

GOVERNMENT OF  
THE DISTRICT OF COLUMBIA

**OFFICE OF THE CHIEF  
MEDICAL EXAMINER**



**2018** | **ANNUAL  
REPORT**





# DISTRICT OF COLUMBIA OFFICE OF THE CHIEF MEDICAL EXAMINER

## MISSION

The mission of the Office of the Chief Medical Examiner (OCME), for the District of Columbia, is to investigate all deaths in the District of Columbia that occur by any means of violence (injury), and those that occur without explanation or medical attention, in custody, or which pose a threat to the public health. OCME provides forensic services to government agencies, health care providers and citizens in the Washington D.C. metropolitan area to ensure that justice is served and to improve the health and safety of the public.

## EXECUTIVE MANAGEMENT

Roger A. Mitchell, Jr., MD  
CHIEF MEDICAL EXAMINER

Francisco J. Diaz, MD  
DEPUTY CHIEF MEDICAL EXAMINER

Beverly A. Fields, Esq.  
CHIEF OF STAFF

Mikelle L. Devillier, Esq.  
GENERAL COUNSEL

## TOXICOLOGY

Lucas W. Zarwell, MFS  
CHIEF TOXICOLOGIST

Samantha S. Tolliver, Ph.D  
DEPUTY CHIEF TOXICOLOGIST

## DATA ANALYSIS

Chikarlo R. Leak, DrPH, MPH  
FORENSIC EPIDEMIOLOGIST

Kamalia M. S. Blunt, BA  
DATA FUSION CENTER SUPPORT SERVICES SPECIALIST

## PRESENTED TO:

The Executive Office of the Mayor,  
The Council of the District of Columbia  
and The Citizens of the District of Columbia



## A MESSAGE FROM THE CHIEF MEDICAL EXAMINER



Greetings,

On behalf of the Office of the Chief Medical Examiner (OCME), I am pleased to present the CY 2018 OCME Annual Report which provides key statistical data stemming from our critical work in death investigation and certification, as well as a snapshot of our key achievements over the year.

With about one hundred employees and a budget of nearly \$12 million in FY2018, the agency investigated 6,066 deaths and performed 1,319 post-mortem examinations, including 157 homicides. We performed 1,271 toxicological postmortem tests, processed 6,655 records and resolved numerous legal matters. These accomplishments were performed in a climate of fiscal responsibility and public stewardship.

This annual report includes statistical data focusing on the number and type of cases accepted and examined; cause and manner of death; decedent demographics (i.e., gender, age, race and residence); and toxicological findings. Moreover, certain agency functions, such as public dispositions, the Breath Alcohol Program and other toxicological services, organ procurement and Data Fusion Center special trend reports are highlighted.

In addition to carrying out the agency's mission to perform sound medicolegal investigations and determine cause and manner of death, the agency experienced several key achievements during 2018.

- » The agency maintained the standards and guidelines of operation as established by the National Association of Medical Examiners (NAME), American Board of Forensic Toxicologists (ABFT), American Board of Medicolegal Death Investigators (ABMDI) and the American Board of Forensic Anthropologists (ABFA), amongst others.
- » Focusing on fiscal accountability and good governance, the agency was able to maintain a small position vacancy rate throughout the fiscal year. This was accomplished utilizing established standard operating procedures for budget, procurement and human resources; managerial oversight; and strategic and performance planning.
- » During the fiscal year, OCME sponsored its annual Fatality Management Symposium and full-scale exercise focusing on family assistance and victim identification training. This involved engagement with and by regional and local emergency response stakeholders as well as the agency's Death Investigations Division and the Records Management Unit.
- » The agency's Data Analysis Fusion Center continues to evaluate mortality statistics in order to determine outcomes and trends towards the improvement of public health and safety. In 2018, it published surveillance reports on Elder Falls, Unsafe Sleeping Environment, Hyper- & Hypothermia, Homicide, Public Dispositions, and Traffic/Accidents.
- » Of note, the agency managed approximately \$790,650 in grant funding to support fatality management, toxicological testing, violence prevention, and the review of fatalities of specified populations.
- » The OCME operates 24 hours a day, 7 days a week, 365 days a year. With a dedicated staff, we will continue working toward our mission of public safety and justice, academic advancement and public health surveillance. Most importantly, we will remain committed to serving as a voice for families, residents and visitors at a time when they are most vulnerable and grief stricken.

In Truth and Service,

**Roger A. Mitchell, Jr. MD FASCP**  
Chief Medical Examiner



# EXECUTIVE SUMMARY

This Annual Report covers data that resulted from the investigation of 6,066 deaths that occurred in the District of Columbia (DC) during the Calendar Year (CY) 2018. The report also presents key agency accomplishments and other major activities such as Expert testimony by the Medical Examiners, Decedents Identification, Disposition of Unclaimed Remains; Toxicological results in Driving Under the Influence (DUI), Drug Facilitated Sexual Assault (DFSA) cases and educational endeavors. The agency hopes that the information contained in the report will be useful to the Executive Office of the Mayor, Councilmembers and the public at large.

The OCME serves the citizens of the DC and the Metropolitan DC area in their most difficult moments by providing timely removal of decedents from homes and public areas; thorough death investigation; prompt provision of death certificates and proofs of death to family members allowing for rapid funeral arrangements and access to insurance and other death benefits. The agency provides services to the public seven days per week during core business hours. However, deaths are reported to the agency and the agency responds to and investigates these reported deaths 24 hours a day, 7 days a week, which includes weekends and holidays. Autopsies are performed every day of the year as well, and on occasion it is necessary for the Medical Examiner to perform them at night. The data presented within this report represents deaths occurring exclusively within the District of Columbia for which the OCME has jurisdiction. The data does not represent ALL deaths of DC residents. The decedent's place of residence or location of injury may be outside of the District.

The Office of the Chief Medical Examiner has a dual role; Public Safety and Public Health.

As a Public Safety agency, the OCME conducts death investigations in an independent manner and without bias. The agency's involvement with a mandatory reported death starts with the death notification and continues through the possible provision of expert testimony in legal proceedings. The agency strives toward quickly responding to death scenes, allowing non-investigating police personnel to return to regular duty. At the death scenes, the OCME takes custody of the body and secures all evidentiary material associated with the body. OCME investigators, forensic and medicolegal, work cooperatively with the Metropolitan Police Department (MPD) to gather information useful to the interpretation of the circumstances of the death. When feasible, the OCME investigators will also ensure identification of the deceased by family members present at the scenes of death. In addition, the Medicolegal Investigators pronounce death at the scene or at the agency, as this function is reserved to specific professionals as specified in the DC Code.

As a Public Health agency, the OCME is well suited to provide information on the state of health of the residents of the District of Columbia and recognize and alert appropriate officials of deaths that may present an immediate threat to its population. Critical to this work is the agency's Data Fusion Center, which conducts epidemiological research in support of the agency's public health surveillance initiative in an effort to reduce the incidence and prevalence of preventable fatalities in the District. Part of this initiative includes real-time analysis and reporting of mortality data to federal, state, and local entities for the purpose of detecting, investigating and predicting trends to better support at risk populations. Additionally, key agency activities are outlined in Appendix B.



## OVERVIEW OF CASES REPORTED AND INVESTIGATED

DURING THE CALENDAR YEAR (CY) 2018, 6,066 CASES WERE REPORTED TO AND INVESTIGATED BY THE DISTRICT OF COLUMBIA OFFICE OF THE CHIEF MEDICAL EXAMINER (DC OCME). OVERALL, THE TOTAL NUMBER OF DEATHS REPORTED TO THE DC OCME HAS SLIGHTLY DECREASED SINCE LAST YEAR. HOWEVER, THE PERCENTAGE OF ACCEPTED CASES REMAINED STEADY AT 39%.

### Medical Examiner Caseload

**Accepted Cases** - The OCME accepted jurisdiction of 1,319 decedent cases, of which 901 cases were autopsied.

**Declined Cases** - The OCME declined jurisdiction of 1,931 decedent cases, of which 73 became Storage Requests.

**Storage Requests** - The OCME provides a unique service to area nursing homes, hospices, and other like facilities by accommodating requests to store deceased bodies. Ninety one of the reported cases were Storage Requests only, and seventy three of the storage requests were previously “Declined” cases, so as a result the agency had a total of 164 Storage Requests, of which 149 were approved (See section 8.0 for additional statistics)

**Cremation Requests:** The OCME must review all cremations for deaths that occur in the District of Columbia. There were 3,405 Cremation requests made to the OCME in 2018; 753 were OCME cases, 2,652 were “New Reports” submitted from area hospitals, clinics and nursing homes, the OCME took jurisdiction of 12 of these “New Reports” for further investigation and certification. (See section 8.0 for details).

**Scene Visits and Body Transport** - The OCME investigation staff reported to 819 scenes. The OCME transported the bodies of 1,430 decedents, of which, 793 were transported directly from scenes of death to the agency.

**Organ/Tissue Donations** - There were 172 organ donation requests during CY 2018.

The following table illustrates the number of autopsy examinations, external examinations, medical record reviews and partial autopsy examinations performed by “Manner of Death.”

## 2018 MEDICAL EXAMINER CASES BY MANNER OF DEATH

Manner	Full Autopsy Examinations	Partial Autopsy Examinations	External Examinations	Review of Medical Records	Non-Human	Anatomical Specimen Disposal	Total
Accident	401	0	105	30	0	0	536
Homicide	154	0	3	0	0	0	157
Natural	264	0	265	10	0	0	539
Stillbirth	0	0	0	0	0	0	0
Suicide	59	0	2	0	0	0	61
Undetermined	23	0	1	0	0	0	24
Other	0	0	1	0	0	1	2
Total	901	0	377	40	0	1	1319





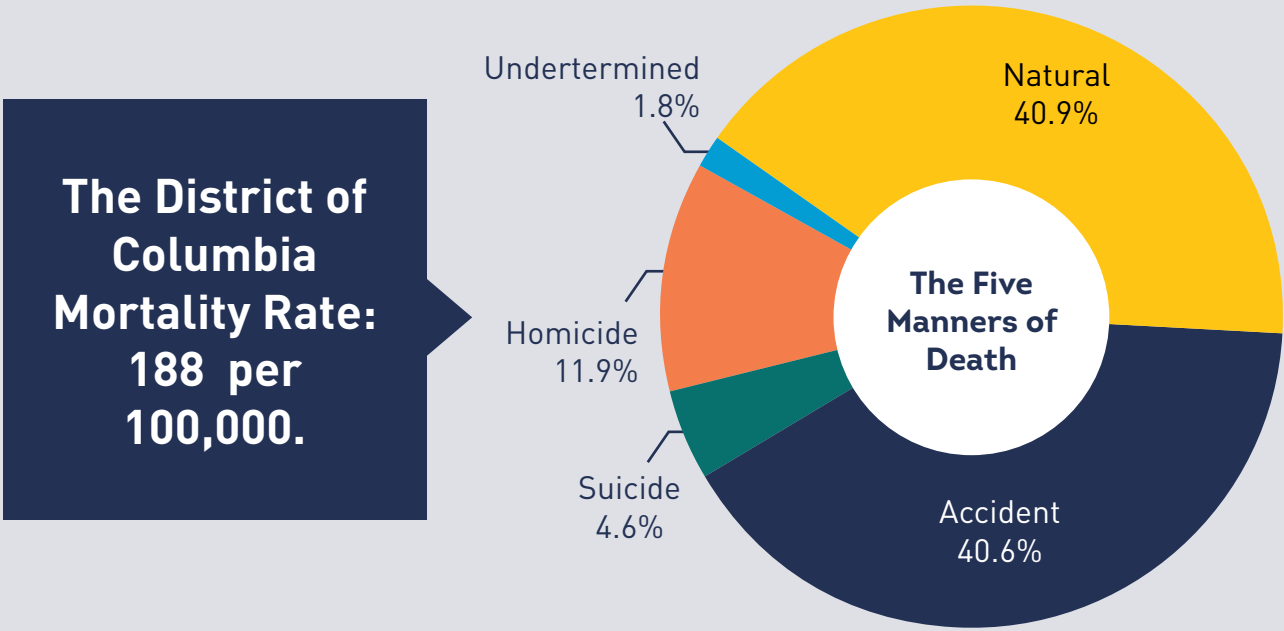
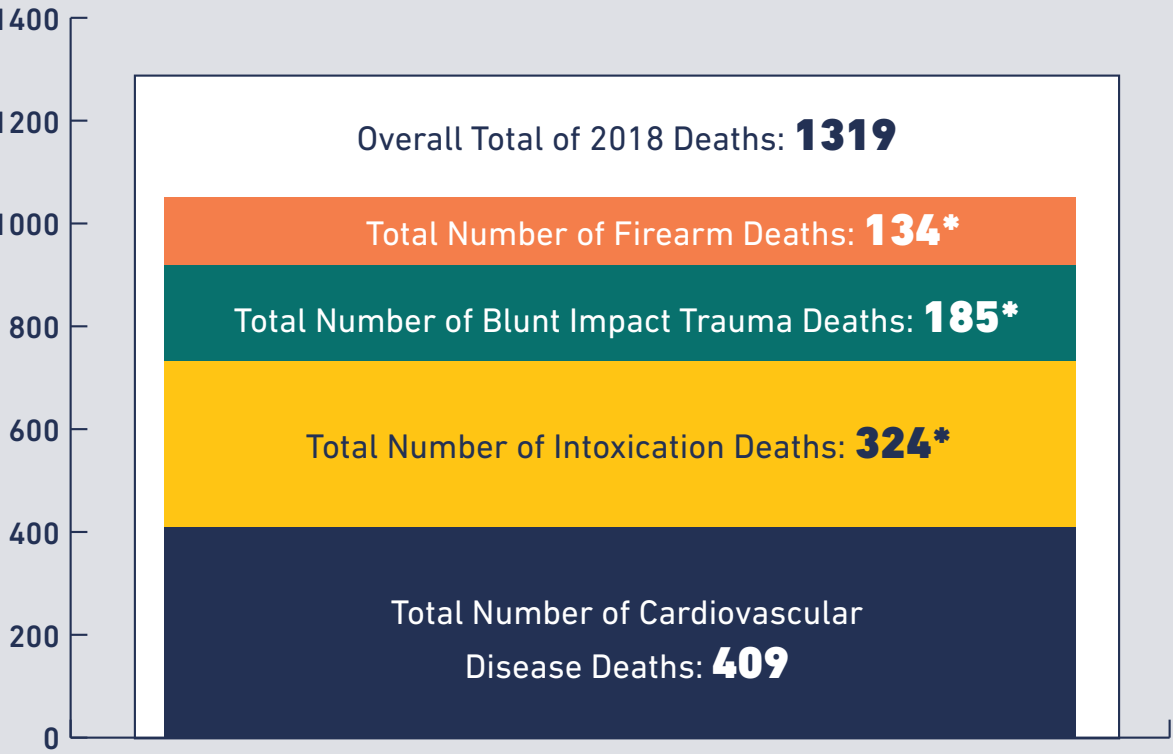
DEMOGRAPHICS OF DECEDENTS OF CY 2018  
ACROSS ALL MANNERS OF DEATH

Age Group	Female	Male	Total	Percent of Ages
<1	12	16	28	2%
1 to 5	2	5	7	1%
6 to 12	5	2	7	1%
13 to 15	0	5	5	0%
16 to 19	6	14	20	2%
20 to 29	15	111	126	10%
30 to 39	29	95	124	9%
40 to 49	47	125	172	13%
50 to 59	78	199	277	21%
60 to 69	84	216	300	23%
70 to 79	54	93	147	11%
80 to 89	27	44	71	5%
90+	20	13	33	3%
Total	379	938	1317*	
Percent of Gender/Sex	29%	71%		100%



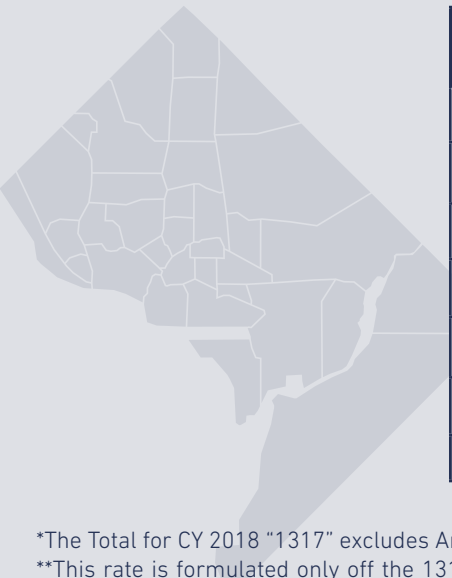
MOST PREVALENT CAUSES OF DEATH IN CY 2018

\*The counts below include ALL Manners.



	Asian	Black	Hispanic	Other	White	Total
Accident	6	378	27	5	120	536
Homicide	3	141	8	1	4	157
Natural	4	422	16	2	95	539
Suicide	5	16	3	-	37	61
Undetermined	1	19	-	-	4	24
Total	19	976	54	8	260	1317*
Percent of Race/Ethnicity	1%	74%	4%	1%	20%	100%

\* Number Excludes Anatomical Remains (1) and Human Remains (1)



Jurisdiction of Residence	Total	Percent of Decedents
DC	996	76%
MD	158	12%
VA	45	3%
Other	29	2%
Undomiciled	82	6%
Unknown	7	1%
Overall Data	1317*	100%

\*The Total for CY 2018 "1317" excludes Anatomical Remains (1) and Human Remains (1).  
\*\*This rate is formulated only off the 1319 decedents received by the OCME of CY 2018 whose deaths occurred in the District.



# SUMMARY OF FINDINGS SUMMARY OF FINDINGS FOR MANNER OF DEATH

**HOMICIDES:** The OCME investigated 157 homicides in the CY 2018. This report reveals that homicides continued to be more prevalent in black males and in persons between the ages of 20-29 than any other category. The most common weapon of choice was firearms. The peak incidents occurred in May and September.

**Toxicology Findings:** Toxicology testing was performed on 154 of 157 homicide cases investigated. Drugs/substances were present in 121 cases. The most commonly detected substances were: Marijuana Metabolites (74), Ethanol (33), Fentanyl (20), Phencyclidine (20), and Cocaine Metabolites (14).

**SUICIDES:** The OCME investigated 61 suicides in the CY 2018. This report reveals that suicides were more prevalent in white males and in persons between the ages of 30-39. Hanging was the most common cause of suicide. Peak incidents occurred in October.

**Toxicology Findings:** Toxicology testing was performed on 58 of 61 suicide cases investigated. Drugs/substances were present in 41 cases. The most commonly detected substances were: Ethanol (17), Marijuana Metabolite (10), Fentanyl (7), Diphenhydramine (5), and Amphetamine (4).

**ACCIDENTS:** The OCME investigated 536 accidents in the CY 2018. Of the 536 cases investigated, 317 of the accidental deaths occurred as a direct result of prescription and/or illicit drug use. Additionally, 162 deaths were the result of blunt force injuries: 63 were traffic-related deaths, 93 were due to falls, and 6 were categorized as “other” as a cause of death due to blunt force injuries. Peak incidents for accidental deaths overall occurred in September.

**Toxicology Findings for Accidents:** Toxicology testing was performed on 406 of the 536 accident cases investigated. Drugs/substances were present in 366 cases. The most commonly detected substances were: Fentanyl (189), Cocaine Metabolites (149), Ethanol (130), Morphine (106), Naloxone (72), Despropionyl-Fentanyl (4-ANPP) (66), Marijuana Metabolites (62), Phencyclidine (55), Diphenhydramine (27), and Para-Fluoroisobutyryl Fentanyl (27).

**TRAFFIC-RELATED ACCIDENTS:** The majority of the 63 traffic accident deaths occurred in the following categories: Blacks, males, and between the ages of 20-29. Traffic accidents were most prevalent in June.

**Toxicology Findings for Traffic-Related Accidents:** Toxicology testing was performed on 41 of the 63 traffic-related accidents. Drugs/substances were present in 30 cases. The most commonly detected substances were: Ethanol (12), Marijuana Metabolite (12), Fentanyl (6), Cocaine Metabolites (5), and Morphine (4).

In the 12 traffic deaths positive for ethanol, 10 were greater than the legal limit (0.08 g/100 mL) for driving under the influence in the District of Columbia. The average blood alcohol concentration of these cases is approximately 0.18 g/100 mL.

**NATURAL DEATHS:** The OCME investigated 539 natural deaths in CY 2018. This report reveals that the leading cause of death in natural cases is Cardiovascular Disease with 409 deaths, followed by Alcoholism with 21 deaths. The majority of natural deaths occurred in January for 2018.

**Toxicology Findings:** No toxicology reporting for natural deaths is being provided for 2018.

**UNDETERMINED:** The OCME investigated 24 cases where the manner of death was concluded to be “Undetermined.” An “Undetermined” manner of death is a result of inconclusive evidence as to the circumstances of the death at the time and/or has inconclusive examination results. As additional information is received, the death may be appropriately re-certified. **Note:** Sudden Unexpected Infant Deaths (SUID) carry an “Undetermined” manner of death.

**Toxicology Findings:** Toxicology testing was performed on 23 of the 24 undetermined deaths investigated. Drugs/substances were present in 16 cases. The most commonly detected drugs were: Cocaine Metabolites (2), Ethanol (2) and Fentanyl (2).

## SUMMARY OF APPENDICES

Also included in this year’s report are the following Appendices:

- A. 2018 OCME ORGANIZATIONAL CHART
- B. KEY AGENCY ACTIVITIES
- C. INTERNAL SERVICES
- D. GLOSSARY



# Table of Contents

<b>1.0- INTRODUCTION .....</b>	<b>18</b>
<b>2.0 - ME INVESTIGATIONS AND MEDICAL LEGAL AUTOPSIES .....</b>	<b>22</b>
Breakdown of Accepted Cases by Exam Type .....	24
Breakdown of Accepted Cases and Autopsies by Month .....	25
Medical Examiner Case Examinations by Manner of Death .....	26
Pie Chart - Medical Examiner Cases by Manner of Death .....	26
Breakdown of Accepted Cases by Residence of Decedents.....	28
Postmortem Toxicology Summary 2018.....	31
2.1 Breakdown of Medical Examiner Investigations .....	34
2.2 - Total Population.....	36
2.3 - Total ME Cases by Demographics and Manner of Death.....	36
<b>3.0 – MANNER AND CAUSE OF DEATH .....</b>	<b>40</b>
3.1 Homicides.....	41
Homicides by Jurisdiction of Incident that Caused Death .....	41
Homicides by Cause of Death .....	42
Homicides by Month .....	43
Homicides by Race/Ethnicity and Gender .....	43
Homicides by Age.....	44

3.2 Suicides.....	47
Suicides by Jurisdiction of Incident of Injury .....	47
Suicides by Cause of Death .....	48
Suicides by Month .....	49
Suicides by Race/Ethnicity and Gender .....	49
Suicide by Age.....	50
3.3 Accidents .....	52
Accidents by Cause of Death.....	53
Accidents by Month.....	54
Accidental Deaths by Race/Ethnicity and Gender .....	55
Accidental Deaths by Age .....	55
Role of the Decedent in Traffic Death.....	57
Traffic Deaths by Month .....	59
Traffic Deaths by Race/Ethnicity and Gender .....	60
Traffic Deaths by Age .....	60
Toxicology Findings for Traffic Accident Cases.....	61
3.3.2 – Toxicology Findings for Deaths due to Accidental Drug Overdose.....	61
3.3.3. Accidental Blunt Injuries due to Falls.....	66



Accidental Falls by Month .....	66
Accidental Falls by Race/Ethnicity and Gender.....	66
Accidental Falls by Age.....	66
Accidental Falls by Jurisdiction of Residence.....	67
3.4 – Natural Deaths.....	69
Natural Deaths by Cause.....	69
Natural Deaths by Month .....	72
Natural Deaths by Race/Ethnicity and Gender.....	72
Natural Deaths by Age .....	73
3.5 – Undetermined Deaths .....	73
Undetermined Deaths by Month.....	74
Undetermined Deaths by Race/Ethnicity and Gender .....	75
Undetermined Deaths by Age.....	75
Toxicology Findings by Undetermined Deaths .....	76
<b>4.0 – SPECIAL REPORTS.....</b>	<b>82</b>
<b>5.0 – WARD HIGHLIGHTS.....</b>	<b>100</b>
<b>6.0 – ORGAN PROCUREMENT.....</b>	<b>104</b>
<b>7.0 – TOXICOLOGY SERVICES .....</b>	<b>108</b>
7.1 - Toxicology Findings for Driving Under the Influence (DUI) Cases .....	109
7.2 - Toxicology Findings for Drug Facilitated Sexual Assault (DFSA) Cases .....	111
7.3 - Breath Alcohol Program.....	115

<b>8.0 – OTHER MAJOR ACTIVITIES.....</b>	<b>118</b>
8.1 - Court-related Activities.....	119
8.2 - Identifications.....	120
8.3 - Public Dispositions.....	122

**APPENDICES:**

- A.** 2018 OCME Organizational Chart
- B.** Key Agency Activities
- C.** Internal Services
- D.** Glossary



## 1.0

## Introduction

The Office of the Chief Medical Examiner (OCME) is required by DC Code §5-1412 to produce an annual report that provides statistical data summarizing the results of investigations conducted by the OCME during a calendar year. This information is a reflection of the status of health of the District of Columbia residents, the level and types of violence to which the population is subjected, the prevalence of drug use and its association with homicides and/or traffic accidents.

THE EXECUTIVE OFFICE OF THE MAYOR, THE OFFICE OF THE CITY ADMINISTRATOR, THE OFFICE OF THE DEPUTY MAYOR FOR PUBLIC SAFETY AND JUSTICE, THE DEPARTMENT OF HEALTH, THE D.C. OFFICE OF THE ATTORNEY GENERAL, THE UNITED STATES ATTORNEY'S OFFICE, THE PUBLIC DEFENDER SERVICE AND OTHER ENTITIES CAN USE THE DATA FOR RESEARCH PURPOSES AND FOR THE DEVELOPMENT OF PREVENTATIVE AND CORRECTIVE POLICIES.

In 2018, the agency had three primary programs: Death Investigation and Certification, Agency Management, and Fatality Review. This report will include data on the Death Investigation and Certification, and the Agency Management programs. The Fatality Review Committees are statutorily required to issue their own Annual Reports.

The OCME investigates the following types of human death occurring in the District of Columbia: 1) violent death, whether apparently homicidal, suicidal or accidental, including deaths due to thermal, chemical, electrical or radiation injury and deaths due to criminal abortion; 2) deaths that are sudden, unexpected or unexplained; 3) deaths that occur under suspicious circumstances; 4) deaths of persons whose bodies are to be cremated, dissected or buried at sea; 5) deaths at the workplace or resulting from work activity; 6) deaths that are due to diseases that may constitute a threat to public health; 7) deaths of persons who are Wards of the District government; 8) deaths related to medical or surgical intervention; 9) deaths that occur while persons are in the legal custody of the District; 10) fetal deaths related to maternal trauma or maternal drug use; 11) deaths for which the Metropolitan Police Department (MPD), or other law enforcement agency, or the United States Attorney's Office requests, or a court ordered investigation; and 12) dead bodies brought within the District without proper medical certification. (See Appendix C – (DC Law 13-172), DC Official Code §5-1401 et seq. (2001)).

All deaths under the jurisdiction of the OCME, as outlined above, are investigated irrespective of the location of the primary causative incident. The data included in this report reflects deaths where the injury may have occurred outside of the District of Columbia, including primarily Maryland and Virginia. The official vital statistics for the District of Columbia are the explicit role and responsibility of the DC Health.

The Chief Medical Examiner, based on the evaluation of the circumstances surrounding the death, determines the type of investigation to be performed, i.e. autopsy or external examination. This decision is not restricted by family preference or religious beliefs. The OCME Medicolegal Investigators, Forensic Investigators and the Detectives of MPD's Natural Squad in the Homicide and Traffic Divisions provide information related to the circumstances of the deaths. The autopsy examination helps answer questions as to time of death, pattern and/or sequence of injuries, and the effect of natural disease on the certification of cause and manner of death. Autopsy procedure requires the retention of tissue specimens up to and including whole organ retention as needed. Tissue retention is for the purpose of ensuring timely and accurate diagnosis. The OCME works in close relationship with legal jurisdictions and often provides expert testimony when called upon.



to do so. Toxicological examinations assist in the determination of the cause and manner of death, and are performed on the majority of cases autopsied depending upon the circumstances of death. Typical examinations conducted by the laboratory provide information on the presence and amount of alcohol, volatiles, illegal drugs, and some commonly used prescription and non-prescription medications. Other expert consultations (e.g. neuropathology and cardiovascular pathology) are requested when appropriate.

Fatality Review Program includes the Child Fatality Review Committee (CFRC) and, the Developmental Disabilities Fatality Review Committee (DD FRC). These committees examine causes and circumstances associated with deaths in their respective populations, evaluate issues associated with services provided and make relevant recommendations that address systemic issues related to services that the District of Columbia provides to the constituents of these vulnerable populations. Each review committee produces an annual report that summarizes relevant findings and recommendations issued as well as government agency responses to the recommendations.

In addition to its routine caseload, the office offers temporary storage of bodies for all District hospices and local hospitals in the District of Columbia when final disposition cannot be established by the next-of-kin. The OCME has a total body storage capacity of 206. Public Dispositions of remains by the OCME will occur when the decedent is not identified or is identified but unclaimed. All efforts are made toward identification of the deceased before final public disposition. To achieve this goal, the OCME has not only trained its technical staff to fingerprint decedents, but also works cooperatively with the Department of Forensic Sciences, Metropolitan Police Department (MPD) and the Federal Bureau of Investigation (FBI). In addition, OCME uses comparative radiology, forensic odontology and/or DNA analysis as necessary to ensure proper and timely identification. The OCME also procures specimens for DNA analysis on each decedent.

OCME is one of the few medical examiner offices in the nation that provides on-site grief counseling. In addition and in preparation for possible terrorist attacks and mass natural disaster events, the OCME has developed alliances with area hospitals and with agencies in the Public Safety and Justice cluster with a goal to integrate its Mass Fatality Plan with the District's Disaster Response Plan. The agency also conducts a mass fatality exercise with local and federal partners in order to test the capacity of Mass Fatality Plan, train staff, develop policies and procedures and identify resources.

Through the years, OCME staff has and continues to be very active in social programs such as Career Day at District of Columbia public and public charter schools, the Mayor's Summer Youth Employment Program, My Brother's Keeper DC, Safer Stronger DC and the DC One Fund.

In the area of education, OCME provides academic training of medical students, pathology residents from local hospitals, and students from national and international universities enrolled in diverse scientific disciplines such as: physician assistance, forensic science, toxicology, and mortuary sciences. The OCME also provided training for members of MPD and various law enforcement entities including the United States Attorney's office and the soldiers of the Marine Corps.







# 2.0

## Medical Examiner Investigations and Medical Legal Autopsies

### ■ Overview of Cases Reported and Investigated

DURING THE CALENDAR YEAR (CY) 2018, THERE WERE **6,238** DEATHS THAT OCCURRED IN THE DISTRICT OF COLUMBIA (DC) AS REPORTED BY THE DEPARTMENT OF HEALTH, CENTER FOR POLICY, PLANNING AND EVALUATION FOR THE DISTRICT OF COLUMBIA, OF WHICH **3,414 OR 57%** OF THESE DEATHS WERE REPORTED TO AND INVESTIGATED BY THE OFFICE OF THE CHIEF MEDICAL EXAMINER (OCME). THE FOLLOWING IS A BREAKDOWN OF HOW THE REPORTED CASES WERE TRIAGED. THE CATEGORIES INCLUDE “ACCEPTED”, “DECLINED”, “STORAGE” OR “CREMATION” CASES.

The data presented within this report represents deaths occurring exclusively within the District of Columbia for which the OCME has jurisdiction. The data does not represent ALL deaths of DC residents. The decedent’s place of residence or location of injury may be outside of the District.

Accepted Cases - The OCME accepted jurisdiction of **1,319** decedent cases, of which **901 cases were autopsied**. There were scene visits for 795 of the 1,319 accepted cases.

Declined Cases - The OCME declined jurisdiction of **1,931** decedent cases, of which 73 became Storage Requests. There were scene visits for 24 of the 1,931 declined cases.

Storage Requests - The OCME provides a unique service to area nursing homes, hospices, and other like facilities by accommodating requests to store deceased bodies. **Ninety one** (91) of the reported cases were storage requests only, and **73** of the storage requests were previously “Declined” cases, so as a result the agency had a total of 164 Storage Requests, of which **149** were approved (See section 8.0 for additional statistics).

Cremation Requests: The OCME must review all cremations for deaths that occur in the District of Columbia. There were **3,405** cremation requests made to the OCME in 2018; 753 were OCME cases, 2,652 were “*New Reports*” submitted from area hospitals, clinics and nursing homes, the OCME took jurisdiction of 12 of these “*New Reports*” for further investigation and certification. (See section 8.0 for details).



Total Number of Cases Reported and Investigated by the OCME	3,414
Total Number of Declined Cases	1931
Percent of Cases Reported & Investigated	57%
Total Number of Cases Accepted for Further Investigation	1319
Percent of Cases Reported & Investigated	39%
Total Number of Autopsies Full – 900; Partial –0; Performed in a University Hospital – 1	901
Percent of Cases Accepted for Further Investigation	68%
Number of Scene Visits by a Medical Examiner or Medico Legal/Forensic Investigator	819
Percent of Cases Accepted for Further Investigation	62%
Total Number of Bodies/Cases Transported by OCME or by Order of the OCME: Transported by Pick-up Service -0 Transported by Office Personnel –1426 (Investigations: 4; Mortuary: 1422 Transported by Others -4 (FEMS -2, Funeral Home - 2 and Police/Park Police – 0)	1430
Total Number of Organ/Tissue Donation Requests: (See Section 3 for breakdown)	172

BREAKDOWN OF ACCEPTED CASES BY EXAM TYPE

Total Number of Cases Accepted and Investigated Further	1,319 <sup>1</sup>
Total Number of Autopsies Full – 900 Partial –0 Performed at a University Hospital – 1	901
Percent of Cases Accepted	68%
Number of External Examinations On-site -376 Off-site - 0	376
Percent of Cases Accepted	29%
Number of Medical Record Reviews *	40
Percent of Cases Accepted	3%
Number of Non-Human Remains *	0
Percent of Cases Accepted	0%
Number of Anatomical Specimen Disposal	1
Percent of Cases Accepted	<1%
Number of Exhumations/Disinterment	0
Percent of Cases Accepted	0%

<sup>1</sup> The Breakdown of Accepted Cases by Exam Type table does not include 1 case of bones that was reported and investigated by OCME.

Definition of Unfamiliar Exam Type Classifications:

- » **Autopsy Performed at a Area Hospital:** During Calendar Year 2018 there was 1 case where the autopsy was performed at a University hospital. The DC Official Code § 5-1409 authorizes the Chief Medical Examiner to deputize any “qualified pathologist” to perform an autopsy on a decedent that is deemed a Medical Examiner case. Some of these cases were initially declined by the OCME and later accepted based on additional information/autopsy findings. Cases in which the autopsy was completed at the hospital, still required review of the autopsy reports and completion of the death certificates be done by the Medical Examiner.
- » **Medical Record Review:** Cases where the body is not available for examination and the investigation and determination of cause and manner of death are based solely on the review of available medical records.
- » **Non-Human Remains:** Cases that are commonly identified as animal remains.
- » **Anatomical Specimen Disposal:** Cases that are identified as those specimens received in formalin.
- » **Exhumations/Disinterment:** Cases where the remains were unearthed from a burial site.

BREAKDOWN OF ACCEPTED CASES AND AUTOPSIES BY MONTH

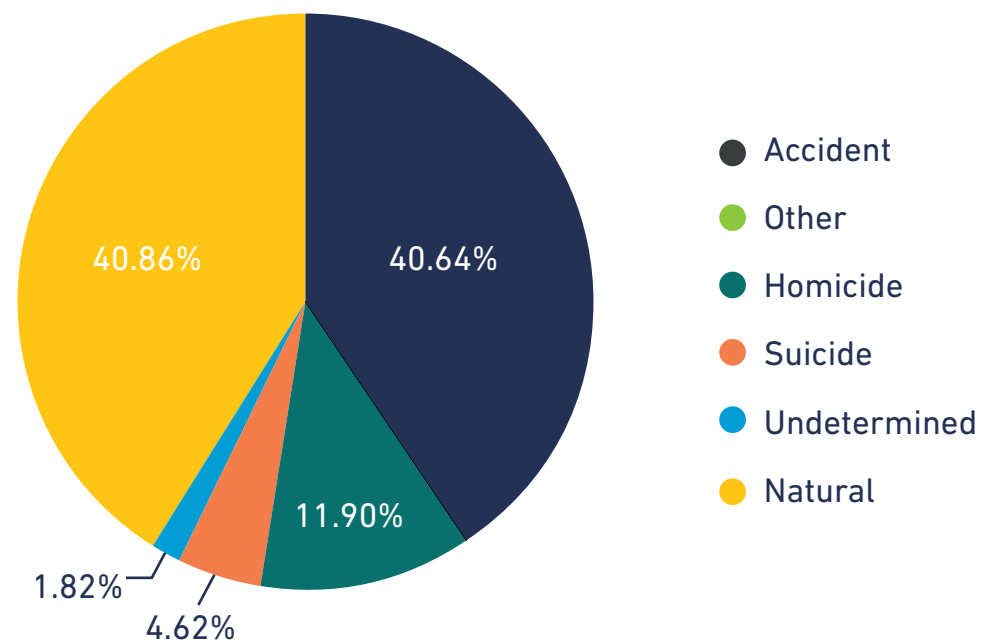
Month	Case Investigations	Autopsies (Full and Partial)
January	125	81
February	87	59
March	111	81
April	114	81
May	115	84
June	115	69
July	124	88
August	86	63
September	121	88
October	114	74
November	92	56
December	115	77
Total	1319	901



MEDICAL EXAMINER CASE EXAMINATIONS BY MANNER OF DEATH

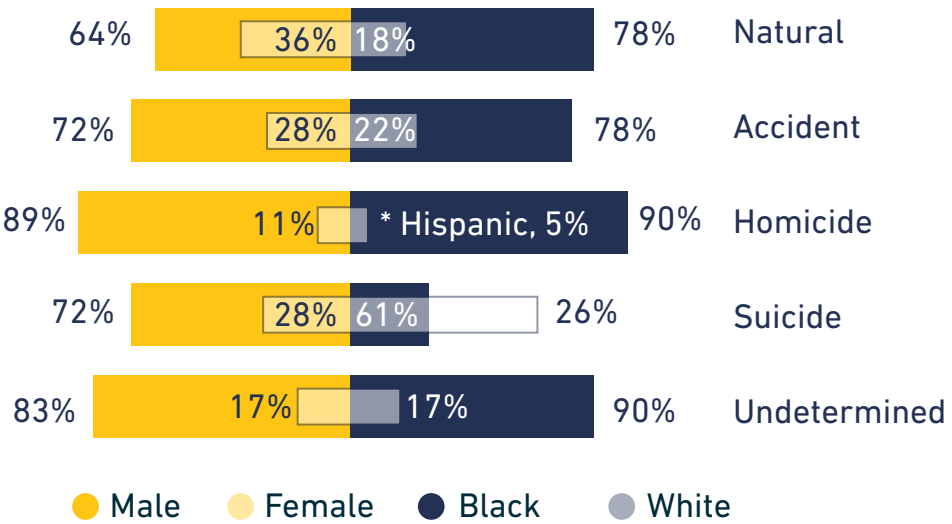
Manner	Full Autopsy Examinations	Partial Autopsy Examinations	External Examinations	Review of Medical Records	Non-Human	Anatomical Specimen Disposal	Total
Accident	401	0	105	30	0	0	536
Homicide	154	0	3	0	0	0	157
Natural	264	0	265	10	0	0	539
Stillbirth	0	0	0	0	0	0	0
Suicide	59	0	2	0	0	0	61
Undetermined	23	0	1	0	0	0	24
Other <sup>2</sup>	0	0	1	0	0	1	2
Total	901	0	377	40	0	1	1319

PIE CHART<sup>3</sup> - MEDICAL EXAMINER CASES BY MANNER OF DEATH



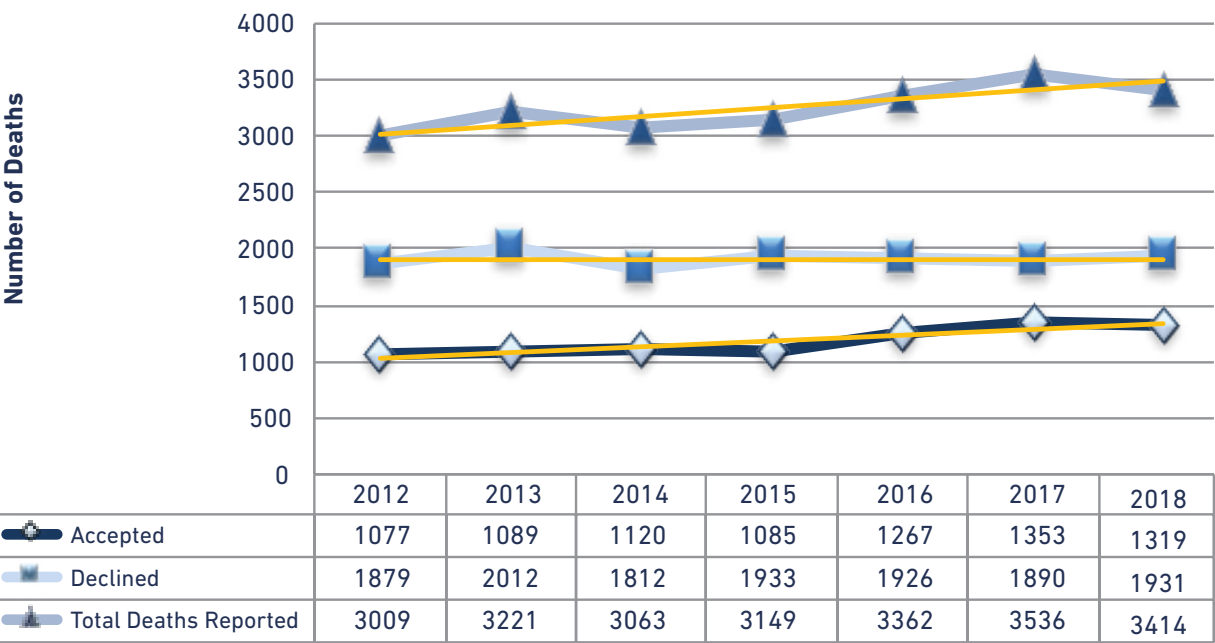
<sup>2</sup> The above table includes the following "Other" cases: Anatomical Specimen (1) and Human Remains (1)  
<sup>3</sup> For illustrative purposes, this pie chart does NOT include "Other" cases: Anatomical Specimen (1) and Human Remains (1).

