of Death section on the table indicate a concern where the percentage of race by manner is higher than the race distribution in the population. The MCCO identified three manners where the race distribution of decedents was disproportionate to the Marion County population distribution: (1) White decedents in Accidental deaths [+8%] and suicide deaths [+19%]; (2) Black decedents in Homicide deaths [+31%], Natural deaths [+7%] and Undetermined deaths [+8%]; and (3) Asian decedents in Suicide deaths [+0.2%].

2020 CENSUS DATA BY RACE FOR MARION COUNTY



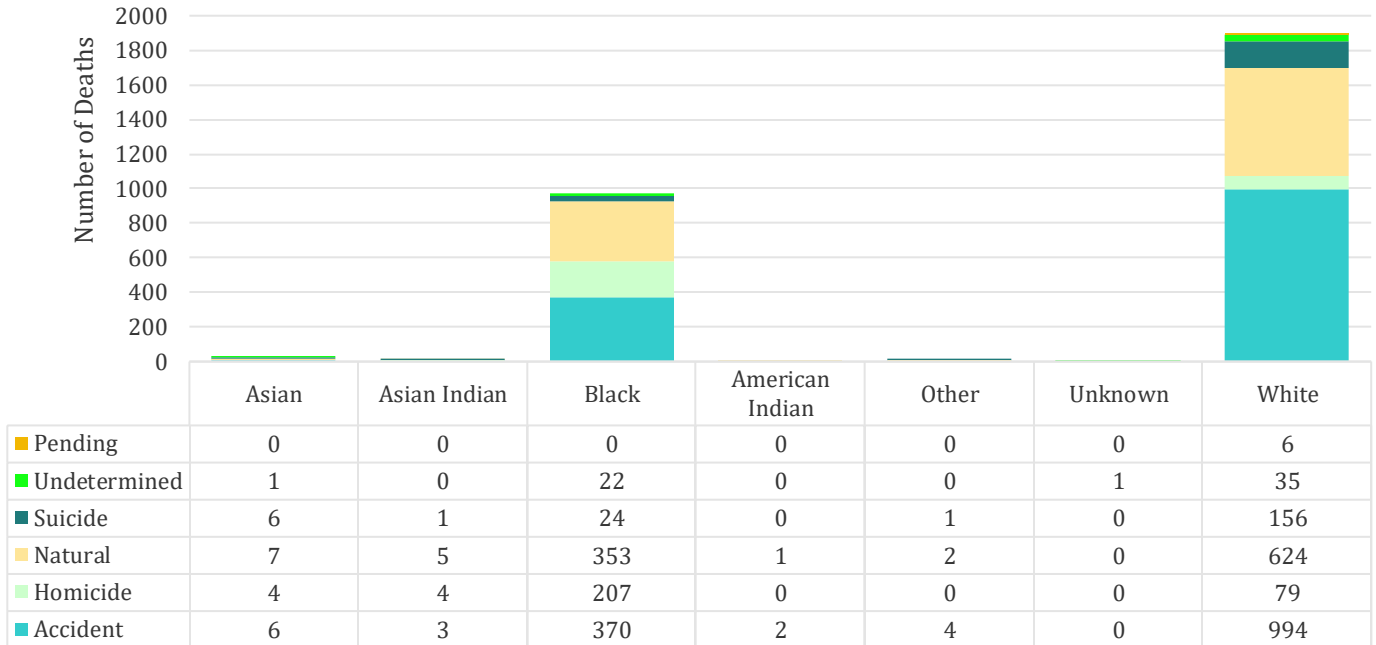
2021 TOTAL DECEDENT POPULATION BY RACE



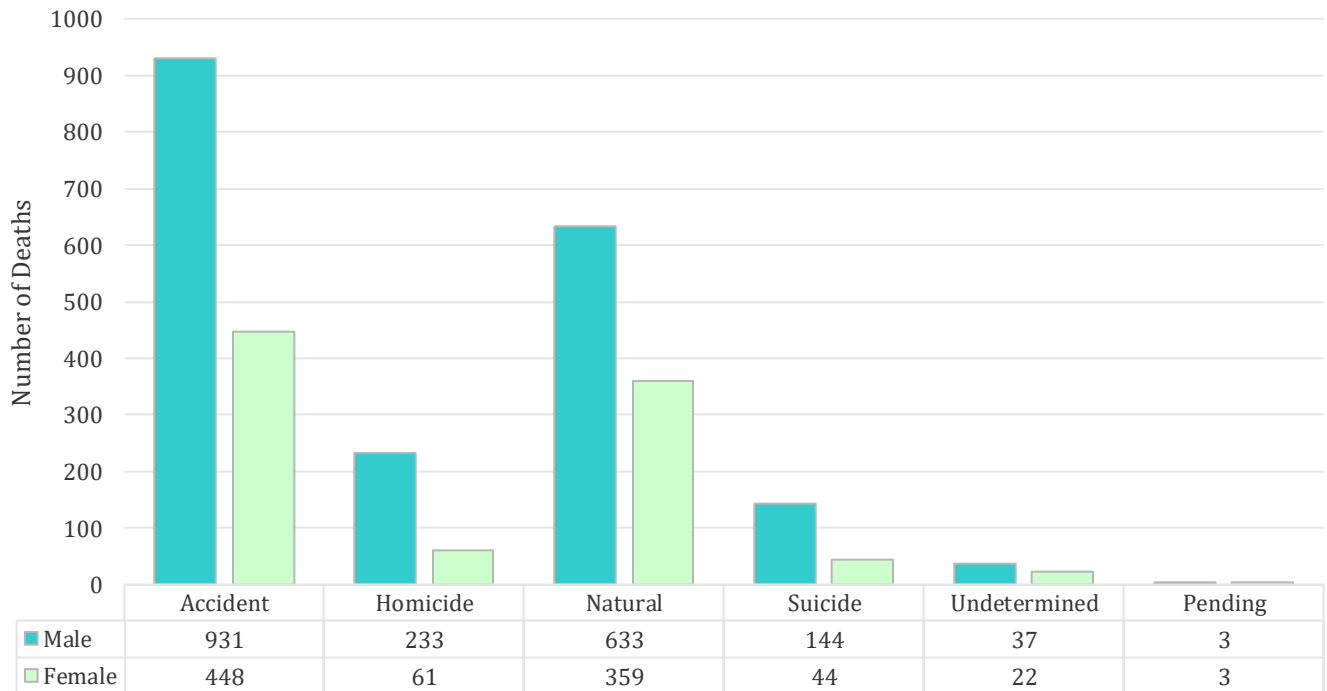
\*\*The MCCO recognizes a lack of analysis throughout the annual report on Hispanic decedents. Through analysis of the CY21 data, the MCCO has identified a data collection issue preventing reliable information on the number of Hispanic decedents among accepted cases. The MCCO is working diligently in CY22 to identify the cause of data capture failure and developing cultural training for all staff to better obtain accurate demographic information on all decedents who come into our care.



### 2021 Deaths by Race and Manner of Death



### Total Number of 2021 Deaths by Gender



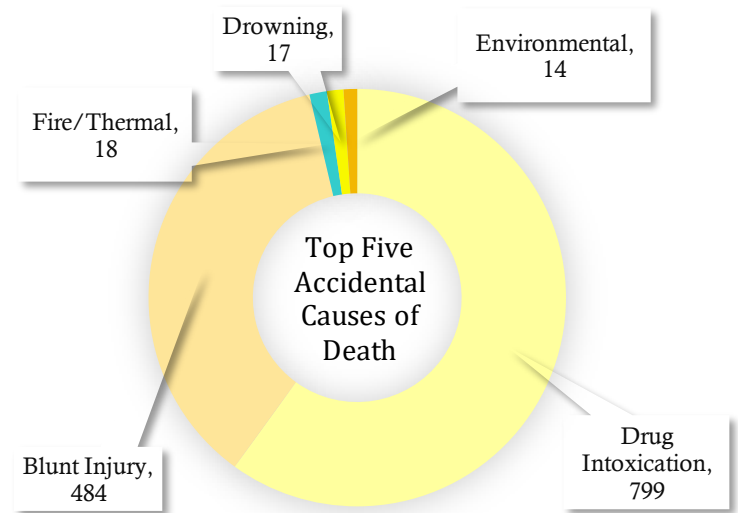
## 2021 Annual Report: Accidental Deaths

The MCCO investigated **1,379** accidental deaths in CY21. Of the **1,379** cases investigated, **268** were motor vehicle accidents and **799** were the result of prescription and/or illicit drug overdose. There was an increase of accidental deaths over CY20 by 29%. Approximately 58% of accidental deaths were the result of drug intoxication. There were more accidental deaths in September than any other month, males made up 68% of decedents, White decedents made up 72%, and the age group of 30-39 was more prevalent at 22% of decedents.

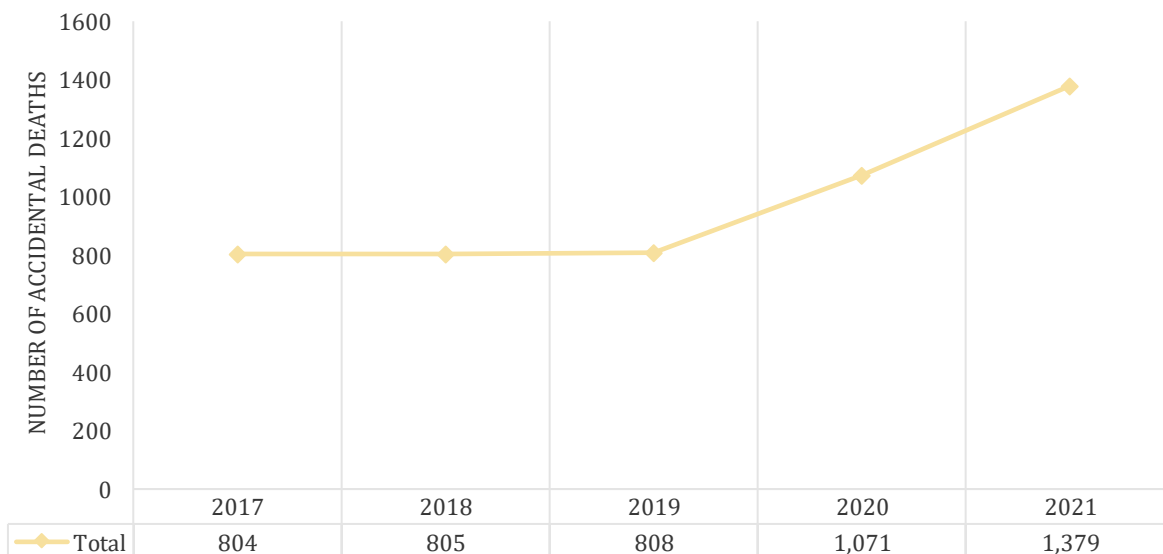
### 1A. ACCIDENTAL DEATHS TOTAL

#### ACCIDENTS BY CAUSE OF DEATH

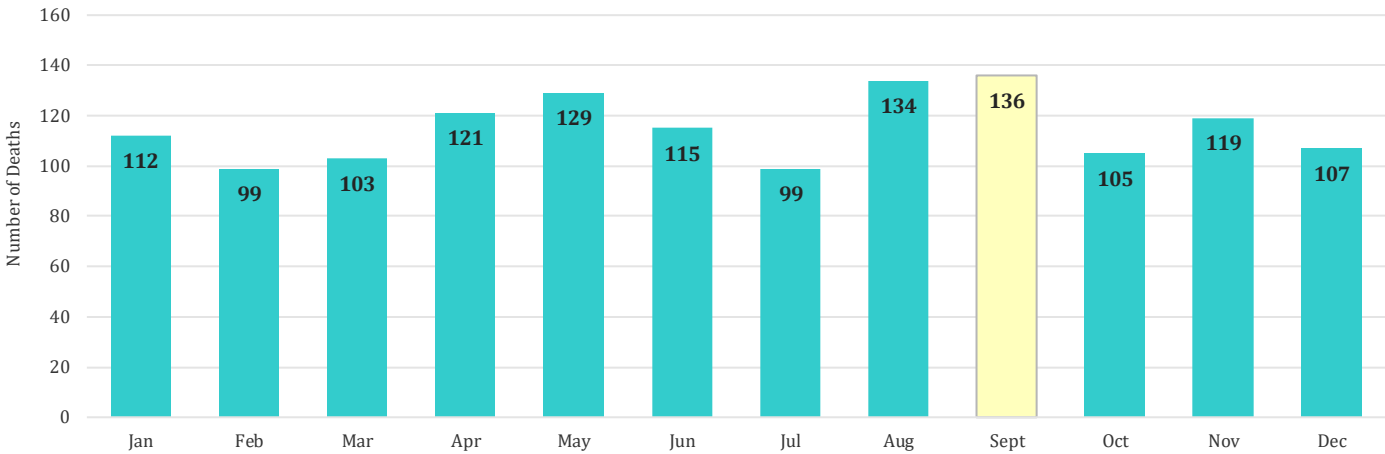
Causes of Accidental Deaths	# of Deaths	% of Deaths
Intoxication (Drug)	799	58%
Blunt Injury	484	35%
Fire/Thermal	18	1%
Drowning	17	1%
Environmental	14	1%
Asphyxiation	11	1%
Unsafe Sleep Environment	9	1%
Choking	8	1%
Carbon Monoxide	5	0%
Other	14	1%
<b>Total</b>	<b>1,379</b>	<b>100%</b>



### YEARLY TRENDS OF ACCIDENTAL DEATHS 2017 - 2021



Accidental Deaths by Month



ACCIDENTAL DEATHS BY RACE AND GENDER

	Male	Female	Total	% of Race
Asian	3	3	6	0%
Asian Indian	2	1	3	0.2%
Black	269	101	370	27%
American Indian	0	2	2	0.1%
Other	2	2	4	0.3%
White	655	339	994	72%
<b>Total</b>	<b>931</b>	<b>448</b>	<b>1,379</b>	
<b>% of Gender</b>	<b>68%</b>	<b>32%</b>		<b>100%</b>

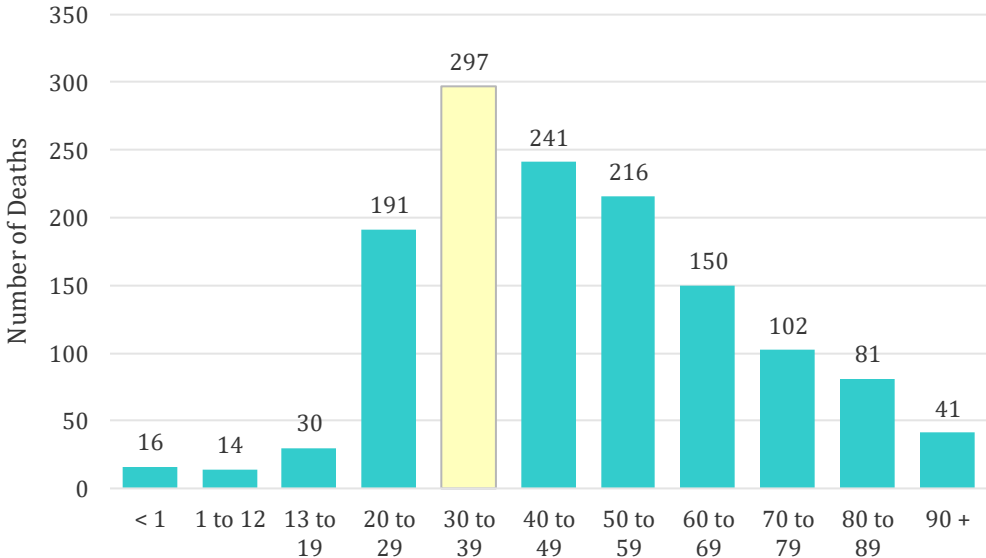
Accidental Deaths by Race and Gender

For CY21, the percentage of male decedents fell by 3% and females rose by 3% from CY20. For CY21, the percentage of Black decedents rose by 2% while White decedents fell by 2%.