COMPARISON OF MANNERS OF DEATH BY SEX AND TOP 2 MOST AFFECTED ETHNICITIES/RACES\* PER MANNER



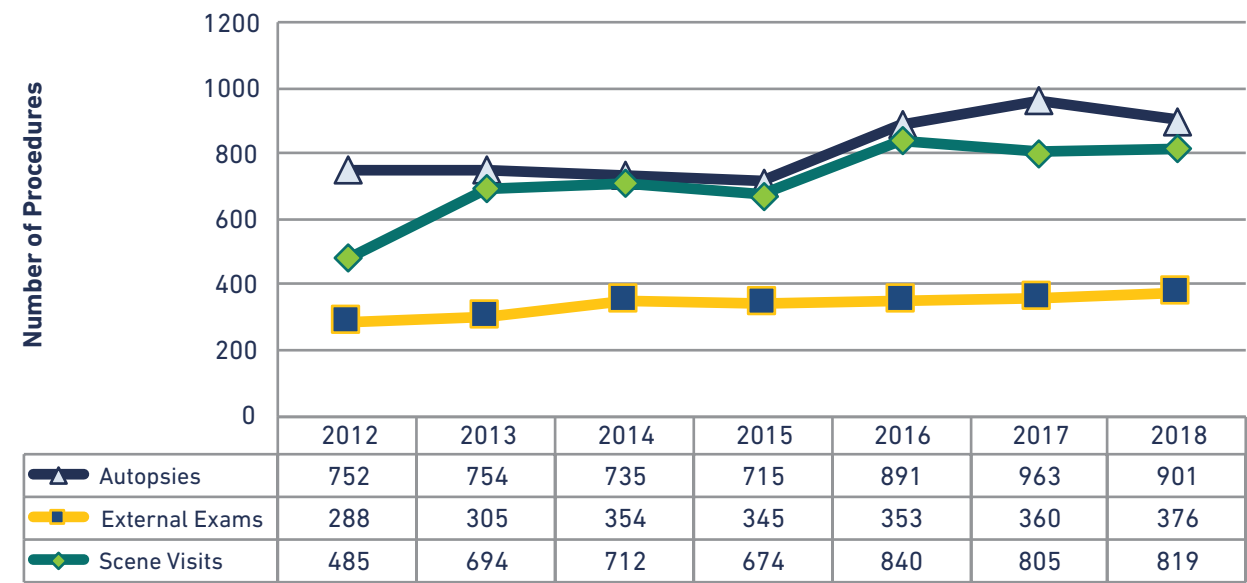
\*The exception to the "Top 2 most affected Ethnicities/Races" is Hispanic being the second most affected by Homicide.  
Manners of death by "sex" is defined as the decedent's sex at birth, and the percentages in this graph reflects ALL ethnicities/races

TRENDS IN DEATHS REPORTED TO THE MEDICAL EXAMINER



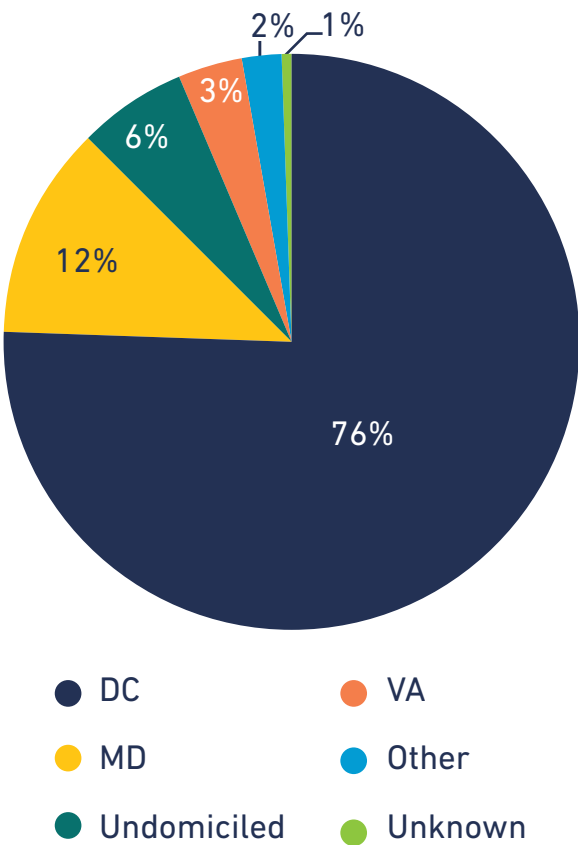
**Note:** All accepted cases and all declined cases will not equal Total Deaths Reported, because there are other types of cases "Death Reports" not included in this illustration.

TRENDS IN DEATHS REPORTED AND INVESTIGATED BY EXAM TYPE



Breakdown of Accepted Cases by Residence of Decedents

By law the Medical Examiner (ME) must accept all traumatic, unwitnessed or suspicious deaths that occur in the DC. As a result, the primary residence of these decedents can be anywhere in the world. Nonetheless, the majority of the cases accepted by the OCME were decedents that resided or were injured in DC, Maryland or Virginia. The breakdown by decedent residence is found below. Just as important, Medical Examiner cases accepted by the OCME do not represent all the suspicious or non-natural fatalities of District residents, who may have died in another state or country. There are DC residents who may have died in hospitals found within another state like Maryland or Virginia that are not reported to OCME.



ME Cases by Jurisdiction of Residence

TABLE: MEDICAL EXAMINER CASES BY RESIDENCE AND MANNER OF DEATH

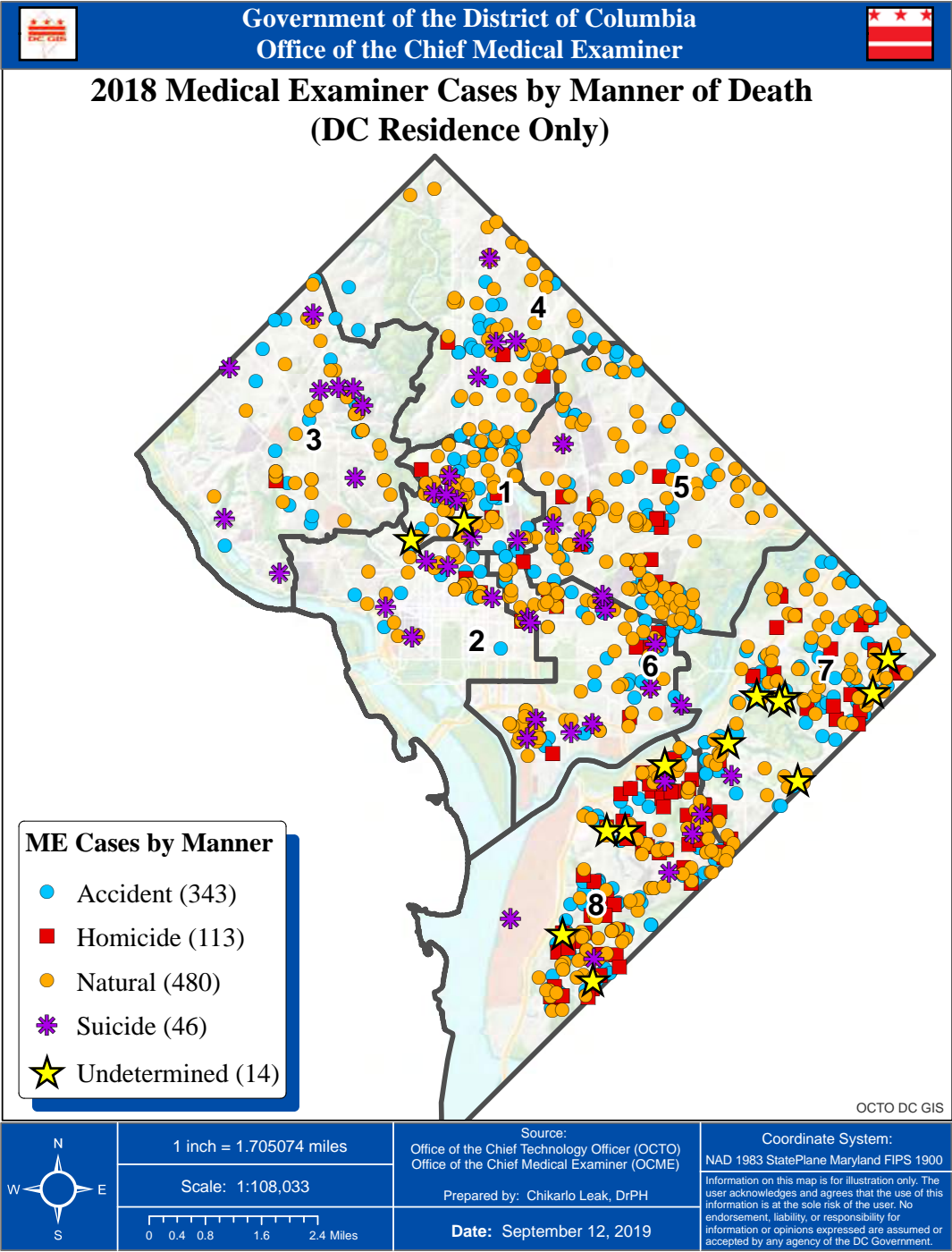
DC Deaths by Jurisdiction of Residence and Manner of Death								
Ward	# of Deaths	Accident	Homicide	Natural	Stillbirth	Suicide	Undetermined	Other
Ward 1	82	25	4	46	0	6	1	0
Ward 2	57	21	3	26	0	6	1	0
Ward 3	63	17	1	36	0	9	0	0
Ward 4	84	29	3	48	0	4	0	0
Ward 5	174	61	13	97	0	3	0	0
Ward 6	119	38	9	62	0	10	0	0
Ward 7	178	74	22	73	0	2	7	0
Ward 8	239	78	58	92	0	6	5	0
DC	996	343	113	480	0	46	14	0
MD	158	93	34	23	0	4	4	0
VA	45	26	3	8	0	7	1	0
Other	29	19	2	4	0	4	0	0
Unknown	7	4	3	0	0	0	0	0
Undomiciled	82	51	2	24	0	0	5	0
Total	1317	536	157	539	0	61	24	0

Note: The above table does not include the following "Other" cases: Anatomical Specimen (1) and Human Remains (1).



## Map of OCME Decedents by DC Ward and Manner of Death

Of the **1,319** decedent deaths investigated by the OCME, **996 (76%)** were DC residents at the time of their death. Of the remaining 323 decedents, 50% were residents of MD and 14% were residents of VA. The map below illustrates the deaths by DC ward and manner of death. The data presented within this report represents deaths occurring exclusively within the District of Columbia for which the OCME has jurisdiction. The data does not represent ALL deaths of DC residents. The decedent's place of residence or location of injury may be outside of the District.



## Postmortem Toxicology Summary 2018

All postmortem specimens received for routine toxicological testing were analyzed for alcohols (ethanol and other volatiles) and major classes of illicit and prescription medications. Additional screens were assigned depending on intake case history and special requests made by physicians. All significant drug results were confirmed by further testing. Typical case specimens received by the toxicology division include blood, urine, bile, vitreous, liver, brain, and gastric contents. In 2018, the OCME Toxicology Division received and inventoried 9,654 postmortem specimens (1,271 cases) yielding 4,218 reported results. This is a decrease from 2017's 10,203 postmortem specimens, 1,304 cases and 4,723 reported results received by the toxicology laboratory.

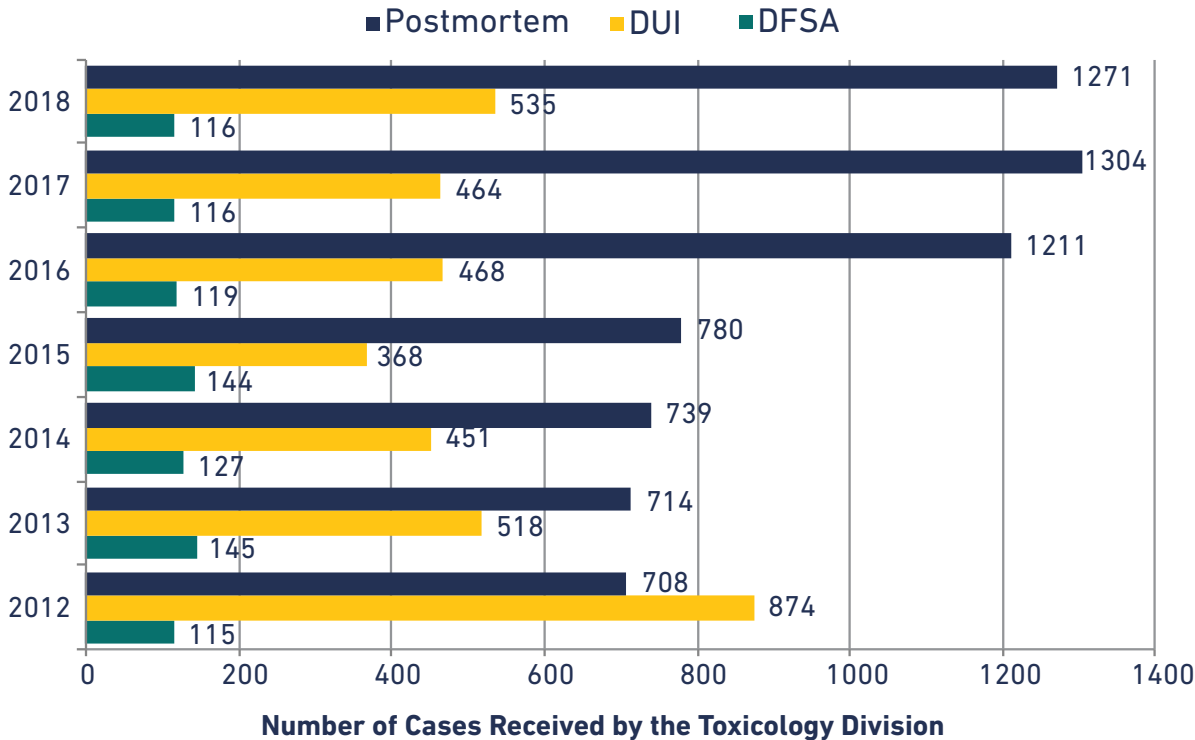
Total number of postmortem cases processed:

Description	Number of Cases	% of Cases
N=	1,271	
Negative	177	13.9%
Positive	731	57.5 %
No testing requested or assigned	363	28.5%

A negative case refers to the absence of any alcohol or detectable drug. A positive case refers to the presence of alcohol and/or drug(s), noting that a case can be positive for more than one substance. The alcohol and/or drugs detected do not necessarily cause or contribute to death. Drugs that are excluded from statistics include common compounds found in routine casework such as: lidocaine, caffeine, and nicotine. These compounds are not quantitated unless they contributed to the death or were detected in a significant concentration. Alcohol and/or drug(s) were present in homicides, suicides, accidents, and undetermined cases.



TRENDS IN CASES PROCESSED BY TOXICOLOGY UNIT



Top 10 Most Prevalent Drugs in Postmortem Cases

The data below highlights the number of times a specific drug was identified in a case. However, most cases included mixed drug toxicity.

The most prevalent drugs in the postmortem cases overall were:

Drug Name	Number of Cases	% of Cases
Ethanol	229	25.2%
Fentanyl	224	24.6%
Marijuana Metabolite	179	19.7%
Cocaine Metabolite	176	19.3%
Morphine/	128/	14.0%/
6-acetylmorphine/	106/	11.6%/
Codeine	96	10.5%
Naloxone	90	9.9%
Phencyclidine	76	8.3%
Despropionyl-Fentanyl (4-ANPP)	66	7.2%
Oxycodone	39	4.2%
Diphenhydramine	37	4.0%

POLY-SUBSTANCE USE AMONG POSTMORTEM CASES IN 2018

Major Common Illicit Drugs (listed in order of prevalence)	Total # of Positive Major Illicit Drug Cases	Most Common Combination	% of Total # of Positive Major Illicit Drug Cases	2nd Most Common Combination	% of Total # of Positive Major Illicit Drug Cases	3rd most Common Combination	% of Total # of Positive Major Illicit Drug Cases
Ethanol	229	Fentanyl	28.3%	Cocaine Metabolite	24.8%	Marijuana Metabolite	17.4%
Fentanyl	224	Heroin	42.8%	Cocaine Metabolite	38.3%	Despropionyl-Fentanyl (4-ANPP)	29.0%
Marijuana Metabolite	179	Ethanol	22.3%	Fentanyl	18.4%	Cocaine Metabolite	14.5%
Cocaine Metabolite	176	Fentanyl	50.5%	Ethanol	32.3%	Heroin	26.7%
Morphine	128	Fentanyl	75.0%	Cocaine Metabolite	35.9%	Ethanol	29.6%
Naloxone	90	Fentanyl	54.4%	Cocaine Metabolite	34.4%	Ethanol	32.2%
Phencyclidine	76	Ethanol	38.1%	Marijuana Metabolite	31.5%	Fentanyl	28.9%
Despropionyl-Fentanyl (4-ANPP)	66	Heroin	53.0%	Cocaine metabolite	40.9%	Naloxone	34.8%
Oxycodone	39	Fentanyl	38.4%	Marijuana Metabolite	28.2%	Heroin	23.0%
Diphenhydramine	37	Fentanyl	51.3%	Cocaine Metabolite	35.1%	Ethanol	32.4%



## 2.1 BREAKDOWN OF MEDICAL EXAMINER INVESTIGATIONS

The US Census estimates that during 2018, the total population within the District of Columbia was **681,170<sup>4</sup>** inhabitants, which comprised primarily of the following racial/ethnic groups: White, Black, Hispanic, Asian and Other. There were a total of **6,238** deaths within the District of Columbia in 2018. In 2018, the OCME investigated **3,414** deaths that occurred in the District of Columbia or were wards of the District and died in another jurisdiction. Of those cases, **1,319** were accepted under the jurisdiction of the Medical Examiner for further investigation; of which **996** of them were known to be residents in the District of Columbia. The following table and charts summarize the manner of death by racial composition. *Although a death occurs in the District of Columbia, the decedent's place of residence can be anywhere in the world.*



<sup>4</sup> Source: US Census Bureau at <http://quickfacts.census.gov/qfd/states/11000.html>.

## 2018 MANNER OF DEATH\* BY RACE WITH 2010 CENSUS DATA

			BY MANNER OF DEATH					
Race	2010 Census	ME Cases DC Residents Only	Total ME Cases	Nat.	Sui.	Hom.	Acc.	Und.
Black (non-Hispanic) <sup>5</sup>	301,053	788	976	422	16	141	378	19
White (non-Hispanic)	209,464	163	260	95	37	4	120	4
Hispanic (any single race)	54,749	35	55	16	3	8	27	0
Asian (non-Hispanic)	20,818	7	17	4	5	3	6	1
Two or more races	12,650	0	0	0	0	0	0	0
Other (non-Hispanic)	1,451	3	5	2	0	0	4	0
American Indian and Alaska Native (non-Hispanic)	1,322	0	2	0	0	1	1	0
Pacific Islander (non-Hispanic)	216	0	2	0	0	0	0	0
Total Population	601,723							
Total # of ME Cases		996	1,317 <sup>6</sup>	539	61	157	536	24
2018 Data – Center for Policy, Planning and Evaluation, DC Health <sup>7</sup>	6,238	6,180	1,313	5,405	61	158	532	24

\*The following accepted cases are not included in the counts above: Anatomical Specimen (1) and Human Remains (1).<sup>567</sup>

**Legend for Manner of Death:**

1. Nat. = Natural Deaths

2. Sui. = Suicide

3. Hom. = Homicide
4. Acc. = Accident

5. Und. = Undetermined

6. Stillbirth = Fetal Deaths

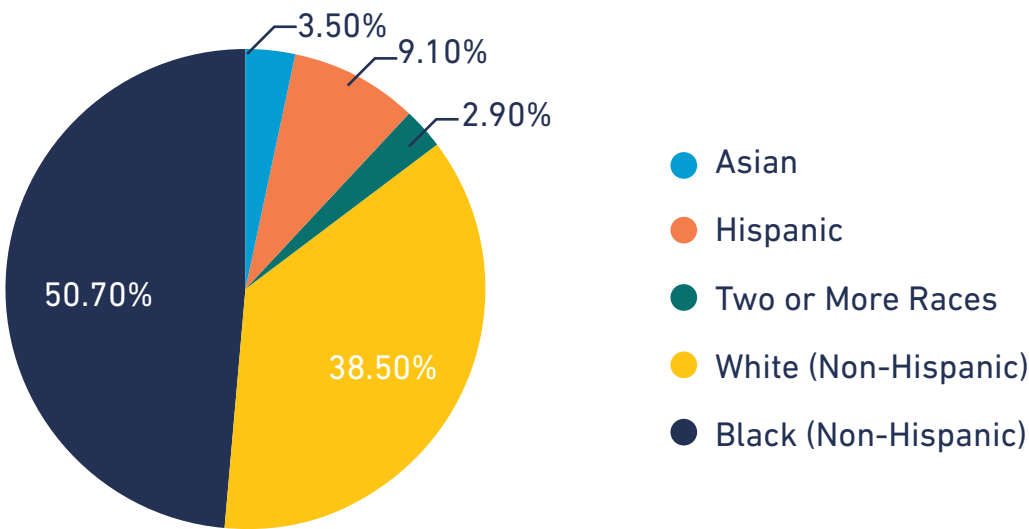
<sup>5</sup> The (non-Hispanic) attribute only applies to the 2010 Census data and does not apply to the OCME statistics for race by "Manner of Death"

<sup>6</sup> The above table does not include the following "Other" cases: Anatomical Specimen (1) and Bones (1).

<sup>7</sup> The DC Health Center for Policy, Planning and Evaluation had 7 cases that were "Pending Investigation" and 218 cases that was missing manner of death at the time of submitting this data to the DC OCME. In addition, the total number of deaths reported by DOH includes all DC residents, including deaths that occurred outside of the District of Columbia.

2.2 - TOTAL POPULATION

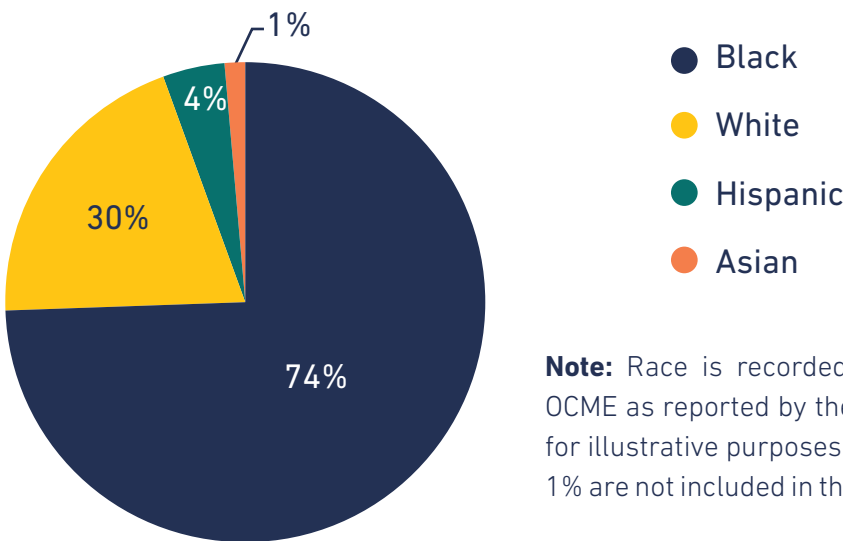
2010 US CENSUS POPULATION DATA BY RACE BY THE DISTRICT OF COLUMBIA



**Note:** The race categories American Indian/Alaska Native and Pacific Islander/Native Hawaiian are not represented in the above graph because they are both less than 1% of the total population in the District of Columbia. On the other hand, Hispanics are represented in this graph; although this classification is considered to be an ethnicity and NOT a race.

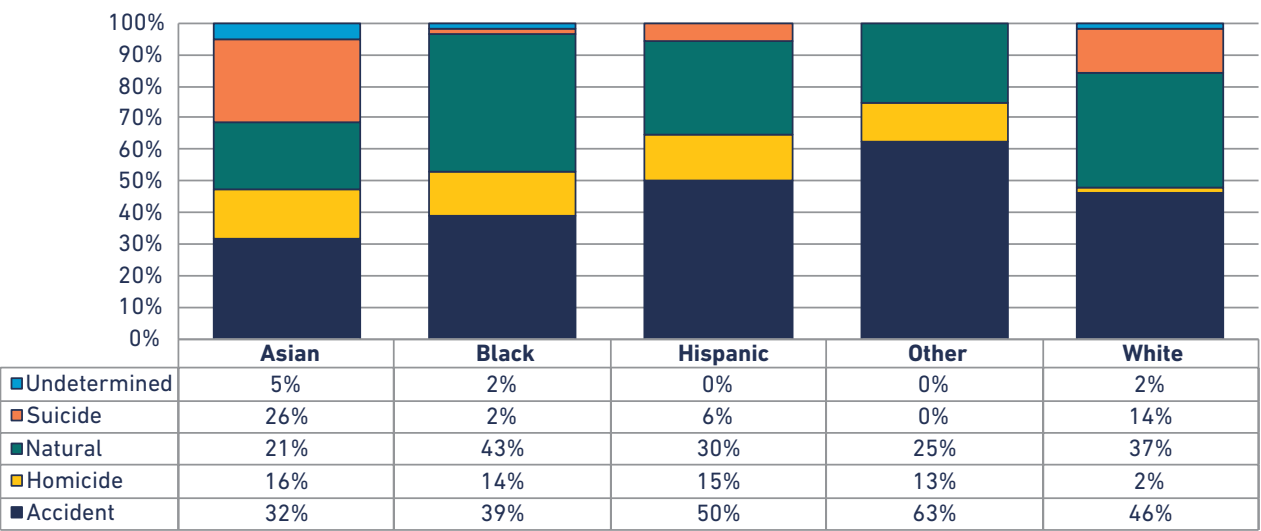
2.3 - TOTAL ME CASES BY DEMOGRAPHICS & MANNER OF DEATH

2018 TOTAL DECEDENT POPULATION BY RACE

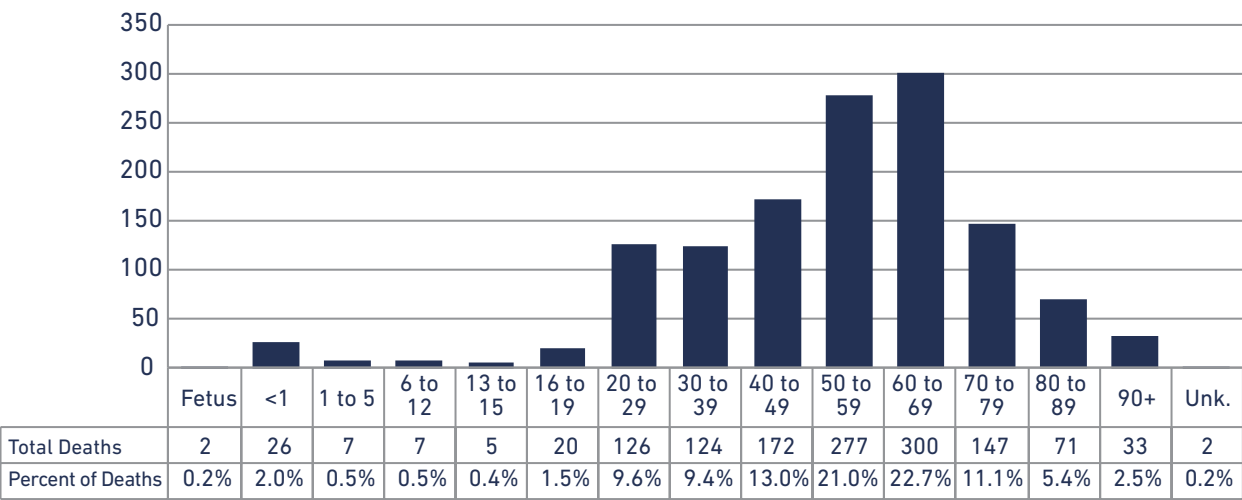


**Note:** Race is recorded by the District of Columbia OCME as reported by the decedent's next of kin. Also, for illustrative purposes those races that are less than 1% are not included in the OCME Total Population chart.

PERCENT OF 2018 DEATHS BY RACE AND MANNER OF DEATH<sup>8</sup>



TOTAL NUMBER AND PERCENT OF 2018 DEATHS BY AGE



TOTAL NUMBER OF 2018 DEATHS BY GENDER<sup>9</sup> AND RACE/ETHNICITY

Race/Ethnicity	Female	Male	Total
American Indian	-	2	2
Asian	10	9	19
Black	270	706	976
Hispanic	11	43	54
Other	-	6	6
White	88	172	260
Total	379	938	1317

<sup>8</sup> The graphs above represent all accepted Medical Examiner cases, but these decedents do NOT represent District residents only.

<sup>9</sup> In this report reflective of ALL Manners, gender in this context means sex at birth.



TOTAL NUMBER OF 2018 DEATHS BY MANNER OF DEATH AND GENDER

Gender	Natural	Accident	Homicide	Suicide	Undetermined	Total	Percent
Female	192	148	18	17	4	379	28.7%
Male	347	388	139	44	20	938	71.1%
Total	539	536	157	61	24	1317	99.8%

**Note:** The above tables do not include – Anatomical Specimen (1) and Human Remains (1).  
The tables above represent all accepted Medical Examiner cases, but these decedents do NOT represent District residents only.





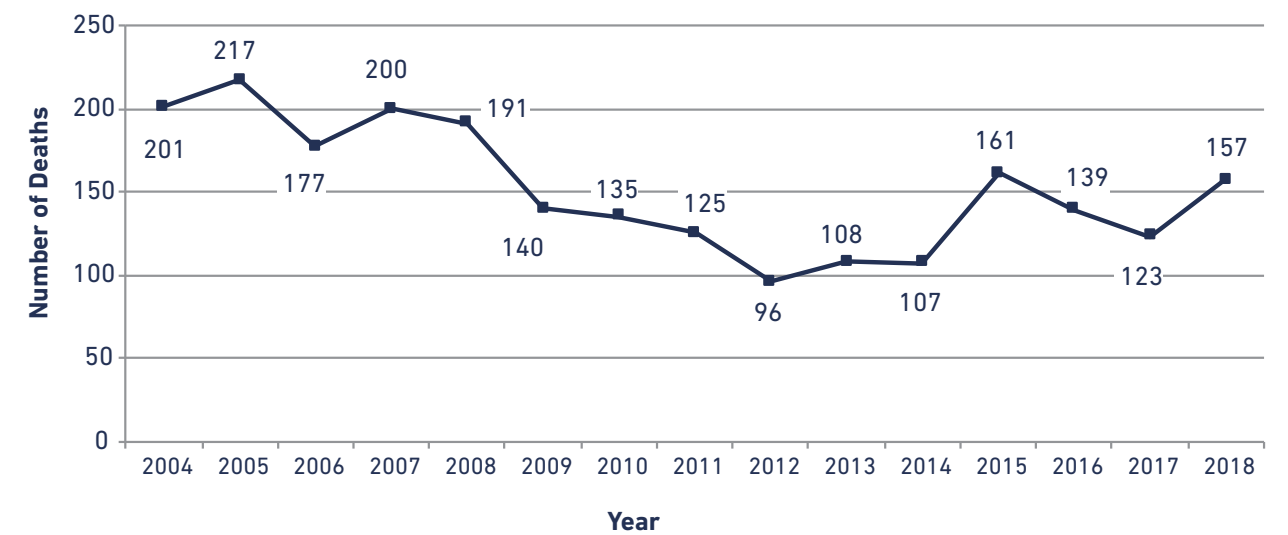
# 3.0

## Manner and Cause Of Death

### 3.1 HOMICIDES

The OCME investigated **157** homicides in the CY 2018. This is a 28% increase from CY 2017. The following tables and graphs provide a distribution by cause of death, month, race, gender and age group. Death by homicidal acts was most prevalent in Black males and in the age group between 20 to 29 years than any other group presented. Firearms were the most prevalent cause of homicides in 2018. In 2018, **May** and **September** had the most homicides.

TOTAL NUMBER OF HOMICIDES (2004-2018)



HOMICIDES BY JURISDICTION OF INCIDENT OF INJURY

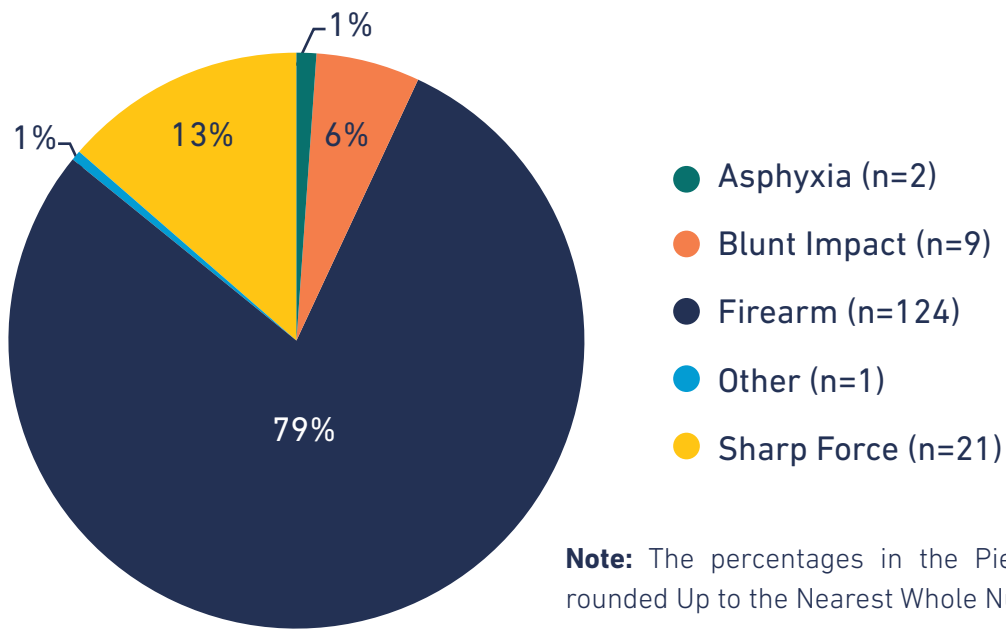
Jurisdiction	# of Homicides	% of Homicides
District of Columbia	135	86%
Maryland	8	5%
Virginia	2	1%
Other	2	1%
Unknown	10	6%
Total	157	100%



HOMICIDES BY CAUSE OF DEATH

Cause of Death	# of Homicides	Percent of Homicides
Asphyxia	2	1.3%
Blunt Impact	9	5.7%
Firearm	124	79.0%
Other	1	0.6%
Sharp Force	21	13.4%
Total	157	100%

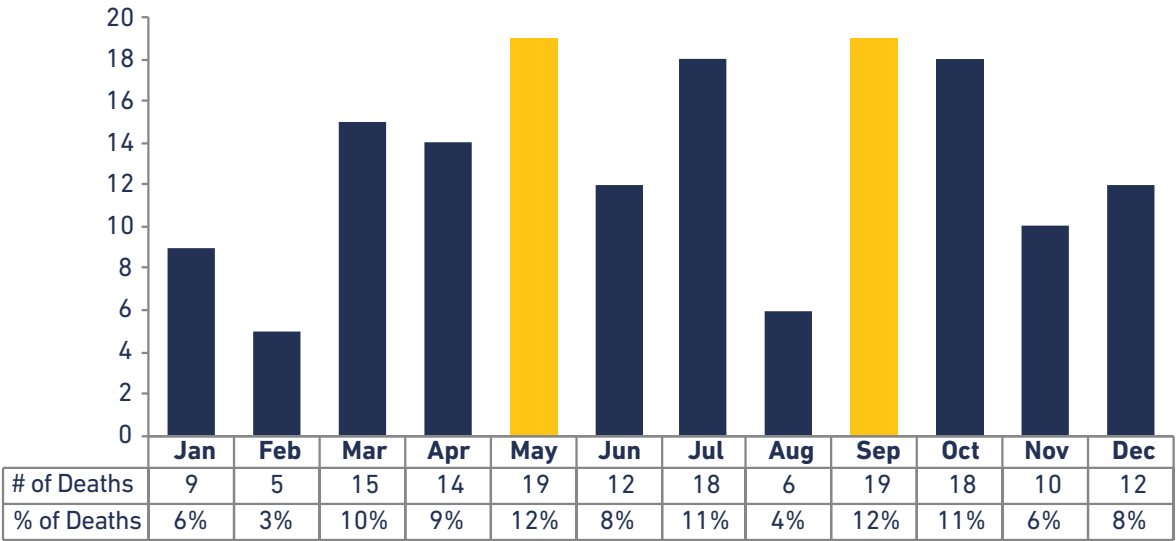
PIE CHART – HOMICIDES BY CAUSE OF DEATH



**Note:** The percentages in the Pie Chart are rounded Up to the Nearest Whole Number



GRAPH - HOMICIDES BY MONTH

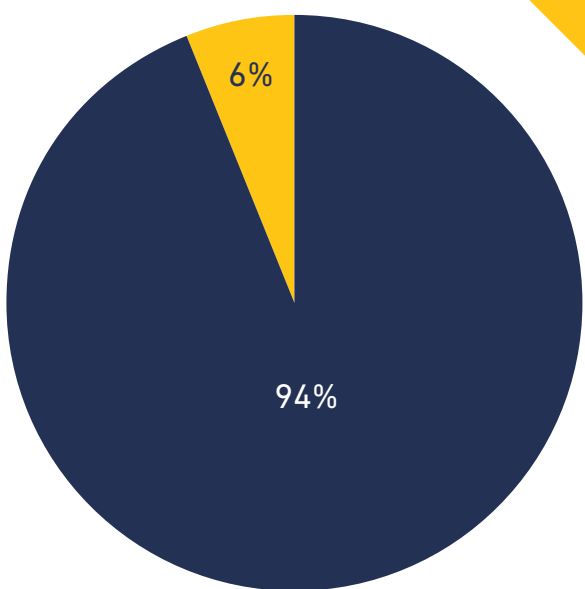
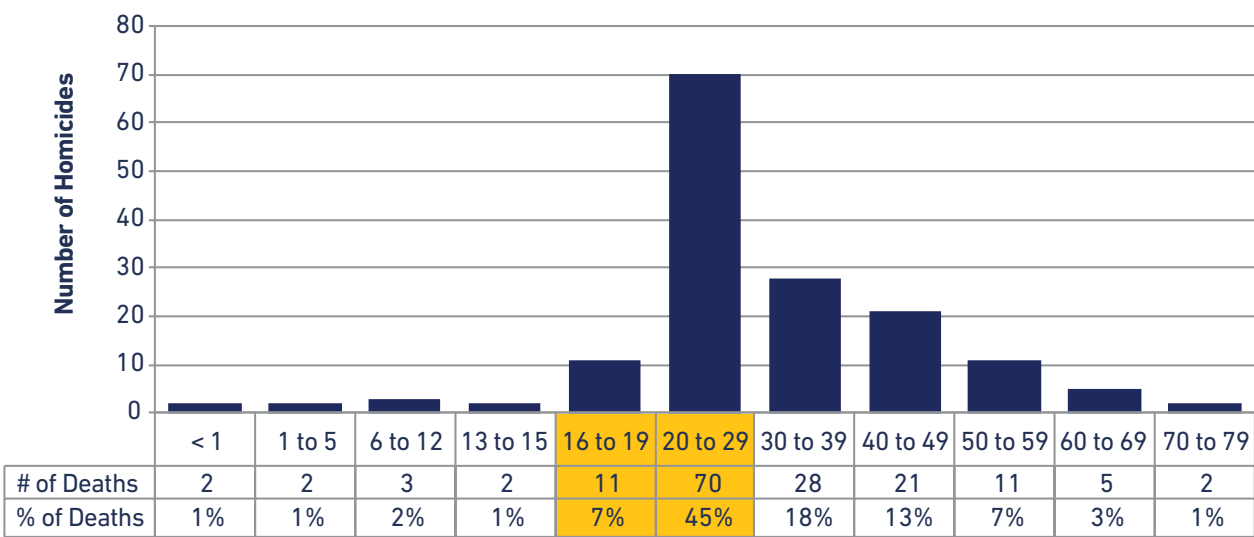


HOMICIDES BY RACE/ETHNICITY AND GENDER

	Female	Male	Total	Percent of Race/ Ethnicity
Black	16	125	141	89.81%
Hispanic	1	7	8	5.10%
Other	1	3	4	2.55%
White	0	4	4	2.55%
Total	18	139	157	
Percent of Gender	11%	89%		100%



CHART - HOMICIDES BY AGE GROUP



Percentage of firearm-related Homicides among adolescents and young adults (16 to 29 yrs old)

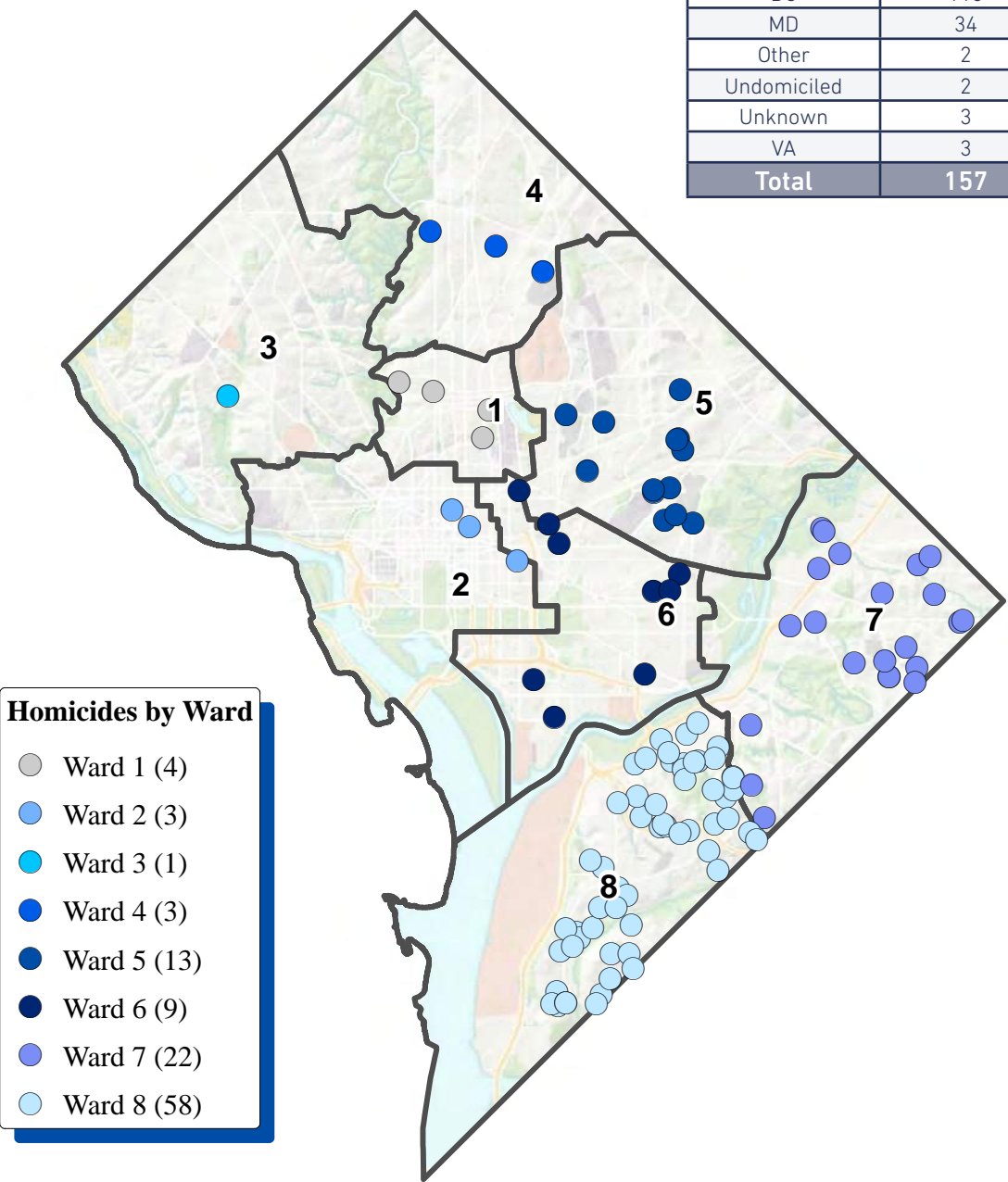
- Firearm
- Non-Firearm



## Map of Homicides by DC Ward and Cause of Death

Of the 157 homicides in the District of Columbia, 113 (72%) of these decedents were District residents at the time of their death, as reported by their next of kin. The map below illustrates the residence location by District ward at the time of their death.

Homicides by Jurisdiction of Residence	
Jurisdiction	# of Deaths
DC	113
MD	34
Other	2
Undomiciled	2
Unknown	3
VA	3
Total	157





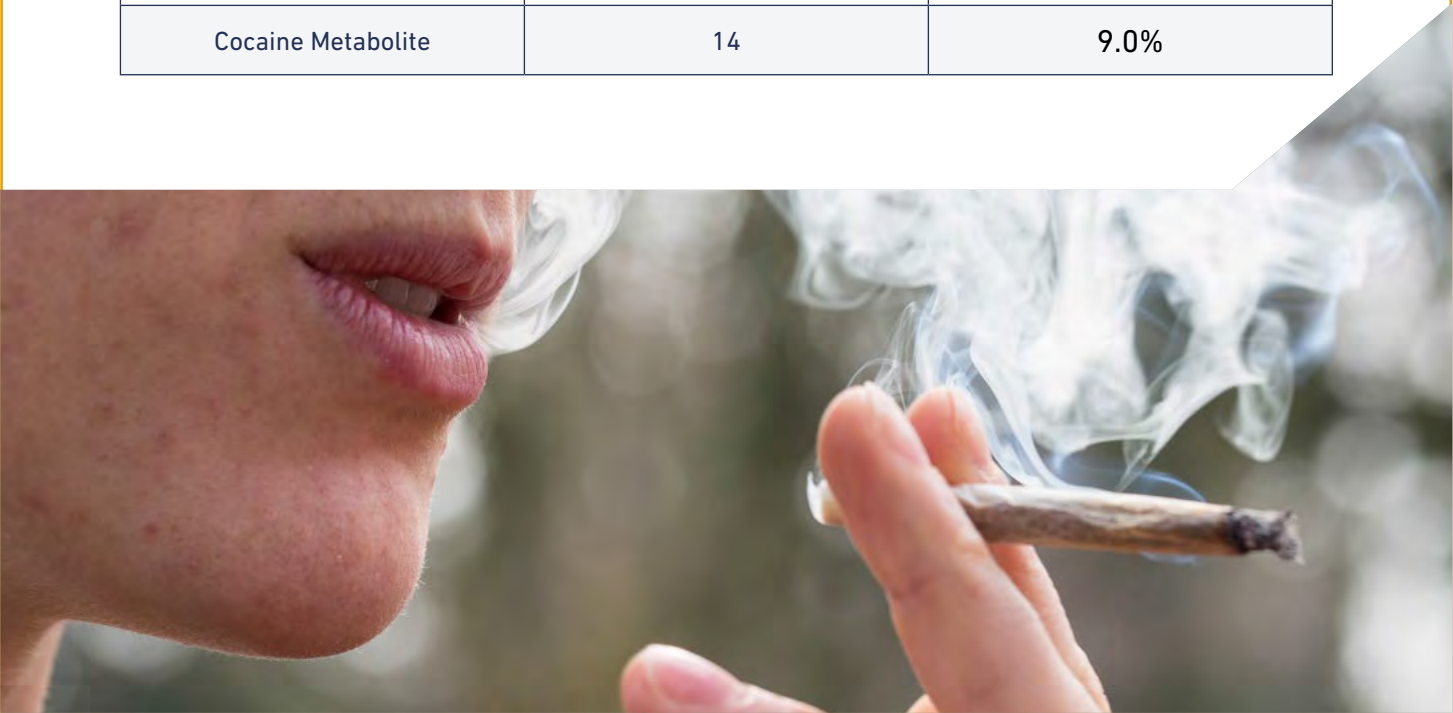
## Toxicology Findings for Homicide Cases

Toxicological analysis was performed on 154 decedents of the 157 homicide cases. Three homicide cases did not receive toxicology testing, one was an external exam and two were skeletal remains. The cases received were screened for alcohol and major drugs of abuse, **Marijuana** being the most prominent substance in all homicide cases. Drugs were absent in 33 specimens of the received homicide cases. Approximately 21% of the homicide cases received by the laboratory were negative for drugs and alcohol.

Description	# of Cases	% of Homicide Cases
N=	157	
Negative	33	21.02%
Positive	121	77.07%
No testing requested or assigned	3	1.91%

The 5 most commonly detected drugs in the homicide cases were:

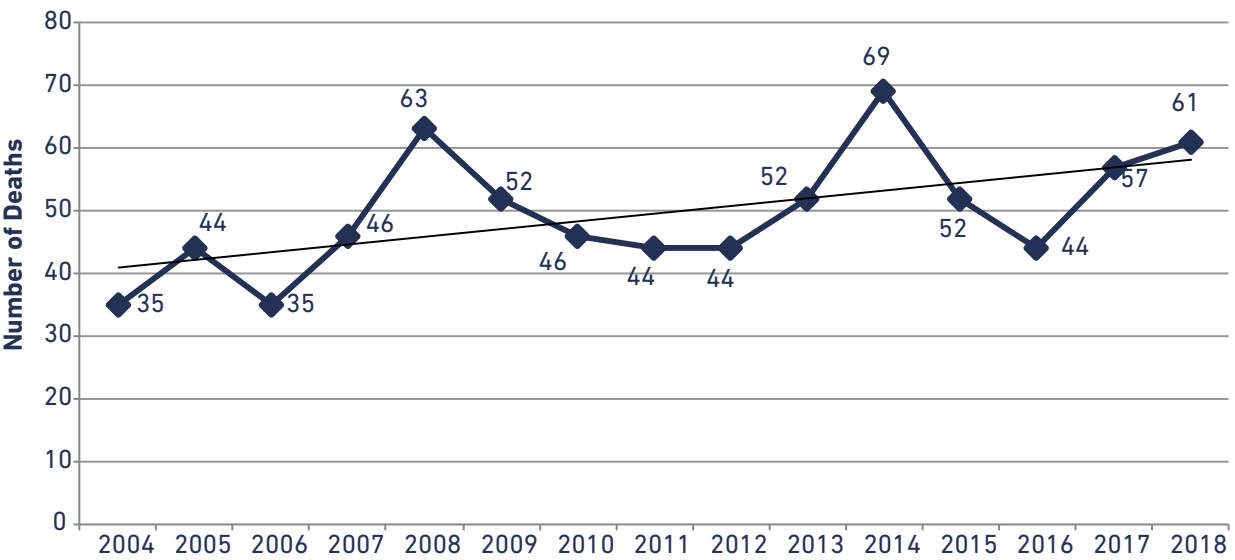
Name of Drug	# of Cases	% of Homicide Cases
Marijuana Metabolite	74	48.0%
Ethanol	33	21.4%
Fentanyl	20	12.9%
Phencyclidine	20	12.9%
Cocaine Metabolite	14	9.0%



## 3.2 SUICIDES

The OCME investigated **61** suicides in CY 2018, which represents a **7%** increase from CY 2017 (**57**). Deaths by suicidal acts were more prevalent in White males and in persons between the ages of 30 to 39 years. In 2017, persons aged from 20 to 29 were amongst the leading age group affected by suicide. Hanging was the leading cause of suicidal deaths. More incidents occurred in **October** than in any other month.

TOTAL NUMBER OF SUICIDES, 2004-2018

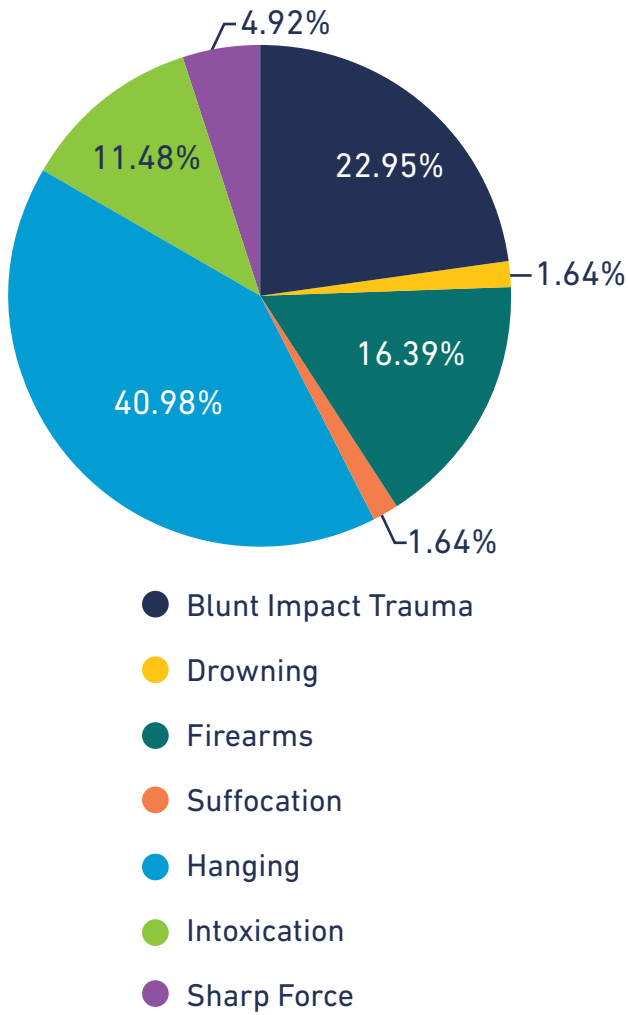


SUICIDES BY JURISDICTION OF INCIDENT OF INJURY

Jurisdiction of Incident	# of Suicides	% of Suicides
District of Columbia	52	85.25%
Maryland	4	6.56%
Virginia	4	6.56%
Unknown	1	1.64%
Total	61	100%

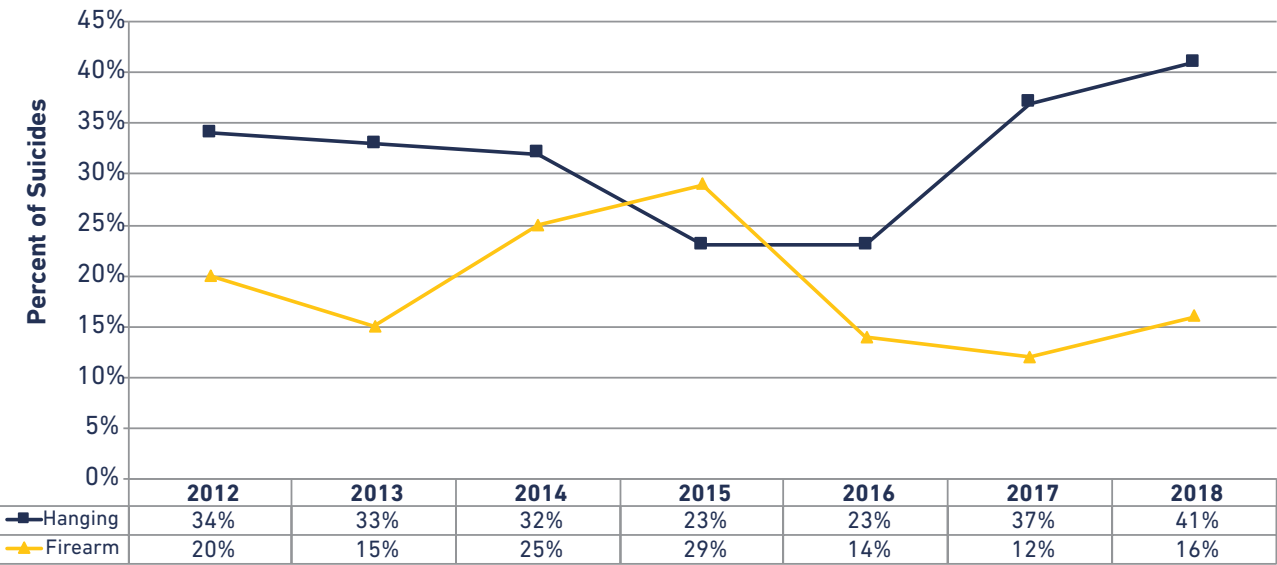
SUICIDES BY CAUSE OF DEATH

Cause of Death	# of Suicides
Hanging	25
Blunt Impact Trauma Building- 8 Bridge- 3 Traffic- 2 Train- 1	14
Intoxication	7
Firearms	10
Sharp Force	3
Suffocation	1
Drowning	1
Total	61

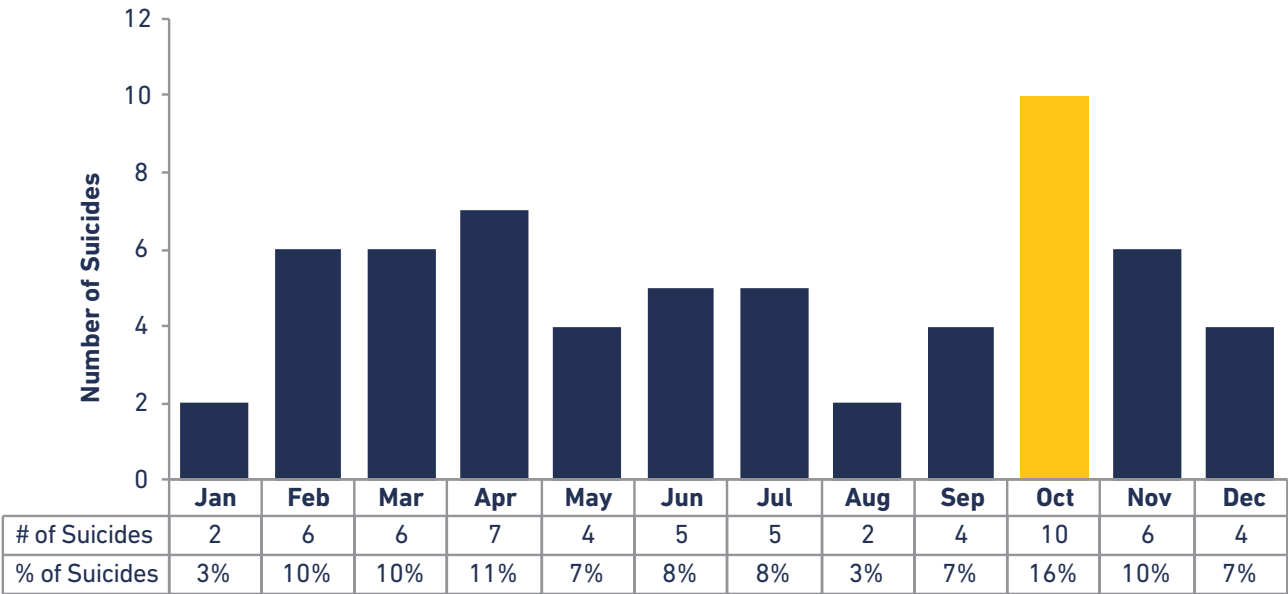


**Note:** The percentages in the "Pie Chart" are rounded up or down to nearest whole number.

CHART - 7-YEAR TREND OF SUICIDES BY FIREARMS AND HANGING



SUICIDES BY MONTH



SUICIDES BY RACE/ETHNICITY AND GENDER

	Female	Male	Total	Percent of Race/Ethnicity
Asian	3	2	5	8%
Black	6	10	16	26%
Hispanic	2	1	3	5%
White	6	31	37	61%
Total	17	44	61	
Percent of Gender	28%	72%		100%





7-YEAR TREND OF SUICIDES BY TOP 2 AFFECTED RACES/ETHNICITIES

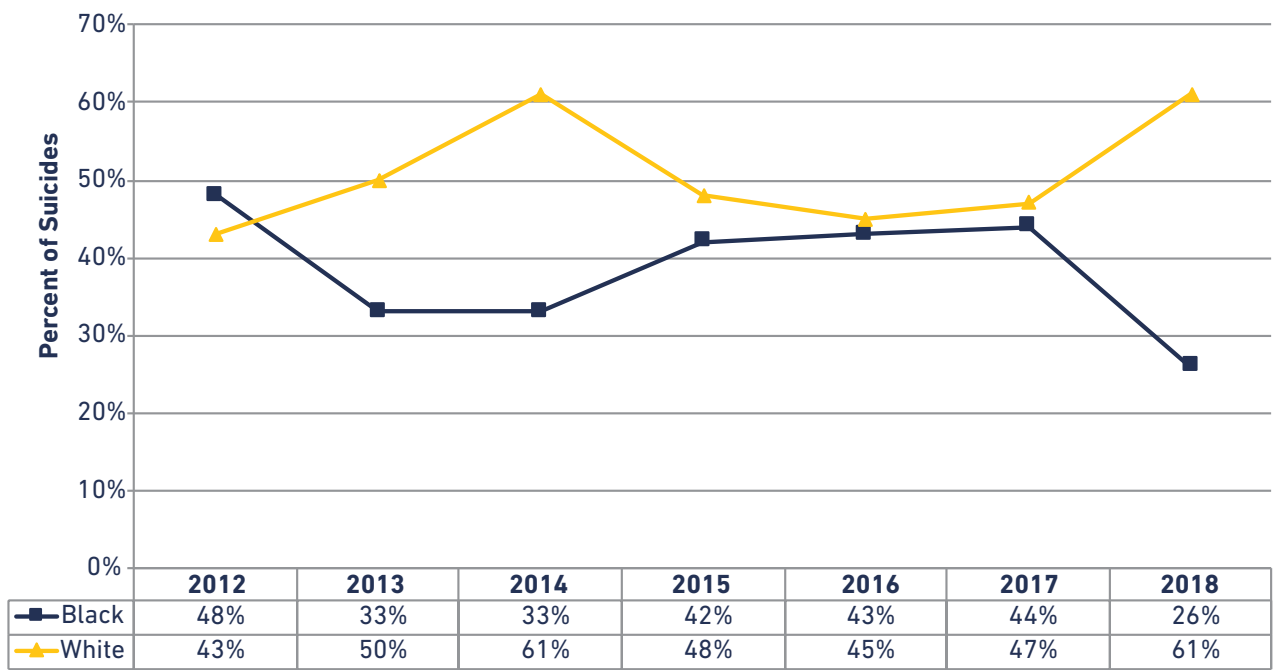
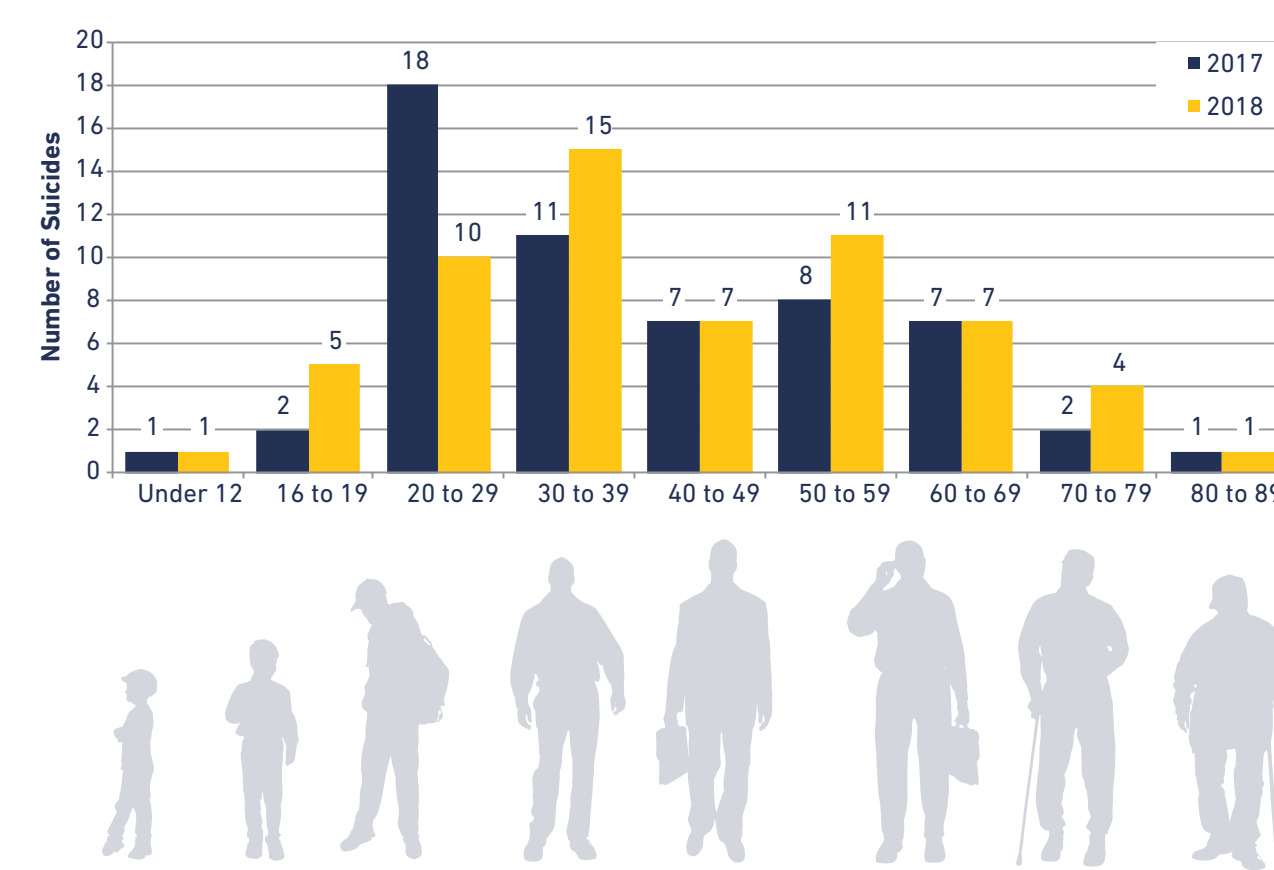
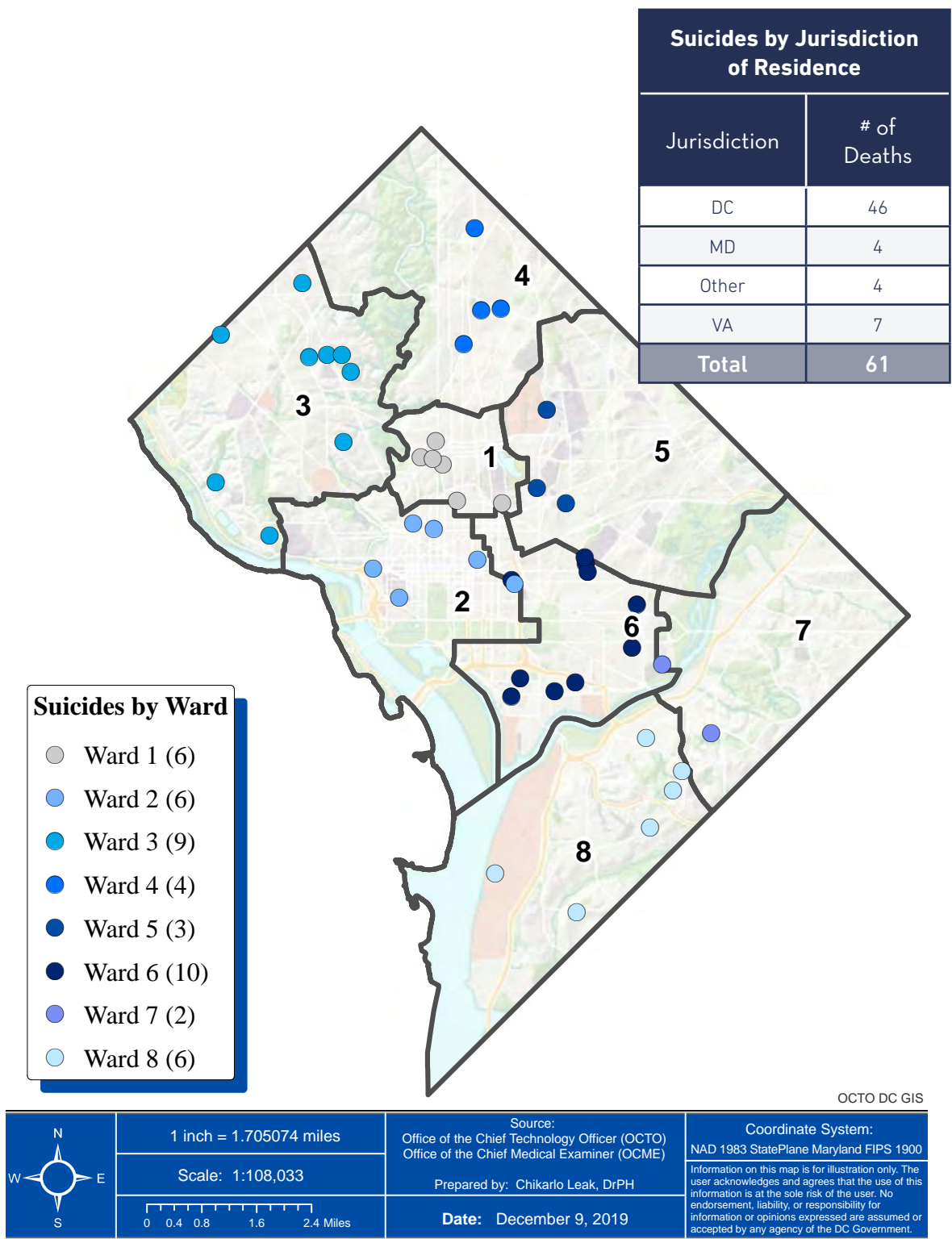


CHART - SUICIDES BY AGE GROUP



Map of Suicides by DC Ward

Of the 61 suicides in the District of Columbia, 46 (75 %) of these decedents were District residents at the time of their death, as reported by their next of kin. The map below illustrates the residence location by ward at the time of their death.



## Toxicology Findings for Suicide Cases

Of the 61 suicide cases investigated by OCME, toxicology analysis was performed in 58 cases. Drugs were absent in 17 suicide cases. Of the positive cases, ethanol is the most prominent substance in all suicide cases. Of the positive cases, ethanol is the most prominent substance in all suicide cases.

Description	# of Suicide Cases	% of Suicide Cases
N=	61	
Negative	17	27.87%
Positive	41	67.21%
No testing requested or assigned	3	4.92%

The 5 most notable detected drugs in suicide cases were:

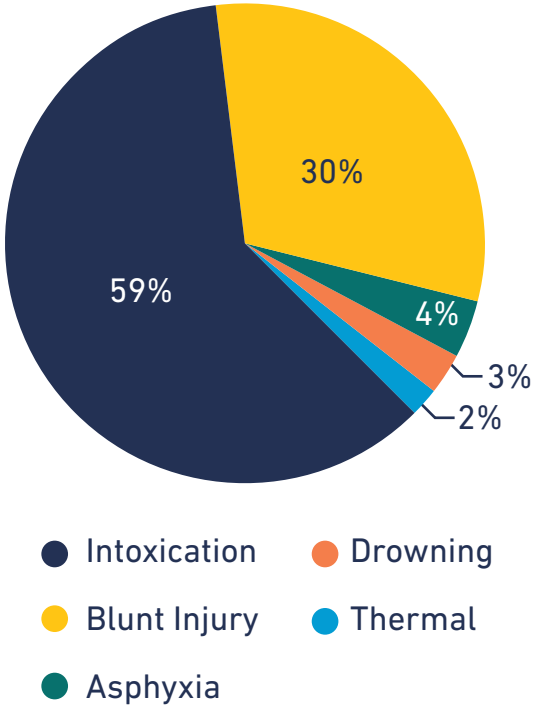
Name of Drug	# of Suicide Cases	% of Suicide Cases
Ethanol	17	29.8%
Marijuana Metabolite	10	17.5%
Fentanyl	7	12.2%
Diphenhydramine	5	8.7%
Amphetamine	4	7.0%

### 3.3 ACCIDENTS

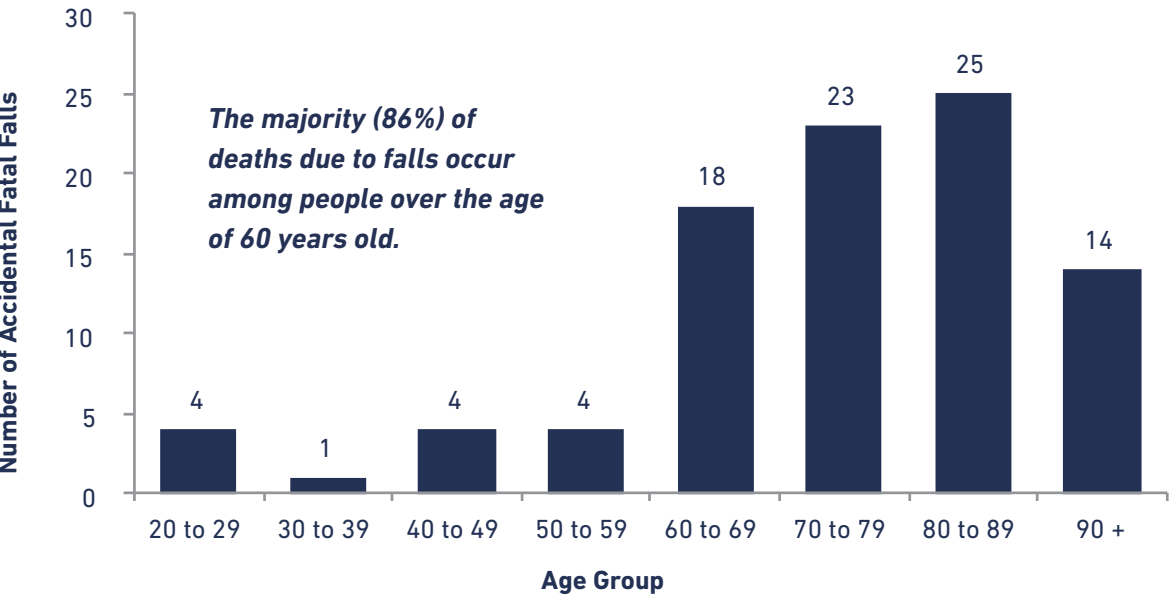
OCME investigated **536** accidental deaths in CY 2018. Of the **536** cases investigated, **63** were related to motor vehicle accidents, **93** were related to falls and **317** of the accidental deaths were the direct result of prescription and/or illicit drug use. There was a decrease in the total number of deaths due to accidents in 2018; however, over 50% of the accidental deaths in the District of Columbia were due to accidental intoxications (drug overdoses). There were more accidental deaths in September than any other month. The special report section of this annual report highlights the increase in the number of opioid-related fatal overdoses seen at the OCME.

## ACCIDENTS BY CAUSE OF DEATH<sup>10</sup>

Causes of Accidental Deaths	# of Deaths	% of Deaths
Intoxication	317	59.14%
Blunt Injury - Due to Fall (93) - Due to Traffic (63) - Due to Other (6)	162	30.22%
Asphyxia	20	3.73%
Drowning	14	2.61%
Thermal	10	1.87%
Hypothermia	5	0.93%
Other	3	0.56%
Inhalation of Combustible Product	3	0.56%
Electrocution	1	0.19%
Therapeutic Complication	1	0.19%
Total	536	100%



## BREAKDOWN OF FALLS BY AGE GROUP



<sup>10</sup> For illustrative purposes, this pie chart does not include causes of death that are 2% or less of the total number of deaths.



GRAPH – FIFTEEN-YEAR OVERVIEW OF ACCIDENTAL DEATHS, 2004-2018

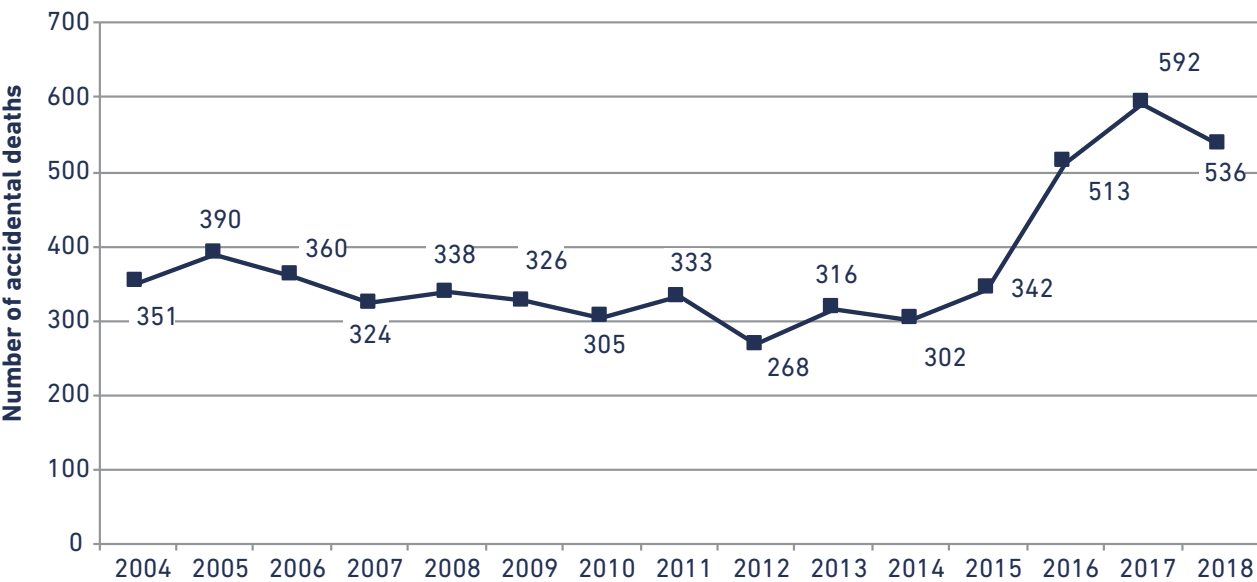
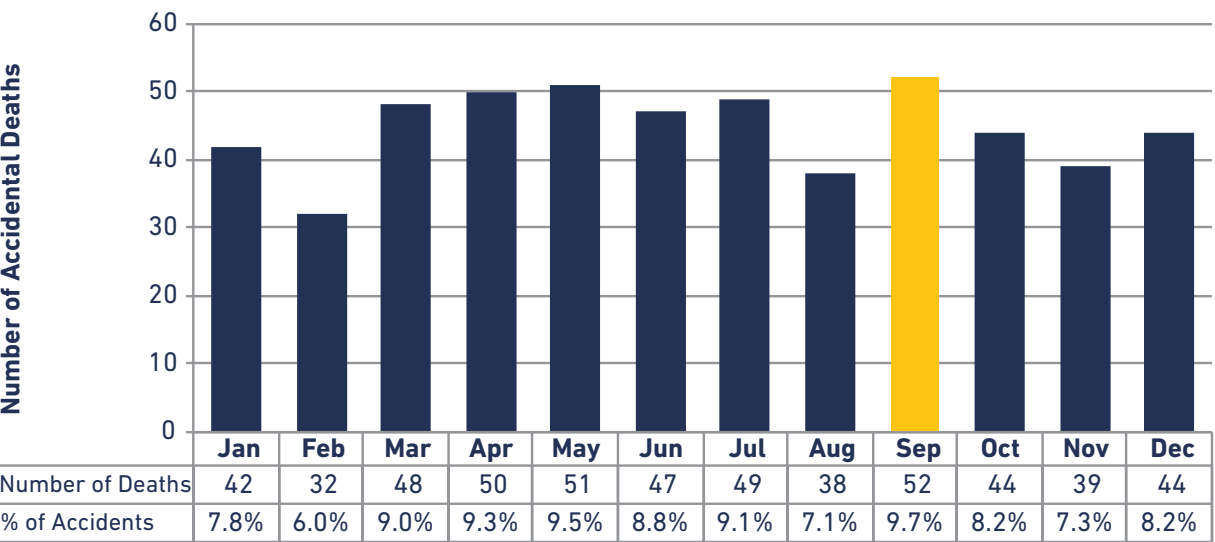


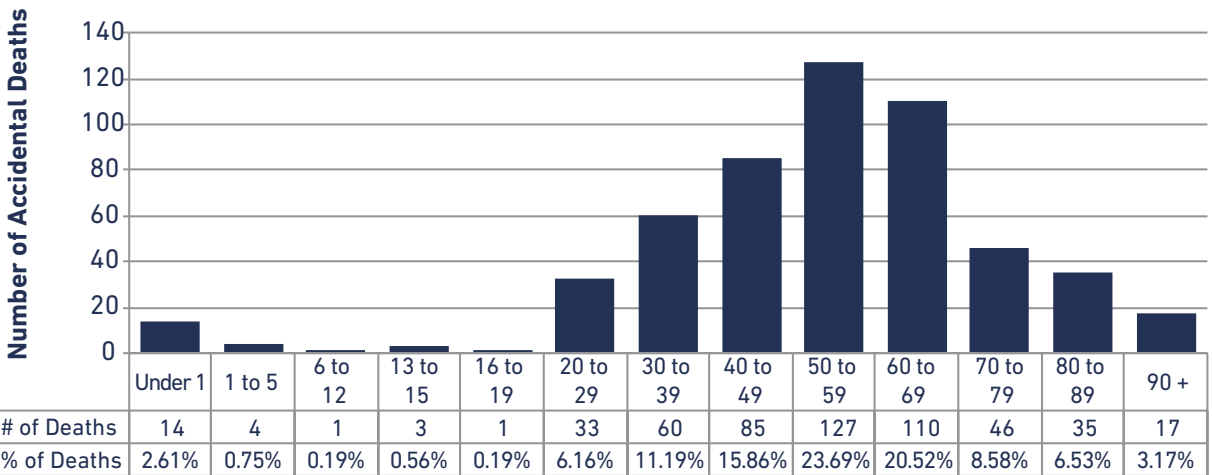
CHART – ACCIDENTAL DEATHS BY MONTH



ACCIDENTAL DEATHS BY RACE/ETHNICITY AND GENDER

	Female	Male	Total	Percent of Race/Ethnicity
Black	99	279	378	70.52%
White	44	76	120	22.39%
Hispanic	3	24	27	5.04%
Asian	2	4	6	1.12%
Other	0	5	5	0.93%
Total	148	388	536	
Percent of Gender	28%	72%		100%

ACCIDENTAL DEATHS BY AGE

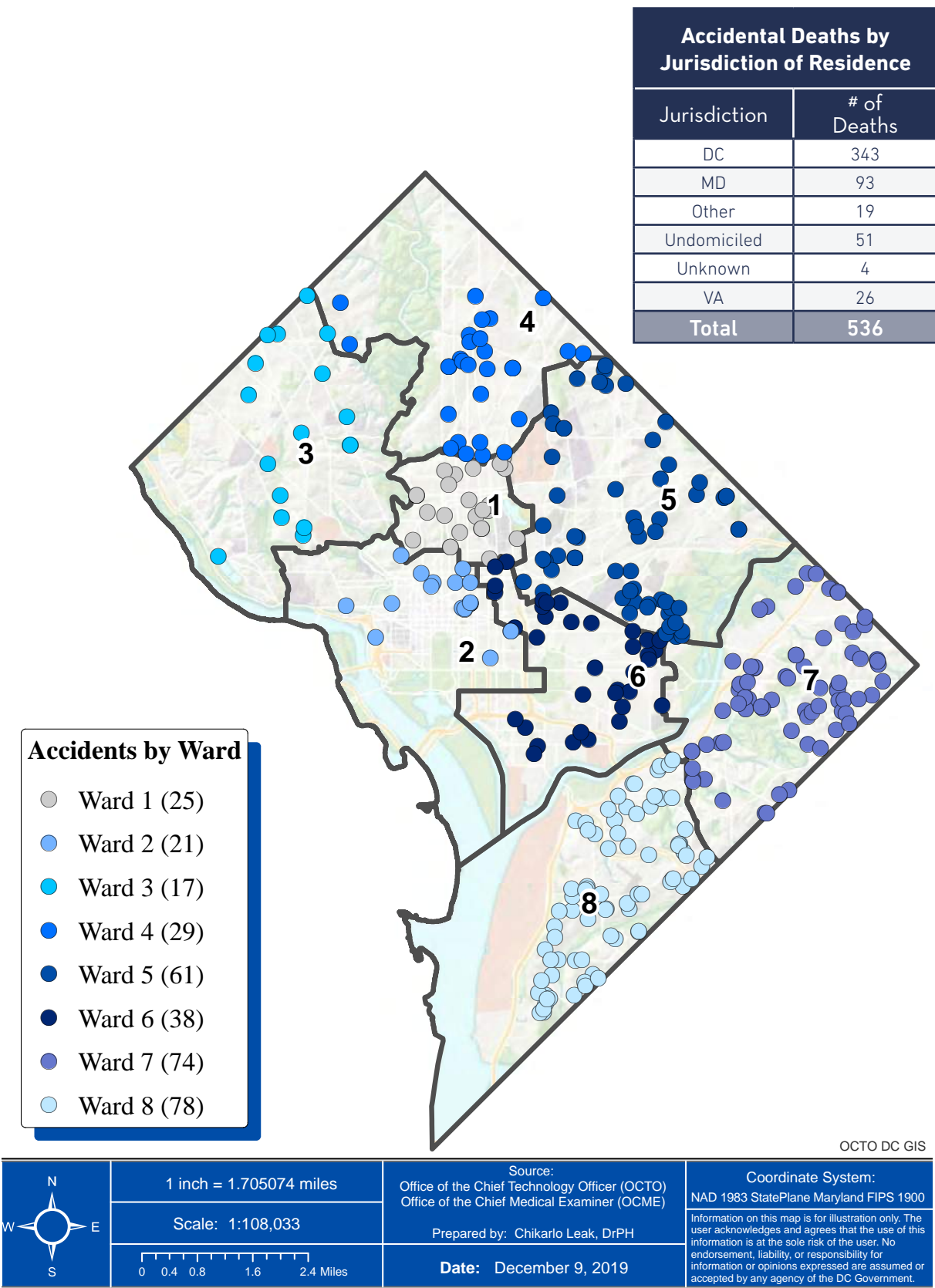


Toxicology Findings for Accident Cases

The toxicology division received 507 accident cases and toxicological analysis was performed on 406 of those cases. Of the analyzed cases, drugs were absent in 40 accident cases. Fentanyl is the most prominent substance in all accident cases.