Accidental Deaths by Age

There was no change in the most prominent age group among accidental deaths from CY20 to CY21. Within each age group there were significant increases with the lowest growth at 2% (13 to 19) and the largest growth at 84% (80 to 89) from CY20 to CY21.

Accidental Deaths by Age



## 2021 Annual Report: Accidental Deaths

### 1B. ACCIDENTAL DEATHS INVOLVING A MOTOR VEHICLE

Of the **268** motor vehicle related deaths, 64% of decedents were the operator of the vehicle, while 18% were pedestrians struck by a vehicle. Motor vehicle fatalities were more prevalent in persons aged 30-39 at 22%, males at 70%, and white decedents at 64%. Motor vehicle fatalities occurred most frequently in September and on Sundays.

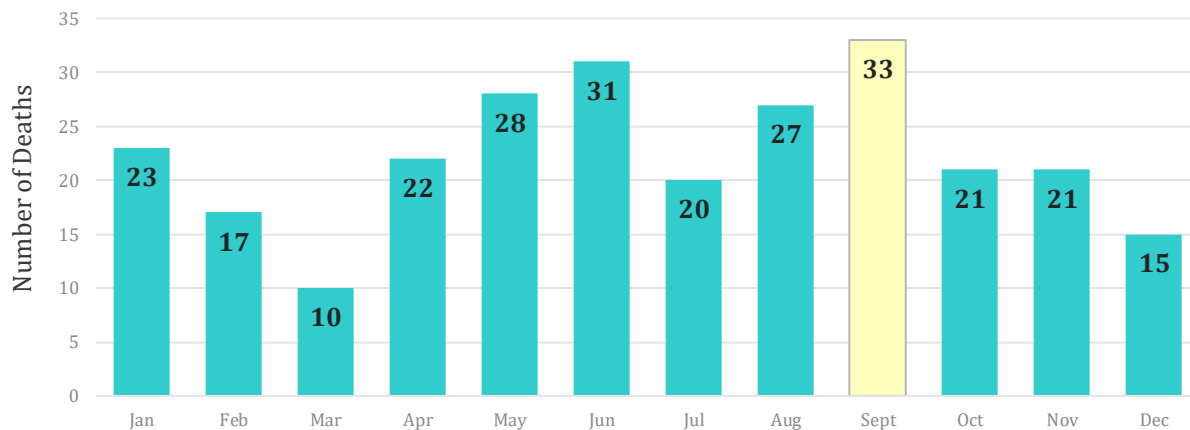
#### ROLE OF THE DECEDENT IN ACCIDENTAL MOTOR VEHICLE DEATHS

Role	# of Deaths	% of Deaths
Driver	171	64%
Passenger	40	15%
Pedestrian	48	18%
Other	8	3%
Unknown	1	0%
<b>Total</b>	<b>268</b>	<b>100%</b>

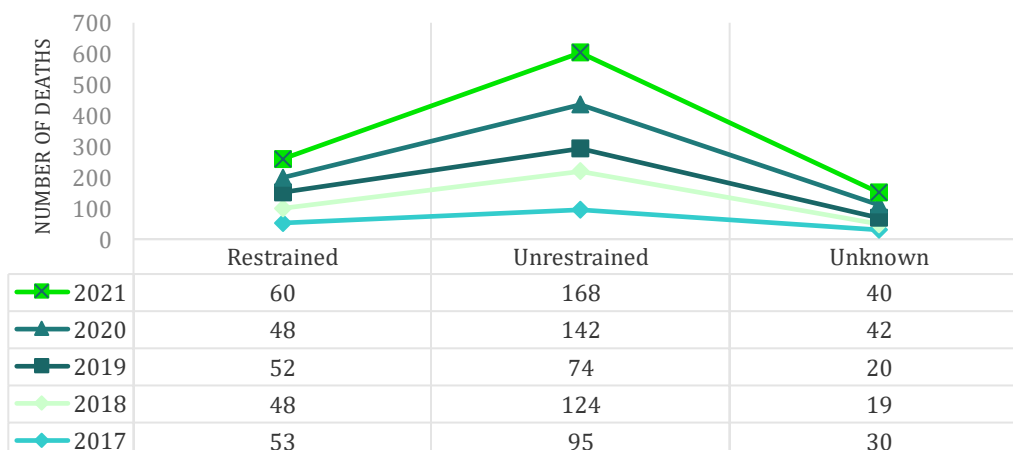
#### Motor Vehicle Death Trends

Overall, MVA related deaths increased by 16% in CY21. The percentage distribution for drivers increased by 3%, passengers increased by 4%, and pedestrians decreased by 5% from CY20 to CY21.

#### MOTOR VEHICLE DEATHS BY MONTH



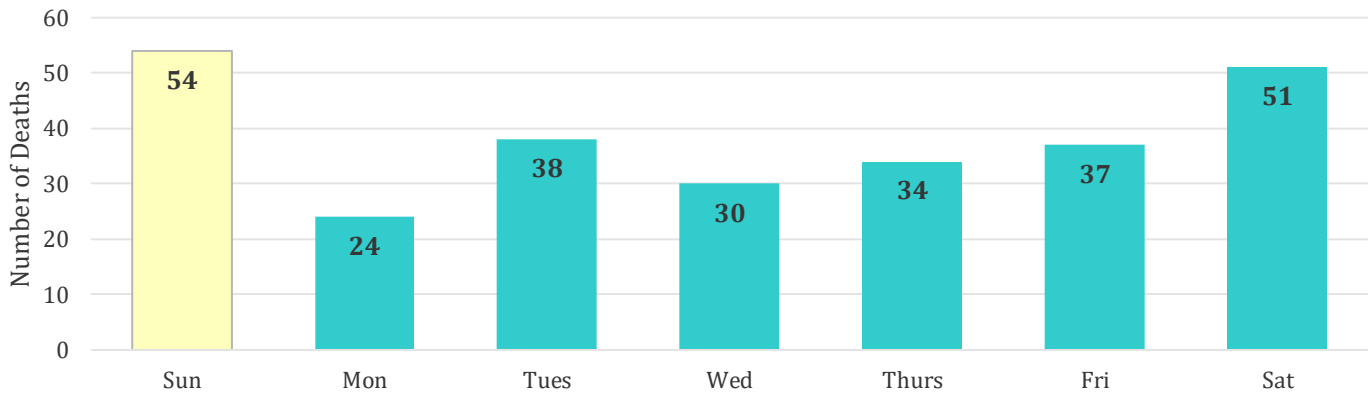
#### SEAT BELT USE IN MOTOR VEHICLE DEATHS



#### Seat Belt Use in Motor Vehicle Deaths

The number of unrestrained decedents increased in CY21 by 18%.

### Motor Vehicle Deaths by Day



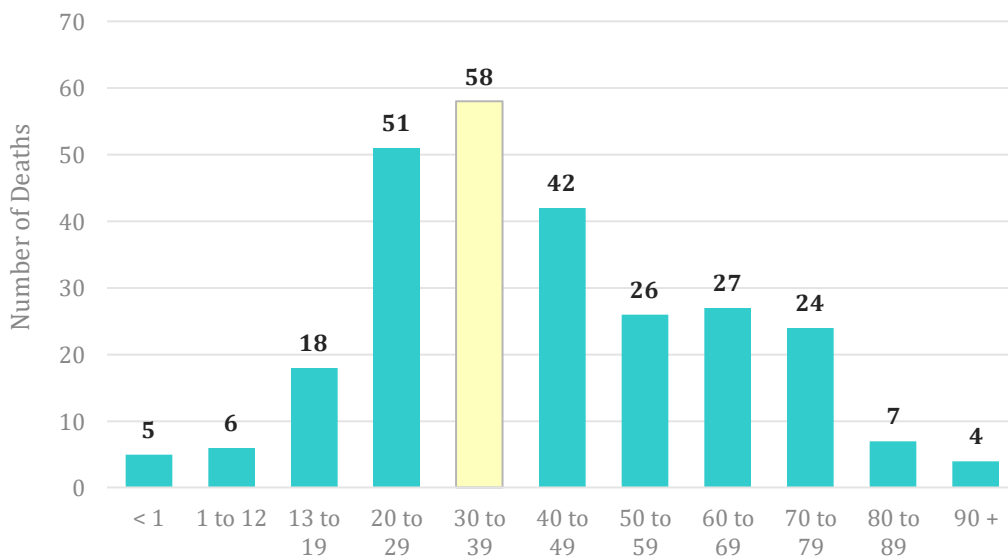
#### Motor Vehicle Deaths by Gender

The prevalence of male decedents was consistent from CY20 to CY21. The distribution of race changed from CY20 to CY21 with White decedents decreasing by 4% and Black decedents increasing by 4%.

#### MOTOR VEHICLE DEATHS BY RACE AND GENDER

	Male	Female	Total	% of Race
Asian	1	0	1	0%
Black	63	30	93	35%
Other	1	1	2	1%
White	123	49	172	64%
<b>Total</b>	<b>188</b>	<b>80</b>	<b>268</b>	
<b>% of Gender</b>	<b>70%</b>	<b>30%</b>		<b>100%</b>

### MOTOR VEHICLE DEATHS BY AGE



#### Motor Vehicle Deaths by Age

The most prevalent age group impacted in motor vehicle deaths changed from 20 to 29 in CY20 to age group 30 to 39 in CY21.



# 2021 Annual Report: Accidental Deaths

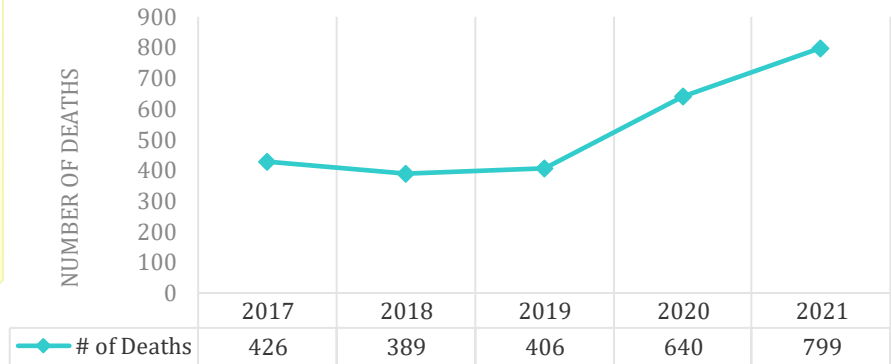
## 1C. ACCIDENTAL DEATHS INVOLVING DRUG INTOXICATION

Of the 799 drug intoxication deaths, toxicology analysis was performed on all cases using a partnership with Phoenix Labs, Axis, and the Indiana State Police Crime Lab. Drug intoxication deaths increased in CY21 by 25%. Drug intoxication fatalities were more prevalent in persons aged 30-39, males at 70%, and White decedents at 70%. Drug intoxication fatalities occurred most frequently in May. Additional analysis of accidental drug intoxication can be found in the Special Report: Drug Overdose Deaths.

### Drug Intoxication Deaths

Drug intoxication deaths increased over CY20 by 25%. Over a five-year comparison, drug intoxication deaths increased by 88%, with over 50% of the growth occurring in the last two calendar years.