Description	# of Accidental Death Cases	% of Accidental Death Cases
N=	507	
Negative	40	7.8%
Positive	366	72.1%
No testing requested or assigned	101	19.9%

MAP OF ACCIDENTS BY DC WARD



The 10 most commonly detected drugs in the accident cases were:

Name of Drug	# of Accidental Death Cases	% of Accidental Death Cases
Fentanyl	189	46.5%
Cocaine Metabolite	149	36.6%
Ethanol	130	32.0%
Morphine	106	26.1%
Naloxone	72	17.7%
Despropionyl-Fentanyl (4-ANPP)	66	16.2%
Marijuana Metabolite	62	15.2%
Phencyclidine	55	13.5%
Diphenhydramine	27	6.6%
Para-Fluoroisobutyrylfentanyl	27	6.6%

3.3.1. Traffic Deaths

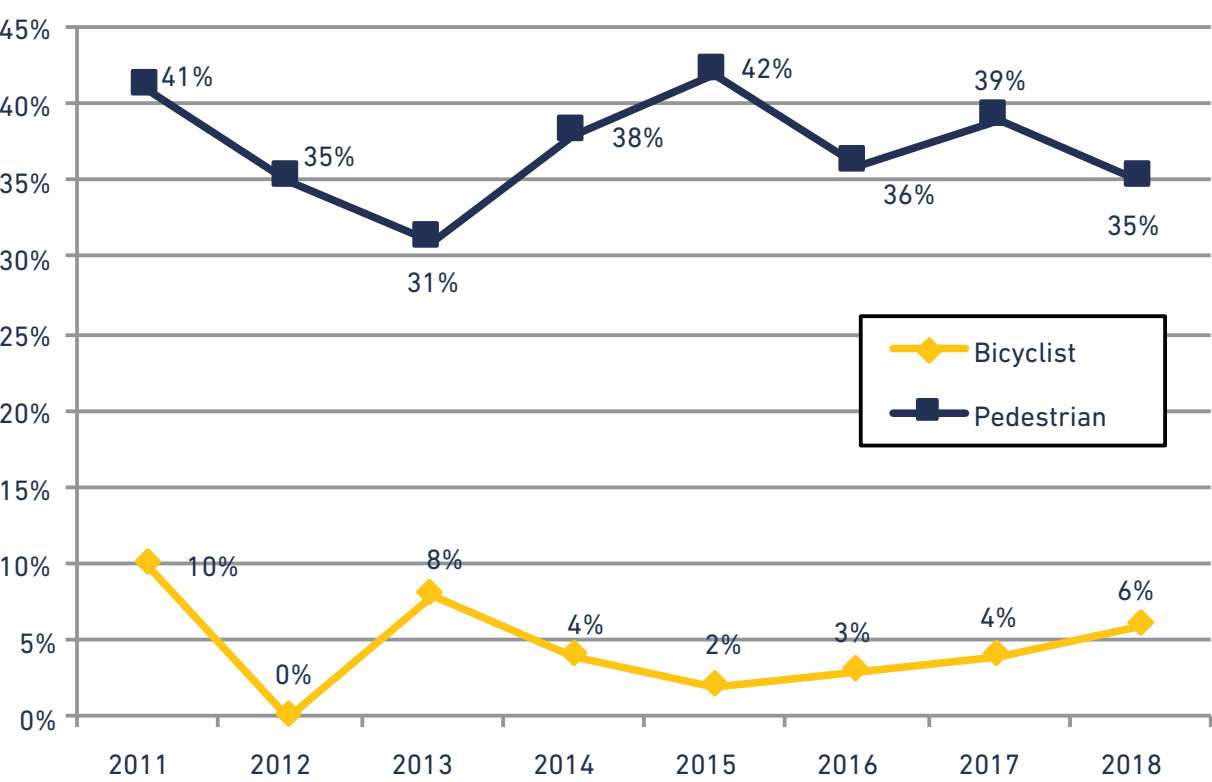
Of the **63** traffic related deaths certified by the OCME in Calendar Year 2018 the majority involved drivers of motor operated vehicles (all types). Traffic fatalities were most prevalent among decedents between the ages of 20 to 29 and in the month of June.

ROLE OF THE DECEDENT IN ACCIDENTAL TRAFFIC DEATHS

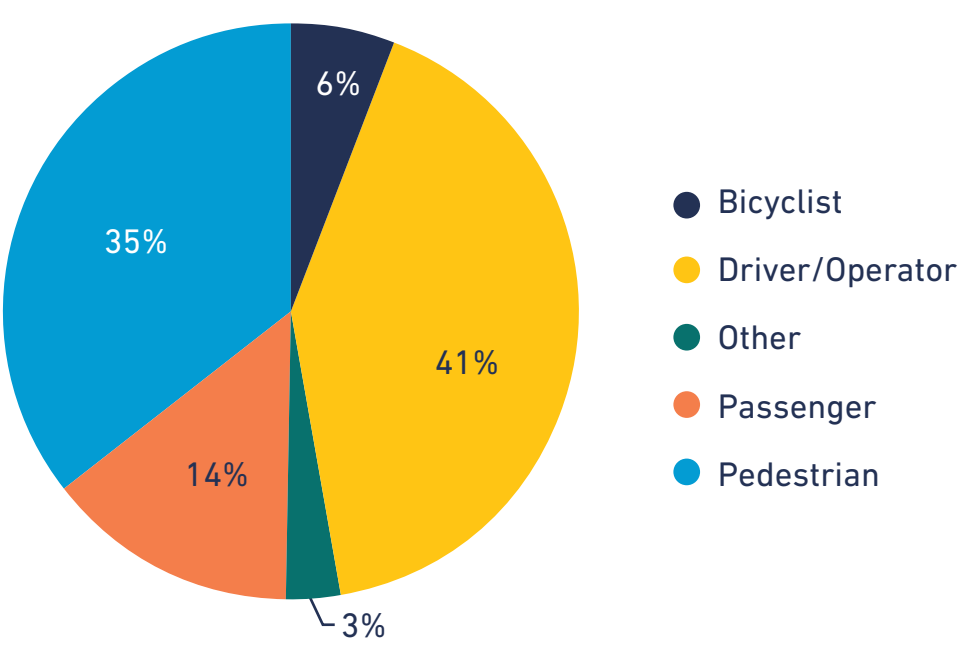
Role	# of Traffic Deaths	% of Traffic Deaths
<b>Driver</b> - Motor Vehicle(15) - Motorcycle (10) - Moped (1)	26	41.27%
Pedestrian	22	34.92%
Passenger - Motor Vehicle (9)	9	14.29%
Bicyclist	4	6.35%
Other	2	3.17%
<b>Total</b>	<b>63</b>	<b>100%</b>



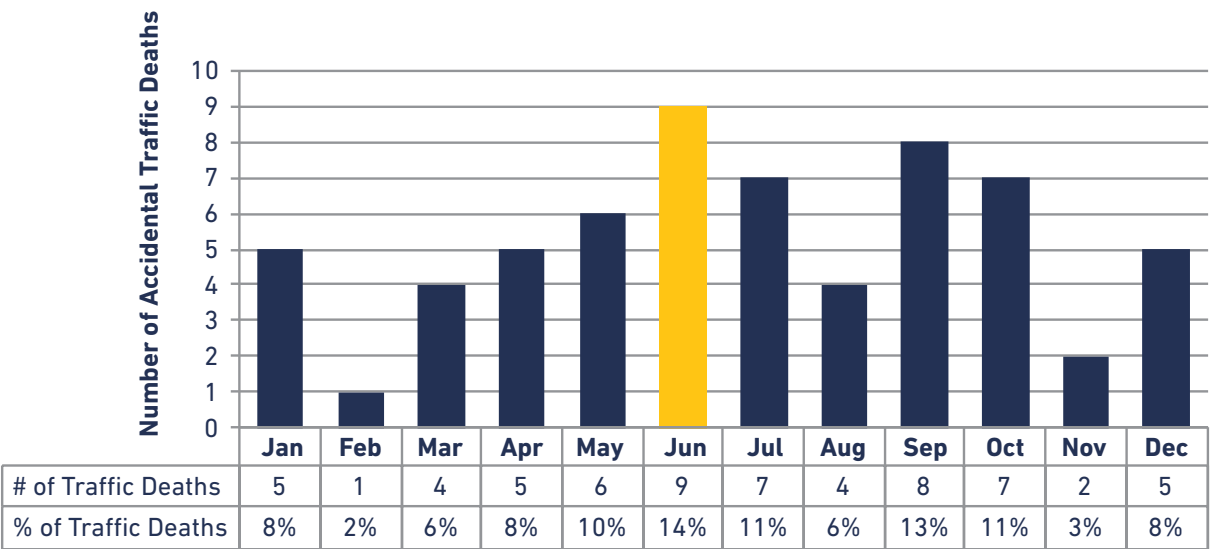
CHART - 8-YEAR TREND OF ROLE OF DECEDENT IN ACCIDENTAL TRAFFIC DEATHS BY PEDESTRIANS AND BICYCLISTS



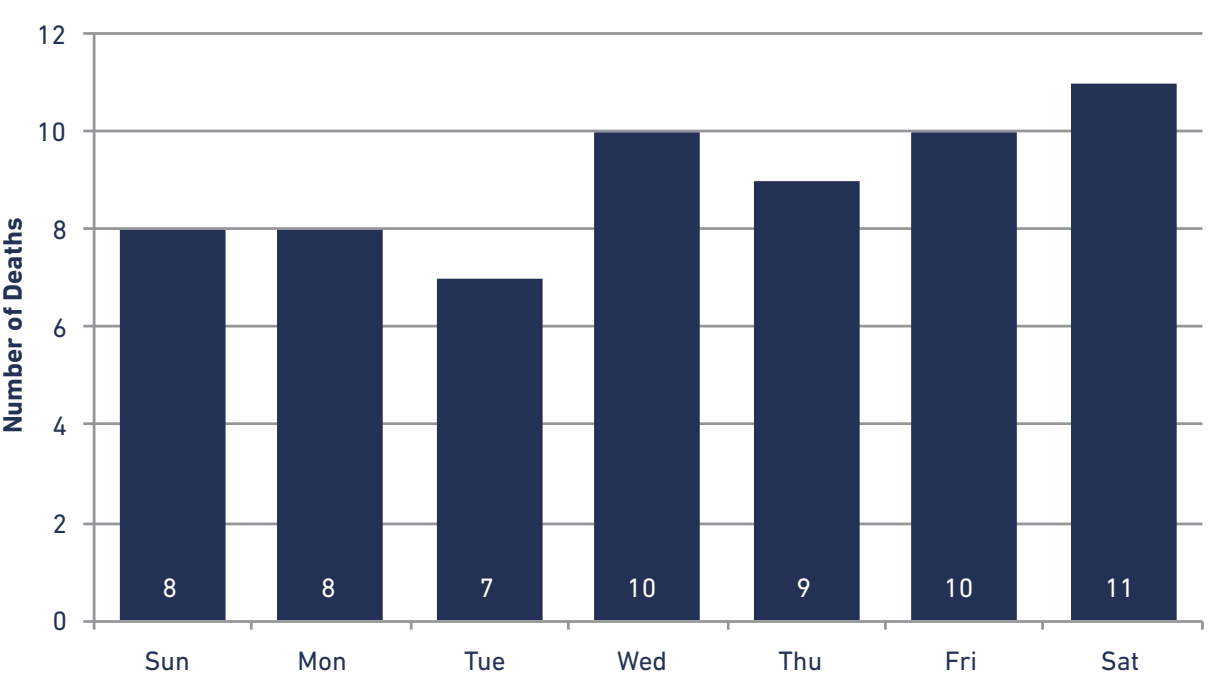
PIE CHART - ROLE OF DECEDENT IN TRAFFIC ACCIDENT



TRAFFIC DEATHS BY MONTH



TRAFFIC DEATHS BY DAY

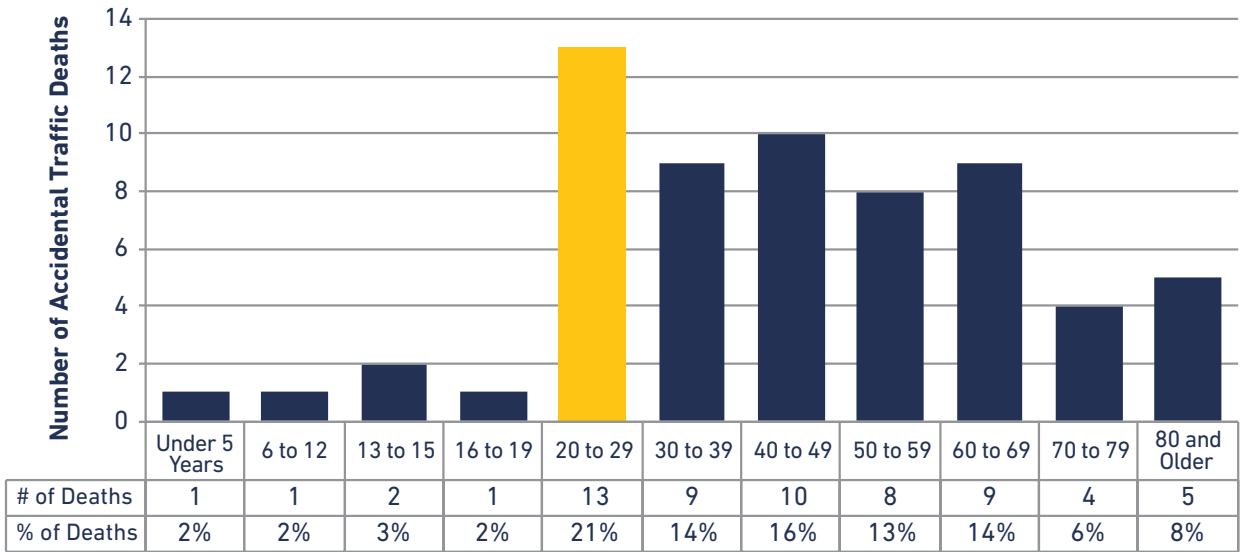


\*The date of the Traffic-related death may not be the same as the date the traffic incident occurred.

TRAFFIC DEATHS BY RACE/ETHNICITY AND GENDER

	Female	Male	Total	Percent of Race/Ethnicity
Black	4	27	31	49.21%
Hispanic	2	8	10	15.87%
Other	1	3	4	6.35%
White	7	11	18	28.57%
Total	14	49	63	
Percent of Gender	22%	78%		100%

TRAFFIC DEATHS BY AGE



TRAFFIC DEATHS BY JURISDICTION OF RESIDENCE

Jurisdiction of Residence	# of Traffic Deaths	% of Traffic Deaths
District of Columbia	24	38.10%
Maryland	25	39.68%
Virginia	10	15.87%
Other	4	6.35%
Total	63	100%

Toxicology Findings for Traffic Accident Cases

Of the 63 Traffic-related deaths investigated by OCME, toxicology analysis was performed on 41 cases. Drugs were absent in 11 traffic accident cases. Of the positive cases, marijuana is the most prominent substance in all traffic accident cases followed by ethanol.

Description	# of Cases	% of Cases
N=	63	
Negative	11	17.5%
Positive	30	47.6%
No testing requested or assigned	22	34.9%

The 5 most commonly detected drugs in the traffic accident cases were:

Name of Drug	# of Cases	% of Traffic Cases
Ethanol	12	29.2%
Marijuana Metabolite	12	29.2%
Fentanyl	6	14.6%
Cocaine Metabolite	5	12.1%
Morphine	4	9.7%

In the 12 traffic deaths positive for ethanol, 10 were greater than the legal limit (0.08 g/100 mL) for driving under the influence in the District of Columbia. The average blood alcohol concentration of the positive results is approximately 0.18 g/100 mL.

3.3.2 – Toxicology Findings for Deaths due to Accidental Drug Overdose

There were 317 OCME cases where death was directly related to drug abuse. Toxicology analysis was performed on 308 cases. Five (5) cases were determined to be accidental overdoses by reviewing hospital records; therefore, no specimens were submitted for toxicology. The most prevalent drug in the population was fentanyl. Additional information regarding accidental intoxications can be found in the “Special Reports” section of this report.



Description	# of Cases	% of Cases
N=	308	
Negative	2	0.6 %
Positive	297	96.4 %
Storage	9	2.9 %

The 10 most commonly detected drugs in drug overdose cases were:

Contributing Drugs	# of Cases	% of Cases
Fentanyl	179	59.8%
Cocaine Metabolite	136	45.4%
Ethanol	106	35.4%
Morphine	98	32.7%
Naloxone	70	23.4%
Despropionyl-Fentanyl (4-ANPP)	65	21.7%
Phencyclidine	46	15.3%
Marijuana Metabolite	42	14.0%
Diphenhydramine	26	8.6%
Para-Fluoroisobutyrylfentanyl	26	8.6%



## Accidental Drug Overdose Fatalities by Age

The majority of drug overdose deaths occurred in decedents between the ages of 51 and 60 years. Fentanyl was the most frequently detected drug in every age group, followed by cocaine, ethanol, then morphine (heroin). The prevalence of phencyclidine, oxycodone, methadone, and marijuana metabolites has been included.

		Age							
		0-10 (n=13)	11-20 (n=0)	21-30 (n=13)	31-40 (n=49)	41-50 (n=66)	51-60 (n=109)	61-70 (n=62)	71-80 (n=9)
Drugs	Methadone (n=16)	0	0	0	3	1	5	6	1
	Fentanyl (n=179)	0	0	6	33	32	71	31	6
	Ethanol (n=106)	0	0	4	16	25	43	16	2
	Morphine (n=98)	0	0	4	17	15	32	25	5
	Phencyclidine (n=46)	0	0	2	12	13	14	5	0
	Cocaine (n=136)	0	0	3	16	25	59	31	2
	Oxycodone (n=16)	0	0	1	2	6	4	3	0
	Marijuana (n=42)	0	0	2	15	8	13	4	0

**Note:** "N" represents the total number of deaths due to accidental drug overdose found within the stated age group or drug category.



## Accidental Drug Overdose Fatalities by Race

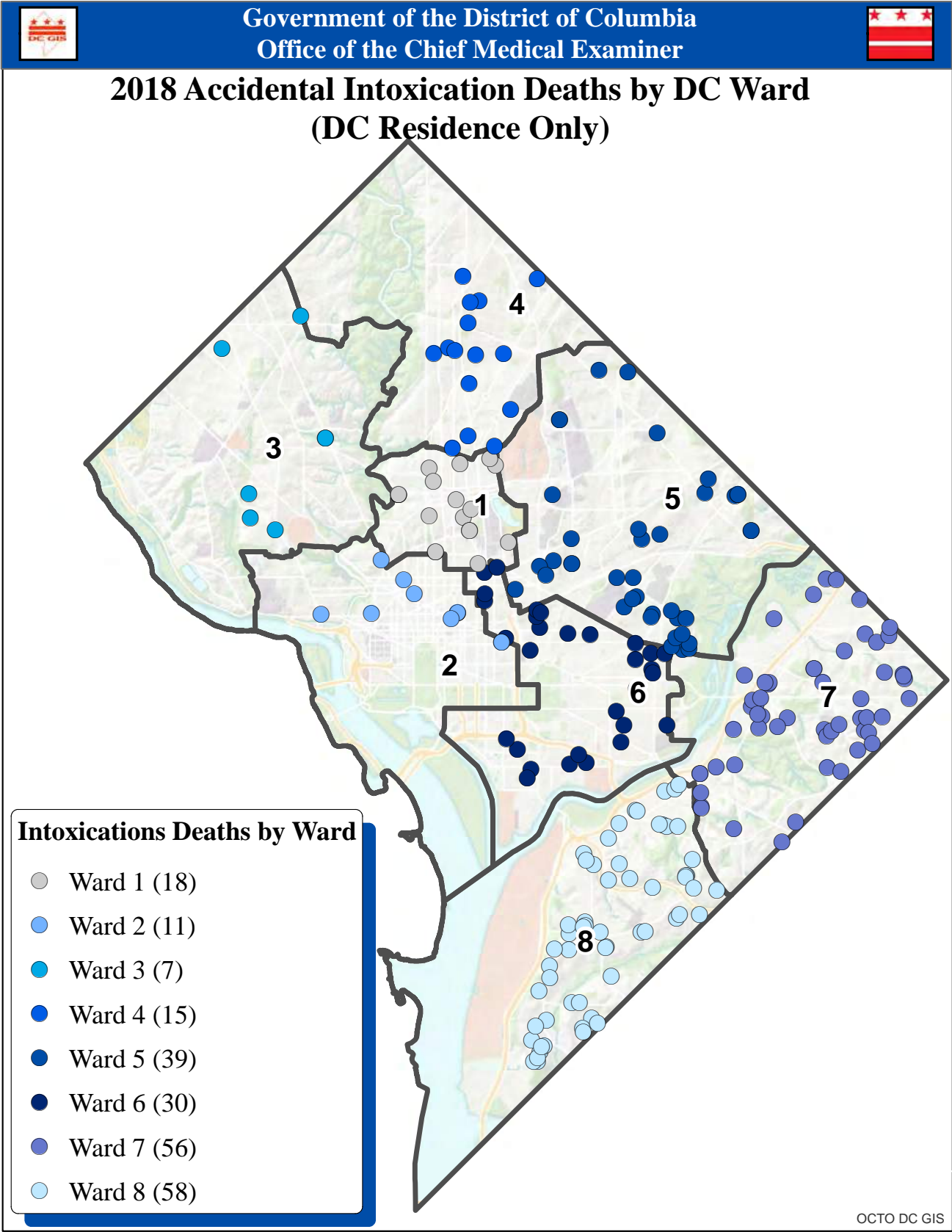
The vast majority of overdose deaths occurred in black decedents, and again the most frequently detected drugs in both black and white decedents were fentanyl, ethanol, cocaine, and morphine. The prevalence of phencyclidine (PCP), oxycodone, marijuana, and methadone has been included.

	Drugs	Race			
		Black (n=259)	Hispanic (n=7)	Other (n=2)	White (n=40)
	Fentanyl	151	3	1	24
	Phencyclidine	44	0	0	2
	Methadone	14	0	0	2
	Ethanol	84	4	0	18
	Cocaine	121	1	0	14
	Morphine	85	2	0	11
	Oxycodone	13	0	0	3
	Marijuana	15	0	1	10

**Note:** “N” represents total number of deaths due to accidental drug overdose found within the stated race

## Map of Accidental Drug Overdoses by DC Ward

Of the 536 accidental deaths, 343 (64%) were DC residents. There were a total of 317 accidental intoxication deaths in the District of Columbia in 2018, of which 291 (80%) were residents of the District of Columbia. The map below illustrates the location of the decedent’s residence by ward at the time of their death, as reported by the decedent’s next of kin. Additional information regarding accidental intoxications can be found in the “Special Reports” section of this report.

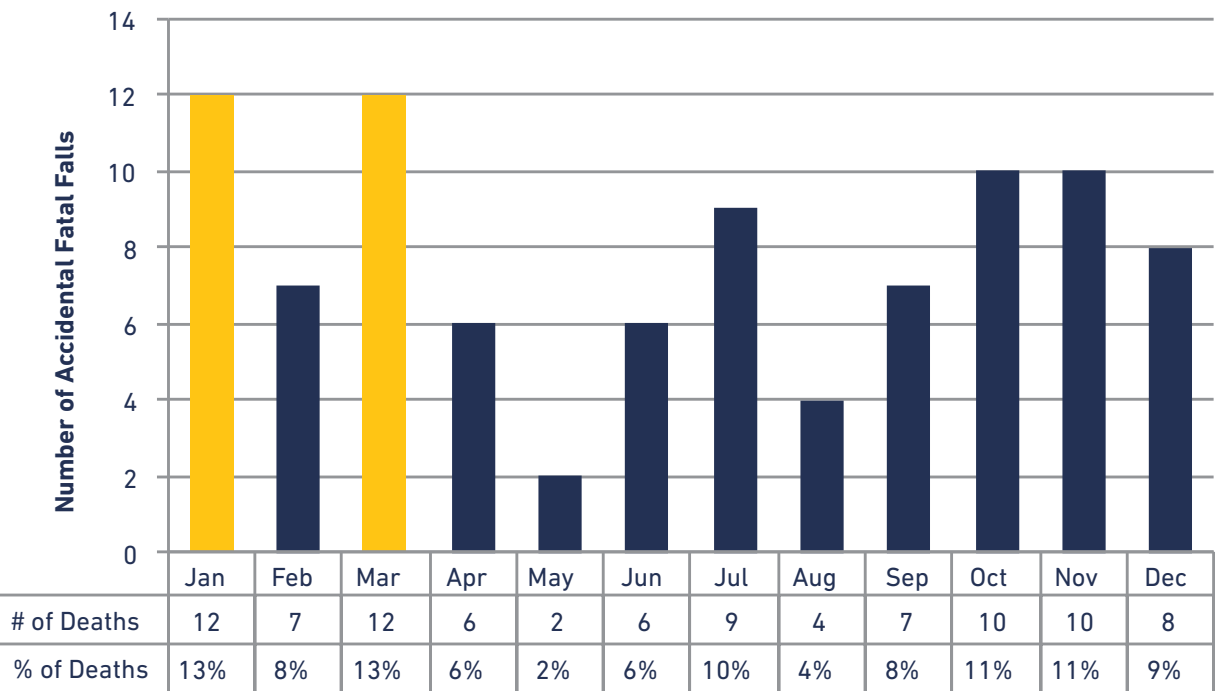




3.3.3. Accidental Blunt Injuries due to Falls

Of the **93** blunt injuries due to accidental falls certified by the OCME in Calendar Year 2018, the majority involved decedents 60 and above. The majority of decedents were male and largely Black followed White. Deaths due to falls were most prevalent in January and March.

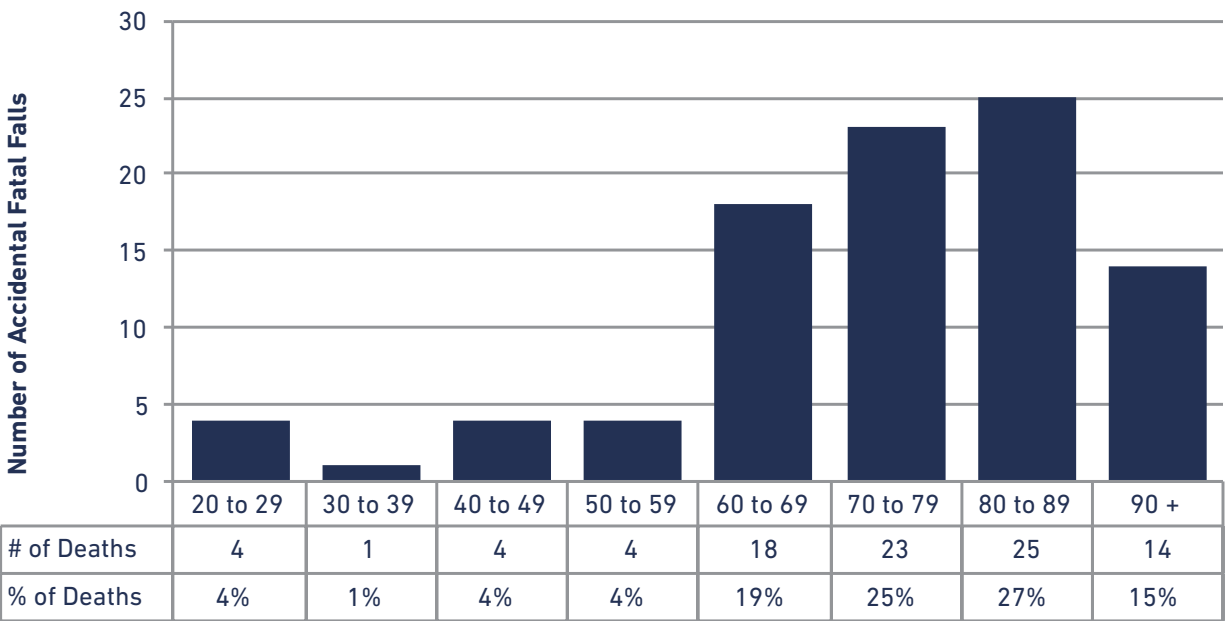
ACCIDENTAL FALLS BY MONTH



ACCIDENTAL FALLS BY RACE/ETHNICITY AND GENDER

	Female	Male	Total	Percent of Race/Ethnicity
Black	18	26	44	47.31%
White	17	24	41	44.09%
Hispanic	0	5	5	5.38%
Asian	0	2	2	2.15%
Other	0	1	1	1.08%
Total	35	58	93	
Percent of Gender	38%	62%		100%

ACCIDENTAL FALLS BY AGE

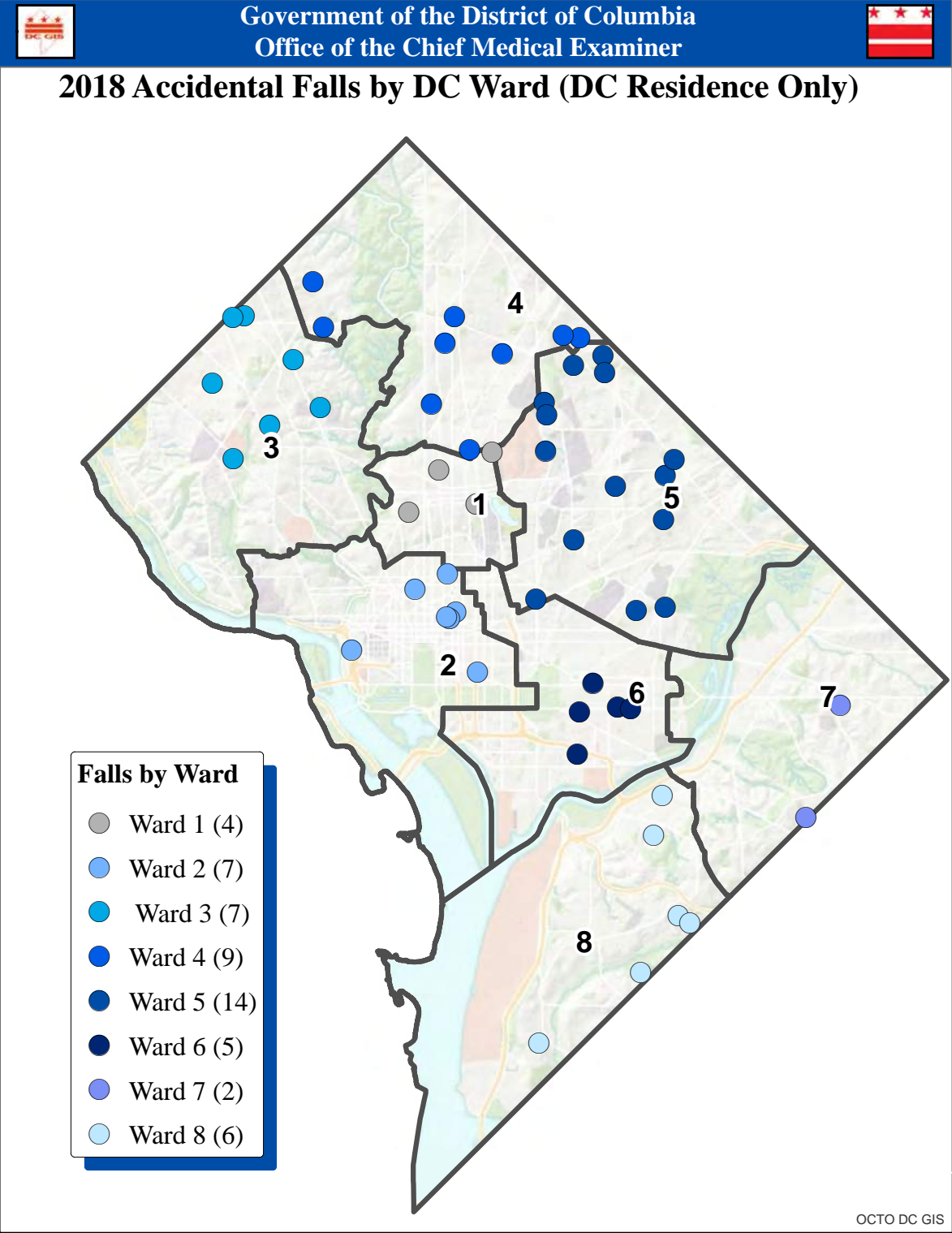


ACCIDENTAL FALLS BY JURISDICTION OF RESIDENCE

Jurisdiction of Residence	# of Accidental Falls	% of Accidental Falls
District of Columbia	54	58.06%
Maryland	24	25.81%
Virginia	9	9.68%
Other	5	5.38%
Undomiciled	1	1.08%
Total	93	100%



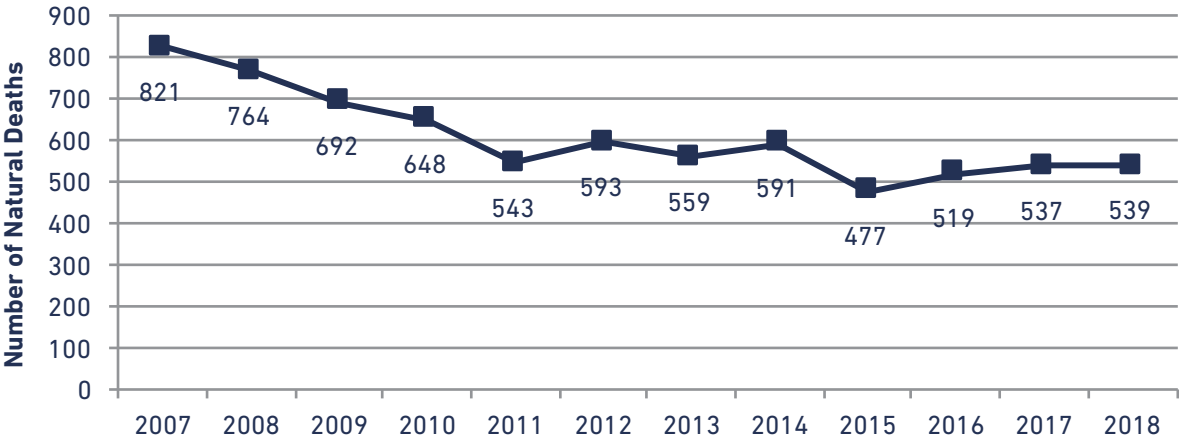
There was a total of **93** accidental deaths caused by blunt injuries due to falls in the DC in 2018, of which 55 (54%) were residents of the DC. The map below illustrates the location of the decedent's residence by ward at the time of their death, as reported by the decedent's next of kin.



### 3.4 – NATURAL DEATHS

Natural deaths continue to account for a large majority of cases reported to and accepted by the OCME. In 2018, **539** deaths were determined to be a result of natural disease. Deaths caused by Cardiovascular Diseases continue to dominate in this category with **409** fatalities. Deaths due to the alcoholism continued to be the second highest (**21**) cause of natural deaths. Blacks were most prevalent in this category representing **78.29%** of the population affected. More natural deaths occurred in **January** than in any other month.

TOTAL NUMBER OF NATURAL DEATHS BY YEAR, 2007-2018

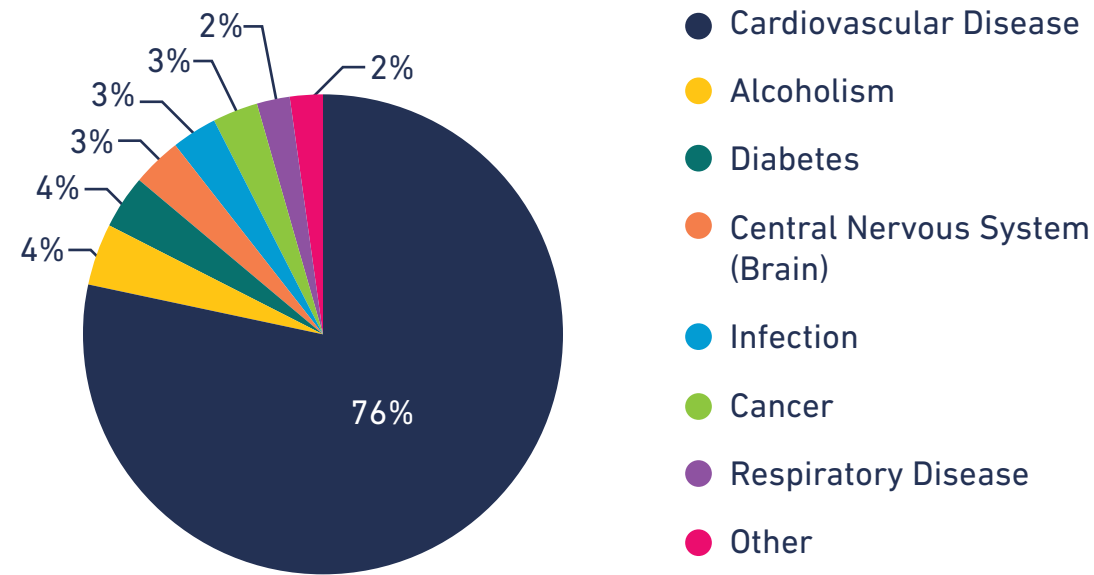


NATURAL DEATHS BY CAUSE

Causes of Natural Deaths	# of Natural Deaths	% of Natural Deaths
Cardiovascular Disease	409	76%
Alcoholism	21	4%
Diabetes	20	4%
Central Nervous System (Brain)	17	3%
Infection	16	3%
Cancer	15	3%
Respiratory Disease	12	2%
Other	11	2%
Obesity or Complications of Obesity	8	1%
Auto Immune/Immune System Disease	2	0.37%
AIDS	2	0.37%
Genetic Disorder	1	0.19%
Therapeutic Complications	1	0.19%
Complications of Drug Abuse	1	0.19%
Infectious Disease	1	0.19%
Blood Disease/Hemopoietic System	1	0.19%
Gastrointestinal Disease	1	0.19%
Total	539	100%

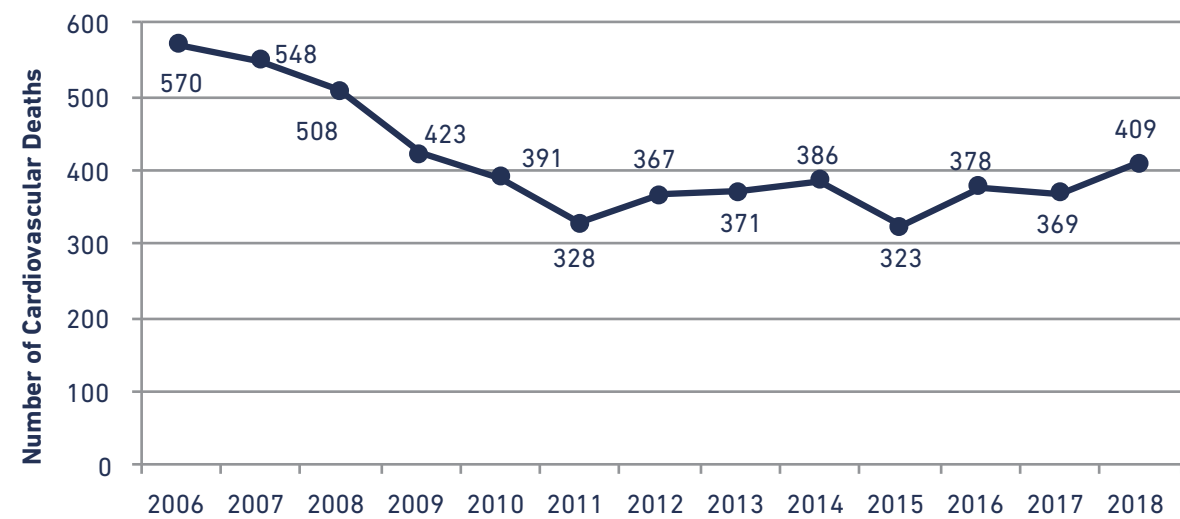


NATURAL DEATHS BY CAUSE



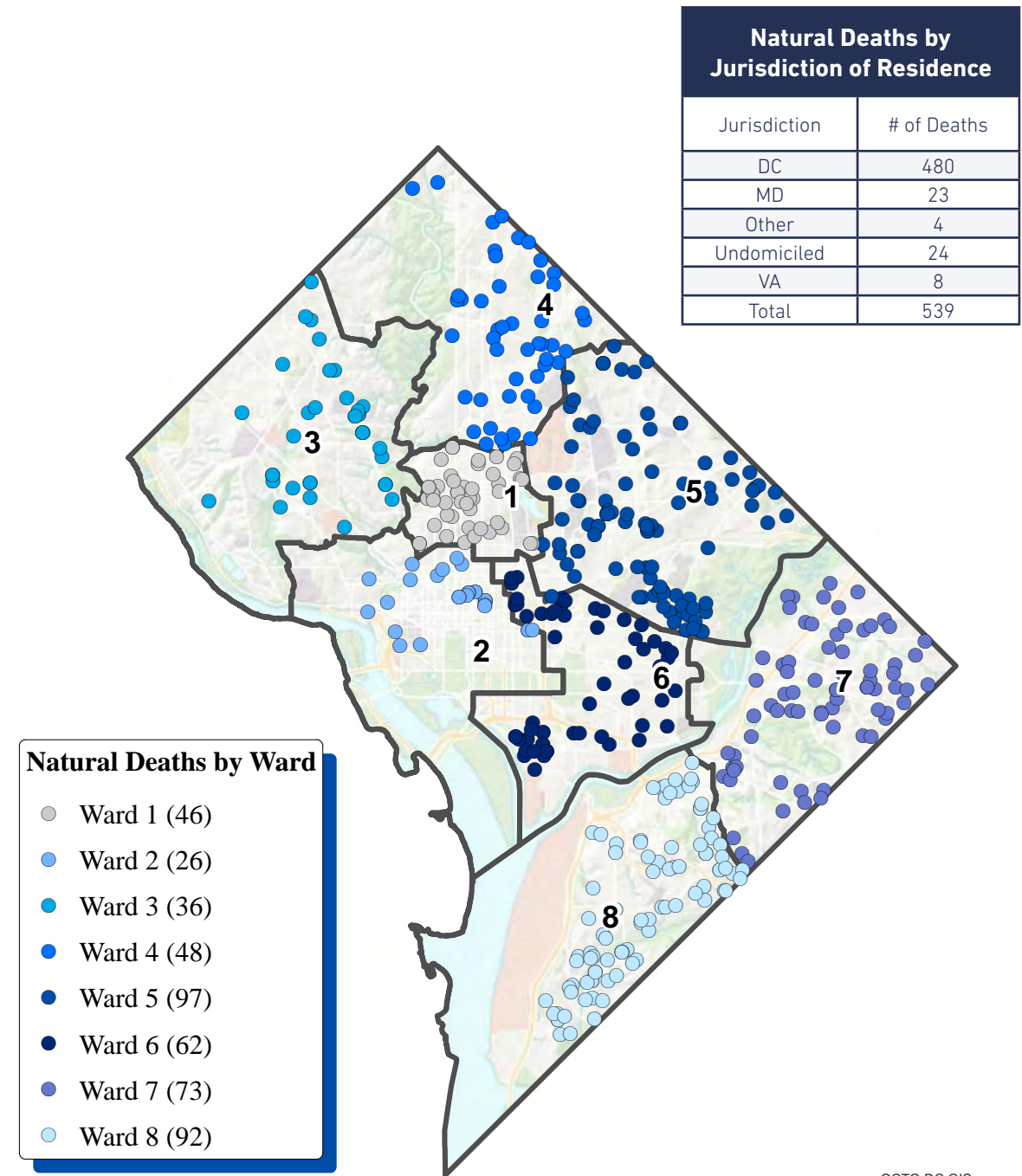
**Note:** This graph does not include causes of death that are less than 2%.