ACCIDENTAL DRUG INTOXICATION TREND  
2017-2021



### DRUG INTOXICATION DEATHS BY RACE AND GENDER

	Male	Female	Total	% of Race
Asian	2	1	3	0.4%
Asian Indian	2	0	2	0.3%
Black	176	56	232	29%
American Indian	0	2	2	0.3%
Other	1	0	1	0.1%
White	378	181	559	70%
<b>Total</b>	<b>559</b>	<b>240</b>	<b>799</b>	
<b>% of Gender</b>	<b>70%</b>	<b>30%</b>		<b>100%</b>

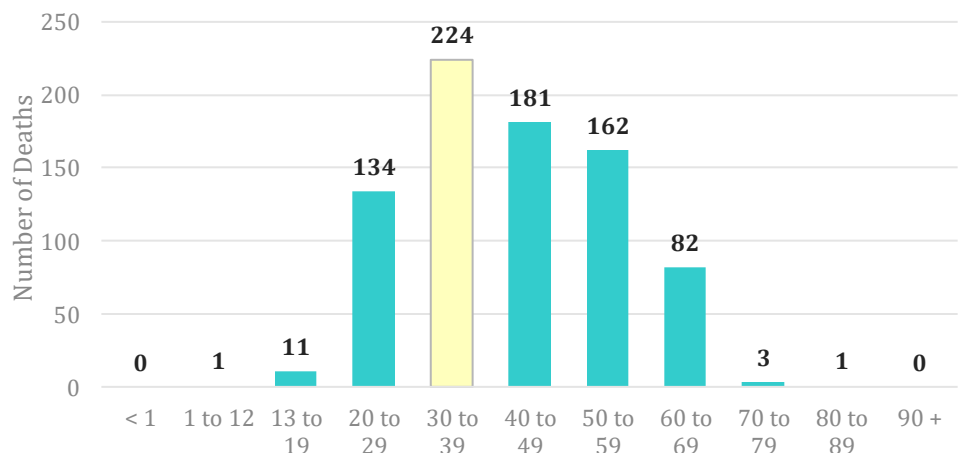
### Drug Intoxication Deaths: Race & Gender

Drug intoxication maintained the trend of being more prevalent among White males at 70%. CY21 decreased in percentage representation from CY20 in the prevalence of males by 3% while females increased by 3%. The same was observed among the racial distribution with White decedents decreasing by 4% and Black decedents increasing by 4%. In two calendar years, Black decedents who died from drug intoxication increased by 6% overall.

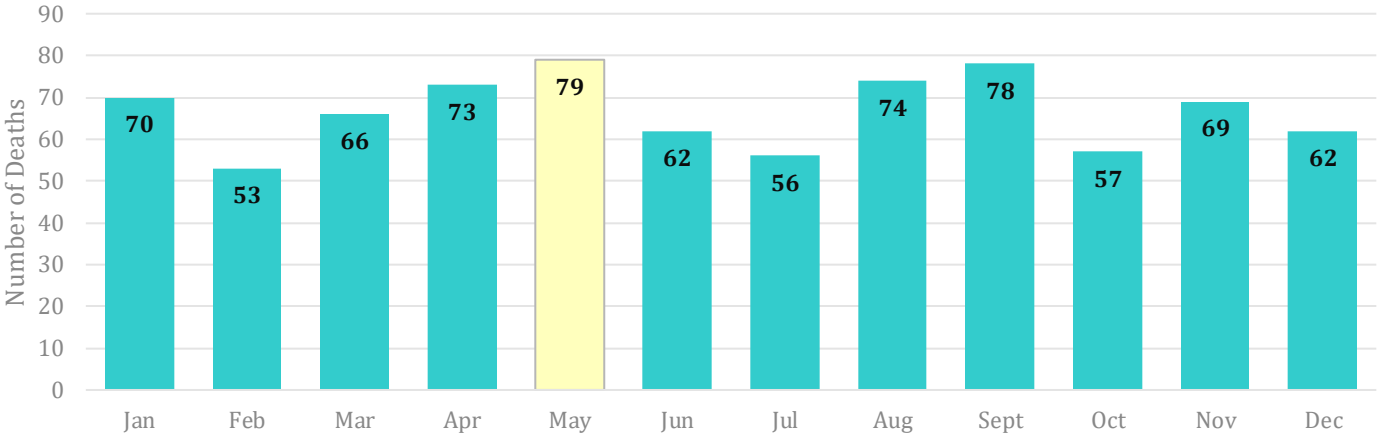
### Drug Intoxication Deaths by Age

The most prevalent age groups impacted by drug intoxication deaths in CY21 changed from the prior year to: (1) 30-39, (2) 40-49 and (3) 50 to 59. This suggests CY21 saw older demographic drug use population resulting in overdose.

### DRUG INTOXICATION DEATHS BY AGE



DRUG INTOXICATION DEATHS BY MONTH

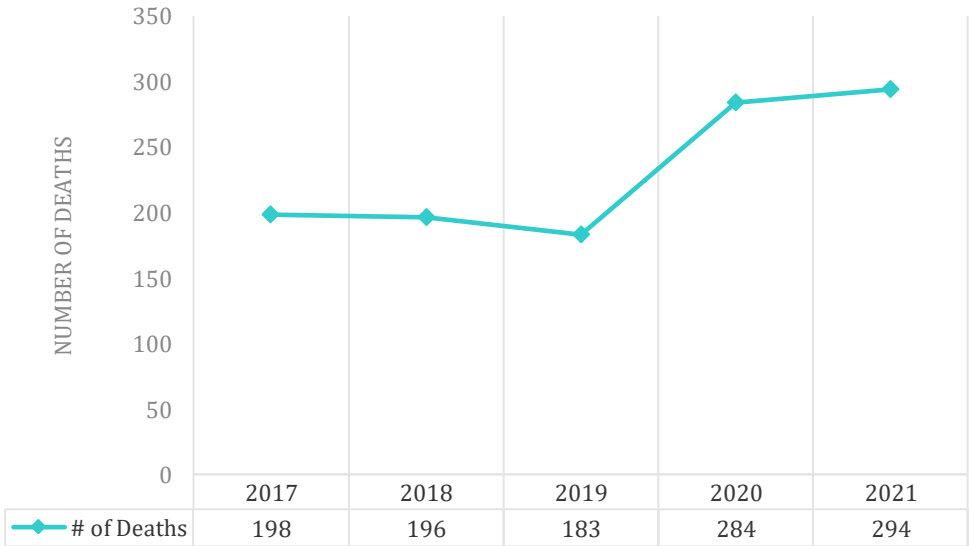


2021 Annual Report: Homicide Deaths

The MCCO investigated **294** homicide deaths in CY21. This is an increase of 4% from the previous CY. The most prevalent cause of death in homicides was firearms accounting for 89% of the total, followed by blunt force trauma at 4%. Homicide deaths were more prevalent among Black decedents at 70%, in males at 79%, in the age group of 20-29 at 33% and the most incidents occurred during July.

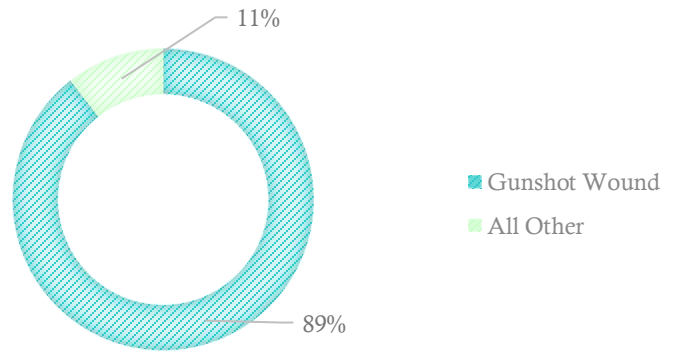
HOMICIDE TRENDS  
2017 - 2021

**Homicide Deaths**  
Homicide deaths increased from the previous year by 4%, with a 61% increase in two calendar years (2019 to 2021).



**HOMICIDES BY CAUSE OF DEATH**

Causes of Homicide Deaths	# of Deaths	% of Deaths
Gunshot Wound	263	89%
Blunt Force	11	4%
Sharp Force	8	3%
Mixed Modality/Combo	8	3%
Strangulation	1	0%
Other	3	1%
<b>Total</b>	<b>294</b>	<b>100%</b>



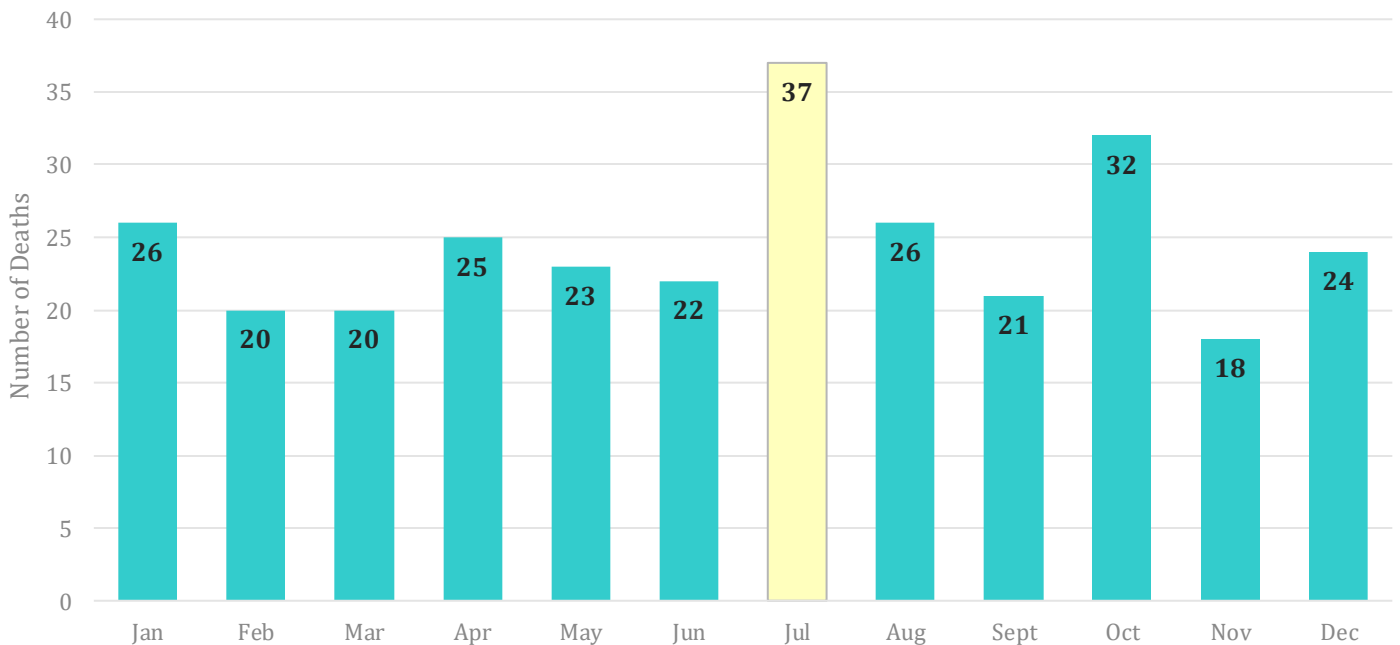
**Homicide Deaths by Race and Gender**

Black males remained the most prevalent race and gender impacted by homicides into CY21. Female decedents increased in prevalence from the year prior by 3%.

**HOMICIDE DEATHS BY RACE AND GENDER**

	Male	Female	Total	% of Race
Asian	3	1	4	1%
Asian Indian	1	3	4	1%
Black	169	38	207	70%
Other	0	0	0	0%
White	60	19	79	27%
<b>Total</b>	<b>233</b>	<b>61</b>	<b>294</b>	
<b>% of Gender</b>	<b>79%</b>	<b>21%</b>		<b>100%</b>

**HOMICIDE DEATHS BY MONTH**

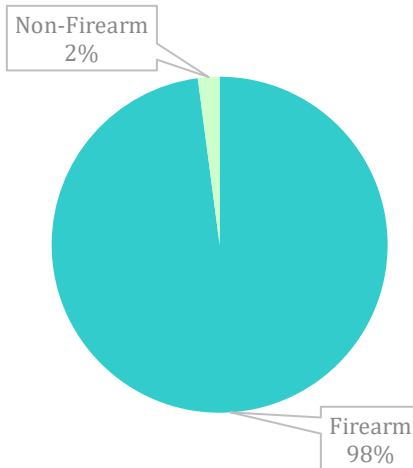
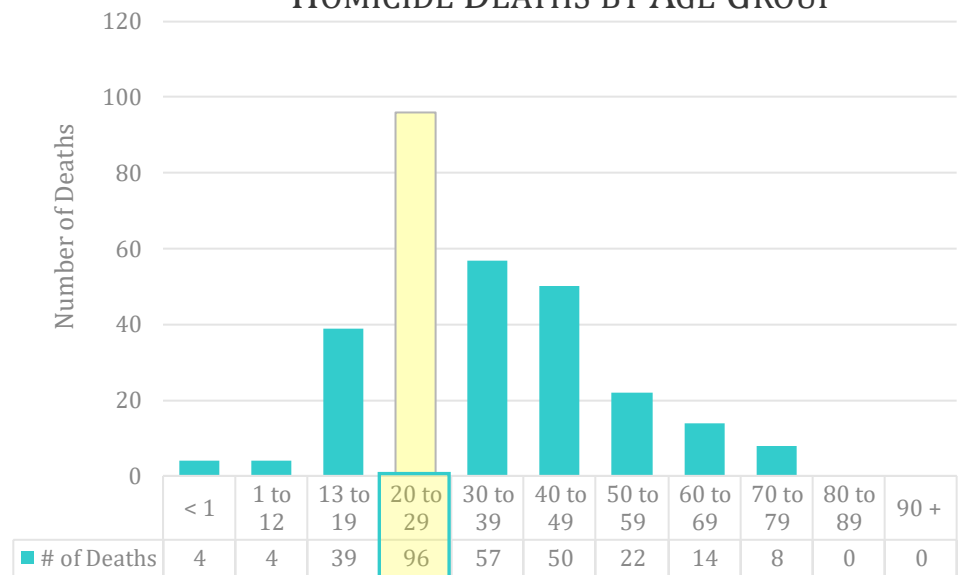


## 2021 Annual Report: Homicide Deaths

### Homicide Deaths by Age

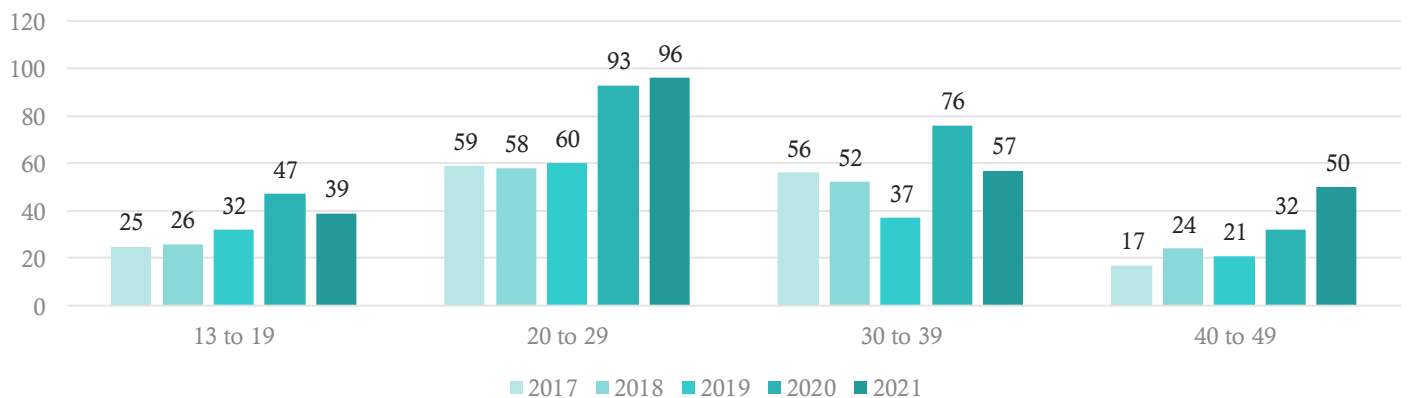
The age group of 20 to 29 has continued to be the dominant age group of homicides deaths over the last five years. This age group accounts for 33% of all homicides in CY21. This is disproportionate when compared to the prevalence of this age group within the Marion County population.