YEARLY TREND IN NATURAL DEATHS DUE TO CARDIOVASCULAR DISEASE REPORTED TO THE OCME (2006-2018)<sup>11</sup>



Map of Natural Deaths by DC Ward

Of the **539** Natural deaths in the District of Columbia, 480 (89%) of these decedents were District residents at the time of their death, as reported by their next of kin. The map below illustrates the residence location by ward at the time of their death.



Natural Deaths by Jurisdiction of Residence	
Jurisdiction	# of Deaths
DC	480
MD	23
Other	4
Undomiciled	24
VA	8
Total	539

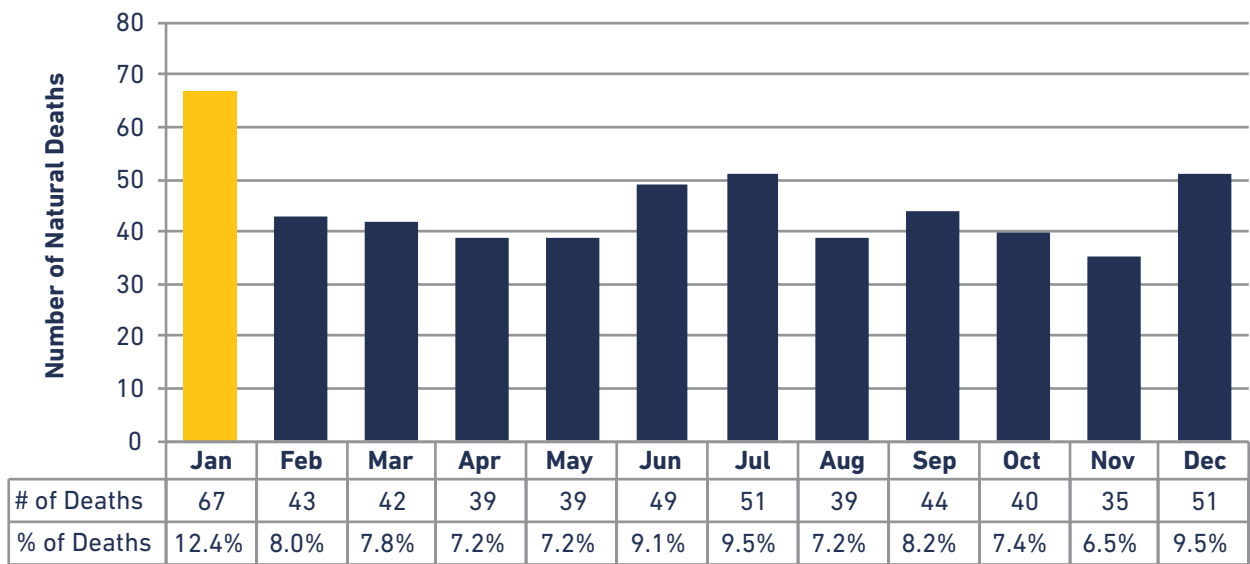
1 inch = 1.705074 miles  
Scale: 1:108,033  
0 0.4 0.8 1.6 2.4 Miles

Source:  
Office of the Chief Technology Officer (OCTO)  
Office of the Chief Medical Examiner (OCME)  
Prepared by: Chikarlo Leak, DrPH  
Date: December 9, 2019

Coordinate System:  
NAD 1983 StatePlane Maryland FIPS 1900  
Information on this map is for illustration only. The user acknowledges and agrees that the use of this information is at the sole risk of the user. No endorsement, liability, or responsibility for information or opinions expressed are assumed or accepted by any agency of the DC Government.

OCTO DC GIS

NATURAL DEATHS BY MONTH



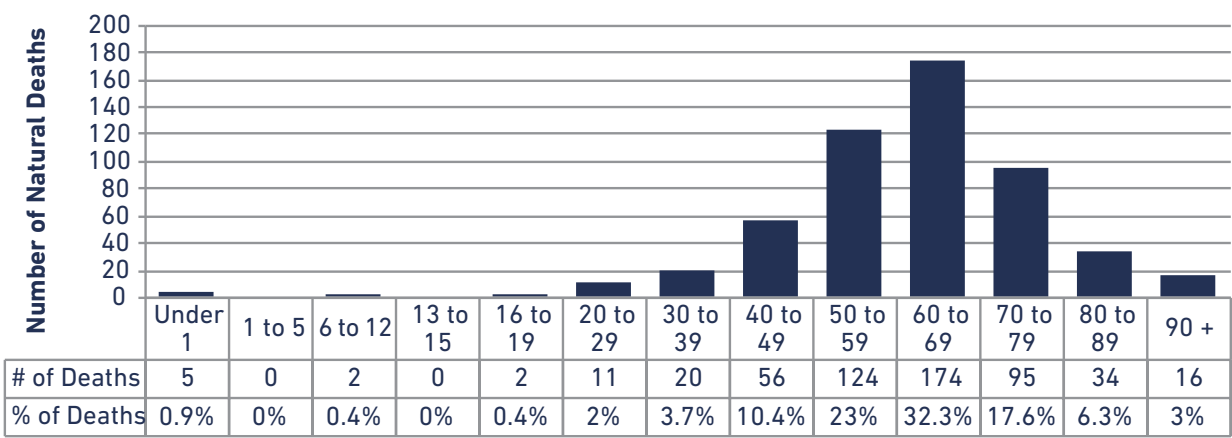
NATURAL DEATHS BY EXAM TYPE

Exam Type	# of Natural Deaths	% of Natural Deaths
Autopsy	264	48.98%
External Exam	265	49.17%
Review of Medical Records	10	1.86%
Total	539	100%

NATURAL DEATHS BY RACE/ETHNICITY AND GENDER

	Female	Male	Total	Percent of Race/Ethnicity
Asian	3	1	4	0.74%
Black	146	276	422	78.29%
Hispanic	5	11	16	2.97%
Other	0	2	2	0.37%
White	38	57	95	17.63%
Total	192	347	539	
Percent of Gender	36%	64%		100%

NATURAL DEATHS BY AGE



3.5 – UNDETERMINED DEATHS

The OCME investigated **24** cases (2% of total Accepted Cases) in which the manner of death was concluded to be “Undetermined,” and of these, **16** cases or **66%**, also had a cause of death classified as “Undetermined.” Peak incidents occurred in **January**.

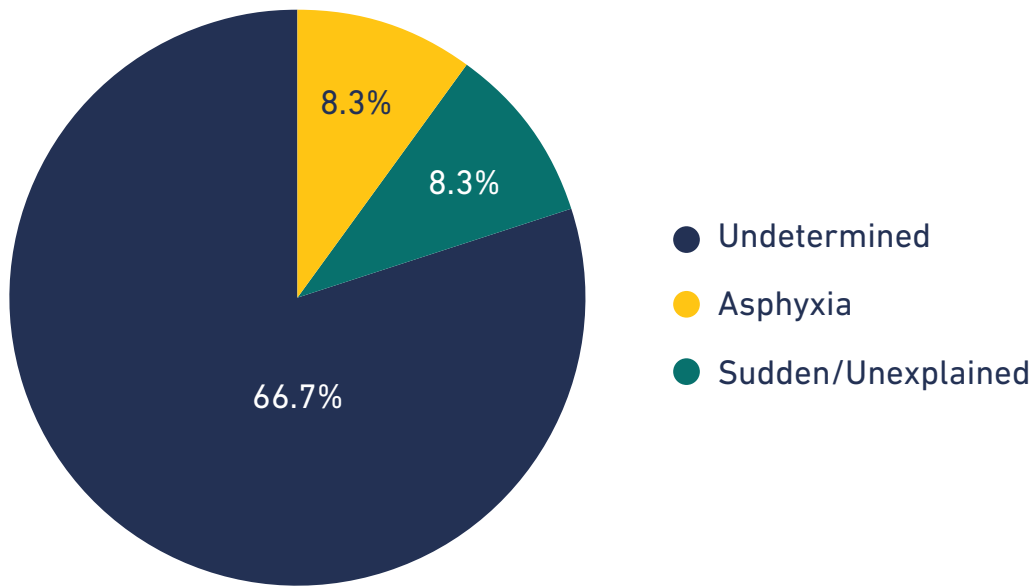
An “Undetermined” manner of death is determined when the evidence or investigatory efforts are inconclusive as to the circumstances of the death. This manner of death can be amended as additional information is received as it infers a continuous investigation/search for clarification of the events surrounding the death. At times, the cause of death can also be certified as “Undetermined” when autopsy findings are not decisive. This is often the case in skeletonized or markedly decomposed remains.

Cause of Death	Number of Undetermined Deaths	% of Undetermined Deaths
Asphyxia	2	8.3%
Drowning	1	4.2%
Other	1	4.2%
Skeletal Remains	1	4.2%
Sudden/Unexplained	2	8.3%
SUID	1	4.2%
Undetermined	16	66.7%
Total	24	100%

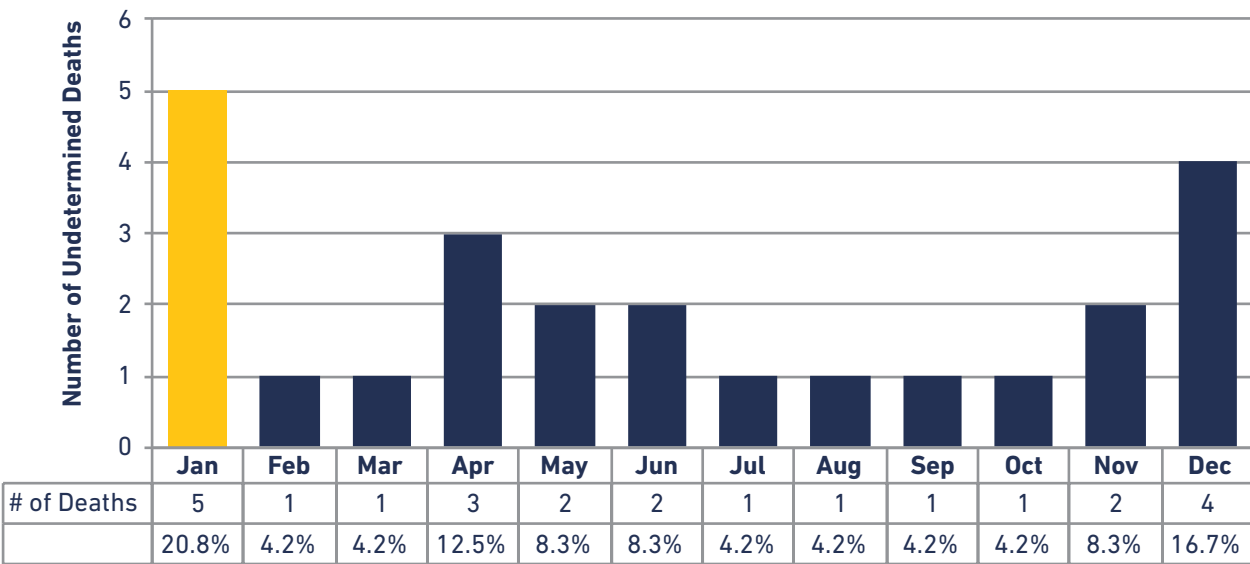


A separate category of “undetermined” manner of death involves infants whose deaths are associated with unsafe sleep environments such as bed/sharing, inappropriate bedding, or other related, similar circumstances, for whom no definite cause of death can be determined despite full autopsy, metabolic, microbiologic, viral or toxicological studies. Many of these deaths were previously certified as SIDS with a Natural manner of death.

UNDETERMINED CASES BY TOP 3 CAUSES OF DEATH



UNDETERMINED DEATHS BY MONTH



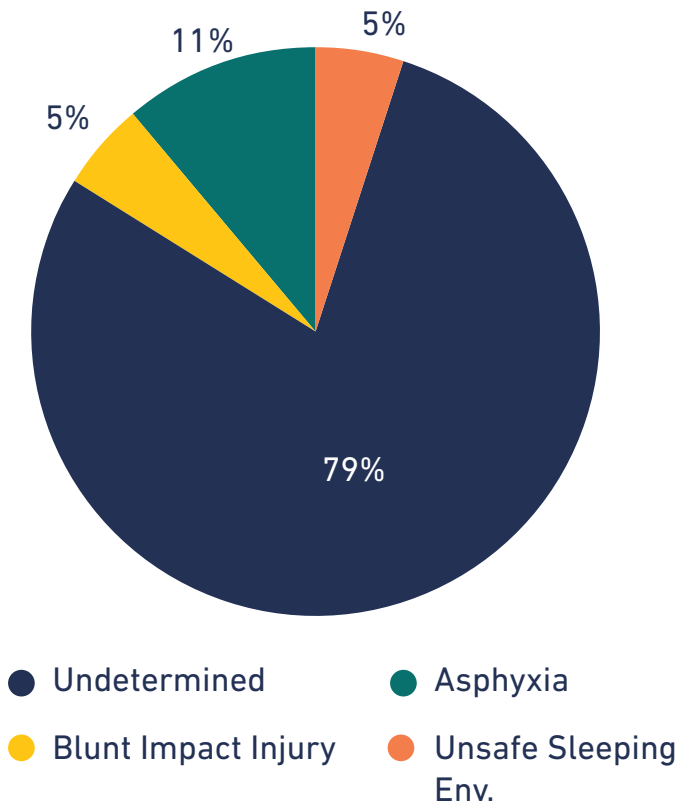
UNDETERMINED DEATHS BY RACE/ETHNICITY AND GENDER

	Female	Male	Total	Percent of Race/Ethnicity
Black	3	16	19	79.17%
Other	1	0	1	4.17%
White	0	4	4	16.67%
Total	4	20	24	
Percent of Gender	16.67%	83.33%		100%

UNDETERMINED DEATHS BY AGE

Age	Number of Undetermined Deaths
Under 1	7
1 to 5	0
6 to 12	0
16 to 19	1
20 to 29	3
30 to 39	1
40 to 49	3
50 to 59	4
60 to 69	4
70 to 79	0
80 to 89	1
90+	0
Total	24

BREAKDOWN OF CAUSE OF DEATH FOR INFANTS



## Toxicology Findings by Undetermined Deaths

The toxicology division received 24 undetermined death cases and analysis was performed on 23 cases. Drugs were present in 16 undetermined deaths.

Description	Number of Cases	% of Cases
N=	24	
Negative	7	29.1%
Positive	16	66.7%
Storage	1	4.1%

The 3 most commonly detected drugs in the undetermined cases were:

Name of Drug	Number of Cases	% of Undetermined Cases
Cocaine Metabolite	2	8.3%
Ethanol	2	8.3%
Fentanyl	2	8.3%

## Toxicology Findings for SUID

The toxicology division received 1 Sudden Unexpected Infant Death (SUID). Toxicological analysis was performed and drugs were not detected.



## 2018 Overview of Infant Sleeping Deaths That Occurred in the District of Columbia by Jurisdiction of Residence

ALTHOUGH A DEATH OF AN INFANT MAY OCCUR IN THE DC, THE INFANT’S PLACE OF RESIDENCE CAN BE ANYWHERE IN THE WORLD. FOR THE PURPOSE OF THIS ANNUAL REPORT, INFANT DEATHS ARE DEFINED AS BABIES THAT ARE AGE ONE YEAR OLD OR LESS AT THE TIME OF DEATH. THIS REPORT WILL IDENTIFY THE RESIDENTIAL JURISDICTION OF THE INFANT BY USING THE PARENTAL RESIDENCE AT THE TIME OF THE INFANT’S DEATH.

The American Academy of Pediatrics recommends using the term bed-sharing instead of the term co-sleeping due the ability to misconstrue the sleeping arrangement. Co-sleeping refers to when a parent and infant sleep in close proximity to each other. While bed-sharing refers to a specific type of co-sleeping in which the infant is sleeping on the same surface as another person. This report includes any infant deaths in which bed-sharing or co-sleeping in the same bed was related to the cause of death.<sup>12</sup> Please see the Infant Deaths by Cause of Death, Manner of Death and Contributing Factors table for a breakdown of the cases in 2018.

### Co-sleeping/Bedsharing

There were a total of 12 co-sleeping/bed-sharing infant fatalities that were certified with a Manner of Death as “**Undetermined**” or “**Accident**” in calendar year 2018. All of the accidental infant fatalities were caused by Asphyxia due to overlay (asphyxia due to overlay was the result of a co-sleeping environment). Of the 12 deaths due to bedsharing, six had parents that were residents of the District of Columbia, five had parents that lived outside of the District (Maryland), and one had parents that were undomiciled. Within this review period, there were no co-sleeping/bedsharing fatalities where the parental residence was outside of the DC wards 7 and 8 (see Infant Sleeping Deaths by Jurisdiction of Residence table). Additionally, there were **four** cases in 2018 where the infant died as a result of a combination of co-sleeping or bedsharing and unsafe sleeping environment or inappropriate bedding.

### Unsafe sleeping environment or Inappropriate bedding

Although “*Unsafe sleeping environment*” and “*Inappropriate bedding*” are classified independently in the circumstances and cause of death, these classifications are very similar as it relates to the sleeping environment of the infant. For example, an adult bed is identified by the DC Medical Examiner as an unsafe sleeping environment, yet it is also known as inappropriate bedding for an infant.

<sup>12</sup> SIDS and Other Sleep-Related Infant Deaths: Evidence Base for 2016 Updated Recommendations for a Safe Infant Sleeping Environment. Rachel Y. Moon, TASK FORCE ON SUDDEN INFANT DEATH SYNDROME. Pediatrics Oct 2016, e20162940; DOI: 10.1542/peds.2016-2940



There were **seven** cases in 2018 where the infant died as a result of unsafe sleeping or inappropriate bedding, yet was NOT attributed to co-sleeping or bed-sharing based on the investigation. With the exception of 1 cases, all of these cases had a Manner of Death of “*Undetermined*.”

Infant Deaths by Cause of Death, Manner of Death and Contributing Factors				
Cause of Death	Manner	Co-sleeping/ Bed-sharing	Unsafe Sleep Environment/ Inappropriate Bedding	Total
Asphyxia	Accident	10	1	11
Asphyxia	Undetermined	0	1	1
SUID	Undetermined	1	0	1
Undetermined	Undetermined	1	5	6
Total		12	7	19

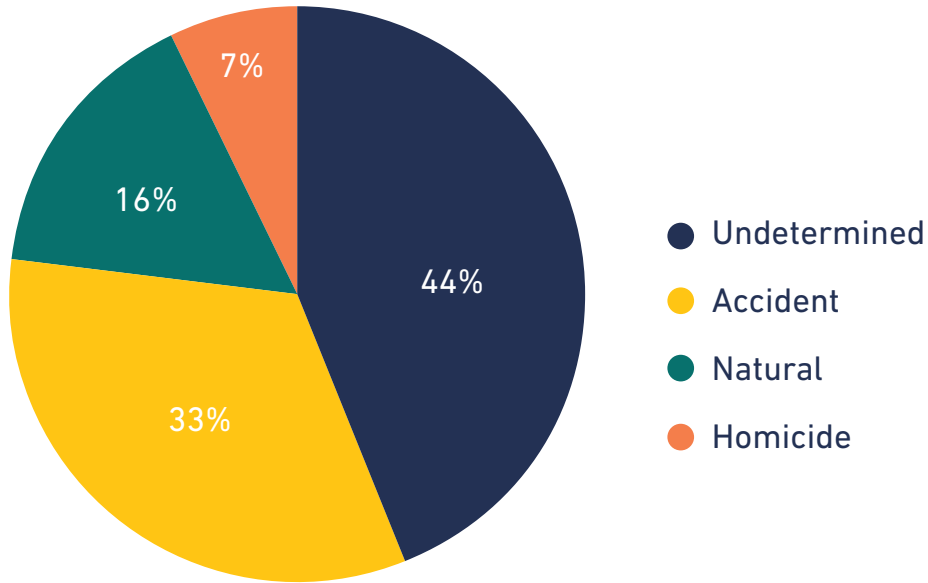
Infant Sleeping Deaths by Jurisdiction of Residence		
Ward	Co-sleeping or bed-sharing	Unsafe sleep environment or Inappropriate bedding
Ward 1	0	0
Ward 2	0	0
Ward 3	0	0
Ward 4	0	0
Ward 5	0	0
Ward 6	0	0
Ward 7	1	5
Ward 8	5	1
DC	6	6
MD	5	1
Undomiciled	1	0
Total	12	7

## Jurisdiction of Parental Residence and Manner of Death

In 2018 there were a total of **26** infant deaths investigated by the OCME. The below table provides a breakdown by manner of death and the parental residence at the time of the infant’s death.

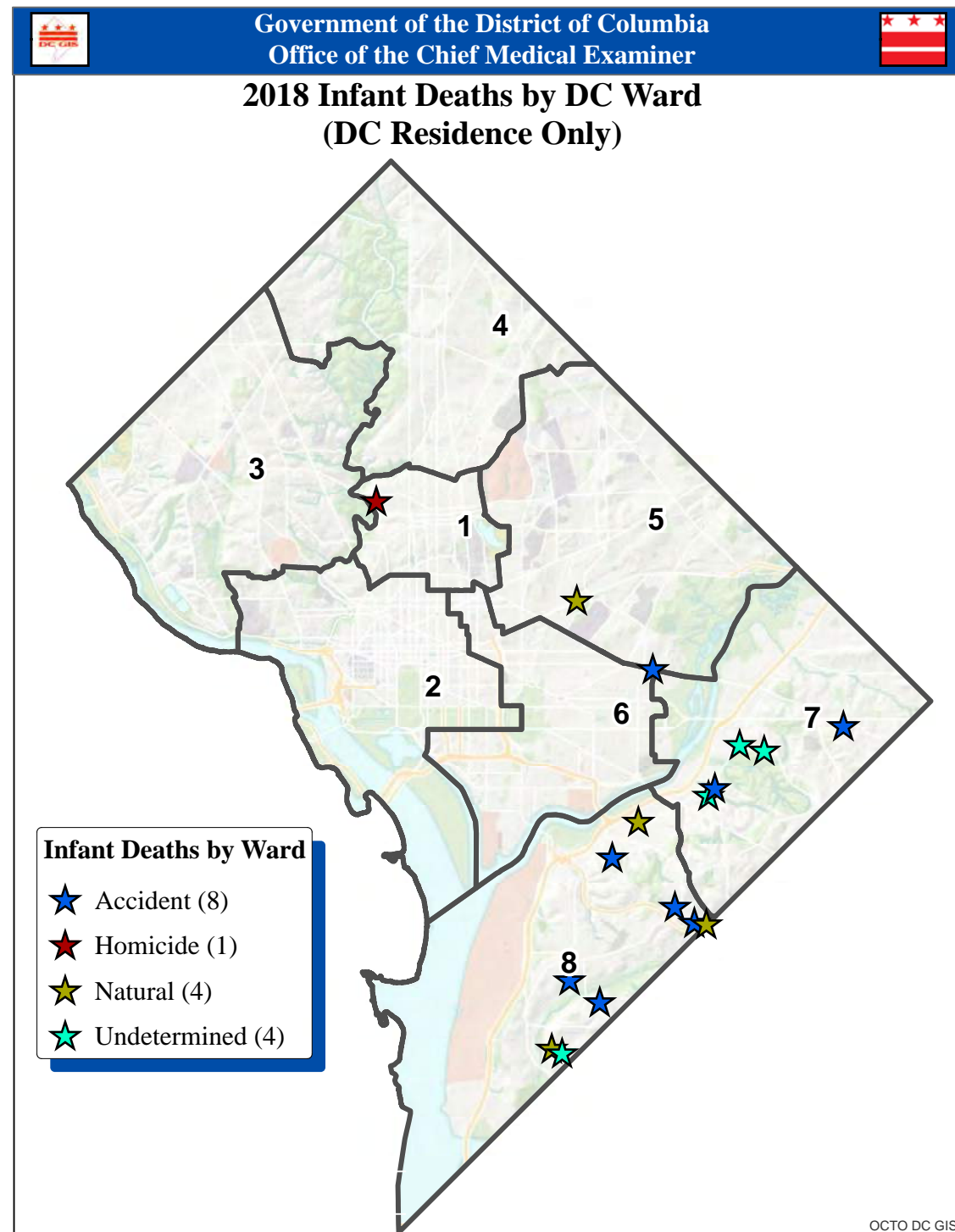
Total Infant Deaths by Jurisdiction and Manner of Death					
Jurisdiction of Parental Residence	Total	Accident	Homicide	Natural	Undetermined
DC	17	8	1	4	4
MD	7	5	0	0	2
Undomiciled	2	0	0	0	2
Total	26	13	1	4	8

INFANTS < 1 YEAR BY MANNER OF DEATH



## Map of Infant Deaths by Ward and Manner of Death

The CDC defines infants as those children 1 year old or less; whereas the OCME reports children “Under 1” and children “1 to 5” separately throughout this report. The map below illustrates those decedents who are 1 year old or less as defined by the CDC and whose parents were residents of the District of Columbia by Ward.





# 4.0

## Special Reports

### ■ DC Violent Death Reporting System

SINCE ITS GENESIS IN 2002, THE NATIONAL VIOLENT DEATH REPORTING SYSTEM (NVDRS) HAS FUNCTIONED AS A PUBLIC HEALTH SURVEILLANCE SYSTEM GENERATED BY THE CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC) THAT RECORDS THE WHO, WHAT, WHEN, WHERE, WHY AND HOW OF VIOLENT FATAL INCIDENTS FOR PARTICIPATING STATES/LOCALITIES/JURISDICTIONS. BECAUSE THE SYSTEM CENTERS ON THE INCIDENT INSTEAD OF THE VICTIM, DATA SUCH AS MULTIPLE HOMICIDES WITHIN A 24-HOUR PERIOD, HOMICIDE-SUICIDES, AND CONNECTIONS BETWEEN SUSPECT(S) AND VICTIM(S) OVER A PERIOD TIME CAN BE COLLECTED.

The system has grown from originally supporting six states to now all 50 states, including the District of Columbia and Puerto Rico. Death certificates, police reports/records, and coroner and medical examiner records are the three core sources among others used in collecting detailed information on violent fatalities occurring in the DC jurisdiction involving deaths due to violence related to suicide, homicide, unintentional firearm deaths, legal intervention, and those of undetermined intent.

Individually, these sources satisfy their intended uses for their agencies, but collectively, they develop a more complete picture surrounding the nature of violent deaths occurring within a state/jurisdiction and aid community partners and agencies in identifying strategies for their prevention or intervention.

In 2016, the District of Columbia's Department of Health (Now known as DC Health) and the District of Columbia's Office of the Chief Medical Examiner (DCOCME) was awarded CDC funds for 5-year period to initiate the District of Columbia Violent Death Reporting System (DCVDRS) and began collecting data in 2017. The contribution of the District of Columbia Metropolitan Police Department (DCMPD) and DC Health as DCVDRS partnering agencies have been invaluable resources toward the efforts against DC violent deaths. The success of DCVDRS, as a whole, would otherwise be unachievable without the collaborative effort of these partnering agencies.

Advantages to utilizing the DCVDRS include, but are not limited to:

- » Collaborative input from partnering agencies-DCMPD and DC Health on circumstances surrounding a single violent death
- » The recording of incidents involving more than death or deaths related to one another (i.e. multiple homicides, incidents involving a homicide and suicide
- » The complete picture surrounding the who, what, when, where, how and why the violent death occurred (i.e. suspect information in homicides, mental health and recent stressors for suicides, crimes committed before fatal injury, etc.).
- » Extensive collection of data involving Intimate-Partner Violence (IPV), Fatalities involving infants, children, teens and wards of the state and Accidental Overdoses.

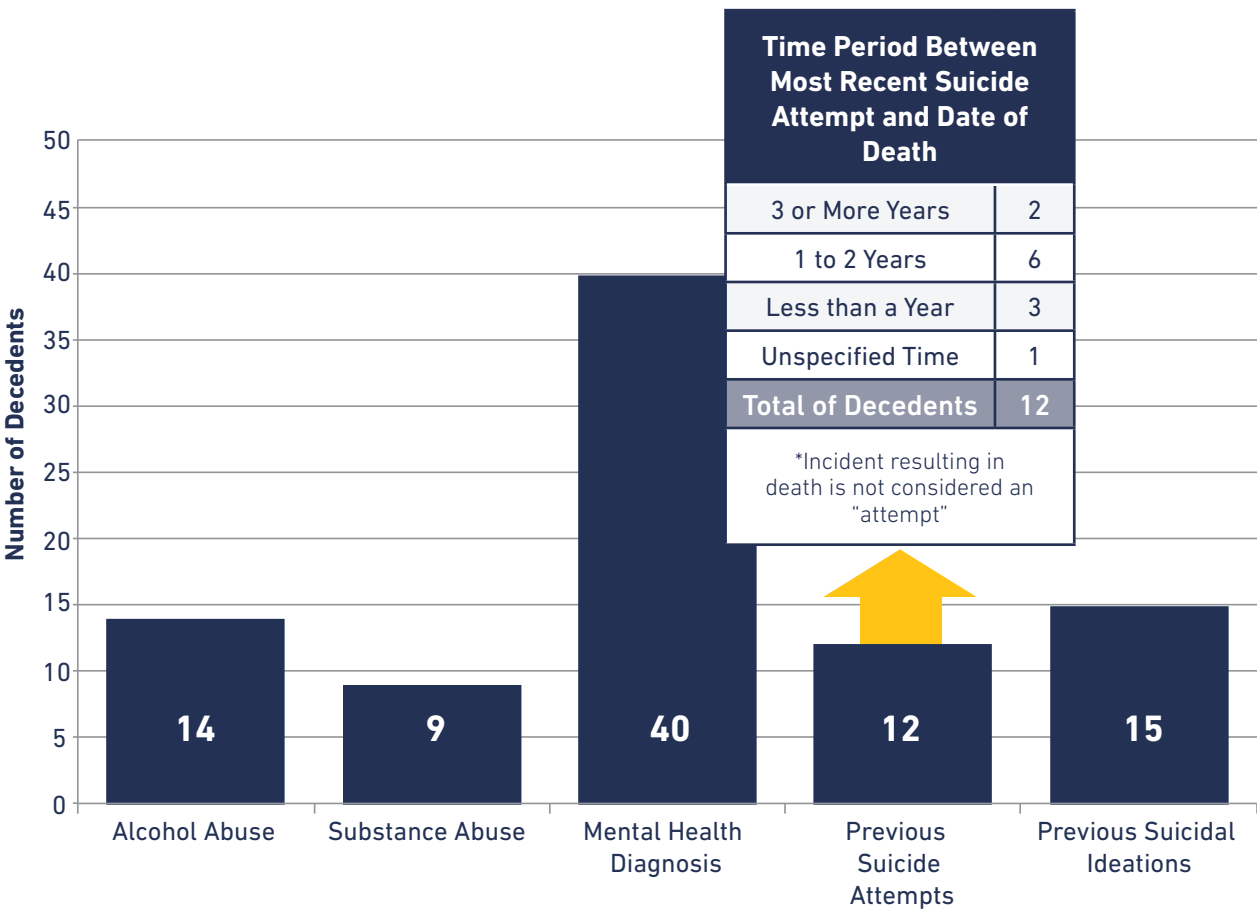
The following report reflects DCVDRS data from 2018.

## DCVDRS Suicide Data

In 2018, the District of Columbia OCME saw 61 suicides. The DCVDRS suicide report reflects any mental illness diagnoses/emotional disorders, history of suicide attempts or ideations, and recent stressors to victim. This information was provided from medical records, evidence found on scene, investigative reports and interviews of witnesses/family/friends.

Forty (40) of the 61 suicide victims in 2018 had at least one mental illness diagnosis with depression being the most common (n=30). Twenty-nine (29) had either been recently receiving treatment (medication, therapy, etc) or had been treated for their mental health in the past. Twenty-three (23) victims had a history of alcoholism and/or substance abuse. Twelve (12) of the 61 suicide victims for 2018 had made at least one suicide attempt prior to death and half (n=6) of those 12 victims made a prior suicide attempt within 1 to 2 years of their death. The shortest listed time period found between prior suicide attempt and date of death was one day, with the longest being over 15 years prior to death. Fifteen (15) decedents had a history of suicidal thoughts or ideations prior to death.

### BEHAVIORAL HEALTH HISTORY OF SUICIDE VICTIMS



\* number of decedents are not mutually exclusive.  
-The same decedent may be counted multiple times amongst the circumstances if they apply.

### MENTAL ILLNESS DIAGNOSIS<sup>13</sup> AND MENTAL HEALTH TREATMENT AT THE TIME OF DEATH

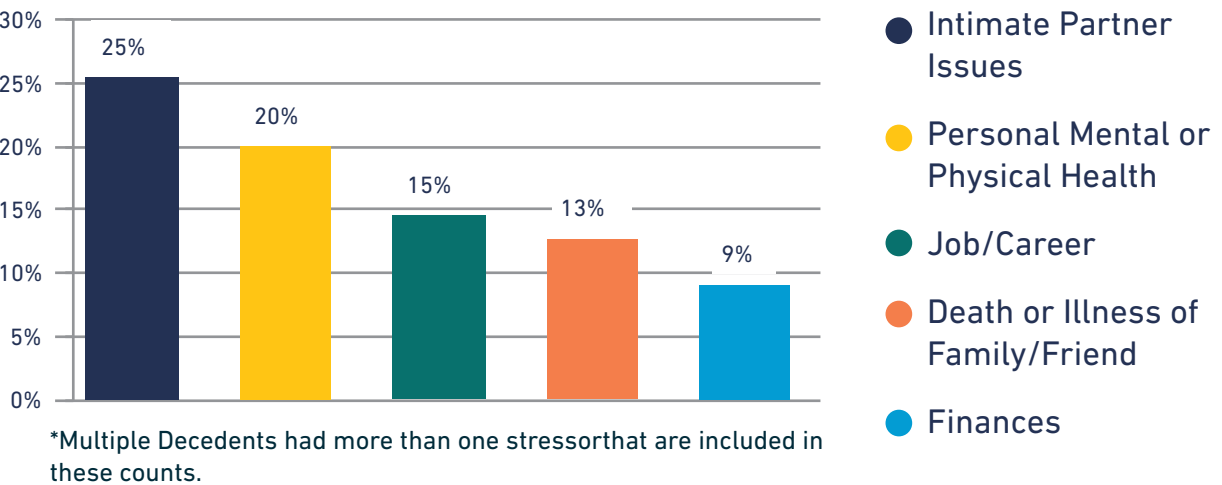


Number of Mental Illness Diagnoses Amongst Suicide Victims by Race					
	Asian	Black	Hispanic	White	Total Number of Diagnoses
Hyperactivity Disorder	-	-	-	3	3
Anxiety	-	1	-	8	9
Bipolar	-	2	-	3	5
Depression	4	5	2	19	30
PTSD	1	1	-	3	5
Schizophrenia	-	2	1	2	5
Other/Unspecified Diagnosis	1	-	-	5	6
*These diagnoses are not mutually exclusive amongst the listed races.					63



The top stressor amongst these decedents was intimate partner related such as an impending or recent break-up, divorce, argument and etc. Forty-three percent of overall decedents had an education completion level of post-secondary education and beyond (i.e. associate's, bachelor's, master's and doctorate).

TOP 5 STRESSORS EXPERIENCED BY SUICIDE VICTIMS



Education Demographic of Suicide Victims by Age						
	8th Grade or Less	9th to 12th Grade	Associate's to Bachelor's Degree	Master's, Doctorate or other Professional Degree	Unknown	Grand Total
Under 15	1	-	-	-	-	1
16 to 19	-	4	1	-	-	5
20 to 29	-	4	1	-	5	10
30 to 39	-	1	10	1	3	15
40 to 49	-	1	4	-	2	7
50 to 59	-	3	2	2	4	11
60 to 69	-	-	1	2	4	7
70 to 79	-	1	1	1	1	4
80 to 89	-	1	-	-	-	1
Grand Total	1	15	20	6	19	61

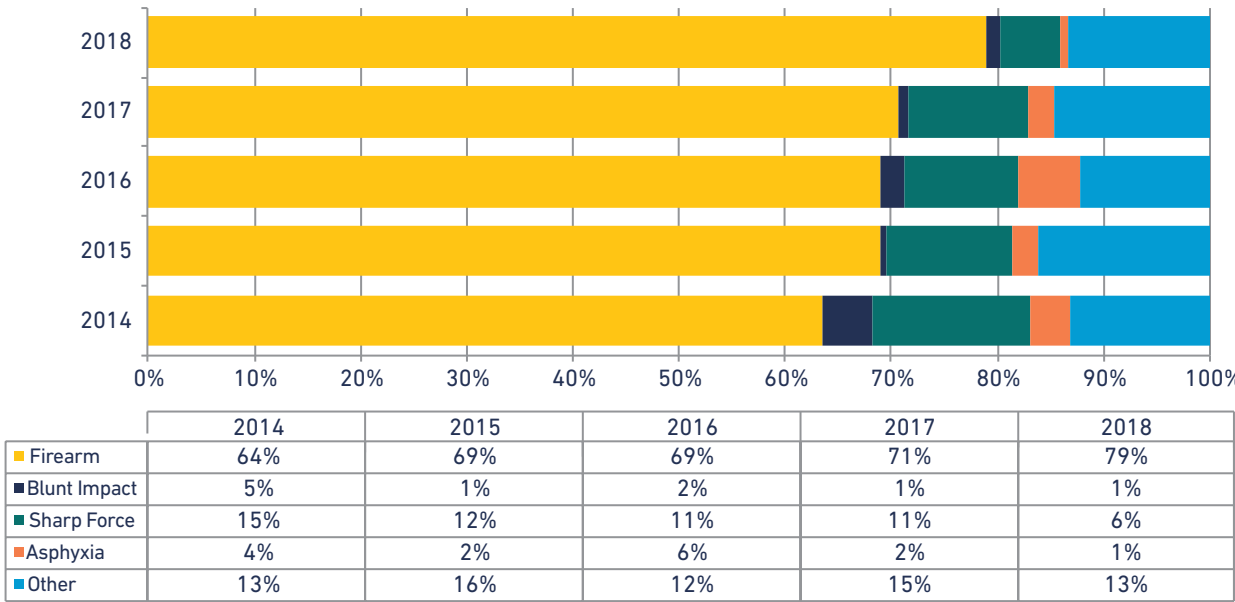
Substance and Alcohol Abuse History Suicide Victims by Gender			
	Male	Female	Total
Alcohol Abuse History	11	3	14
Substance Abuse History	7	2	9
	18	5	23

DCVDRS Homicide Data

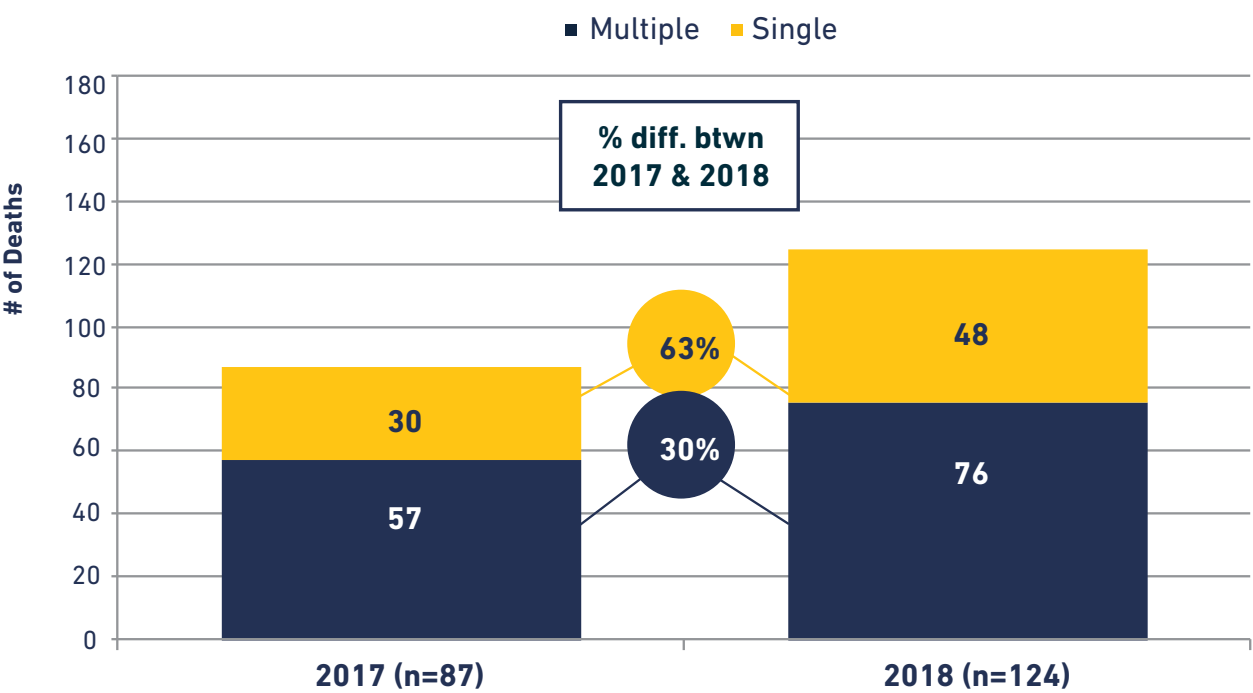
In 2018, the District of Columbia OCME saw 157 homicides. Circumstances surrounding the homicidal incidents are collected in the DCVDRS among other variables and demographics. Due to the often-extensive legal, multi-agency and multi-state incorporated legwork surrounding homicides for the District of Columbia, there are incidents where no circumstances could be recorded to give reason or understanding to the homicide. Overtime, as new evidence presents itself to investigative parties, circumstances surrounding homicides may not be currently available.

The data below highlights severity trends in firearm related homicides as 124 of the 157 homicides seen in the district for CY 2018 were due to firearms. Between 2014 and 2018, the percentage of firearm-related homicides has steadily increased from 64% in 2014 to 79% in 2018. Upon examination, both multiple and single gunshot wounds increased significantly between 2017 and 2018, 30% and 63% respectively. Among multiple gunshot wound homicides, the average number of gunshot wounds increased from 5.33 in 2017 to 6.38 in 2018. Note: there are a number of decedents amongst 2017 and 2018 where the firearm injury occurred a year or more prior to the year of death.

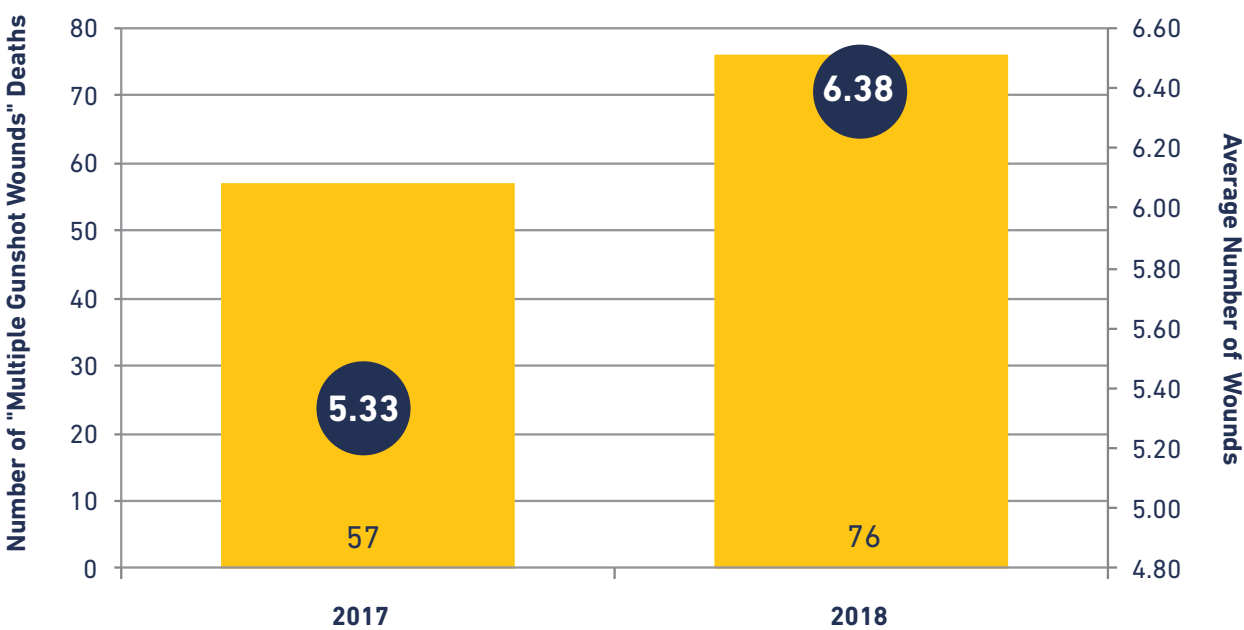
YEARLY TREND OF HOMICIDES BY CAUSE OF DEATH, 2014-2018



FIREARM-RELATED HOMICIDES BETWEEN 2017-2018:  
SINGLE VS. MULTIPLE GUNSHOT WOUNDS



AVERAGE NUMBER OF ENTRANCE WOUNDS IN HOMICIDES DUE TO  
MULTIPLE GUNSHOTS ONLY, 2017-2018

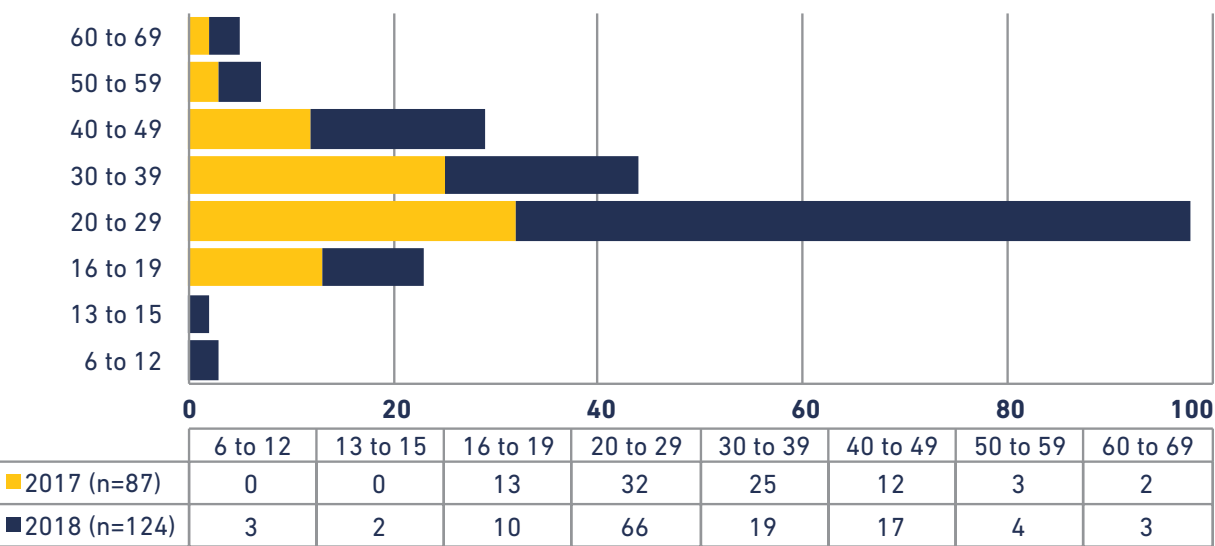


Demographic Breakdown of Decedents:  
Firearm vs. Non-Firearm

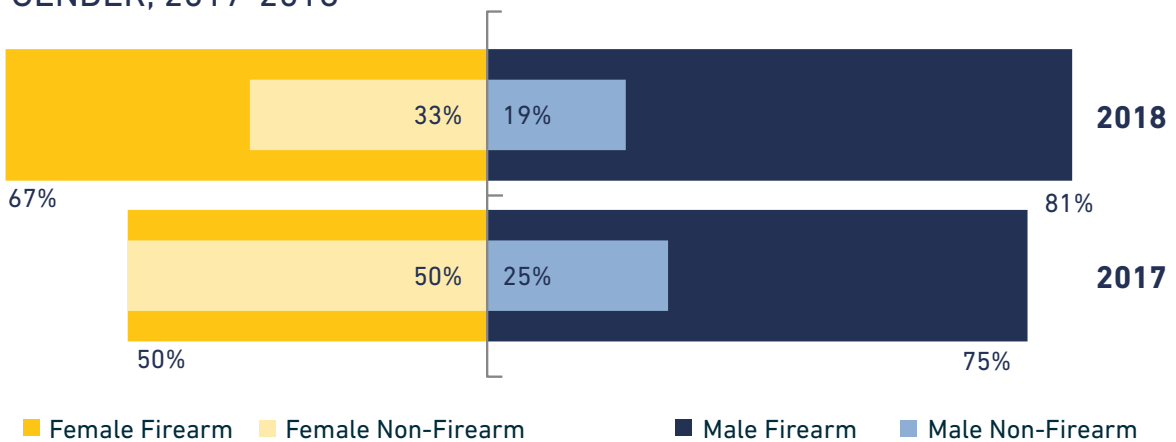
Approximately 60% of all homicides happened among adults between the ages of 20-39 years old. In 2017, 37% of all firearm-related homicides were among decedents age 20 to 29, however, the percentage of firearm-related homicides among that age range increased to 55% in 2018. Blacks accounted for 298 or 87% of all homicides. This observation remains true for firearm-related homicides, with 87% to 94% of the firearm-related homicides occurring among Blacks.

Generally, homicides were more common among males, which is also the case for firearm related homicides. Females were more likely to die from non-firearm related homicides with the exception of 2017 at 50%. Given the small number of homicides among women (22 in 2017 and 18 in 2018), the percentages observed in firearm and non-firearm-related homicides among females are sensitive to small differences in the number of deaths per year.

FIREARM-RELATED HOMICIDES BY AGE, 2017-2018

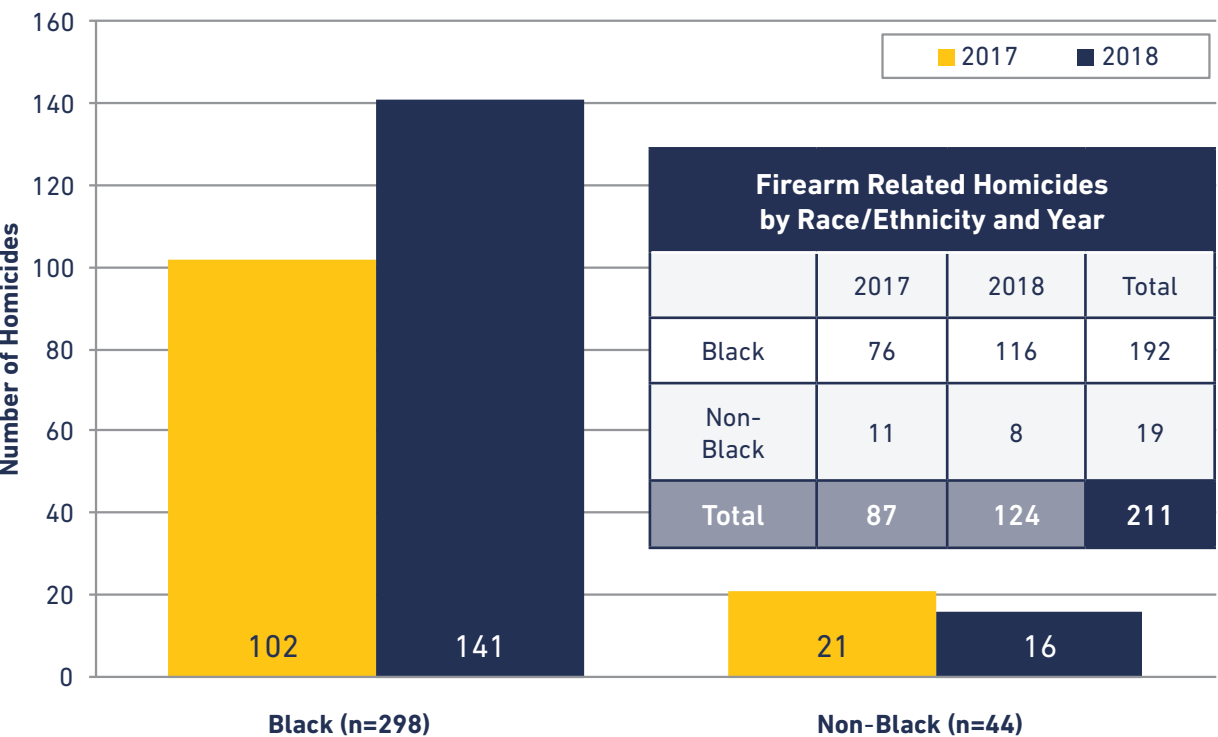


COMPARISON OF NON-FIREARM VS FIREARM RELATED HOMICIDES  
BY GENDER, 2017-2018





NUMBER OF HOMICIDES BY RACE/ETHNICITY AND YEAR



4.1 – SPECIAL REPORT

DC Opioid Overdose Report

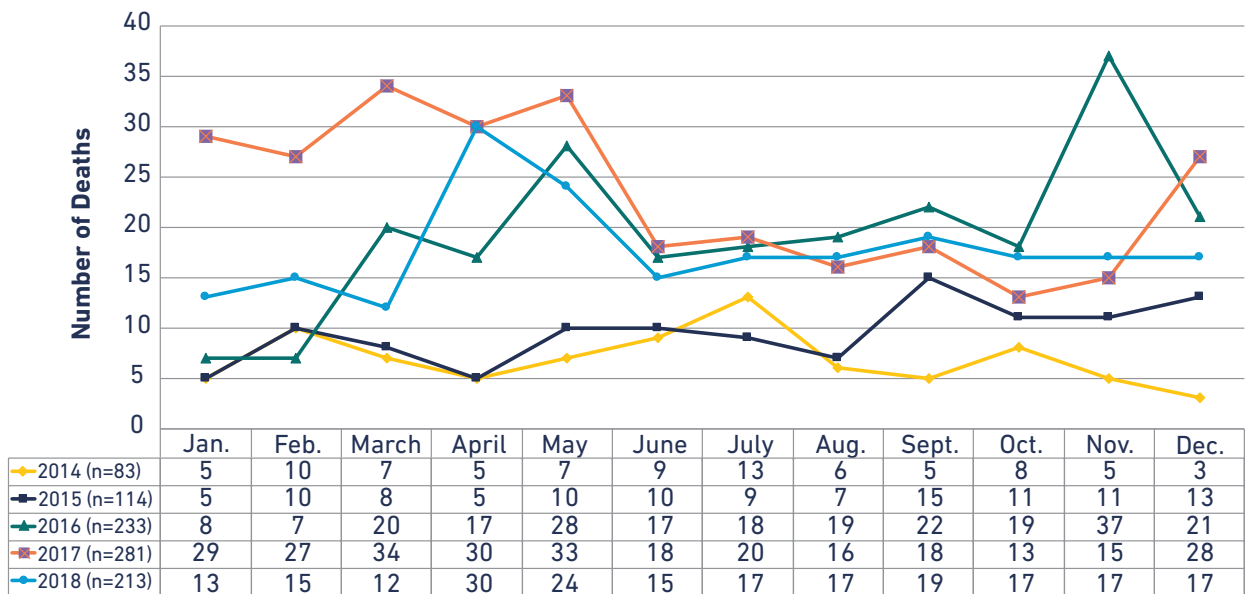
Deaths due to Opioid Drug Use: January 1, 2014 to December 31, 2018

The DC Office of the Chief Medical Examiner (OCME) investigated a total of **924**<sup>14</sup> deaths due to the use of opioids from January 1, 2014 through December 31, 2018: **83** deaths in CY 2014, **114** in CY 2015, **233** deaths in CY 2016, **281** deaths in CY 2017 and **213** in CY 2018 respectively. This report examines the presence of opioids (*heroin, fentanyl, fentanyl analogs, morphine, prescription opioids and the general category of opiates*) in deaths observed at the OCME. In 2017, there were 366 intoxication deaths, of which (77%) or 281 were opioid-related overdoses. In 2018, there are 313 intoxications deaths, of which (68%) or 213 are opioid-related overdoses.

Trends in Deaths due to Opioid Use

Despite the downward trend observed during the 1<sup>st</sup> quarter of 2018, there were 30 fatal overdoses in April (Fig. 1). On average, there are 18 opioid-related overdoses per month in 2018. **The total number of opioid overdoses in 2018 is slightly less than 2016 levels.**

FIG. 1: NUMBER OF DRUG OVERDOSES DUE TO OPIOID USE BY MONTH AND YEAR (N=920)



Incidence of Opioids by Year

As depicted in Figure 2(a), there has been a steady increase in the total number of opioids found in fatal overdoses between 2014 and 2017. The majority of opioid overdoses were due to multiple drug toxicity, ranging from 1 to 7 opioids per death. There were a total of **122** opioids<sup>15</sup> found in the 83 deaths in 2014, **159** opioids in the 114 deaths in 2015, **409** opioids in the 233 deaths in 2016 and **537** opioids in the 281 deaths in 2017. To date, there have been **404** opioids identified in the 213 decedents in 2018.

Figure 2(b) displays the illicit and prescription opioids identified through toxicology testing of the 924 decedents from 2014 to 2018. Overall, the most prevalent drugs identified were heroin followed by fentanyl, although the trend is reversed in 2017 and 2018. Table 1 highlights the various fentanyl analogs found per year.

<sup>15</sup> Morphine and fentanyl can both be prescribed. However, for the sake of this report, they are included under the illicit opioids.

FIG. 2(A): TOTAL NUMBER OF OPIOID DRUGS CONTRIBUTING TO DRUG OVERDOSES BY YEAR (ALL OPIOIDS)

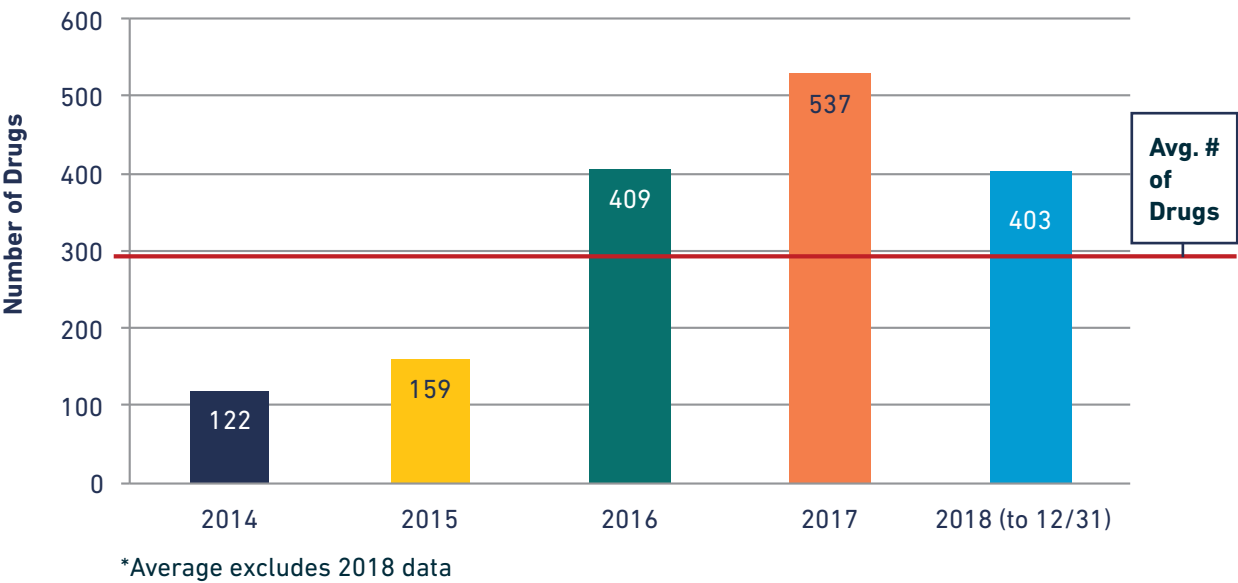


FIG. 2(B): NUMBER OF OPIOID DRUGS CONTRIBUTING TO DRUG OVERDOSES BY YEAR

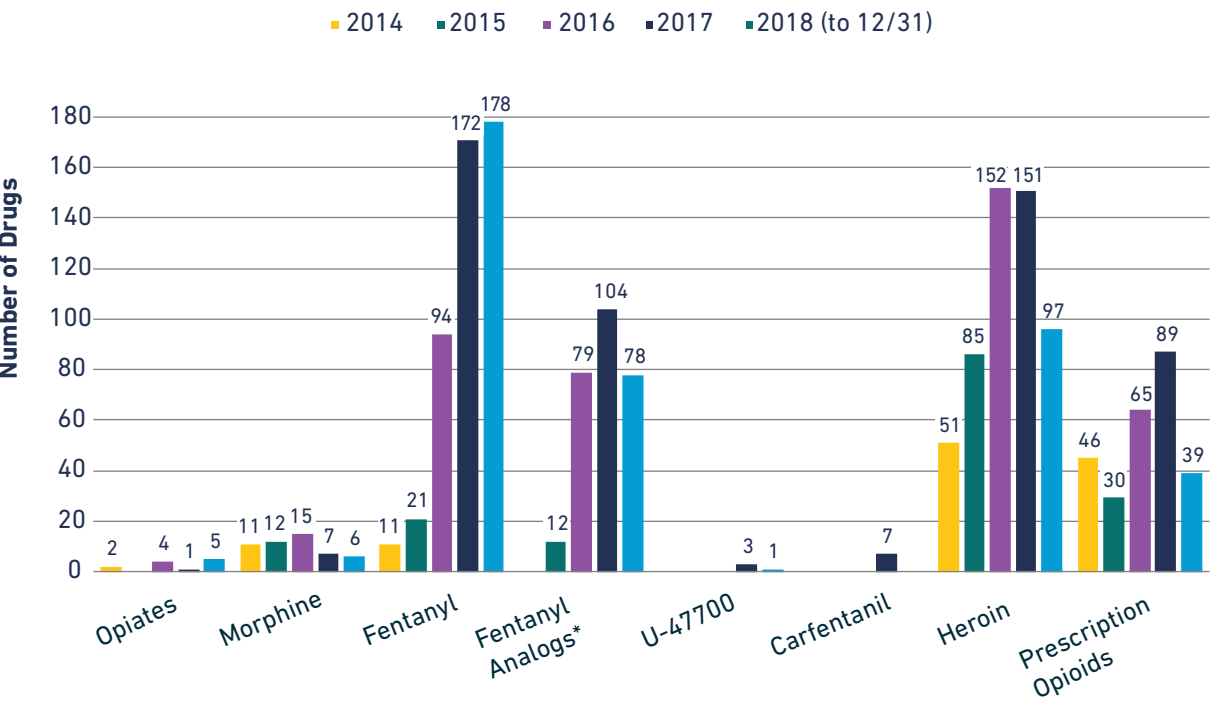


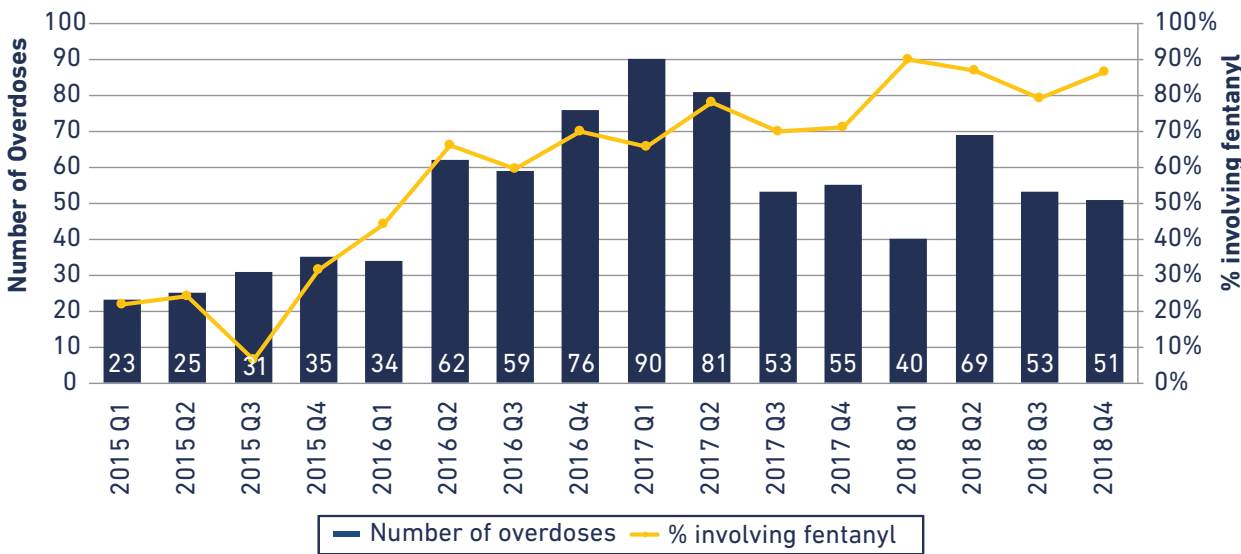
Table 1: Number of Fentanyl Analogs by Year

	2014	2015	2016	2017	2018
Acetyl Fentanyl	0	12	0	10	21
Furanyl Fentanyl	0	0	56	53	1
Despropionyl Fentanyl	0	0	20	7	10
Methoxyacetyl Fentanyl	0	0	0	1	0
Butyryl Fentanyl	0	0	0	2	3
P-fluoroisobutyryl Fentanyl	0	0	3	4	38
Isobutyryl Fentanyl	0	0	0	0	1
P-fluorofentanyl	0	0	0	0	1
Valeryl Fentanyl	0	0	0	0	1
Norfentanyl	0	0	0	0	2
P-fluorobutyryl Fentanyl	0	0	0	28	0
Total	0	12	79	105	78

Increase in Fentanyl/Fentanyl Analogs in Opioid Overdoses

Figure 3 highlights the increasing percentage of cases containing fentanyl or fentanyl analogs. The percentage of cases containing fentanyl or a fentanyl analog has gradually increased since 2015. In 2016, **62%** of cases involved fentanyl or a fentanyl analog. The noticeable increase in the presence of fentanyl and fentanyl analogs began in March 2016, with over half of the cases containing fentanyl. In 2017, **71%** of the cases contained fentanyl or a fentanyl analog. **However in 2018, approximately 85% of the opioid overdoses contain fentanyl.**

FIG. 3 NUMBER OF OPIOID OVERDOSES CONTAINING FENTANYL/FENTANYL ANALOGS BY QUARTER

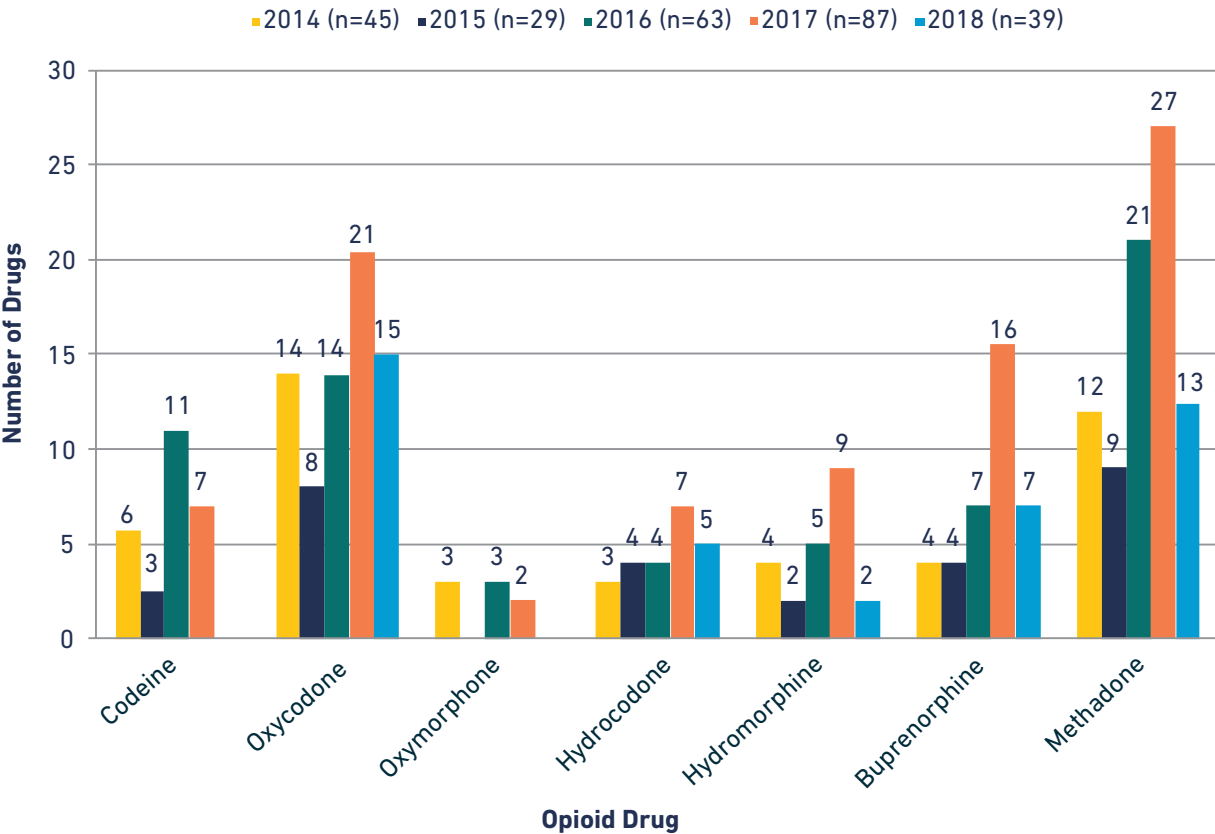




Prescription Opioids

There were **270** prescription opioids found in the 924 drug overdoses between January 2014 and December 2018 (Fig. 4). Despite the downward trend between 2014 (n=46) and 2015 (n=30), the number of prescription opioids identified in fatal opioid overdoses had increased steadily between 2016 and 2017 (n=65, 2016) (n=89, 2017). However, the number of prescription opioids identified in fatal opioid deaths has decreased in 2018 to 39. Figure 4 illustrates that methadone and oxycodone are the most prevalent prescription opioids identified.

FIG. 4: NUMBER OF PRESCRIPTION OPIOIDS CONTRIBUTING TO DRUG OVERDOSES BY YEAR (N=263)

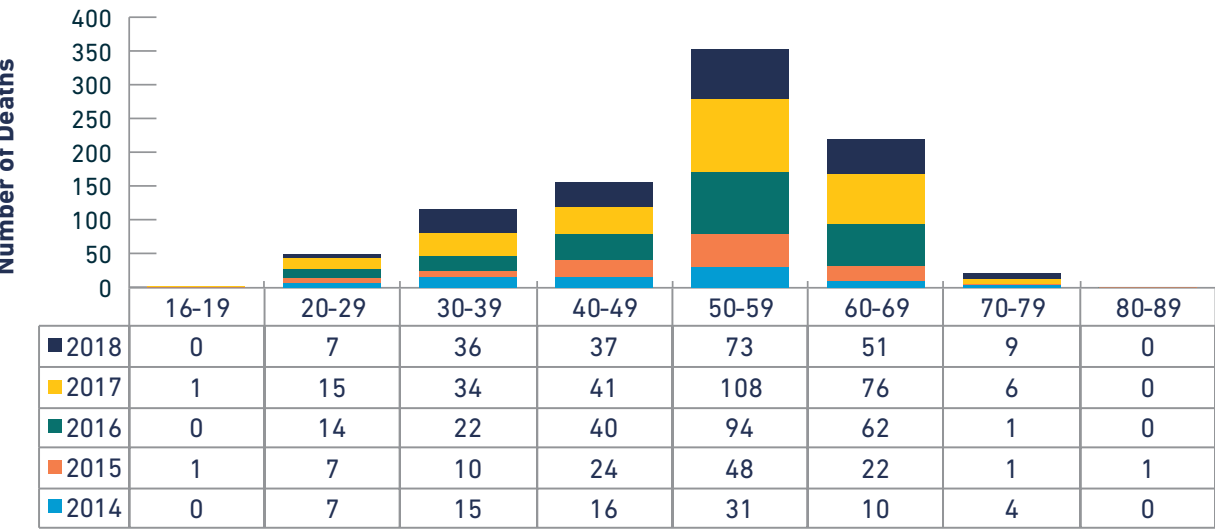


Age

Approximately **79%** of all overdoses due to opioid drug use happen among adults between the ages of 40-69 years old (Fig. 5). Deaths due to opioid use were most prevalent among people ages 50 to 59 (n=38%).



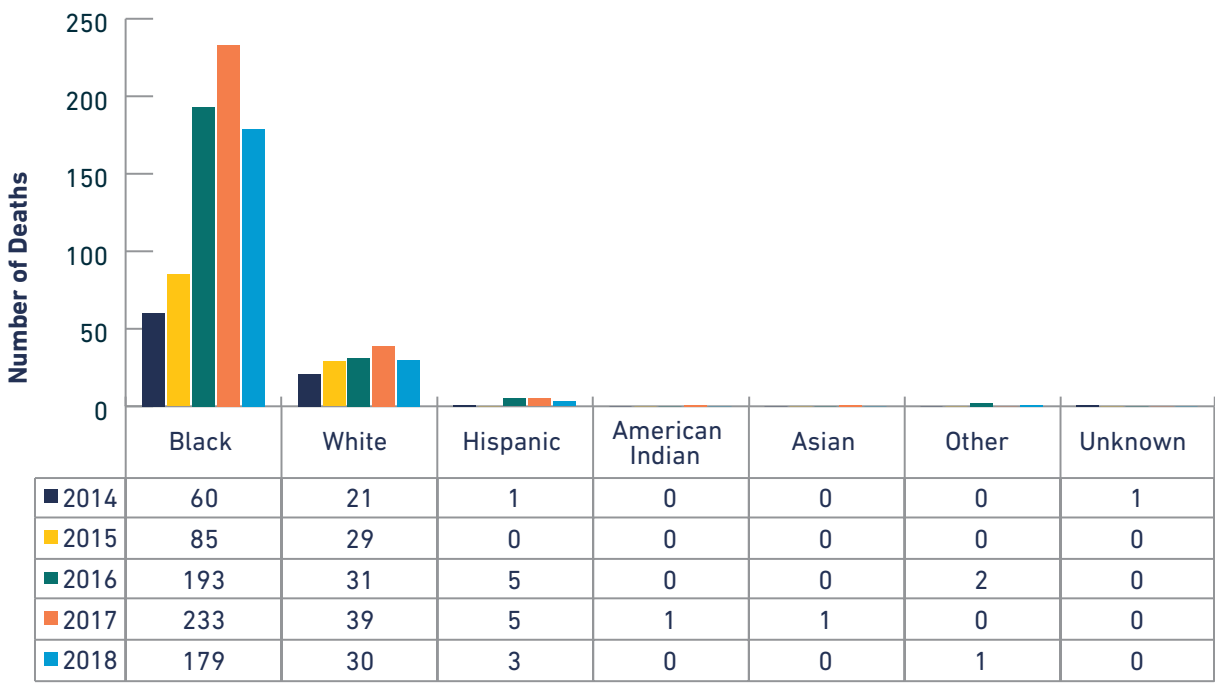
FIG. 5: DRUG OVERDOSES DUE TO OPIOID USE BY AGE



Race/Ethnicity

Overall, **750** or **82%** of all deaths due to opioid use were among Blacks (Fig. 6). This trend remains consistent across years.

FIG. 6: NUMBER OF DRUG OVERDOSES DUE TO OPIOID USE BY RACE/ETHNICITY AND YEAR



Gender

Fatal overdoses due to opioid drug use were more common among **males** (Fig. 7).

The majority of the decedents were residents of DC (Fig.8). From 2014 to 2018, opioid-related fatal overdoses were most prevalent in **Wards 7 & 8** (n=321) (Fig.9). However, there are variations across years.