### HOMICIDE DEATHS BY AGE GROUP



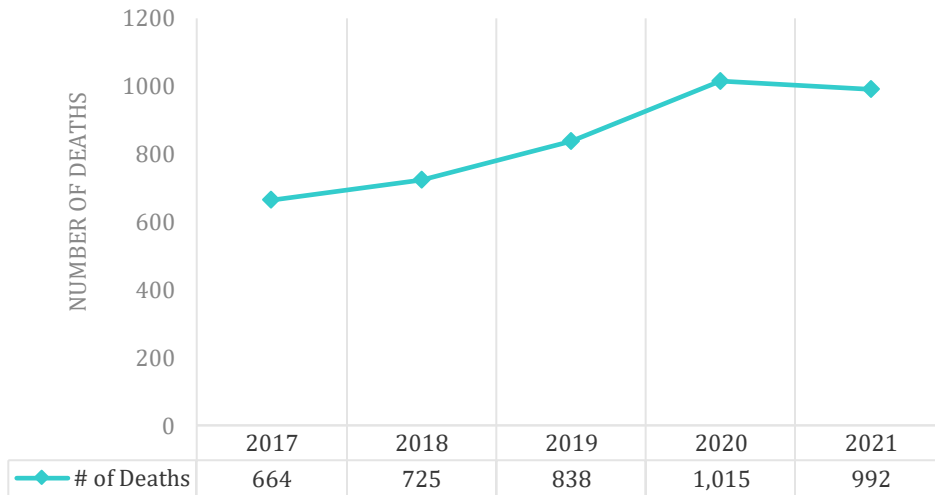
Percentage of firearm related Homicides among young adults 20 to 29 years old

### Homicides in the Top 4 Age Groups 2017 - 2021



The MCCO investigated **992** natural deaths in the CY21. The top cause of death ruled in the **992** natural death investigations was cardiovascular disease at **511** (52%). Natural deaths decreased from CY20 by 2%. Of the **992** natural deaths investigated, 338 received a forensic exam. Males were found to be more prevalent in natural deaths at 64%, White decedents made up 63% of the cases with persons in the age group 60-69 at 28%. Most incidents occurred in December.

### NATURAL DEATH TRENDS 2017-2021



#### Natural Death Trends

Natural deaths decreased from the prior year by 2%; however, natural deaths overall have not fallen substantially in a 5-yr comparison. Natural deaths represented 34% of the total accepted cases for CY21. This follows the same trend for the last two calendar years.

#### Natural Causes of Death

The two main causes of natural deaths remained consistent in CY21: Cardiovascular and Respiratory. Alcohol related and diabetes related deaths fell by 13% and 39% respectively. COVID-19 related deaths increased by 88% from the prior calendar year.

\*COVID-19 deaths represented are only ones where the MCCO accepted jurisdiction and COVID was the primary cause of death. Additional information regarding COVID deaths investigated by the MCCO is covered in a separate section of this report.

#### NATURALS BY CAUSE OF DEATH

Causes of Natural Deaths	# of Deaths	% of Deaths
Cardiovascular Disease	511	52%
Alcohol-Related	71	7%
Diabetes	64	6%
Neurological (Brain)	32	3%
Infection	16	2%
Cancer	32	3%
Respiratory Disease	101	10%
Obesity	5	1%
HIV/AIDS	2	0.2%
Renal/Hepatic	46	5%
Gastrointestinal	9	1%
Congenital/Autoimmune	7	1%
Vascular	4	0.4%
COVID-19*	81	8%
Other	11	1%
<b>Total</b>	<b>992</b>	<b>100%</b>



## 2021 Annual Report: Natural Deaths

### NATURAL DEATHS BY EXAM TYPE

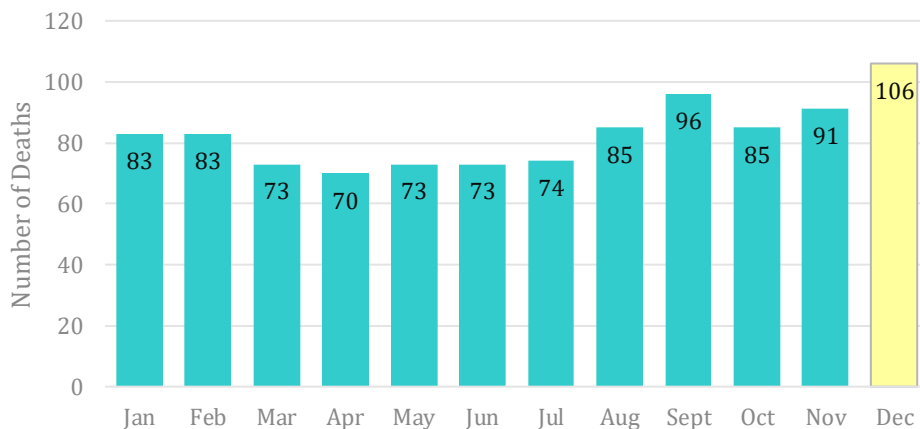
Type of Exam	# of Exams	% of Exams
Full Exam	159	16%
Partial Exam	13	1%
External Exam	166	17%
Medical Record Review Only	654	66%
<b>Total</b>	<b>992</b>	<b>100%</b>

\*Medical record review is performed when a forensic exam is not required for a cause and manner of death determination, or an investigation is performed following a delayed notification of death when the body is not available for exam.

### NATURAL DEATHS BY RACE AND GENDER

	Male	Female	Total	% of Race
Asian	5	2	7	<b>1%</b>
Asian Indian	3	2	5	<b>0.5%</b>
American Indian	0	1	1	<b>0.1%</b>
Black	219	134	353	<b>36%</b>
Other	1	1	2	<b>0.2%</b>
White	405	219	624	<b>63%</b>
<b>Total</b>	<b>633</b>	<b>359</b>	<b>992</b>	
<b>% of Gender</b>	<b>64%</b>	<b>36%</b>		<b>100%</b>

### NATURAL DEATHS BY MONTH



#### Natural Deaths by Month

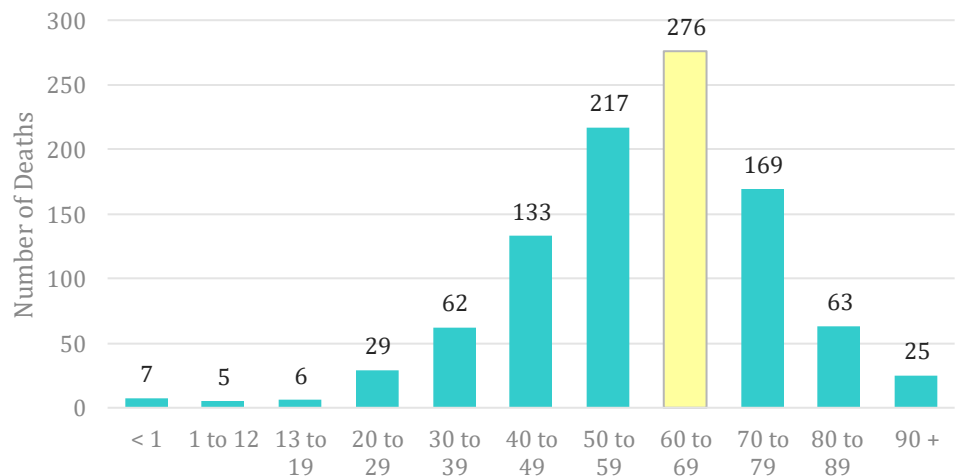
The most Natural deaths occurred in December, which is a change from the prior year. The higher number of deaths in December for CY21 is attributed to the surge of COVID related deaths which occurred following the rise of Delta and Omicron variants.

### Natural Deaths by Age

The age group with the highest number of Natural deaths did not change from the prior year. The 40 to 49 and 70 to 79 age groups increased over the prior year. In total, all age groups remained at similar totals when compared to prior years. However, the gap between groups has been decreasing for the last two years.

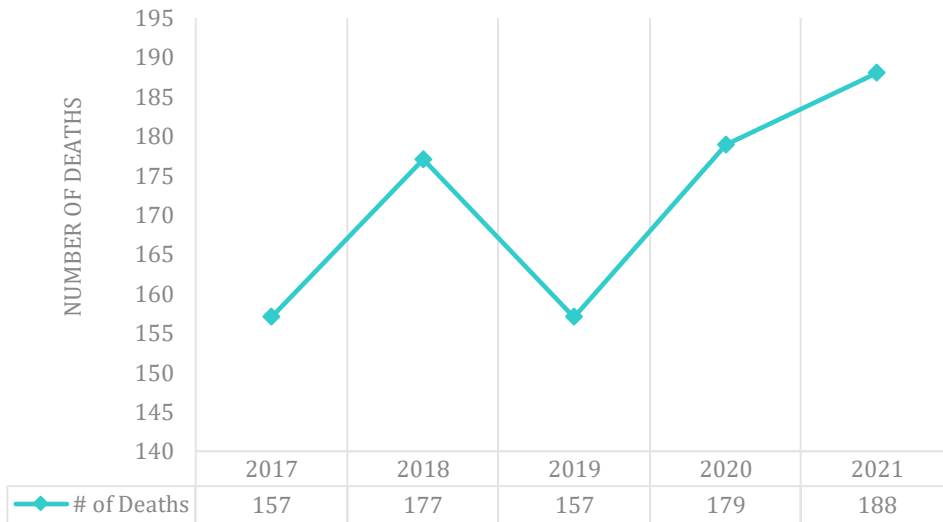
\*\*In CY21, the MCCO has found an increasing number of decedents between 20 to 49 have been dying from natural diseases or infections which are the direct result of long term (chronic) illicit substance abuse. This is discussed in detail in a separate section of the report.

### NATURAL DEATHS BY AGE GROUP



The MCCO investigated **188** suicides in the CY21. This is an increase from the previous CY by 5%. Suicides were more prevalent among males at 77%, White decedents at 83%, and in the age group of 20-29. Firearm was the leading cause of death in suicides at 59%, followed by hanging/ligature at 22% and drug intoxication at 10%. The most incidents occurred in July.

### SUICIDE DEATH TRENDS 2017-2021



#### Suicide Trends

There was a 5% increase in suicides in CY21 from the prior year. The CY21 total number of Suicides was observed to be the highest rate in a 5-yr comparison but matched the previous highest year (CY16).

#### Suicide Cause of Death

There was no significant change in the most prevalent cause of death from the prior year. Firearms remain the leading cause of death among suicides for six consecutive years. Hanging/ligature increased slightly by approx. 3% from the prior year but the gap between the top two methods remained at a similar difference in CY21 as seen in prior years (see table below).

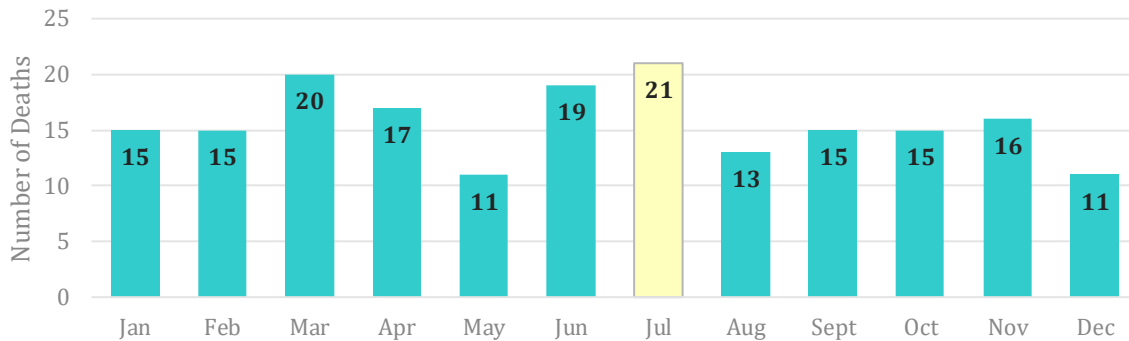
#### SUICIDES BY CAUSE OF DEATH

Causes of Suicide Deaths	# of Deaths	% of Deaths
Hanging/Ligature	41	22%
Blunt Trauma	3	2%
Intoxication (OTC / Narcotic)	19	10%
Firearm	110	59%
Sharp Force Trauma	5	3%
Inhalation	7	4%
Ingestion of Non-Medication Substance	1	1%
Thermal/Fire	2	1%
<b>Total</b>	<b>188</b>	<b>100%</b>

#### TOP 2 METHODS OF SUICIDE OVER 5 YEAR TREND: 2017-2021

	2017	%	2018	%	2019	%	2020	%	2021	%
Firearm	80	51%	98	55%	90	57%	108	60%	<b>110</b>	<b>59%</b>
Hanging	49	31%	49	28%	38	24%	34	19%	<b>41</b>	<b>22%</b>

### SUICIDE DEATHS BY MONTH



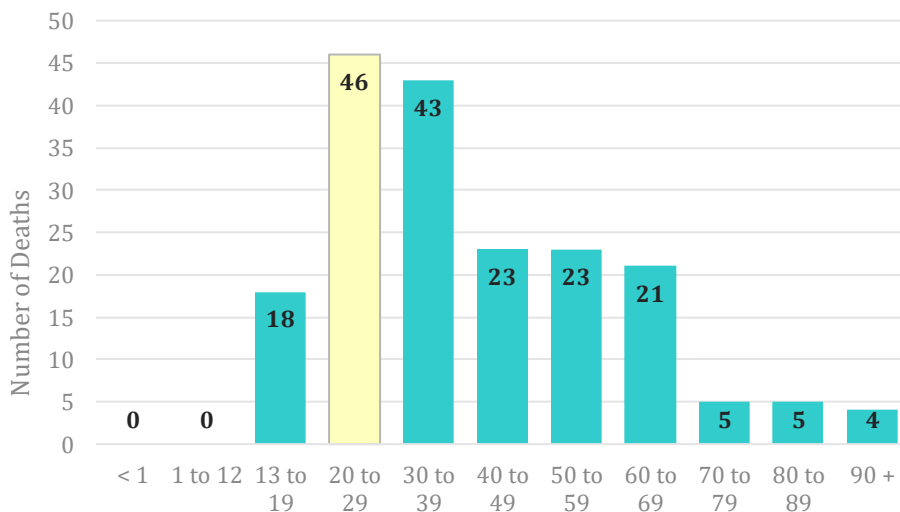
#### Suicides by Race and Gender

The race and gender distributions among Suicides did not change drastically from the prior calendar year. Most suicide deaths involved White males (83% and 77% respectively). Suicides involving females decreased by approximately 2% from the prior year.