FIG. 7: PERCENTAGE OF DRUG OVERDOSES DUE TO OPIOID USE BY GENDER AND YEAR

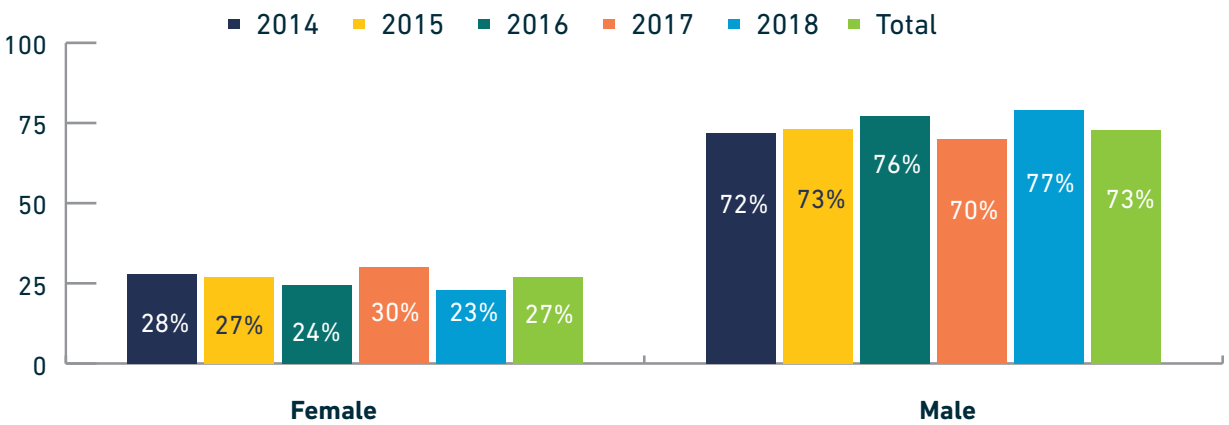


FIG. 8: NUMBER OF DRUG OVERDOSES DUE TO OPIOID USE BY JURISDICTION OF RESIDENCE AND YEAR

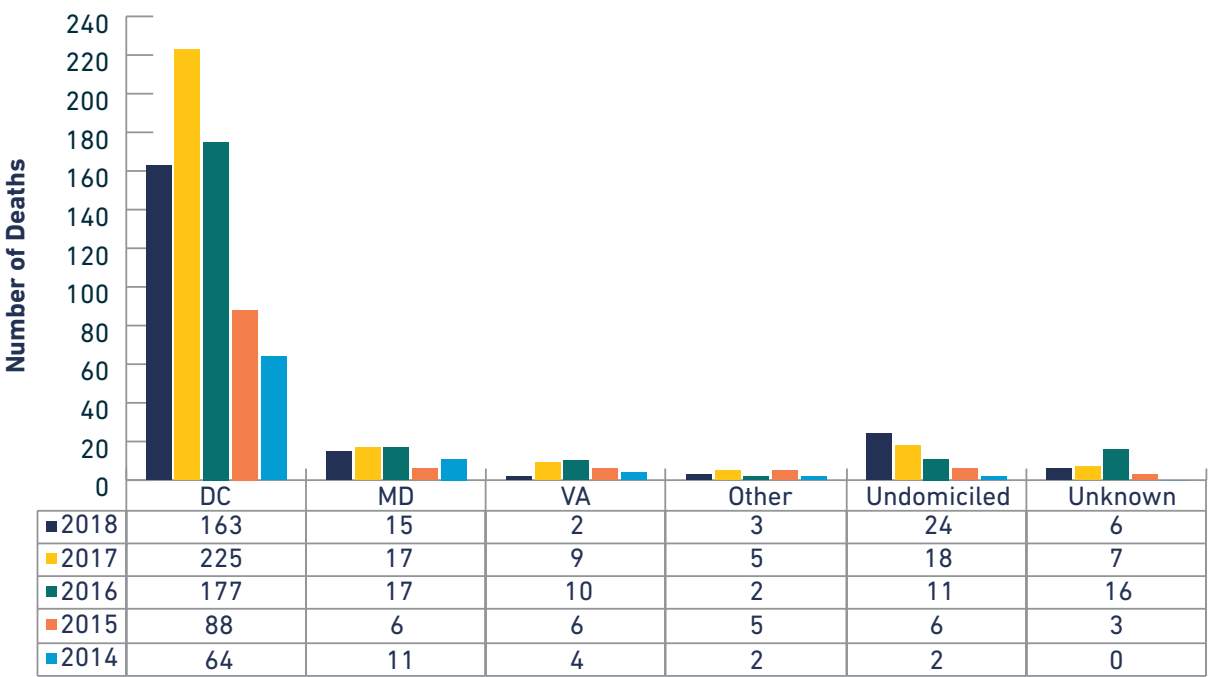
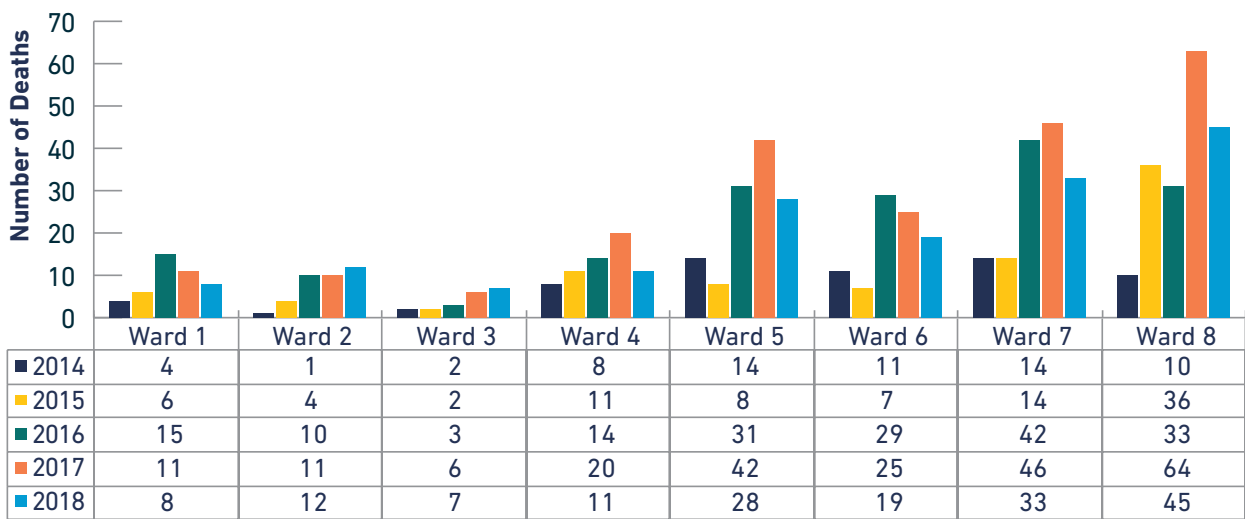


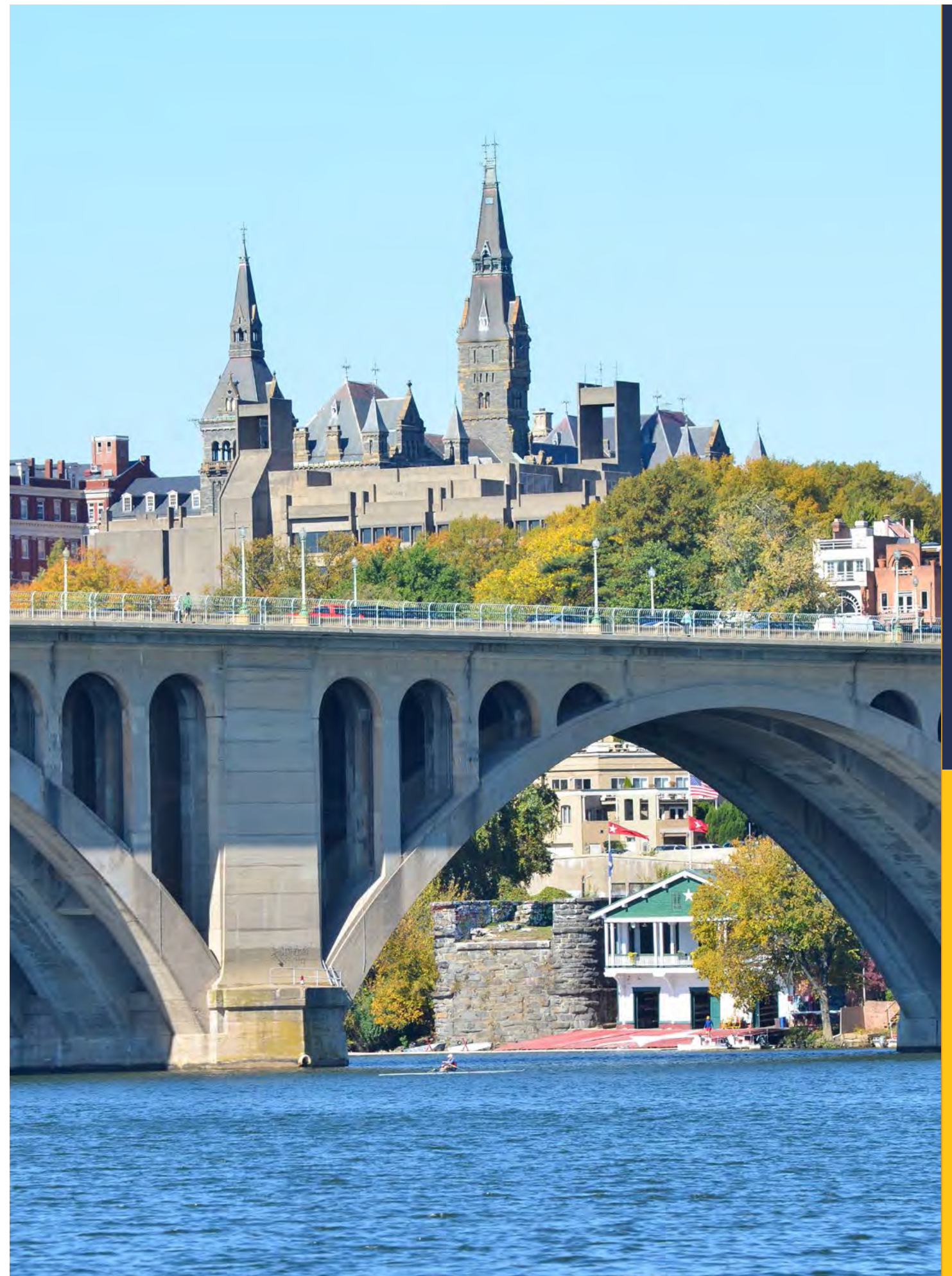
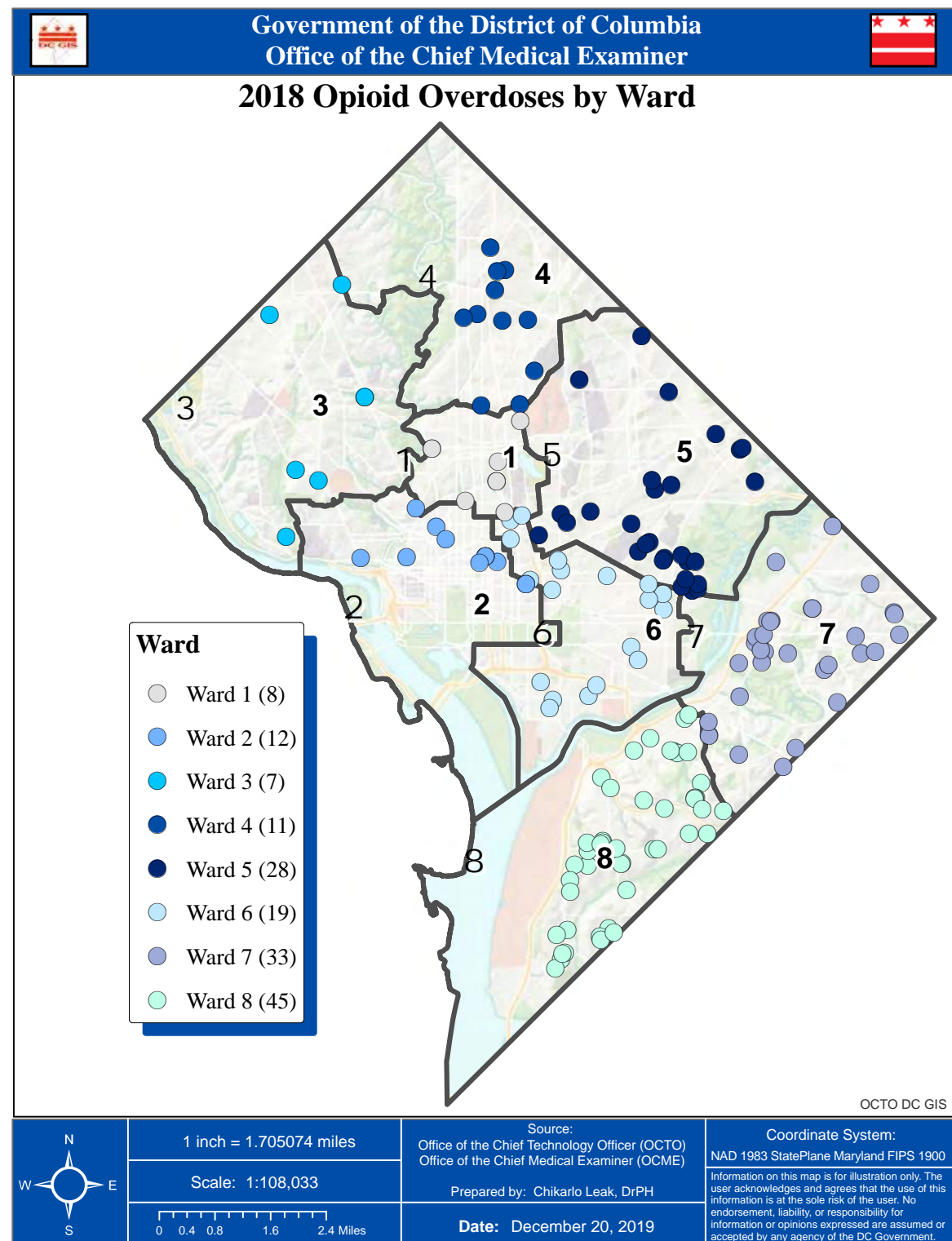
FIG. 9: NUMBER OF DRUG OVERDOSES DUE TO OPIOID USE BY WARD OF RESIDENCE AND YEAR





## Map of Opioid related Deaths by Jurisdiction of Residence

The map below displays opioid overdoses in 2017 by jurisdiction of residence. As stated previously, opioid overdoses are prevalent in Wards 5, 6, 7 and 8. The map also highlights a hotspot in Ward 2.



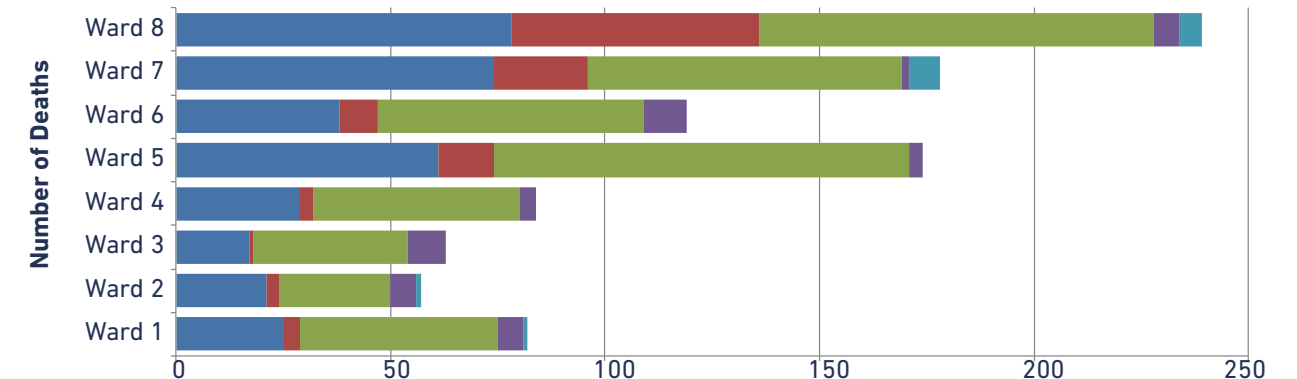


# 5.0

## Ward Highlights

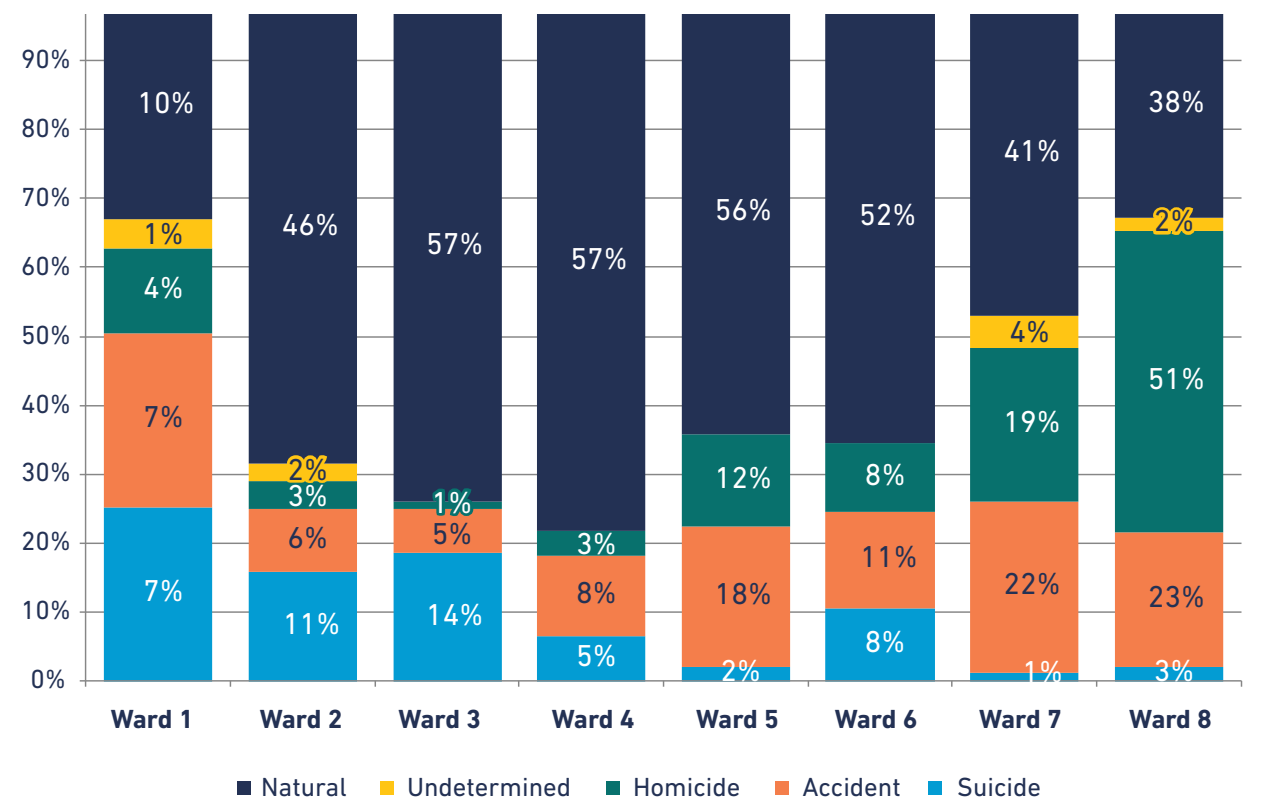
Overall, **996** or **75%** of all decedents were residents of the District of Columbia. This section highlights the leading manner and causes of death by Ward. The tables below provide the leading causes of death (manner) by the decedent's jurisdiction of residence.

DC WARD BREAKDOWN BY MANNER OF DEATH



	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8
Accident	25	21	17	29	61	38	74	78
Homicide	4	3	1	3	13	9	22	58
Natural	46	26	36	48	97	62	73	92
Suicide	6	6	9	4	3	10	2	6
Undetermined	1	1	0	0	0	0	7	5
Total (n=996)	82	57	63	84	174	119	178	239

PERCENT OF DC WARD BREAKDOWN BY MANNER OF DEATH





## Ward 1

Of the 996 DC residents seen at the OCME, there were 82 decedents from Ward 1. The most prevalent cause of death was cardiovascular disease (35) followed by drug overdoses (18) and blunt injuries due to falls (4).

## Ward 2

There were 57 decedents from Ward 2, the fewest of any Ward. Similar to Ward 1, the most prevalent cause of death was cardiovascular disease (24) followed by drug overdoses (13), and blunt injury due to falls (7).

## Ward 3

There were 63 decedents from Ward 3. Similar to last year, there was no undetermined manner of deaths. The most prevalent cause of death was cardiovascular disease (26) followed by drug overdoses (9), and blunt injury due to falls (7).

## Ward 4

There were 84 decedents from Ward 4. The most prevalent cause of death was cardiovascular disease (36) followed by drug overdoses (15), and blunt injury due to falls (9).

## Ward 5

There were 174 decedents from Ward 5, the third highest number among the 8 DC Wards. Ward 5 had the highest number of natural deaths amongst all wards. The most prevalent cause of death was cardiovascular disease (75) followed by drug overdoses (39), and blunt injuries due to falls (14). Ward 5 had the third highest number of homicides, following Wards 7 and 8.

## Ward 6

There were 119 decedents from Ward 6. The highest number of suicides came from Ward 6 for CY 2018. The most prevalent cause of death was cardiovascular disease (48) followed by drug overdoses (31), and firearm-related violent deaths (9).

## Ward 7

There were 178 decedents from Ward 7, the second highest number following Ward 8. In addition, Ward 7 had the highest number of undetermined deaths (7) and the second highest number of homicides (74). The most prevalent cause of death was drug overdoses (56), followed by cardiovascular disease (53), and firearm-related violent deaths (17). Ward 7 is the only the Ward where fatal drug overdoses were more prevalent than cardiovascular disease for CY 2018.

## Ward 8

There were 239 decedents from Ward 8, the most of any Ward. There were more deaths with a manner of death of accident (78) and homicide (58) than any other Ward. The most prevalent cause of death was cardiovascular disease (69), drug overdoses (59), and firearm-related violent deaths (52). Ward 8 (5) was second to Ward 7 (7) with Undetermined cases.



# 6.0

## Organ Procurement

The Uniform Anatomical Gift Revision Act of 2008 mandates in Sec. 22 (a) [The] Chief Medical Examiner shall cooperate with procurement organizations to maximize the opportunity to recover anatomical gifts for the purpose of transplantation, therapy, research, or education.

THE PRIMARY ENTITY THAT PROCURES ORGAN DONATIONS IN THE DISTRICT OF COLUMBIA IS THE WASHINGTON REGIONAL TRANSPLANT CONSORTIUM (WRTC). TO MAINTAIN COMPLIANCE WITH THIS LAW AND ENSURE FULL COOPERATION IS OCCURRING WITH AND BETWEEN THE OCME AND WRTC - THE MEDICAL EXAMINER MONITORS AND TRACKS ALL ORGAN DONATION REQUESTS. HOWEVER, THE OCME ALSO HAS A REGULATORY OBLIGATION TO ENSURE THAT DONATION REQUESTS DO NOT COMPROMISE THE ETHICAL STANDARDS, INVESTIGATION EFFORTS OR EVIDENCE OF THE REMAINS, AND THAT THE PROCESS IS CONDUCTED WITH RESPECT AND HONOR TO THE DECEDENTS AND THEIR FAMILIES.

The following tables provide a statistical rendering of all work related to organ requests and the procurement of organs where approval has been provided, as well as where approval is not required.

Permission Granted?	# of Requests	# Procured
Yes	171	40
No	1	0
Request Abandoned	0	0
Not Required	0	0
Total Requests	172	40



## FOR THE GOOD OF THE COMMUNITY- EXCERPTS FROM ORGAN DONATION LETTERS

***"When a person saves a single life, it is as if they have saved the whole world."***

"We would like to thank you for your invaluable assistance...the donor's left kidney and pancreas was gifted to a married 46-year old gentleman...he had been awaiting a transplant for only 3 months before this generous gift arrived."

"...The donor's left kidney was gifted to a 62-year old woman. She is married with 3 children. She was on the national transplant waiting list for 17 months, and on dialysis since August of 2018 before receiving her second chance at life. Her overall health is good and she looks forward to spending time with her family and going hiking."

"...The donor's bone and connective tissues were recovered and many benefit as many as 60 people who suffer from wide range of health issues... Because of this gift, individuals may receive the gift of sight and recover from their blindness".

"...A six-month old baby girl received a segment of the donor's liver. She had been waiting just over a month for this lifechanging gift. She is a twin and also has a four year old sister. Thanks to this donation, this child has a new chance for living a long, healthy life."

"The donor's right kidney was gifted to a seven-year-old boy...He attends school, enjoys camping and play dates. His hobbies include reading, sporting activities and video gaming. He is very grateful to the family for their acts of kindness."

"The recipient of the donor's liver is a 22-year-old woman...who is currently a college student. She spent seven years on the transplant waiting list...She looks forward to finishing college."

"...The donor's heart was transplanted into an 18 year old student. Prior to receiving the transplant, he suffered from an illness that affected her heart. The recipient and his family are extremely grateful for this life saving gift. He plans to return to school for his senior year".

"The recipient of the donor's right kidney is a 36 year old woman. She is a single with two children...She has been waiting almost 3 years for this special gift and on dialysis close to 9 years...She is planning to go on a cruise with her family after her recovery."

"The recipient of the donor's right kidney is a 65-year-old retired gentleman...He is married and has four children...He wanted to express this to the donor family: "Thank you so much for giving me the opportunity to having the kidney. I am taking care of it. God Bless you all, from the bottom of my heart. Thank you."

"A woman in her 30s is the recipient of the donor's left kidney. She is a proud mother of a one-year-old child...She sends the following message to the family: "Your loved one lives on through me, thank you for a second chance at life."



# 7.0

## Toxicology Services

### 7.1 - TOXICOLOGY FINDINGS FOR DRIVING UNDER THE INFLUENCE (DUI) CASES

Toxicological examinations were performed on driving-under-the-influence (DUI) cases to assist law enforcement agencies in the investigation of such cases. Routine toxicological examinations for DUI cases include analysis for alcohols (ethanol and other volatiles) and major classes of illicit and prescription medications. Additional screens were assigned depending on requests made by law enforcement. In 2018, the laboratory received 431 cases from the Metropolitan Police Department (MPD), 71 cases from the United States Parks Police (USPP), 12 specimens from the United States Capitol Police (USCP), 20 specimens from the United States Secret Service (USSS), and 1 specimen from the Central Intelligence Agency (CIA). Specimens received were either blood or urine, and multiple specimens could be received with each of the 535 cases. A total of 676 specimens were received in 2018.

A negative case refers to the absence of any alcohol or detectable drug. A positive case refers to the presence of alcohol and/or drug(s), noting that a case can be positive for more than one substance. Drugs that are excluded from typical DUI toxicology reports include common compounds found such as caffeine and nicotine.

#### TOTAL NUMBER OF DUI CASES ANALYZED:

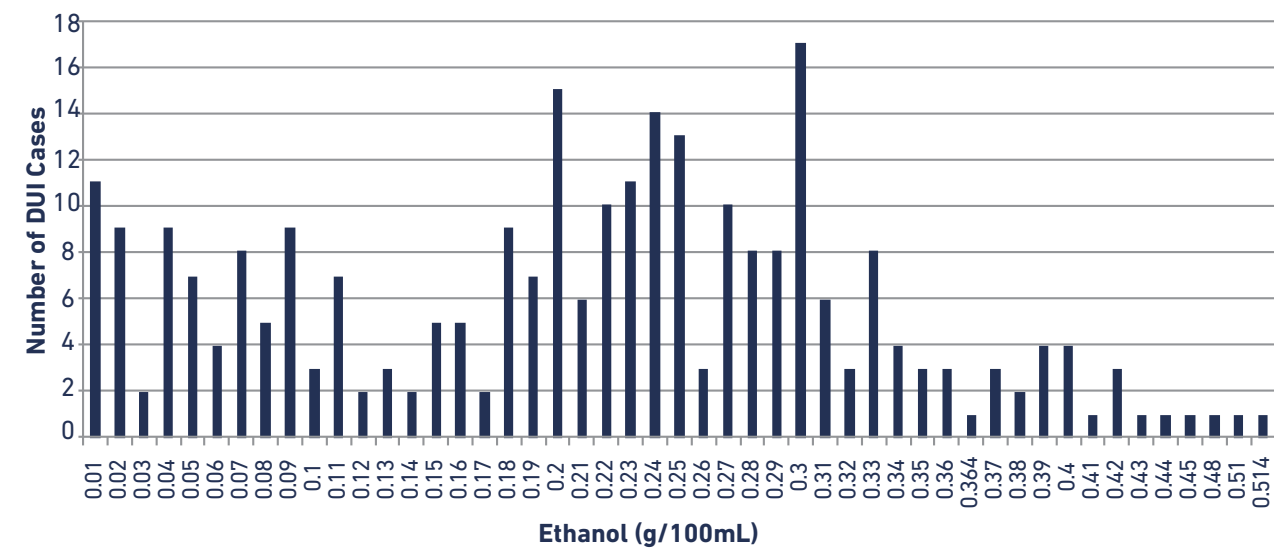
Description	# of Cases	% of Cases
N=	535	
Negative	22	4.1 %
Positive	513	95.8 %

#### THE 5 MOST COMMONLY DETECTED DRUGS IN THE DRIVING UNDER THE INFLUENCE CASES WERE:

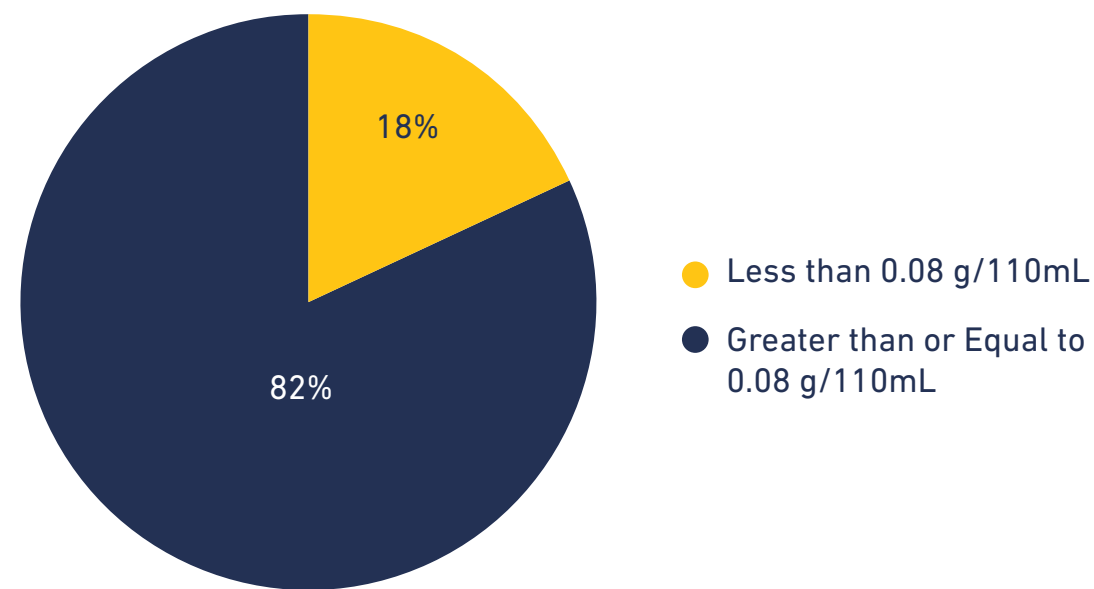
Drug	# of Cases	% of Cases
Ethanol	329	61.4%
Marijuana Metabolite	218	40.7%
Phencyclidine (PCP)	142	26.5%
Cocaine Metabolite	56	10.4%
Fentanyl	25	4.6%

**NOTE:** Additional information regarding driving under the influence of controlled substances can be found in Section 7.3 - Breath Testing Program.

DISTRIBUTION OF ALCOHOL CONCENTRATION IN URINE  
AMONG 2018 DUI URINE SAMPLES



URINE ALCOHOL RESULTS BASED ON PER SE LAW



7.2 - TOXICOLOGY FINDINGS FOR DRUG FACILITATED  
SEXUAL ASSAULT (DFSA) CASES

Toxicological examinations were performed on drug facilitated sexual assault cases to assist law enforcement agencies in the investigation of such cases. Routine toxicological examinations for DFSA cases include analysis for alcohols (ethanol and other volatiles), major classes of illicit and prescription medications, and targeted drugs commonly used in DFSA cases. Additional screens were assigned depending on requests made by law enforcement. In 2018, the laboratory received cases from District government agencies including 55 cases from Metropolitan Police Department and 61 cases from the Office of Victim Services. Specimens received were blood and urine, and multiple specimens were received with each of the 116 cases.

A negative case refers to the absence of any alcohol or detectable drug. A positive case refers to the presence of alcohol and/or drug(s), noting that a case can be positive for more than one substance. Drugs that are excluded from typical DFSA toxicology reports include common compounds found such as caffeine and nicotine.

Total number of DFSA cases analyzed:

Description	# of Cases	% of Cases
N=	116	
Negative	3	2.5 %
Positive	113	97.4 %

The 8 most toxicologically significant drugs detected in the drug facilitated sexual assault cases were:

Drug	# of Cases	% of Cases
Marijuana Metabolite	41	35.3%
Ethanol	38	32.7%
Acetone	18	15.5%
Quinidine/Quinine	15	12.9%
Diphenhydramine	14	12.0%
Amphetamine	13	11.2%
Cocaine Metabolite	13	11.2%
Phencyclidine	9	7.7%



Subject demographics for DFSA cases were: Cases submitted by Agency and cases processed:

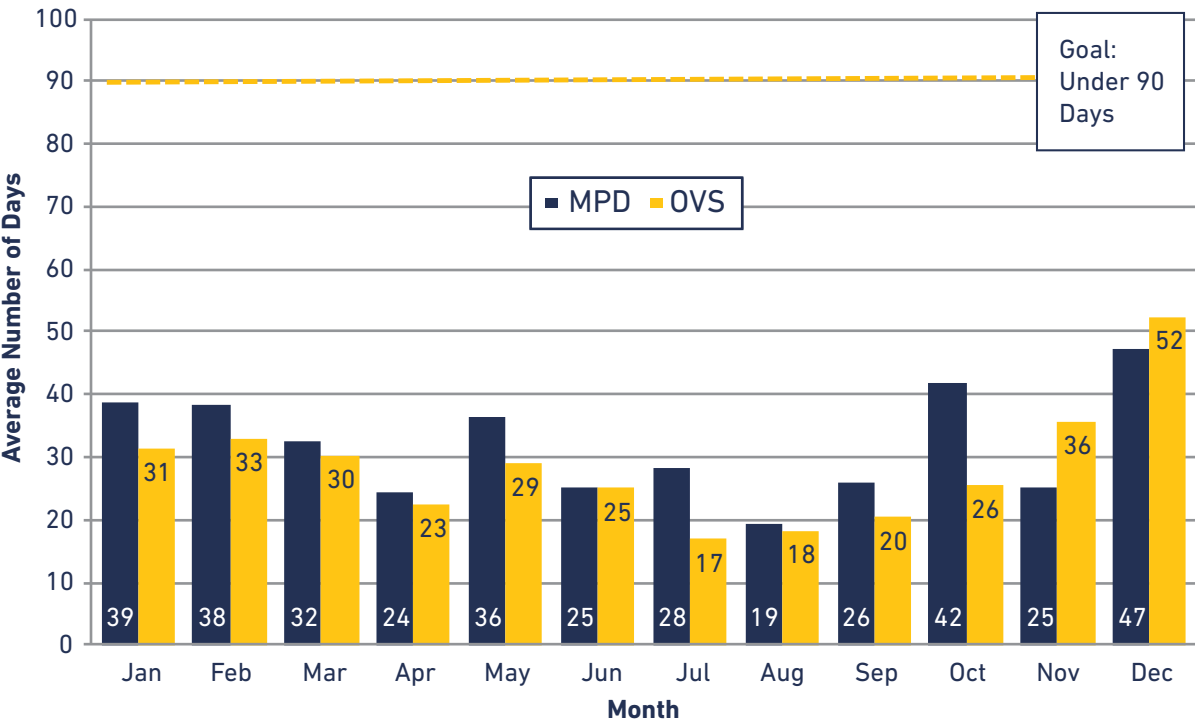
Average Age (years)	27
Gender	% of Total
Male	12.9%
Female	87.0%
Total	99.9%

Agency	Cases Received	% Processed
MPD	55	100%
OVSJG (DC SANE)	61	100%

Age Range	# of Cases
Ages ≥10 and <15	1
Ages ≥15 and <20	18
Ages ≥20 and <25	36
Ages ≥25 and <30	25
Ages ≥30 and <35	17
Ages ≥35 and <40	9
Ages ≥40 and <50	7
Ages ≥50 and <70	3
Total	116



AVERAGE MONTHLY TURNAROUND TIME FOR DFSA CASES SUBMITTED TO OCME



## Turnaround Time (TA) for Each Case Submitted to OCME:

The Sexual Assault Victims Right Act of 2014 (SAVRA) is the result of survivor and systems advocacy efforts to improve the District’s response to sexual assaults. SAVRA requires OCME to disclose the amount of time taken to process each sexual assault kit submitted for toxicology testing. The goal is complete toxicology testing within 90 days. The turnaround time for each case submitted to OCME is listed below by submitting agency, date received and date reported.

Turnaround Time (TAT) for Cases Submitted to OCME by Agency							
Submitting Agency	Received Date	Report Date	TAT (Days)	Submitting Agency	Received Date	Report Date	TAT (Days)
MPD	10/15/18	1/18/19	95	OVS	1/12/18	2/14/18	33
OVS	11/16/18	2/19/19	95	OVS	1/12/18	2/14/18	33
OVS	12/3/18	2/19/19	78	MPD	3/15/18	4/17/18	33
MPD	1/8/18	3/20/18	71	MPD	3/15/18	4/17/18	33
MPD	12/3/18	2/4/19	63	MPD	3/29/18	4/30/18	32
MPD	5/3/18	6/25/18	53	OVS	9/7/18	10/9/18	32
OVS	12/3/18	1/25/19	53	OVS	9/7/18	10/9/18	32
OVS	12/3/18	1/24/19	52	OVS	3/30/18	4/30/18	31
MPD	1/22/18	3/14/18	51	OVS	3/30/18	4/30/18	31
MPD	7/2/18	8/22/18	51	MPD	5/3/18	6/3/18	31
MPD	2/20/18	4/11/18	50	MPD	5/3/18	6/3/18	31
MPD	12/5/18	1/24/19	50	MPD	6/11/18	7/12/18	31
MPD	2/21/18	4/11/18	49	MPD	7/16/18	8/16/18	31
OVS	2/21/18	4/11/18	49	MPD	2/12/18	3/14/18	30
OVS	12/17/18	2/4/19	49	OVS	2/20/18	3/22/18	30
OVS	12/3/18	1/17/19	45	MPD	4/9/18	5/9/18	30
OVS	12/3/18	1/17/19	45	MPD	10/15/18	11/14/18	30
OVS	12/3/18	1/17/19	45	OVS	10/15/18	11/14/18	30
OVS	10/15/18	11/28/18	44	OVS	10/15/18	11/14/18	30
MPD	1/2/18	2/14/18	43	MPD	1/16/18	2/14/18	29
MPD	1/11/18	2/23/18	43	MPD	1/29/18	2/27/18	29
MPD	2/1/18	3/14/18	41	OVS	2/21/18	3/22/18	29
MPD	12/27/18	2/6/19	41	OVS	3/19/18	4/17/18	29
MPD	12/27/18	2/6/19	41	MPD	3/19/18	4/17/18	29
MPD	12/27/18	2/6/19	41	OVS	5/16/18	6/14/18	29
OVS	2/21/18	4/2/18	40	OVS	5/16/18	6/14/18	29
MPD	5/24/18	7/2/18	39	OVS	6/25/18	7/24/18	29
OVS	9/7/18	10/14/18	37	MPD	8/20/18	9/18/18	29
MPD	3/26/18	4/30/18	35	OVS	1/17/18	2/14/18	28

Turnaround Time (TAT) for Cases Submitted to OCME by Agency (continued)							
Submitting Agency	Received Date	Report Date	TAT (Days)	Submitting Agency	Received Date	Report Date	TAT (Days)
MPD	4/2/18	4/30/18	28	OVS	11/16/18	12/7/18	21
MPD	1/2/18	1/29/18	27	OVS	11/16/18	12/7/18	21
MPD	1/2/18	1/29/18	27	OVS	7/19/18	8/8/18	20
MPD	1/2/18	1/29/18	27	MPD	8/2/18	8/22/18	20
OVS	4/18/18	5/15/18	27	OVS	10/31/18	11/20/18	20
MPD	5/29/18	6/25/18	27	OVS	10/31/18	11/20/18	20
OVS	6/25/18	7/22/18	27	OVS	10/31/18	11/20/18	20
MPD	10/18/18	11/14/18	27	OVS	10/31/18	11/20/18	20
MPD	11/1/18	11/28/18	27	OVS	10/31/18	11/20/18	20
MPD	11/1/18	11/28/18	27	OVS	6/7/18	6/26/18	19
MPD	11/1/18	11/28/18	27	MPD	6/25/18	7/13/18	18
OVS	2/9/18	3/7/18	26	MPD	7/23/18	8/9/18	17
MPD	6/28/18	7/24/18	26	OVS	8/13/18	8/30/18	17
MPD	9/27/18	10/23/18	26	OVS	8/13/18	8/30/18	17
MPD	9/27/18	10/23/18	26	MPD	8/13/18	8/30/18	17
OVS	2/9/18	3/5/18	24	OVS	7/11/18	7/27/18	16
MPD	11/5/18	11/28/18	23	OVS	7/11/18	7/27/18	16
MPD	11/19/18	12/11/18	22	OVS	7/11/18	7/27/18	16
MPD	2/12/18	3/5/18	21	OVS	7/11/18	7/27/18	16
OVS	4/18/18	5/9/18	21	MPD	8/20/18	9/5/18	16
OVS	4/18/18	5/9/18	21	MPD	10/29/18	11/14/18	16
OVS	4/18/18	5/9/18	21	MPD	4/30/18	5/15/18	15
OVS	8/1/18	8/22/18	21	MPD	8/27/18	9/11/18	15
OVS	9/7/18	9/28/18	21	MPD	7/26/18	8/9/18	14
OVS	9/7/18	9/28/18	21	OVS	9/7/18	9/19/18	12
OVS	9/7/18	9/28/18	21	OVS	9/19/18	10/1/18	12
OVS	9/7/18	9/28/18	21	OVS	9/19/18	10/1/18	12
OVS	11/16/18	12/7/18	21	OVS	9/19/18	10/1/18	12
OVS	11/16/18	12/7/18	21	OVS	9/19/18	10/1/18	12

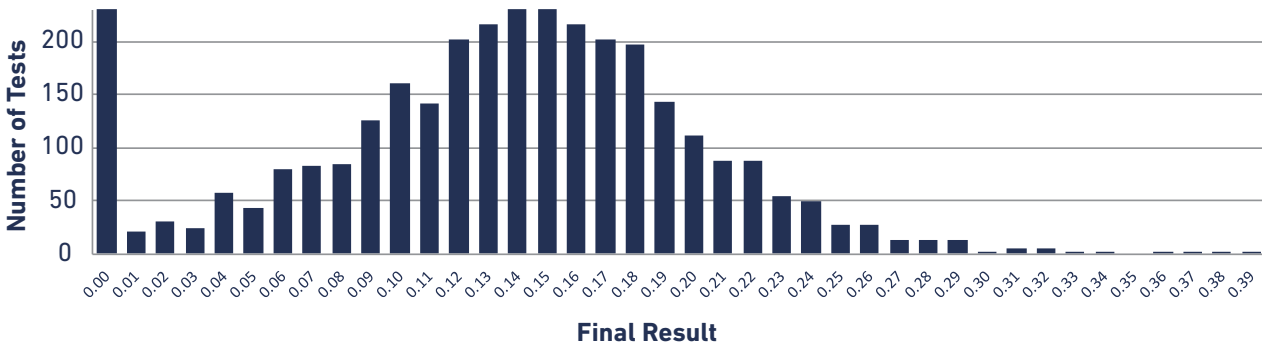
7.3 - BREATH ALCOHOL PROGRAM

In 2018, four 40-hour Operator Training Courses were offered, licensing a total of 65 operators. Thirty-six operators were recertified; therefore there were a total of 177 licensed operators. This resulted in 5,172 evidential breath tests being administered through the deployment of 8 instruments into the field since 2012.

Program Facts

- » Total 40-hour Operator Trainings Provided in 2018: 4
- » Total New Breath Test Operators Trained in 2018: 65
- » Total Recertification Trainings in 2018: 5
- » Total Operators Recertified in 2018: 36
- » Total Licensed Breath Test Operators in 2018: 177
- » Breath Alcohol Technicians Trained: 2
- » Breath Alcohol Maintenance Technician Trained: 0
- » Breath Alcohol Toxicologist Trained: 0
- » Total Certified Active Technicians: 10
- » Number of evidential instruments in the field (cumulative): 8
- » Total Evidential Tests Taken from 2012-2018: 5,172

TESTS TAKEN IN 2018 BY DISTRICT:





1D: 125

2D: 88

3D: 216

4D: 70

5D: 111

6D: 85

7D: 111

MPD Alc. Van: 1

Total: 807

**Final Results from all Districts from 2012 – 2018:** The most prevalent final result is 0.00 g/210L. This can be due to the impairment of a subject by a substance other than ethanol. The most prevalent breath alcohol concentrations range from 0.13 – 0.19 g/210L.

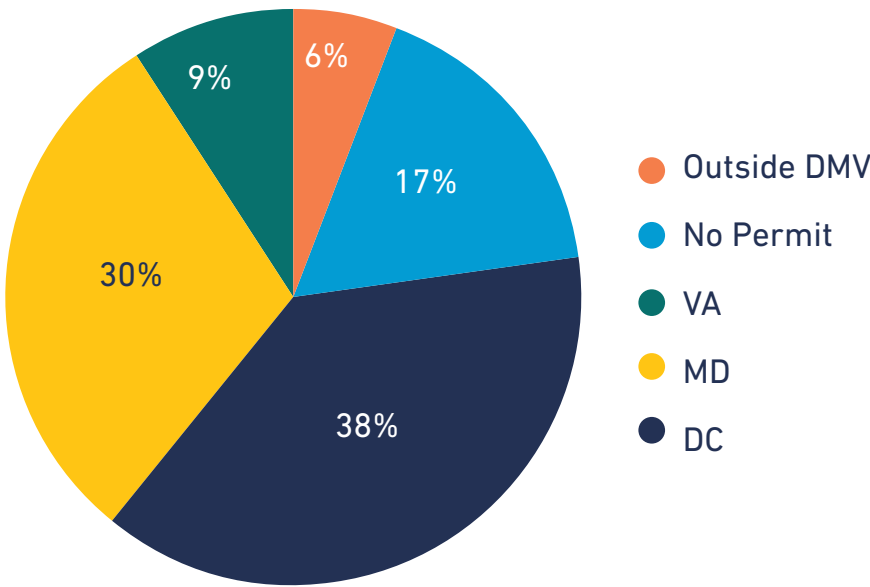
TOTAL NUMBER OF BREATH ALCOHOL TESTS BY DISTRICT AND YEAR

Serial Number (District)	2012	2013	2014	2015	2016	2017	2018	TOTALS
013303 (1D)	40	192	151	106	103	146	125	863
013304 (2D)	0	100	126	99	105	119	88	637
013305 (3D)	83	330	281	131	179	140	216	1360
013306 (4D)	0	55	76	54	77	93	70	425
013307 (5D)	0	102	149	111	97	103	111	673
013308 (6D)	0	46	99	37	57	115	85	439
013309 (7D)	96	255	128	55	42	77	111	764
013310 (Alcohol Van)	0	0	0	2	4	4	1	11
Total Evidential Tests as of 12/31/2018	219	1080	1010	595	664	797	807	5172

**Additional Facts:**

Overall, the program maintains an average of 11% refusals (a refusal is when someone elects to not take an evidential breath test). These statistics do not include refusals of the PD 29 Implied Consent form. These are refusals captured by the breath testing instrument due to a deficient sample or refusal during the breath test.