#### SUICIDE DEATHS BY RACE AND GENDER

	Male	Female	Total	% of Race
Asian	4	2	6	3%
Asian Indian	1	0	1	0.5%
Black	21	3	24	13%
Other	0	1	1	1%
White	118	38	156	83%
<b>Total</b>	<b>144</b>	<b>44</b>	<b>188</b>	
<b>% of Gender</b>	<b>77%</b>	<b>23%</b>		<b>100%</b>

### SUICIDE DEATHS BY AGE GROUP



#### Suicide Deaths by Age

The dominant age group for Suicide did not change from the year prior; however, the gap between the 20 to 29 and 30 to 39 age group changed significantly. The 30 to 39 age group increased by 30%. There were no suicides in decedents under age 13 for CY21 and a significant decrease in the 70 to 90+ age groups.

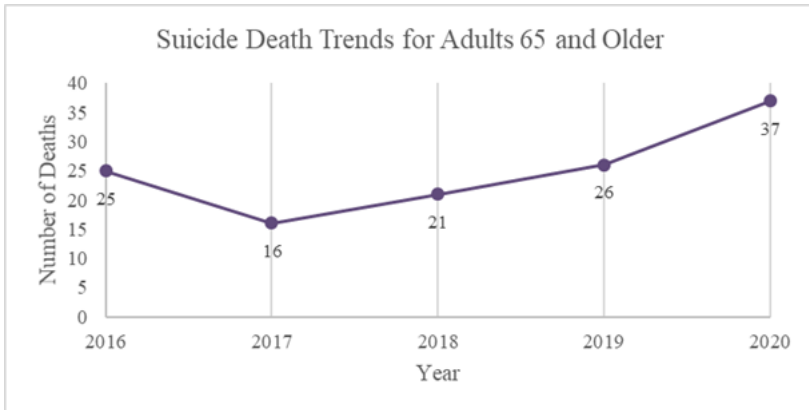
*\*\*Focused research on suicides in decedents age 65+ was conducted in CY21 and presented in a highlighted section below.*

# SUICIDE RESEARCH PROJECT: 2021

The MCCO regularly has interns in both baccalaureate and graduate degree programs throughout the academic year. Annually, interns are assigned research projects to further their education, gain research/writing skills and assist the office by providing in-depth findings to the public. Below are the findings of the Fall 2021 intern research project. The research was conducted by a graduate Epidemiology candidate from Indiana University – Purdue University Indianapolis.

**Research Focus:** Suicides in the age group 65+

**Findings:** Adults 65+ in Marion County are more vulnerable to the burden of suicide than the average adult of the same age nationally.



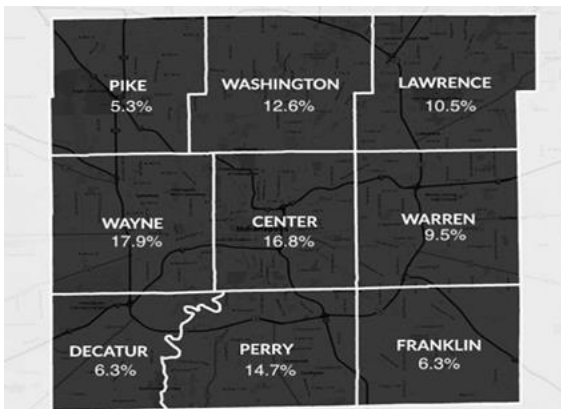
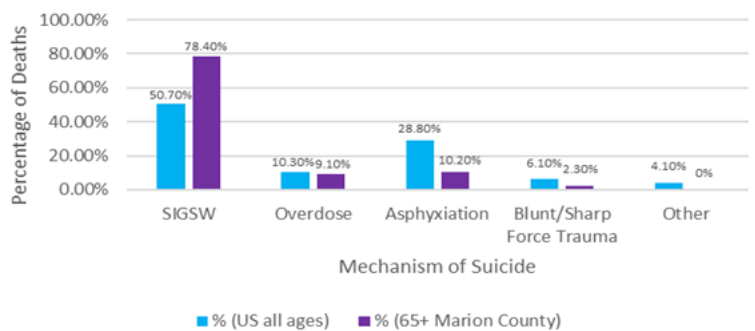
## Suicide Deaths by Age

The research project revealed that suicide deaths in the 65+ age group over a five-year period increased in Marion County by approx. 48%, whereas it only increased 2.2% nationally. This finding suggests a public health issue in Marion County for the aging population and availability of both physical and mental health resource availability.

## Mechanism of Suicide

The research project also found that while Marion County is lower than the national percentage for overdose or asphyxiation suicides, over a five-year period is 27.7% higher than the national percentage for the use of firearms in suicides. Secondary research reviewed during the project reported suicide attempts by older adults are more likely to result in death.

Mechanism of Suicide for all US Suicides v. 65+ Suicides in Marion County 2016 to 2020



## Suicide Deaths by Location

The most significant finding during the research project was the location where suicide victims lived. It was found the highest number of suicides in the age group 65+ occurred in Wayne Township, which is the township with the least number of hospitals and mental health resource centers. This suggests either a lack of availability or inability to travel to a mental health resource location resulted in the higher percentage.

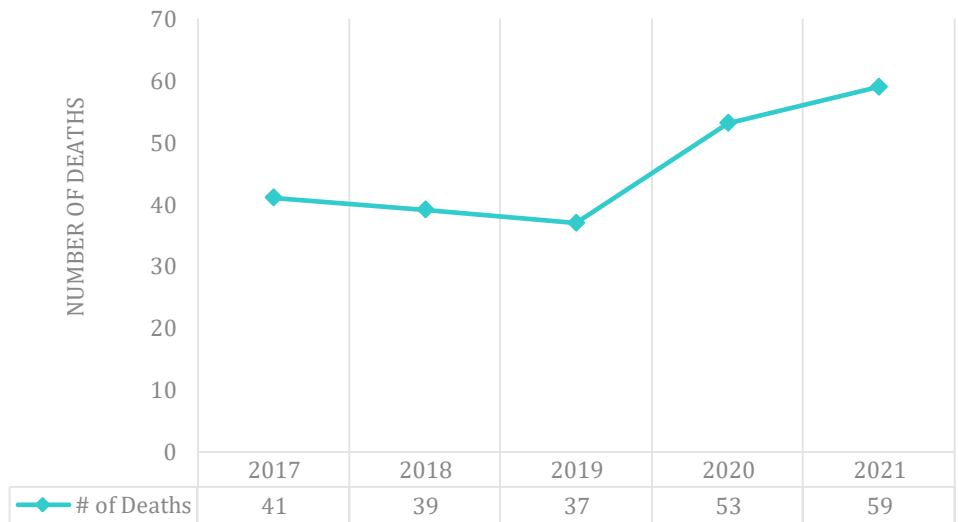
**Recommendations:** Implement a selective prevention strategy to reduce the risk factors of suicide in the 65+ age group in Marion County: (1) Available services should focus on minimizing disability to maximize independent functioning, (2) assess older age groups for suicide risk based on loss (employment, independence, body functions, loved ones) and (3) alter screening tools to address risk in this specific age group.

The MCCO investigated **59** deaths which were ruled as undetermined for manner after the investigation, which is an 11% increase over CY20. A death is ruled as undetermined if insufficient medical or social history can lead to a reasonable conclusion on the manner of death. The most prevalent cause of death ruled in undetermined death investigations in CY21 was unsafe sleep situations at **14**. The most prevalent age group of undetermined deaths was 30 to 39 (37%), with the most impacted groups being White decedents at 59% and males at 63%. Most incidents occurred during January.

**Undetermined Deaths**

The MCCO aims to have as few cases as possible ruled as undetermined. This can be due to lack of physical or social findings which can lead to a reasonable conclusion on the manner of death. The rate of undetermined deaths has been relatively consistent over the last five years; however, in CY20 and now in CY21, there has been a steady increase. CY21 saw an 11% increase in the total over CY20, which is a 60% increase in undeterminable deaths over the last two years.

**UNDETERMINED DEATH TRENDS  
2017-2021**



**UNDETERMINED BY CAUSE OF DEATH**

Causes of Undetermined Deaths	# of Deaths	% of Deaths
Drug Intoxication	8	14%
Gunshot Wound	4	7%
Thermal/Fire	1	2%
Unsafe Sleep	14	24%
Anoxic Brain Injury	3	5%
Blunt Force Trauma	10	17%
Undetermined	13	22%
Other	6	10%
<b>Total</b>	<b>59</b>	<b>100%</b>

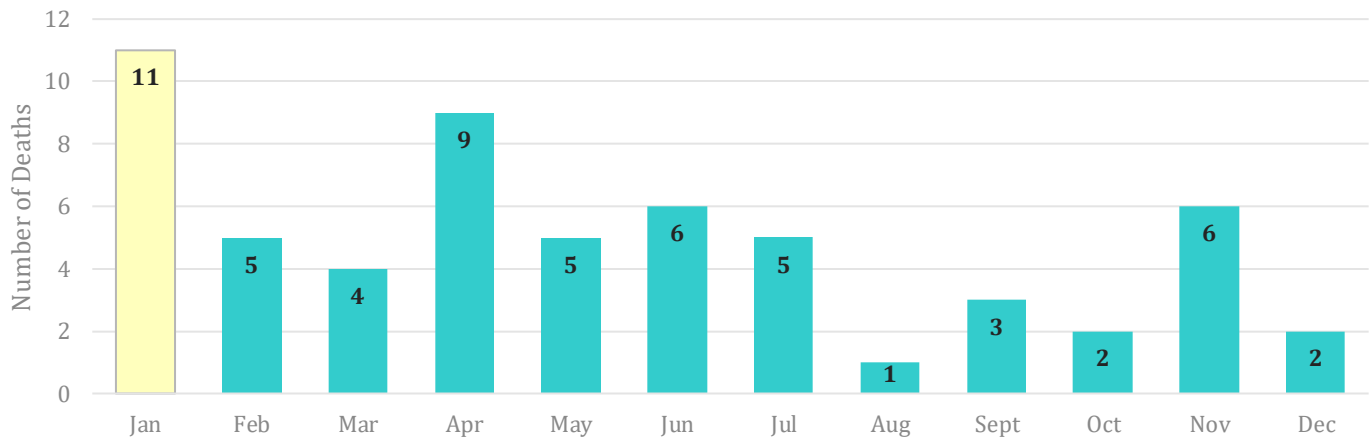
**Undetermined Deaths by Cause**

The two leading causes of undetermined deaths remained unchanged from the prior year: Unsafe sleep and undetermined. Infants who die in the circumstances of an unsafe sleeping environment can be ruled as undetermined following test results or lack of any other significant medical findings. Sudden Unexplained Infant Deaths are also ruled as undetermined.



## 2021 Annual Report: Undetermined Deaths

### UNDETERMINED DEATHS BY MONTH



### UNDETERMINED DEATHS BY RACE AND GENDER

	Male	Female	Total	% of Race
Asian	1	0	1	2%
Black	15	7	22	37%
White	20	15	35	59%
Unknown	1	0	1	2%
<b>Total</b>	<b>37</b>	<b>22</b>	<b>59</b>	
<b>% of Gender</b>	<b>63%</b>	<b>37%</b>		<b>100%</b>

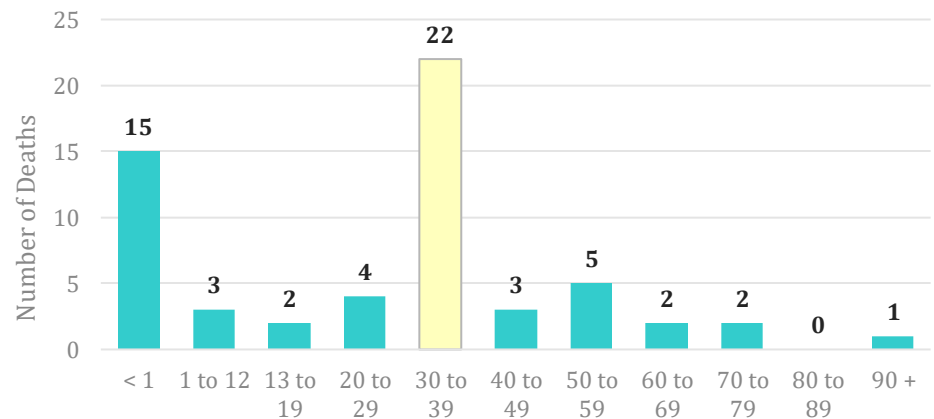
### Undetermined Deaths by Race and Gender

The race and gender distribution for undetermined deaths did not have any significant changes. Males increased by approx. 6% and females decreased by approx. 5%. Black decedents increased by approx. 7% and White decedents decreased by approx. 1% from the prior year.

### Undetermined Deaths by Age

There was a significant shift in the age distribution of undetermined death investigations. Year over year, infants (under 12 months) have been the majority age group ruled as undetermined deaths due to co-sleeping and SUID investigations. However, in CY21, the 30 to 39 age group had the highest number for undetermined deaths. The top three causes within this age group included: blunt force trauma, drug intoxication and undetermined etiology.

### UNDETERMINED DEATH BY AGE GROUP



## COVID-19 PANDEMIC



In CY21, the COVID-19 pandemic continued in Marion County with a brief decline in confirmed deaths in the first quarter of the year. The average number of COVID deaths per day in Q1 of CY21 was 1.03 COVID deaths a day. In Q2 this trend continued to decline; however, the number of cases where the MCCO accepted jurisdiction increased. In Q2 of CY21, the MCCO accepted jurisdiction over an additional 21% of COVID-related deaths reported to our office. Beginning in Q2, decedents where COVID was present but not the primary cause of death began to increase. In Q3, reported COVID deaths began to increase with the spread of the new variants throughout the county. The MCCO saw a 182% increase in the number reported beginning in Q3 with the number of accepted cases increasing as well. In Q4, with the continued increase of hospitalizations, the MCCO closed out the calendar year with the highest number of accepted cases where COVID-19 was the main cause of death, or the decedent was COVID-19 positive at the time of death. Most cases in Q4 occurred in December 2021.

As COVID is considered a natural disease process, all deaths where the **primary** cause of death was determined to be from COVID were certified as Natural deaths on the death certificate. The MCCO also tracked other deaths where a decedent was confirmed to have COVID but it was not the primary cause of death. For example, if a homicide victim was found to be COVID positive, investigative records were labeled with the appropriate code. This was due to ensuring any COVID-positive materials (clothing, tissue samples, etc) were handled with universal safety precautions. In addition, COVID-positive decedents requiring a full forensic exam had to be transported to a special facility as the forensic exam increases the risk of transmission of the virus from the deceased to a living individual. It is important to note that because the disease is deemed a natural process, all deaths suspected or confirmed from COVID were not required to be reported to the MCCO. Hospitals, nursing homes, and other health care facilities frequently report deaths to the MCCO for confirmation that a forensic investigation is not required to determine the cause and manner of death OR if a treating physician is refusing to sign the death certificate.

The MCCO continued to use a coding process within its information management system to easily track and pull COVID-related statistics. Any COVID death where the MCCO accepted jurisdiction (i.e. the MCCO was responsible for the investigation into the cause and manner or for signing the death certificate), was separated from any COVID death reported to the office.

Federal funding and FEMA aid towards the MCCO budget ended in December 2021 in the COVID-19 pandemic response.

COVID deaths reported to or accepted by the office received one of the following codes:

Code	Description
CV-C	COVID was confirmed through a recent test
CV-S	COVID was suspected; decedent exhibited symptoms consistent with the disease OR the decedent had been in recent close contact with any individual who had been symptomatic or received a positive COVID test result
CV-S/P	COVID was suspected but was pending confirmatory test results
CV-S/N	COVID was suspected due to symptoms but a confirmatory test showed SARS-CoV-2 was not detected

Case Type	Number Reported
Phone Consultation	325
Scene Consultation*	3
Accepted Case	155
<b>Total</b>	<b>483</b>

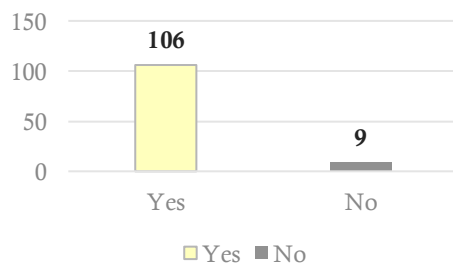
### COVID Deaths Reported

\*A scene consultation is where a Deputy Coroner is requested to the scene to perform an onsite physical exam to confirm whether a full forensic investigation is necessary. For COVID deaths, the MCCO were called to both residential scenes and funeral homes to perform swab testing on decedents to confirm whether the decedent was positive for SARS-CoV-2 at time of death.

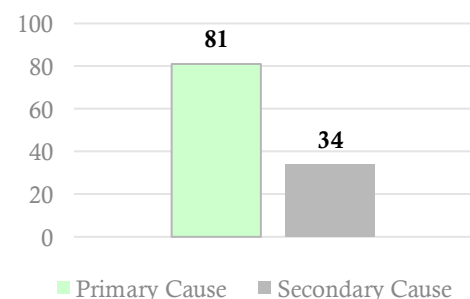
The MCCO submitted testing on 146 cases in CY21 and 89 were transported to MCCO for confirmatory testing for COVID either as the primary or secondary cause of death or for temporary storage prior to final disposition. The MCCO determined based on CDC and WHO guidelines whether a full forensic exam or an external forensic exam was necessary to determine the cause of death. Of the 155 accepted cases, 115 were found to have died directly from COVID or were found to have been COVID positive at the time of death but it was not the direct cause of death. Of the 155 accepted cases, 40 were found to be COVID negative.

### COVID Positive Decedents: Accepted Case Analysis

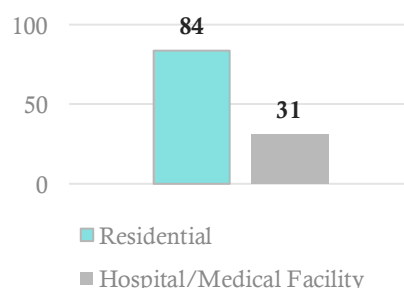
COVID Positive Decedents:  
Presence of Pre-existing  
Medical Conditions



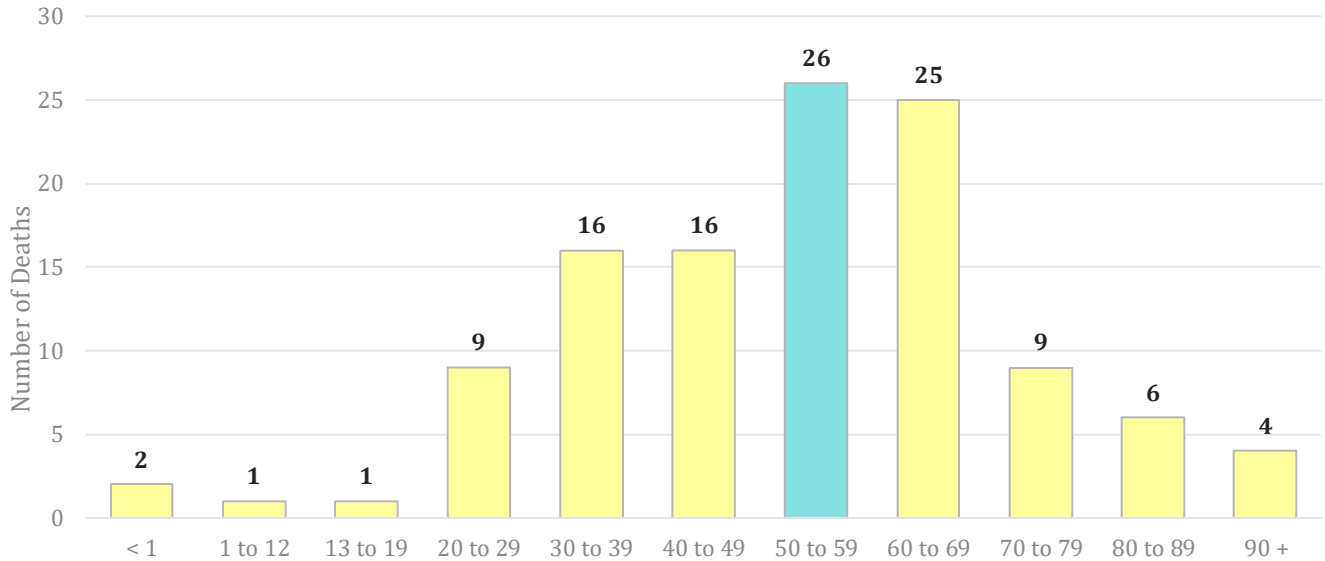
COVID Cause of Death



COVID Positive Decedents  
Location of Death



### COVID POSITIVE DEATHS BY AGE GROUP



### COVID POSITIVE DEATHS BY RACE AND GENDER

	Male	Female	Total	% of Race
Asian	1	0	1	1%
Black	34	14	48	42%
White	48	18	66	57%
<b>Total</b>	<b>83</b>	<b>32</b>	<b>115</b>	
<b>% of Gender</b>	<b>72%</b>	<b>28%</b>		<b>100%</b>

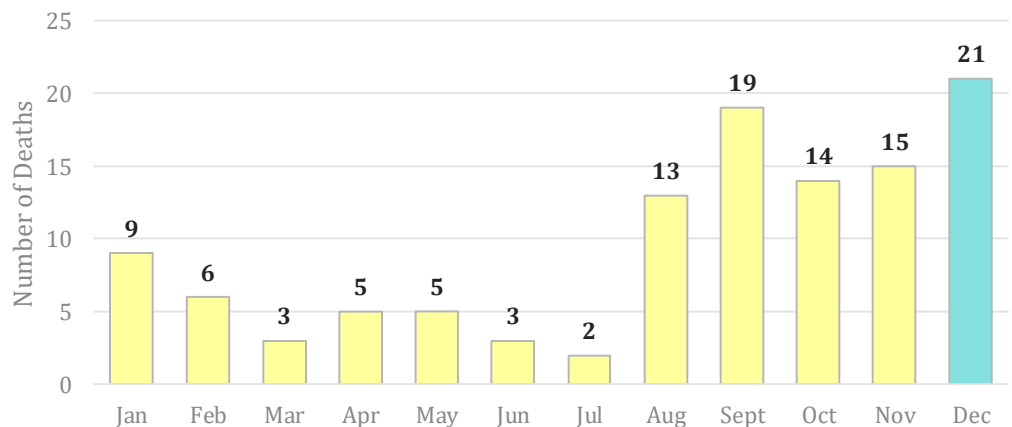
#### COVID Positive Deaths by Race and Gender

White males were the most impacted group at 57% and 72% respectively.

#### COVID Positive Deaths by Month

While the graph depicts ONLY those accepted cases, the highest prevalence of accepted cases for COVID positive decedents occurred in December 2021 during the second surge within Marion County due to both the Delta and Omicron variants.

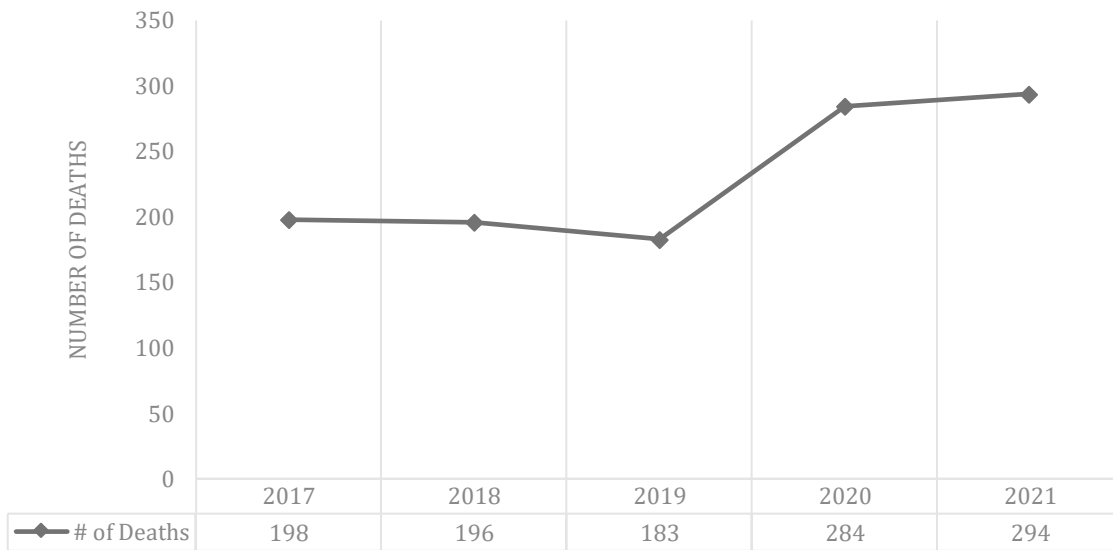
### COVID POSITIVE DEATHS BY MONTH



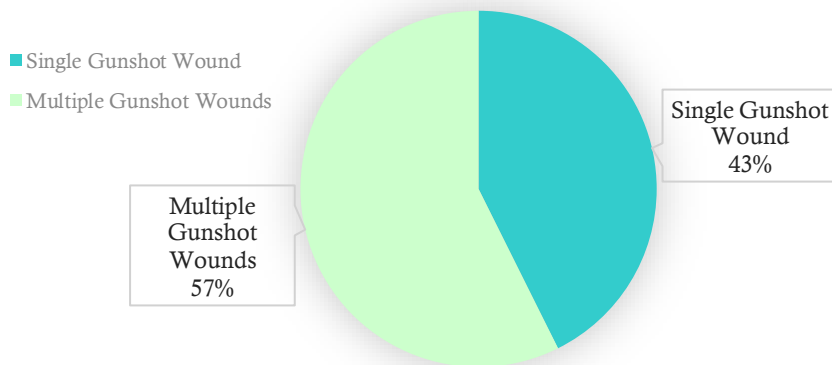
### HOMICIDE DEATHS INVOLVING FIREARMS

The MCCO investigated **294** homicides of which 90%, or **265**, involved firearms. Of the **265** involving firearms, 57% were the result of multiple gunshot wounds. Homicide deaths involving firearms were more prevalent among decedents aged 20-29 and males. The MCCO investigated **19** incidents which were multiple homicide scenes, the highest number investigated by the MCCO in a Calendar Year.

HOMICIDE TRENDS  
2017 - 2021



### Number of Gunshot Wounds per Incident



**Number of Gunshot Wounds**

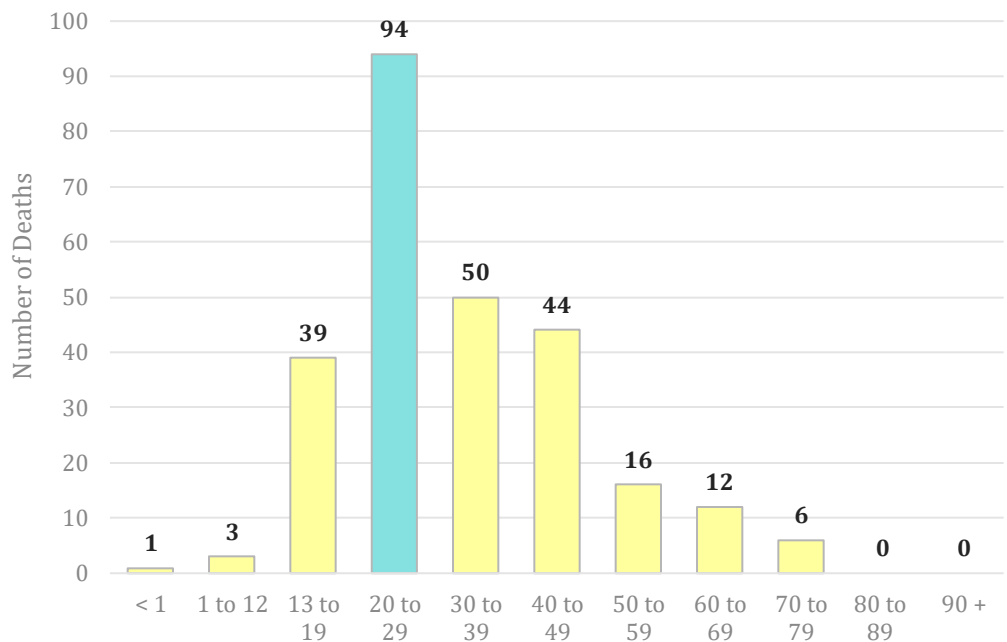
In CY21, the gap between single versus multiple gunshot wounds continued to widen, matching previous year trends. In CY21, multiple gunshot wounds increased by 4% while single gunshot wounds decreased by 4%.



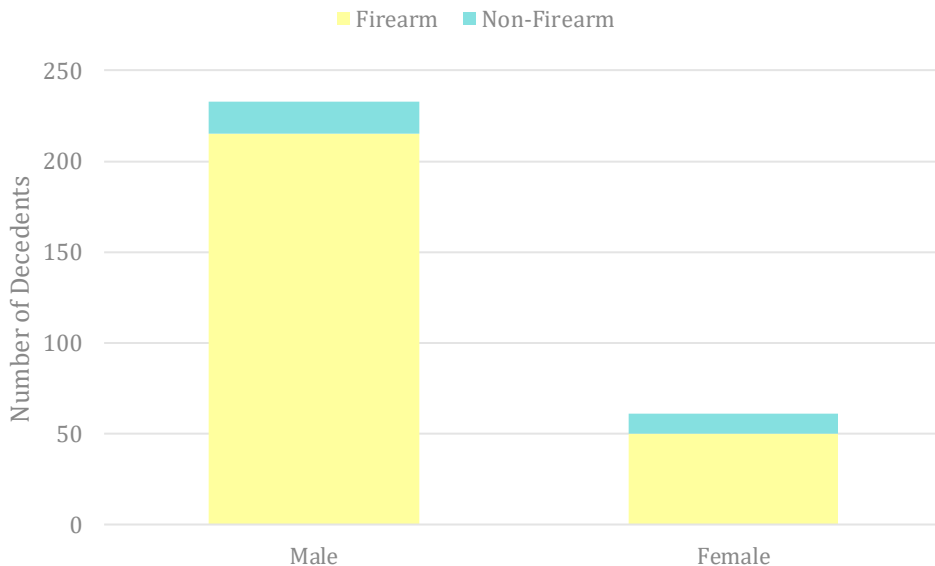
**Homicides by Firearm per Age Group**

For CY21 the distribution remained consistent with the most impacted age group to be 20 to 29 years old. There was one fetal death determined to be as the result of the homicide of the mother. The gap between age groups widened further in CY21. Meaning individuals aged 20 to 29 are victims of homicide by firearm at disproportionate rates compared to other age groups.

**HOMICIDES INVOLVING FIREARMS BY AGE GROUP**



**FIREARM VS. NON-FIREARM HOMICIDES BY GENDER**



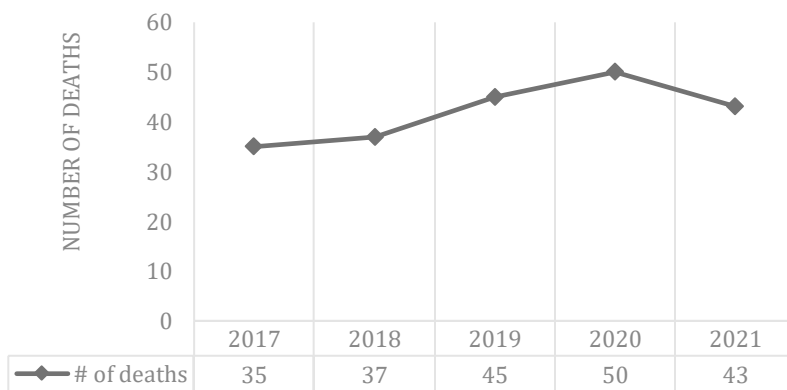
**Firearm vs. Non-Firearm Death compared to Gender**

In CY21, the gap between firearm versus non-firearm related injuries got smaller when compared to the prior year. The gender distribution remained consistent with the more prevalent group being male. However, the incidents involving female firearm homicide victims saw a continued increase year over year for the last two calendar years.

## INFANT DEATHS

The MCCO investigated 43 infant deaths in the CY21. This is a decrease of 1% over CY20. The demographics of infant deaths changed dramatically for the second year in a row. The gender prevalence changed in CY21 with males at 53% and females at 47%. The race of infant deaths changed to a higher prevalence of Black decedents at 65% (an increase of 17% over the prior year) and White decedents at 33% (a decline of 11% from the prior year). The main cause of death in infant deaths was due to an unsafe sleep environment at 36% of total cases followed by both undetermined at 14% and both positional asphyxia and prematurity at 8%.

### TRENDS IN INFANT DEATHS 2017-2021



#### Infant Deaths

In CY21, the rate of infant deaths (any child 12 months or younger) decreased for the first time in five years. The rate of infant deaths has declined by 1% from the prior calendar year but the causes of death and most common manners of death did not change in CY21 versus prior years.

#### Infant Deaths by Manner

Accidental and undetermined continued to be the top two manners in infant deaths; however, homicides increased by 1% and naturals declined by 2%.

#### INFANT DEATHS BY MANNER OF DEATH TRENDS 2018 TO 2021

Manner of Death	2018	%	2019	%	2020	%	2021	%
Accident	14	38%	18	40%	8	16%	16	37%
Homicide	3	8%	5	11%	4	8%	4	9%
Natural	8	22%	10	22%	9	18%	7	16%
Undetermined	12	32%	8	18%	27	54%	15	35%
Pending	0	0%	4	9%	2	4%	1	2%
<b>Total</b>	<b>35</b>	<b>100%</b>	<b>45</b>	<b>100%</b>	<b>50</b>	<b>100%</b>	<b>43</b>	<b>100%</b>

#### INFANT DEATHS BY RACE AND GENDER

	Male	Female	Total	% of Race
Black	15	13	28	65%
Other	1	0	1	2%
White	7	7	14	33%
<b>Total</b>	<b>23</b>	<b>20</b>	<b>43</b>	
<b>% of Gender</b>	<b>53%</b>	<b>47%</b>		<b>100%</b>

#### Infant Deaths by Race and Gender

In CY20, the majority demographic changed to Black infants, increasing by 4%, but the genders were equal, with male infants increasing by 3% over CY19. In CY21, this trend continued as Black infants increased by 17% over the prior year and male infants increased by 3%.

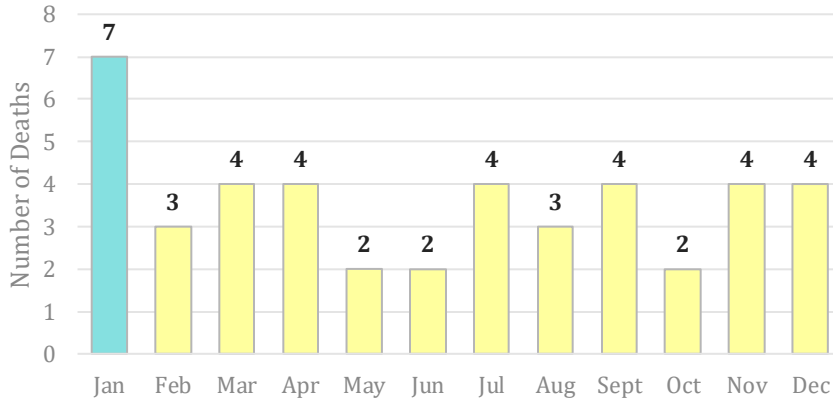
**Infant Deaths by Cause**

Unsafe sleep remained the most prevalent cause of death in infants for CY21; however, the total number of instances did not change from the prior year (18). SUID cases increased over the prior year by 7% and COVID-19 contributed to 5% of infant deaths in CY21.

**INFANT DEATHS BY CAUSE OF DEATH**

Causes of Deaths	# of Deaths	% of Deaths
Unsafe Sleep	18	42%
Undetermined	3	7%
Blunt Force Trauma	7	16%
Gastrointestinal	1	2%
Prematurity/Fetal	3	3%
Neurologic	2	5%
SUID	4	9%
Pulmonary	2	5%
COVID-19	2	5%
Pending	1	2%
<b>Total</b>	<b>43</b>	<b>100%</b>

**INFANT DEATHS BY MONTH**



**Infant Deaths by Month**

The prevalence of infant deaths changed in CY21 from CY20 with the highest reported number of infant deaths occurring in January 2021 versus in May of the prior year.

**Fetal Deaths by Cause**

The MCCO investigated 3 fetal deaths in CY21, a decrease of 75% from the prior year. The highest number occurred due to homicide of the mother or due to abuse of the mother resulting in fetal death followed by motor vehicle accidents causing placental damage resulting in fetal death.

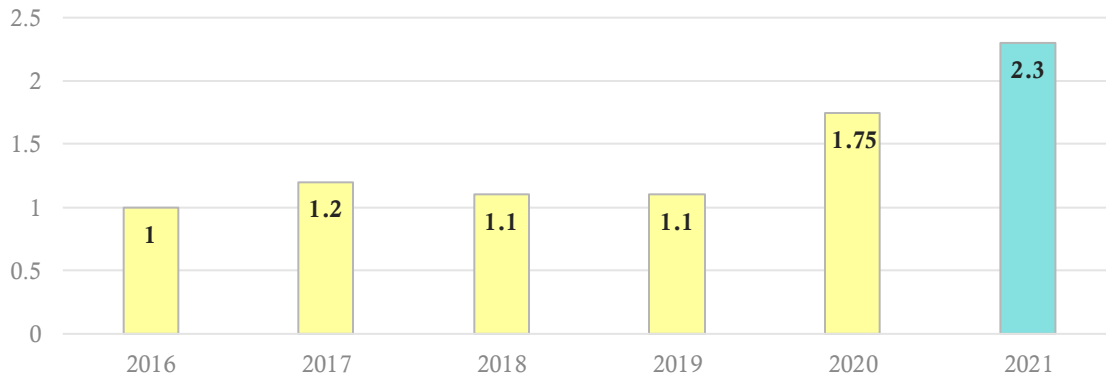
**FETAL DEATHS BY CAUSE OF DEATH**

Causes of Deaths	# of Deaths	% of Deaths
<b>Homicide (of mother or abuse to the mother)</b>	2	67%
<b>Motor Vehicle Accident</b>	1	33%
<b>Total</b>	<b>3</b>	<b>100%</b>

## DRUG INTOXICATION DEATHS

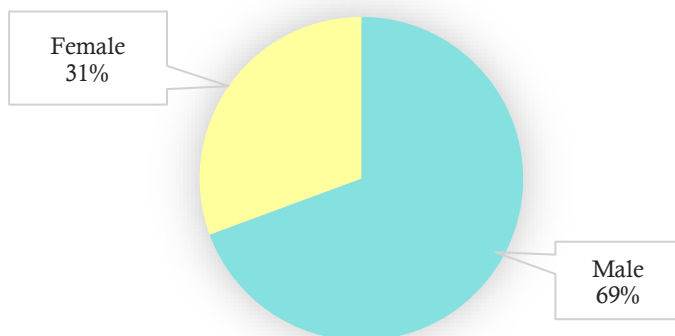
The MCCO investigated a total of **826** drug intoxication deaths in CY21. The total number of deaths involving drug intoxication included: accidental, suicide, and undetermined manners of death. Of the **826** drug intoxication deaths, **683** (83%) involved Opiates. Of the **683** cases involving Opiates, **641** (78%) involved Fentanyl or Fentanyl analogs.

Fatal Drug Intoxication Deaths per Day  
2016 to 2021



In CY21 the MCCO has joined other medico-legal offices across the country in ruling an increasing number of deaths where chronic substance use disorders are directly contributing to natural causes of death. The MCCO has found severe cardiac, neurologic, or respiratory diseases. In CY21, the MCCO ruled 22 cases where the cause of death was natural but found medical evidence that a chronic substance use disorder was equally contributory. These deaths were included in the drug intoxication analysis due to positive toxicology findings or a direct medical link between the cause of death and history of chronic drug use. The MCCO believes this will be a growing public health concern as it will result in additional strain on local medical providers and cause an increasing number of deaths.

### Drug Intoxication Deaths by Gender



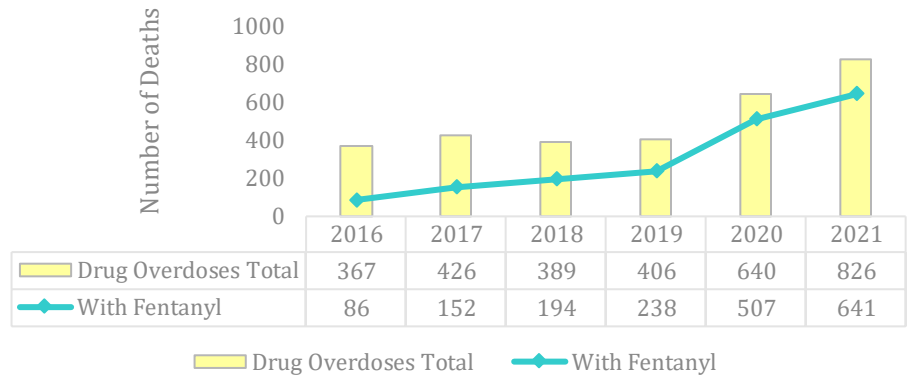
#### Drug Intoxication Deaths by Gender

In CY21, males were the most impacted group in drug intoxication deaths. However, Females increased by approx. 3% over the prior year. The gender distribution of drug intoxication deaths has remained relatively consistent year over year, with slight percentage variations occurring.

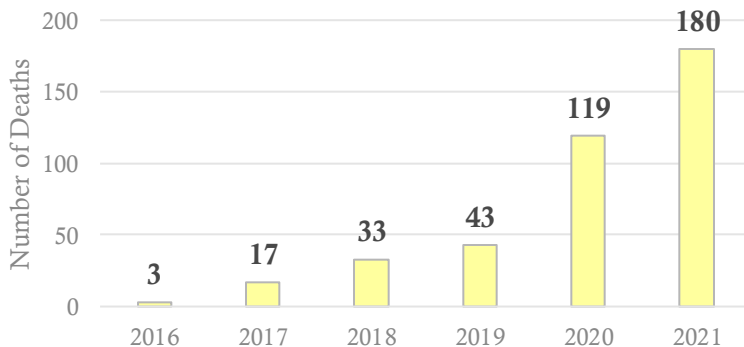
### Drug Intoxication Deaths and Fentanyl

In CY21, Opiate related drug intoxication deaths now make up 83% of all overdoses in Marion County. In six years, there has been a 125% increase in total overdose deaths and 645% increase in the number of fentanyl related drug intoxication deaths.

### PREVALENCE OF FENTANYL IN DRUG INTOXICATION DEATHS 2016-2021



### PREVALENCE OF FENTANYL ANALOGS IN DRUG INTOXICATION DEATHS



### Fentanyl Analogs

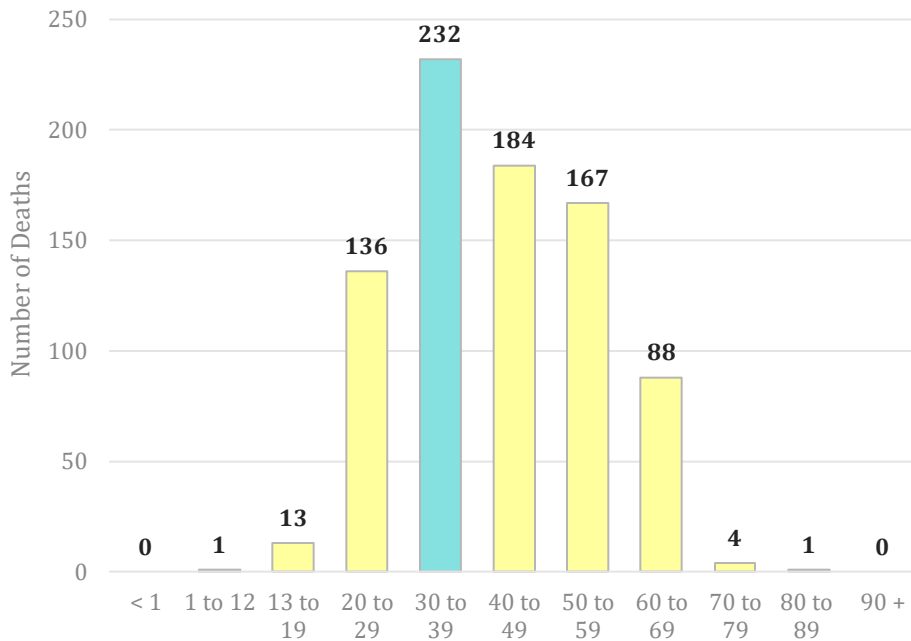
The types of analogues detected include Acetyl Fentanyl, Acryfentanyl, Norfentanyl, Methoxyacetyl Fentanyl, Carfentanyl, Para-Fluorobutyryl Fentanyl, Furanyl Fentanyl and Butyrylfentanyl.

In CY21, Fentanyl analogs increased again for the sixth year in a year. There was an increase of 51% over the prior year and an over 5,000% increase in the last six years.

### DRUG INTOXICATION DEATHS BY RACE: 2016 TO 2021

	2016	%	2017	%	2018	%	2019	%	2020	%	2021	%
American Indian	0	0%	1	0.2%	0	0%	0	0%	0	0%	2	0.24%
Asian	2	1%	1	0.2%	2	1%	0	0%	0	0%	3	0.36%
Asian Indian	0	0%	0	0%	0	0%	0	0%	1	0.16%	2	0.24%
Black	69	19%	99	23%	82	21%	93	23%	160	25%	238	28.81%
Native Hawaiian	0	0%	0	0%	0	0%	0	0%	1	0.16%	0	0%
Other	3	1%	9	2%	5	1%	1	0.2%	2	0.31%	1	0.12%
White	293	79%	316	74%	300	77%	312	77%	476	74%	580	70.22%
<b>Total</b>	<b>367</b>	<b>100%</b>	<b>426</b>	<b>100%</b>	<b>389</b>	<b>100%</b>	<b>406</b>	<b>100%</b>	<b>640</b>	<b>100%</b>	<b>826</b>	<b>100%</b>

DRUG INTOXICATION DEATHS BY AGE GROUP



Drug Intoxication Deaths by Age Group

The dominant age group among drug intoxication deaths in CY21 remained consistent from the prior year. However, in the 40 to 49 and 50 to 59 age groups there were increases shortening the gap between the top three age groups. There was also a significant increase in the 60 to 69 age group. This suggests an aging illicit substance use population. The MCCO has also investigated higher numbers of older decedents who had a prior history of illicit substance abuse when they were younger but started using again following years of sobriety.

Definition of Unfamiliar Exam Type

\*Medical Record Review are cases where the body is not available, or a forensic exam is not necessary, to determine the cause and manner of death. This only occurs when an individual dies in a hospital and medical records and/or toxicology is available.

DRUG INTOXICATION DEATHS BY EXAM TYPE

Type of Exam	# of Exams	% of Exams
Full Exam	307	37%
Partial Exam	9	1%
External Exam	402	49%
*Medical Record Review Only	108	13%
<b>Total</b>	<b>826</b>	<b>100%</b>

DRUG INTOXICATION DEATHS BY MANNER

Manner of Death	# of Cases	% of Cases
Accident	799	97%
Suicide	19	2%
Undetermined	8	1%
<b>Total</b>	<b>826</b>	<b>100%</b>



In CY21, the MCCO submitted **1,618** samples for toxicology testing. The table below shows the total number of substances found in all toxicology tests performed in CY21. Each substance then is calculated by the total number of times it appeared in toxicology results over the entire calendar year.

Substance	Qty
1,1-Difluoroethane	2
*~4-ANPP	34
7-Aminoclonazepam	4
Acetaminophen	12
*~Acetylfentanyl	136
Alcohol/EtOH	122
Alprazolam	35
Amitriptyline	2
Amphetamine	60
Atomoxetine	1
Benzodiazepine	23
Benzoyllecgonine	5
*Buprenorphine	9
Bupropion	1
*~Butyrylfentanyl	15
Cannabinoids	1
*~Carfentanyl	1
Chlordiazepoxide	3
Chlorpheniramine	2
Citalopram	11
Clonazepam	8
Cocaethylene	6
Cocaine	189
*Codeine	3
Cyclobenzaprine	18
Demoxepam	5
Desmethylsertraline	1
*Dextromethorphan	4
Diazepam	8

Substance	Qty
*Dihydrocodeine	9
Diltiazem	1
Diphenhydramine	26
Doxylamine	2
Ephedrine	2
Etizolam	6
Etomidate	2
*Fentanyl	641
Flualprazolam	1
Flubromazolam	19
*~Fluorofentanyl	17
Fluoxetine	7
Gabapentin	50
Haloperidol	1
*Heroin	11
*Hydrocodone	26
*Hydromorphone	2
Hydroxyzine	10
Ketamine	3
Lamotrigine	1
Lidocaine	1
*Loperamide	2
Lorazepam	5
Metaxalone	1
*Methadone	16
Methamphetamine	324
Methanol	2
Metonitazene	11
Metoprolol	3

Substance	Qty
Mirtazapam	6
Mitragynine	2
*Morphine	47
Nordiazepam	3
*Norfentanyl	51
Norketamine	2
Olanzapine	1
*Opiate	26
*Opioid	16
*Oxycodone	32
Paroxetine	2
Phencyclidine	3
Phenobarbital	5
Phentermine	1
*Pregabalin	6
Promethazine	2
Quetiapine	3
Quinine	1
Salicylate	1
Sertraline	4
*Tapentadol	1
Tizanidine	1
Topiramate	2
*Tramadol	4
Trazadone	6
Verapamil	1
Xylazine	30
Zopiclone	1

\*Opiate/Opioid  
~Fentanyl Analog

### Top Five Toxicology Findings

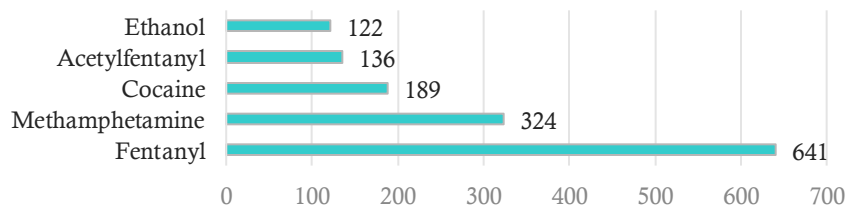


Figure 4: Ruins at Holiday Park. Photo provided by Indy Parks



## **MARION COUNTY CORONER’S OFFICE: KEY AGENCY ACTIVITIES AND ACHIEVEMENTS**

### **I. ACCREDITATION**

The MCCO continued in CY21 working towards obtaining reaccreditation with the National Association of Medical Examiners. The National Association of Medical Examiners (NAME) is one of the main accrediting bodies for medical examiner and coroner’s offices. NAME helps set and enforce industry standards for performance, technical-scientific knowledge, and a concept for death investigation systems’ administrative and operational aspects. The MCCO will continue with internal projects to obtain accreditation by the end of CY 24.

### **II. BUDGET**

Due to the increasing number of forensic death investigations, the MCCO began pursuing a more aggressive budget increase for CY21. The MCCO is working to obtain funds for a new, state-of-the-art forensic facility that is better equipped to handle the increase in homicide and overdose-related deaths, including a specialized autopsy suite specially designed for infection control by CDC guidelines.

### **III. GRANTS**

The MCCO worked on attaining additional grant funding to help lessen the financial burden for forensic death investigations on Marion County residents. The MCCO successfully obtained additional grant funding for infant death investigations, overdose death investigations (OD2A), and a forensic pathology fellowship. The MCCO will be pursuing additional grant funds in CY22. The MCCO also obtained approval for the use of ARPA funds to assist with the financial cost of the rising numbers related to drug overdoses from opiates and gun-related homicides.

## MARION COUNTY CORONER'S OFFICE: KEY AGENCY ACTIVITIES

### IV. FATALITY REVIEW TEAMS

The MCCO continued to participate in local fatality review teams: Child Fatality Review, Drug Overdose Fatality Review, and Domestic Violence Fatality Review. These committees conduct reviews to provide analysis and recommendations to the public and county entities so they can address systemic problems, provide better services, and be held accountable. The MCCO also began a partnership with the Marion County Public Health Department to assist with the development of future fatality review teams on trends to identify at-risk populations and bring assistance to impacted groups in Marion County.

### V. DATA REQUESTS

The MCCO received multiple requests in CY21 for death data from Marion County. The MCCO aims to provide reliable data to local, state, and federal partners to assist in research projects, legislation development, and community initiatives. Data provided by the MCCO can help identify a range of issues from new or emerging death trends to social/medical influences impacting deaths in Marion County. Data requests in CY21 were received from:

- U.S. Department of Defense
- U.S. Department of Justice
- Indiana University
- Office of Finance and Management: Controller's Office, Indy City-County
- Indiana High Intensity Drug Trafficking Areas (HIDTA)
- Marion County Public Health Department
- Indiana State Department of Health
- City-County Council
- Multiple local media outlets
- U.S. Drug Enforcement Agency

# Years of Service Recognition

The MCCO would like to thank the following staff members for their dedication, commitment, and hard work for the agency over the years:

40  
Years

Marchele Hall - Deputy Administrator (44 years)

30  
Years

Connie Fulp - Administrative Clerk (32 years)

25  
Years

Dave Grannan - Deputy Coroner (26 years)  
Alfarena McGinty - Chief Deputy Coroner (25 years)

20  
Years

Michele Willis - Senior Deputy Coroner (22 years)

15  
Years

Dominique Battles - Autopsy Supervisor (16 years)  
Wilma Owens-Lacefield - Senior Medical Transcriptionist (16 years)  
Amanda Wells - Deputy Coroner (16 years)

10  
Years

Pamela Young - Senior Deputy Coroner (12 years)  
Jessica Miller - Deputy Coroner (11 years)  
Michael Battee - Autopsy Technician (11 years)  
Mallory Malczewski - Budget Analyst (10 years)

5  
Years

Jarrett Hiatt - Senior Deputy Coroner (6 years)  
Jennifer Suarez - Deputy Coroner (6 years)  
Ted Veirs - Deputy Coroner (5 years)

# MARION COUNTY CORONER'S OFFICE

## ANNUAL REPORT



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