PERCENT OF BREATH TESTING REFUSALS DUE TO DEFICIENT SAMPLES OR PERSONAL REFUSAL







# 8.0

## Other Major Activities

All other major activities are conducted under the oversight and strict supervision of the Chief Medical Examiner and/or his designee.

### 8.1 - COURT-RELATED ACTIVITIES

A parameter not often considered in evaluating the Medical Examiners workload is time spent in pre-trial conferences, depositions and expert testimony provided in family, civil and criminal litigations. This annual report presents tabulated data for these expert services provided in OCME calendar year 2018.

Type of Judicial Service	Number of Court-Related Activities
Court Testimony	4
Depositions	0
Grand Jury	1
Pre-trial Conference	13
Other	2
Total	20

Court Services by Type	Number of Court-Related Activities
Civil	1
Criminal	17
Other	2
Total	20

Court Services by Jurisdiction	Number of Court-Related Activities
DC	33
Maryland	10
Virginia	7
Other	1
Total	51



For calendar year 2018 the above data represents approximately **50** hours of Medical Examiner time. In general the least amount of time spent on this activity was 15 minutes, and the maximum recorded time spent on a court-related activity was 6.50 hours.

8.2 - IDENTIFICATIONS

■ Identifications<sup>16</sup>

The Office of the Chief Medical Examiner is mandated by law DC Code § 5-1412 to “... [give] the name, if known, of every person whose death is investigated.” The process of identification can be a complex and lengthy procedure. The methods used to identify decedents whose deaths are investigated by the OCME are detailed below. The methods of identification are listed from the most to least commonly used.

**Visual identification:** This method is used whenever circumstances of death and discovery allow. In general, the immediate family, close friends, neighbors or colleagues provide identification verification through viewing a photograph of the decedent. At the OCME facility, a digital photograph is taken of the decedent’s face and presented to the family or other appropriate individual. Also, visual identification may occur at the death scene if an appropriate individual observed the decedent and is available to speak with the medicolegal death investigator.

**TIMEFRAME: INSTANT.**

**Fingerprint:** When the physical state of the decedent allows, fingerprints are captured. These fingerprints are sent to the law enforcement and processed through the Automated Fingerprint Identification System (AFIS). Fingerprints are searched through both the criminal and civil databases. If the fingerprint search returns a negative hit, the fingerprints are sent to the Department of Homeland Security for a search of individuals in the immigration database.

**TIMEFRAME: TYPICALLY 1-5 HOURS, BUT MAY TAKE UP TO 3 DAYS.**

<sup>16</sup> There were a total of twenty-five accepted Medical Examiner cases that were not required to be identified, because eleven were Non-Human Remains and fourteen were Review of Medical Records, where the remains were not required to be transported to the Medical Examiner’s office.

ID Method	# of ID's
ID By Visual at OCME – 266 at Scene - 249	515
ID By Fingerprints	411
ID By X-ray	55
ID Waived	299
ID By Dental X-ray	2
ID By Circumstantial Evidence	18
ID by DNA	5
ID Other	4
Unidentified	0
ID Not Required <sup>15</sup>	0
Total	1309

**Radiograph (X-ray) Comparison:** Individualizing skeletal characteristics are captured during routine medical and dental radiographs. Antemortem (before death) radiographs are compared to post-mortem (after death) radiographs and these individualizing characteristics are targeted to confirm identification.

**TIMEFRAME: UP TO 1 WEEK.**

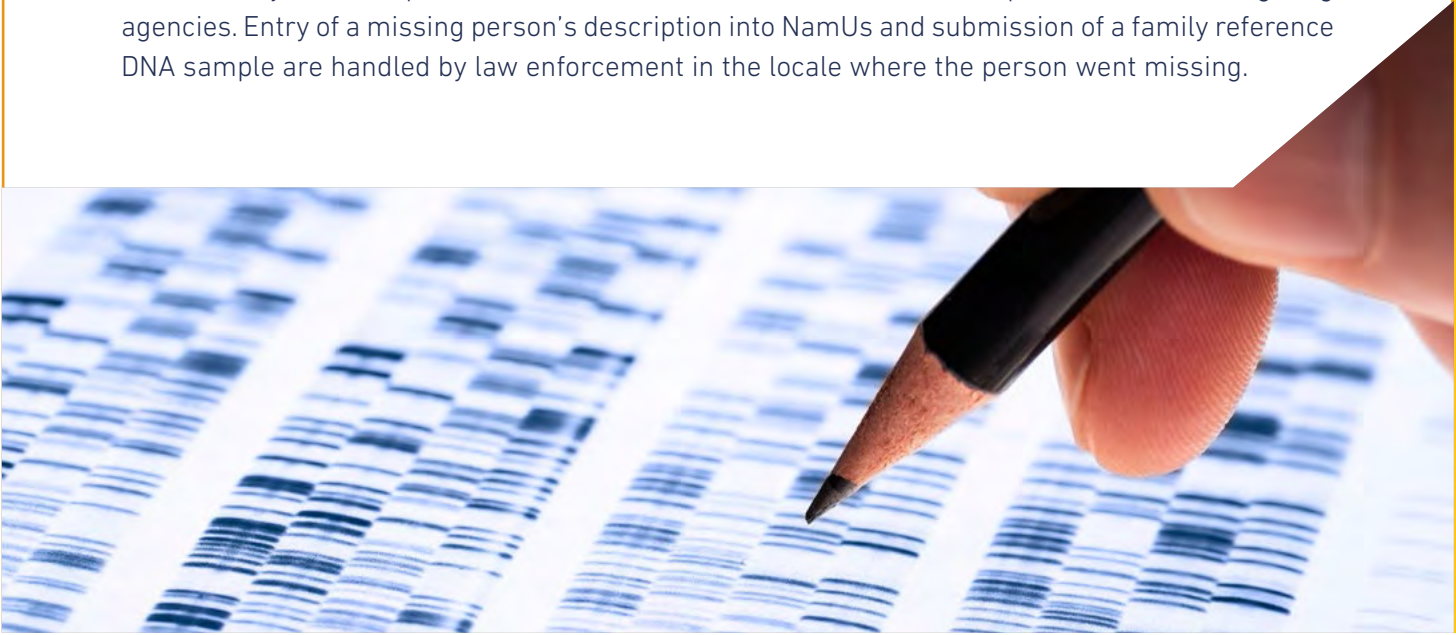
**DNA testing:** This method requires the decedent’s DNA profile to be compared to the DNA profile of a close biological relative, preferably a parent or child. The DNA profiles are obtained from a decedent specimen (i.e. femur bone, blood, teeth or deep muscle tissue) and a buccal (cheek) swab collected from the biological relative. Alternatively, the decedent’s DNA profile can be compared to the DNA obtained from the decedent’s personal item such as a tooth brush or hair brush.

**TIMEFRAME: UP TO 3 TO 6 WEEKS.**

**Circumstantial Identification:** Circumstantial identification is utilized when no other means of identification are available and the investigative information strongly supports the identification. Investigative information may include: discovery location (i.e., locked and secured residence); decedent’s physical state and date last known to be alive; and, physical description of the decedent (i.e., sex, age, and race).

**Unidentified:** Individuals are classified as unidentified when a tentative name cannot be confirmed by the methods listed above or no tentative name is known and fingerprint submissions result in negative hits. Prior to final disposition of the decedent, the case is entered into the National Missing and Unidentified Persons System (NamUs). NamUs is a database managed by the US Department of Justice (DOJ) and is available to the public. Included in a NamUs entry are the decedent’s physical description, circumstances surrounding death, identification photograph, photographs of tattoos and clothing, dental and skeletal radiographs and fingerprint cards. Additionally, a biological sample is submitted to a DOJ funded DNA laboratory for analysis and the decedent’s DNA profile is uploaded to the Combined DNA Index System (CODIS).

Family members searching for lost love ones have access to NamUs through the internet (<http://www.namus.gov/>) and may submit a buccal swab for processing and uploading to a family member specific DNA database. The unidentified decedent’s DNA profile is regularly compared to all the family member profiles in the database. Positive matches are reported to the investigating agencies. Entry of a missing person’s description into NamUs and submission of a family reference DNA sample are handled by law enforcement in the locale where the person went missing.



8.3 - PUBLIC DISPOSITIONS

All bodies examined at the OCME are stored by the agency until the next of kin or other authorized individual makes funeral arrangements. Usually this occurs in a matter of days. However, a portion of the population remains “Unclaimed” or “Unidentified” and final disposition must be arranged by the agency.

Additionally, the OCME provides storage of remains for nursing homes and hospices that do not have refrigerated facilities to store bodies. A minimal one-time fee is charged to these facilities and the remains are kept until family members are located or able to make funeral arrangements, or until the expiration of 30-days and at such time public disposition can occur. By regulation (DC Code §5-1411), OCME is required to arrange final disposition for unclaimed remains housed at local hospitals.

The process for which unclaimed bodies are handled is called “Public Dispositions.” After a 30-day waiting period and after all efforts to locate family members are exhausted the OCME makes final arrangements for these bodies through a contracted local funeral home. Unclaimed decedents are cremated and the cremains are buried. At the discretion of the medical examiner, unclaimed or unidentified decedents may be buried. Furthermore, the OCME has a memorandum of understanding with the National Museum of Health and Medicine allowing the museum to serve as a repository for unidentified skeletal remains. The museum archives the remains until the individual is identified and can be returned to his or her family.

Unclaimed decedents identified as United States military veterans are provided a burial at Quantico National Cemetery. First, veteran status is verified through the National Scheduling Office. Then, a burial is scheduled and the decedent is transported, dressed and casketed by the contracted local funeral home. Family members may attend the interment service.

Notably, Public Dispositions are not performed by medical examiners in neighboring jurisdictions. For instance, in Maryland bodies are released to the Anatomical Board after 3 days if they are not claimed by Next of kin.

There were a total of 278 Public Disposition cases, of which 96 were Medical Examiner cases and 181 were Storage cases. Of the public disposition cases, 93 cases were cremains as opposed to bodies. The cremains were located within the District of Columbia and submitted to the OCME for final disposition. There were no unidentified decedents that were released for Public Disposition in 2018. The breakdown by Adult, Children and Fetuses:

Description	# of Public Dispositions
Adults	274
Children	3
Fetus	1
Cremains	0*
Total	278

\*At times, cremains are found in the community and submitted to the medical examiner’s office. The OCME buries these cremains held in individual urns with the cremains of the unclaimed decedents.

BREAKDOWN OF PUBLIC DISPOSITIONS AND THE ASSOCIATED COSTS

Public Disposition by type	# of Unclaimed Remains
Cremations – adults	178
Cremations – child	0
Cremations – fetal remains	1
Buried children	1
Cremains released for burial	92
Transport to Quantico National Cemetery – identified US Military Veteran	6
TOTAL	278 unclaimed remains

Cremation Requests

Pursuant to DC Code §5-1405 the OCME must investigate and approve all Cremation requests for deaths that have occurred in the District of Columbia “regardless of where the cremation will occur”. This involves review of the cause and manner of death to be sure it is an etiologically specific disease process and that the manner is natural. Should the cause of death not be appropriately documented, the certifying physician is contacted, the cause of death reviewed and the appropriately formatted cause of death is determined. If this review reveals the manner of death is not natural, the death then falls under the jurisdiction of OCME.

Storage Requests

The OCME offers temporary body storage for individuals as well as institutions unable to make immediate funeral arrangements. Institutions – but not families – are charged a \$150.00 fee for such requests. In these instances, death certificates are also reviewed for appropriate causation.

During Calendar Year 2018 there were **76** Storage Requests made to the DC OCME

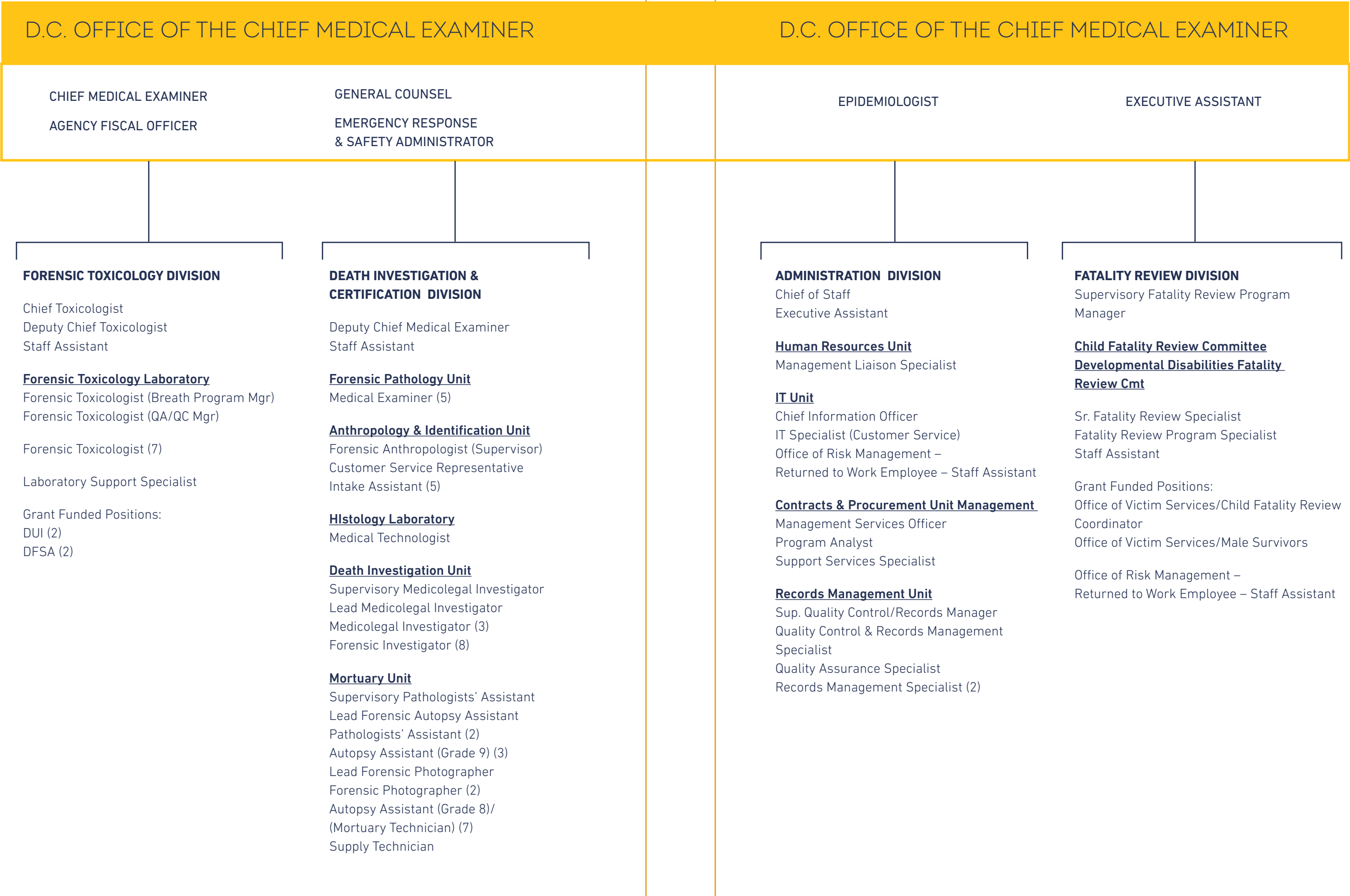


# APPENDIX


## A

OCME Organizational  
Chart









# APPENDIX B

KEY AGENCY  
ACTIVITIES





## KEY AGENCY ACTIVITIES

### Mayoral & District-wide Initiatives

Learn, Earn, Advance, Prosper (L.E.A.P.) Program

The District's L.E.A.P. Program is a network of interconnected partners utilizing the "earn-and-learn" approach that links the District's unemployed residents with employment, education and training opportunities. The program allows individuals to earn wages and accumulate work experience thus bolstering their ability to advance along a career pathway and into the middle class.

During 2018, the agency permanently hired a L.E.A.P. participant to serve in the Histology Laboratory as an assistant to the Medical Technologist.

### Administration Performance Management

The agency's Administrative Division provides support to the work discussed within this annual report in the areas of: strategic planning; finance and procurement; human resources; information technology; quality assurance and control; legal management; risk management; labor management; and incident management. The agency's administration and key managers

also facilitate key strategic partnerships in the fields of forensic services, education, emergency services, health care, research, grants and law enforcement. The agency also continues to offer internship opportunities for students in forensic science and physician assistant programs throughout the nation.

The Administrative Division is responsible for monitoring and ensuring efficient operations via establishment and compliance of an agency performance plan that includes key performance indicators – the performance component of agency management. The agency performance accountability per performance plan objectives and KPIs is included herein. This management team was successful in shepherding the initiatives outlined herein.

## I. Strategic Planning:

### A. Mission Statement

"The mission of the Office of Chief Medical Examiner (OCME) is to ensure that justice is served and that the health and safety of the public is improved by conducting quality death investigations and certification, and providing forensic services for government agencies, health care entities and grieving families.

The mission is achieved through:

- » Provision of vision and leadership for the OCME;
- » Achievement and maintenance of excellent forensic service, education and research in the critical areas of:
  - Investigation, Response, and Reporting of the Cause & Manner of Death;
  - Expert Witness Testimony;
  - Education and Training of law enforcement, health care providers and other stakeholders; and
  - Provision of family assistance in understanding the cause and manner of death of decedents;
- » Support of law enforcement and public health related initiatives at the state, local, and county levels (i.e. Gang Violence, Drug Abuse); surveillance of critical mortality data; and identification of emerging public health/law enforcement trends; and
- » Development of partnerships with county/state agencies geared toward mass fatality preparedness."



## II. Accreditation

The agency has been able to maintain the standards and guidelines of operation for medicolegal death investigation, forensic pathology, histology, forensic toxicology, anthropology and other services performed as established by those professional and peer-review organizations that provide accreditation and professional training and oversight of these particular disciplines and industries. These include the National Association of Medical Examiners (NAME), American Board of Forensic Toxicologists (ABFT), American Board of Medicolegal Death Investigators (ABMDI) and the American Board of Forensic Anthropologists (ABFA), amongst others.

The OCME was initially fully accredited by NAME through a period of February 16, 2016 through February 16, 2021 and has been reaccredited each year to present, including 2018. NAME accreditation is based on an inspection and accreditation guideline checklist that consists of 351 item focusing operations, resources, the facility, standard operation procedures and staff interviews. The American Board of Forensic Toxicology (ABFT) has granted the OCME Forensic Toxicology Laboratory has accreditation for two years from October 2017 through October 2019.

The OMCE has also worked toward ISO (International Organization for Standardization) completing the initial phase in its quest to apply for accreditation by the International Standards Organization (ISO). Not only did the agency facilitate manager and staff training throughout the year, but also in hiring an experienced ISO consultant, the agency was able to complete draft quality and training manuals, review standard operating procedures, and most significantly have a Pre-Assessment Audit & Report completed on August 18, 2018. The audit found that the agency was in conformance with 169 of 192 accreditation requirements, of which 21 required changes/updates to existing policies and procedures. Only three of the 21 were identified during facility walkthrough and related to lab suitability and evidence storage and were considered critical.

## II. Data Fusion Center & Public Surveillance

The agency's Data Fusion and Analysis Center evaluates mortality statistics in order to determine outcomes and trends toward the improvement of public health and safety. Several critical trend reports were published.

Public surveillance reports published in 2018 include: Elder Falls, Unsafe Sleeping Environment, Hyper- & Hypothermia, Homicide, Public Dispositions, and Traffic/Accidents.

**Opioids:** In March 2015, DEA Issued a nationwide alert identifying fentanyl as a threat to public health and safety. This was followed by a DEA National Heroin Threat which noted that beginning late 2013 through 2014, several states reported spikes in overdose deaths due to fentanyl and its analog acetyl-fentanyl. In September 2015 to December 2015, there were a total of 50 opioid related deaths in the District of which 11 (22%) involved fentanyl, acetyl fentanyl or both. Significantly, from March 2016 to May 2016, there were 58 opioid related deaths of which 36 (62%) involved the

same type of cases. These trends demonstrate that the District is experiencing a significant spike in opiate related deaths involving fentanyl and fentanyl analogs (acetyl, furanyl and despropionyl) as noted by the DEA National Heroin Threat and should be elevated as a public safety and justice emergency.

### National Violent Death Reporting System:

Currently, DC does not have a comprehensive surveillance system of violent deaths and proposes to create an efficient and comprehensive system to track and describe violent deaths that can be used to inform prevention efforts and reduce the number of deaths. The NVDRS grant enables the stakeholders (OCME, DOH and MPD) to evaluate surveillance systems and build enhanced reporting methodologies toward improved data collection to include demographic data, trends analysis and epidemiology studies which provide sound foundations for violence prevention strategies.

## III. Incident Management Planning

Per its mission and duty, the agency is responsible for fatality management within the District. This includes development and overall coordination of the District-wide mass fatality plan; the recovery and transport of remains; identification of remains -- often requiring anthropological expertise, as well as dental, DNA and digital X-ray services; evidence recovery; critical involvement in a Family Assistance Center (FAC); and coordination of numerous stakeholder partnerships.

In 2018, the agency partnered with federal, regional and local agencies in a focus on Continuity of Operations Planning (COOP). The agency participated in full-scale and tabletop exercises simulating a complex coordinated attack and a weather incident and a coordinated hurricane incident, as well as, a tabletop exercise to review staffing, resources and gaps. The agency also secured a COOP site to be utilized as an alternative mortuary and forensic laboratory operations, as well as a fatality management operations and training center. The agency will be partnering with the District's Homeland Security and Emergency Management Agency (HSEMA) for modernization and upgrading of the site with regard to infrastructure and resources. The agency was awarded capital funding to renovate the site to accommodate mortuary, laboratory and emergency response operations.

During the year, the agency sponsored its annual Fatality Management Symposium and full-scale exercise focusing on family assistance and victim identification training. This involved engagement with and by regional and local emergency response stakeholders, as well as the agency Death Investigations Division and Records Management Unit staff.

The agency also managed about a little under \$500,000 in grants slated for fatality management to include administration of fatality management equipment and cache, development of mass fatality plans and associated fatality management trainings and exercises, as well as hiring of fatality management staff.

## IV. Legislative Activities

During 2018, the agency worked toward the establishment of three new fatality review committees which it would administer.

### Maternal Mortality Review Committee

The agency responded to concerns raised by medical professionals and the community regarding a national trend surrounding an increase in maternal deaths. Working with other stakeholders, the agency assisted in the establishment of a District Maternal Mortality Review Committee (MMRC) through legislation passed on June 5, 2018.

### Violence Mortality Review Committee

Legislation was passed on October 30, 2018 to establish a Violence Mortality Review Committee to evaluate homicides and suicides and to perform retrospective review of socioeconomic determinant risk and protective factors surrounding such deaths.

### Opioid Fatality Review Committee

The agency has been instrumental in providing timely and accurate data surrounding deaths associated with opioid crisis in the District of Columbia. Part of this work was the development of the syringe testing program for the District. In several cases, the syringe used for injecting opioids was left on the death scene. These discarded syringes were not being tested. The syringe-testing program ensures that syringes left on scenes of death are tested for new and emerging drugs of abuse by the Department of Forensic Sciences.

The agency began working in support of a Mayor's initiative to reduce the use of opioids in the District and served on the District-Wide Opioid Working Group convened by the Department of Behavioral Health and DC Health. The agency's role is to provide all mortality data, as well as act as a thought leader surrounding policy and program development. All information generated is used to influence mortality and morbidity in the District of Columbia.

As part of the working group recommendations, the agency began work on the establishment of an Opioid Fatality Review Board to be created by Mayor's order. The board would assist in the District's efforts to prevent opioid overdose deaths and inform prevention and intervention efforts by reviewing such deaths in the District.

The agency also addressed an issue of restoring the discretion of the medical examiner in accordance with District laws and regulations to take jurisdiction of bodies and investigate deaths of person with intellectual and developmental disabilities served by Department of Disabilities Services (DDS). A Mayor's Order was issued that rescinded the obligation to the medical examiner to perform autopsies on persons served by the Department of Disabilities Services (DDS).

## V. Academic Activities

The agency's statutory mandate includes an academic component in order to ensure that staff obtains requisite training to maintain licensures and certificates and to implement agency standards and work processes and procedures accurately and effectively.

The agency utilized a NIJ- Paul Coverdell Forensic Science Improvement - Continuing Education sub grant from the Office of Victim Services & Justice Grants (OVSJG) in the amount of \$82,814 to support numerous agency trainings. This amount was also supplemented by the agency's local budget.

In 2018, staff completed academic training in the following agency disciplines: forensic pathology, toxicology, fatality management, death investigations, forensic photography and legal. Trainings included: Borkenstein Course on Alcohol & Highway Safety, Society of Forensic Toxicologists (SOFT) Training, Mass Fatality Management Victim Identification, National Violence Death Reporting System, Forensic Ultra Violet & Infrared Photography, Fingerprint Science and Tenprints, International Association for Chemical Testing; Forensic and Pediatric Pathology, National Medical Associations Medical Training, International Association for Chemical Testing; Opioids and Marijuana, National Bar Association Legal Training, International Association of Coroners & Medical Examiners Annual Training; and Fatality Management Full Scale and Tabletop Exercises.

The OCME also provided training to external stakeholders in several areas. The Chief Medical Examiner participated in several conferences providing presentations regarding "deaths in custody," "drug impaired driving," In addition to the table top and full scale fatality management exercises, the agency conducted a Homicide School for twenty-two Metropolitan Police Department (MPD) officers for the purpose of providing an overview of death scene investigation and other critical operations of the medical examiner systems, including forensic pathology and forensic toxicology services.

Lastly, agency staff published numerous publications and papers and the agency engaged in partnerships with area universities to include Howard University (residency rotation), George Washington University (residency rotation and forensic pathology instruction), and the University of the District of Columbia (donation of decedent bodies to Mortuary Science Program and Continuity of Operations planning).

## VI. Capital Projects

In an effort to ensure that staff spacing needs are and that the agency maintains industry standards with regard to utilization of equipment, resources and its fleet, the agency was awarded capital funds in the amount of \$4.5 million toward implementation of three projects.



**Project 1: \$1,475,000**

Due to staff growth from about 70 in 2014 to over 100 (including fellows, residents, and interns) currently, the agency completed the design, during 2018, of renovation of its office space. The renovation will also allow for technological adjustments and the complete build out of an agency Fatality Management Operations Center (FMOC) given that the agency is statutorily mandated as the coordinator of fatality management. The actual renovations for the project will be begin in FY19 and continue in a phased approach in subsequent fiscal years.

**Project 2: \$1,500,000**

The agency developed an equipment replacement plan for all equipment utilized by the forensic toxicology laboratory which is currently about 7-8 years old and is due to be replaced by industry standards within 7-10 years. In addition to the Forensic Toxicology Equipment Replacement Plan, the agency anticipates procuring both a Laboratory Information System (LIMS) and CT-Scanner with the funding.

**Project 3: \$275,000**

The agency manages a fleet of vehicles to support the day-to-day duties toward accomplishment of its mission. However, because the fleet is aging, a fleet replacement plan was developed and will be supported in FY19 and beyond with the purchase of several vehicles.

**Death Investigation and Certification Management**

The OCME's Death Investigation and Certification Division is responsible for forensic pathology, forensic investigation and mortuary services. The forensic pathology, investigation, identification, mortuary and the medical examiner transport team (METT) staff work toward the determination of cause and manner of death and completion of postmortem examination reports. This entails ensuring that appropriate death scene response and investigation, investigative reporting, postmortem examination reporting, public disposition and other factors that are measured by agency performance management. The Identification Unit administers the agency's Decedent Identification Program ensuring that identifications are made in an accurate and efficient manner according to agency and District policies and procedures and utilizing principles of medicolegal death investigation and forensic anthropology. Further, the OCME's Histology Laboratory, led by a Medical Technologist, provides additional support to the determination of cause and manner of death.

A critical agency Key Performance Indicator (KPI) requires that the agency complete 90% of all reports of postmortem examinations within 90 calendar days from the time of autopsy in all cases Q2 -93.8 ; Q3 -95.3; Q4-99 ) The forensic pathology staff, assisted by forensic investigators, toxicologists, as well as pathologist' and autopsy assistants, met this KPI target consistently in 2018 from 93% to 99%.

During 2018, the agency deployed its digital fingerprint system Morphident which enables the identification of decedents in minutes via a digital connection to the Automated Fingerprint Identification System (AFIS). The Morphident system compares a decedent's fingerprints to fingerprints housed in a local database obtained by law enforcement agencies in DC, MD and VA. When a decedent is identified, the system returns an immediate "hit" and a report that lists the individual's name, date of birth, and photograph. As a result of this initiative, the turnaround time for identification via fingerprint comparison decreased from days to minutes. Immediate identification of a decedent provides crucial investigative information to law enforcement. Furthermore, rapid identification allows the agency to provide timely information to families and eliminates the need for families to visually identify their loved ones -- a requirement that is a significant burden to some.

Through its METT, the agency was also able to provide improved response to multiple death scenes -- 98% -- within its KPI target of a 60 min. response. The agency was also able to expand its hours of operation, and increase the volume of cases released to funeral home. Previously the agency would release up to 4 cases per day. The agency is now able to release up to 12 cases per day, and has often reached that high mark. This had enabled the agency to provide better customer service to its constituency which equates to shorter wait times for families to receive their loved ones.

**Forensic Toxicology Laboratory Management**

The OCME Forensic Toxicology Laboratory maintains standards of practice for the detection, identification and quantitation of alcohol, drugs and other toxins in biological specimens. Re-accredited by the American Board of Forensic Toxicology (ABFT) for the period November 1, 2015 to October 31, 2017, the forensic toxicology laboratory has made key strides in support of efficient operations and provision of service on medical examiner cases.

Moreover, the laboratory continues to provide testing services to external local and federal agencies. During 2018 , the laboratory processed 534 Driving Under the Influence (DUI) cases for outside agencies, an increase of 95 (18%) cases from 2017. Members of the toxicology laboratory staff are also trained to provide interpretive services and expert testimony on a variety of drug and alcohol related matters and provides such service to the Office of the Attorney General (OAG), the Public Defenders Service, and the United States Attorney's Office (USA).

During 2018, the agency continued to administer the District's Breath Alcohol Testing and Calibration Program with updated protocols which ensure the integrity and continuity of the program. All MPD's Breathalyzers (in all Districts), as well as the Mobile Unit, are recertified and continuously monitored and law enforcement operator certification classes are ongoing.

In FY2018, the OVSJG awarded the toxicology laboratory a subgrant in the amount of \$236,653 for Victim Report and Non-Report Drug Facilitated Sexual Assault Testing: Service Provision and Improvements. The toxicology laboratory provides Drug Facilitated Sexual Assault (DFSA) testing for victims of rape, sexual assault, and other sex crimes. Biological samples are obtained through the Metropolitan Police Department (MPD) and DC Sexual Assault and Nurse Examiner (SANE) Program and are submitted to the agency. Specimens submitted through chain of custody are



tested by the Toxicology Unit within the agency and results are released to MPD or DC SANE depending on their report/non-report classification.

The agency also received funding in the amount of \$282,128 from the District's Department of Transportation (DDOT) for Impaired Driving Testing Services.

Note that The toxicology laboratory has significantly exceeded its KPI which requires that 75% of toxicology examinations be completed within 90 calendar days of case submission. The average rate was 98.5%.

## Fatality Review Management

The Fatality Review Division (FRD) is tasked with fulfilling statutory mandates for the operation of two fatality review committee's board: Child Fatality Review Committee (CFRC), which includes the Infant Mortality Review Team subcommittee, and the Developmental Disabilities Fatality Review Committee (DDFRC). These committees and boards conduct reviews of to provide analysis and recommendations to the public and District entities serving defined populations, so they can address systemic problems, provide better services and be held accountable. In 2018, these reviews were held and recommendations to prevent deaths were developed for other agencies and entities with respect to policies and procedures and operations.

Per statutory mandate, the FRD worked diligently to publish the 2018 CFRC Annual Report and OTHER ANNUAL REPORTS and continued to provide critical administrative support and facilitation of the developmental disabilities fatality review committee.

The FRD secured grant funding from the OVSJGS) for \$69,412 to provide one staff person to support the District's Male Survivor Advisory Board. The agency's role was to provide administrative support and facilitation of case conferences and fatality reviews of male survivors and victims of crime in conjunction with OVSJG.

On October 4, 2017, the Office of the D.C. Auditor initiated an audit of the Domestic Violence Fatality Review Board covering fiscal years 2003 through 2017. The agency provided administrative support to DVFRB from 2006 through 2015, where its authority was transferred to OVSJG. The transfer was due to OVSJG's particular expertise regarding domestic violence and provision of support to multidisciplinary review process, as well as its ability to allocate resources to the project. The purpose of the audit is to determine DVFRB statutory compliance and whether best practices were adopted in the case review process. The audit was ongoing through 2018.





# APPENDIX C

INTERNAL  
SERVICES





# Wendt Center for Loss and Healing RECOVER Program

January 2018- December 2018

THIS YEAR THE RECOVER PROGRAM UNDERWENT PROGRAMMATIC CHANGES TO BEST MEET THE NEEDS OF THE CHANGING OCME IDENTIFICATION PROTOCOL. FROM JANUARY THROUGH THE END OF SEPTEMBER 2018, THE WENDT CENTER'S RECOVER PROGRAM CONTINUED TO WORK COLLABORATIVELY WITH THE OFFICE OF THE CHIEF MEDICAL EXAMINER TO SUPPORT THE COMMUNITY THROUGH THE PROCESS OF DECEDENT IDENTIFICATION BY PROVIDING CRISIS AND EARLY INTERVENTION BEREAVEMENT SUPPORT, EDUCATION, AND RESOURCES TO ALL INDIVIDUALS WHO COME TO THE OCME TO COMPLETE DECEDENT IDENTIFICATION.

Ensuring a positive identification and the emotional well-being of surviving family members were both of critical importance. The last quarter of this fiscal year was dedicated to redeveloping a group support model to offer to individuals whose deceased loved one was served by the OCME. During this time, collaborative meetings, program development, brochure creation and distribution, and staff trainings took place. Educational groups and support groups are scheduled to launch as a pilot program in 2019. As in past years, recognizing the impact of vicarious trauma is critical, thus monthly stress release workshops were facilitated by RECOVER staff, and the option to schedule 1:1 well-being sessions continued to be offered to all OCME staff members.

The RECOVER team is comprised of counselors, social workers, and masters graduate interns who are trained in the topics of grief, trauma, loss, and crisis intervention. To the best of scheduling ability, staff counselors are present at the OCME 7 days a week to provide support, education, and resources to individuals and families as they navigate the decedent identification process. The RECOVER staff believes in empowering survivors through education, normalization, and compassionate emotional support. All individuals completing decedent identifications are treated with respect and dignity. Staff counselors work closely with OCME investigators, communications staff, and medical examiners to provide families with appropriate and helpful information in an effort to decrease the anxiety and stress that can often accompany sudden death and the identification process. Staff assists families in thinking about next steps, preparing children for funerals, and recognizing acute reactions to crisis, loss, and trauma. It is within the identification suite that RECOVER staff will often teach individuals grounding and stabilizing techniques to

manage the overwhelming feelings experienced during an ID. Educational resources (in Spanish and English) are displayed in the family ID rooms with full permission to families to take what they need or want. Themes of the educational material include grief, trauma, violence, supporting children, and self-care. On occasion, the Language Line was utilized to best meet the language and cultural needs of a family completing an identification.

The number of families presenting to complete the process of decedent identification progressively declined during each quarter of this year. Family members were able to complete decedent identification through other means, which decreased the demand for traveling to the OCME. RECOVER staff provided informational packets and support to nearly **335 people** who presented to complete **167 identifications** during the period of January – September 2018. Twenty three percent (**23%**) of the ID's were with families navigating sudden death to homicide and suicide. The informational packets provide families with a better understanding of the policies and procedures of the OCME, how to talk to children and teens about trauma, understanding grief and loss, preparing for a funeral or memorial service, accessing a community based vigil program, identifying common reactions to death, identifying concrete recommendations for taking care of oneself after a death and resources for crisis, burial assistance and social services. Follow up phone calls are made to the majority of families for continuity of care and to increase awareness of the continued impact of trauma and grief beyond the identification. Phone call content included validating and educating about common reactions, preparing for memorials, exploring and discussing supports and resources in place, awaiting cause of death, helping children and teens cope with the death, and ways to connect back with the OCME. of the calls made to families were successful in establishing contact and connection.

During 2018, members of the Wendt Center RECOVER team presented on vicarious trauma and self-care at the OCME sponsored Homicide School. RECOVER staff were a part of the training team for the Office of Victims Services Justice Grants Mass Disaster Academy. Team members drew on their vast knowledge, skill, and experience responding to community base and national crises as well as their work within the OCME. RECOVER staff teamed up with OCME Medico-Legal Investigators to teach at the 2018 summer Institute of the National Student Leadership Conference. Workshops focused on the pursuit of forensic investigation as a career choice and understanding vicarious trauma and self-care when exposed to death, gore, violence, and extreme emotion. Empathy and compassion when working with traumatized and newly bereft individuals was integrated into the training agenda.

The Wendt Center staff no longer attends the CFRC meetings yet clinical program information is provided on each case being reviewed. Given that the Wendt Center staff meets with families at the OCME for decedent identification, provides follow-up phone calls, facilitates vigils, and offers a variety of therapeutic interventions following a death, it has made sense to integrate Wendt Center clinical program information into CFRC case discussions.

Each month, a RECOVER counselor facilitates a stress relief/well-being session to OCME staff. Staff members attend hour-long sessions during which they are invited to explore different outlets to express stress and improve well-being. Each month, five different sessions are scheduled to



meet each team's unique needs and shift schedules. Sessions provide educational material on issues including vicarious trauma, loss, self-care, stress, mindfulness, and grief. Sessions have become increasingly popular and are well attended. Staff who are unable or choose not to attend are still provided with support and educational materials. RECOVER staff receive very positive feedback from OCME staff regarding the impact of the sessions. Additionally, RECOVER staff offers 1:1 wellness support for any OCME staff person in need of additional time to explore secondary traumatic stress, crises, and self-care.

Within the community, Wendt Center staff often connect with children, teens, and adults who have had deceased family members served by the OCME. The connectivity and collaboration between Wendt Center programs and community based programs can increase how supported families feel by external interventions. 2018 saw the launch of the Wendt Center's Training Institute, which has increased the ability to respond to community-based crises, train more clinical professionals in trauma, traumatic grief, and best practice clinical modalities. Additionally, through our Resilient Scholars Project, we have continued to provide trauma counseling in schools and homes to a portion of DC's youngest residents who suffer the consequences of violence. Many of these children and teens also participate in our annual summer grief camp, where homicide is among the leading causes of death experienced by campers.

While the RECOVER program changed dramatically in its physical presence at the OCME, it has continued to provide necessary support and information to staff, families, and community members coping with loss, change, trauma and grief.





# APPENDIX D





# Glossary

**Autopsy** – A detailed postmortem external and internal examination of a body to determine cause and manner of death, collect evidence, and determine the presence or absence of injury.

**Cause of Death** – The disease, injury, or poison that results in a physiological derangement or biochemical disturbance that is incompatible with life. The result of post-mortem examination, including autopsy and toxicological findings, combined with information about the medical history of the decedent, serves to establish the *cause of death*.

**Chief Medical Examiner** – The head of the *Office of the Chief Medical Examiner*. The Chief Medical Examiner must be a board certified forensic pathologist licensed to practice medicine in the District of Columbia and may appoint a *Deputy Chief Medical Examiners* and other forensic pathologists.

**Drug Caused Death** – A death caused by a drug or combination of drugs.

**External Exam** – A detailed postmortem external examination of the decedent's body, clothing, and injuries that may have caused or contributed to their death another.

**Fentanyl/Fentanyl Analogs** – According to the National Institute of Drug Abuse, fentanyl is a synthetic and short-acting opioid analgesic, is 50-100 times more potent than morphine and approved for managing acute or chronic pain associated with advanced cancer. Although fentanyl may be prescribed to treat severe pain, most of the fentanyl highlighted in this report is illicitly produced non-pharmaceutical fentanyl and fentanyl analogs.

These non-pharmaceutical drugs are commonly laced in heroin, causing significant problems across the country, particularly as heroin abuse has increased.

**Jurisdiction** – The jurisdiction of the Medical Examiner extends to all reportable deaths occurring within the boundaries of the District of Columbia, whether or not the incident leading to the death (such as an accident) occurred within the district. The Office of the Chief Medical Examiner functions pursuant to District of Columbia Code, Division I, Title 5, Ch.14. (DC Law 13-172). Reportable deaths are defined by DC Official Code §5-1401 *et seq.* (2001), as explained in the "Introduction" section of this report. Not all natural deaths reported fall within the jurisdiction of the Medical Examiner.

**Manner of Death** – The general category of the circumstances of the event which causes the death. The categories are *accident, homicide, natural, suicide, and undetermined*.

**Manner: Accident** – The *manner of death* used when there is no evidence of intent; an unintentional, sudden, and unexpected death.

**Manner: Homicide** – The *manner of death* in which death results from the intentional harm of one person by another, including actions of grossly reckless behavior.

**Manner: Natural** – The *manner of death* used when a disease alone causes death. If death is hastened by an injury, the *manner of death* is not considered natural.

**Manner: Suicide** – The *manner of death* in which death results from the purposeful attempt to end one's life.

**Manner: Undetermined** – The *manner of death* for deaths in which there is insufficient information to assign another manner. An undetermined death may have an undetermined cause of death and an unknown manner, an undetermined cause of death and a known manner, or a determined cause of death and an unknown manner.

**Motor Vehicle Collision Related Death** – A death involving a motor vehicle. Motor vehicles include automobiles, vans, motorcycles, trucks, aircraft, and trains. The decedent is usually a driver of, a passenger in, or a pedestrian who is struck by a motor vehicle. The death of a bicyclist that is struck by a motor vehicle is considered to be a motor vehicle related death.

**Office of the Chief Medical Examiner** – The Office of the Chief Medical Examiner (OCME) is responsible for the investigation of sudden, violent, or unexpected death.

**Race/Ethnicity** – The racial categories used in this report are: African American, American Indian/Alaska Native, Asian/Pacific Islander, Other, and White. Hispanic is the only ethnicity included in data.

**Stimulant** – A class of drugs, including cocaine and oral amphetamines, whose principal action is the stimulation of the central nervous system.

**Sudden and Unexpected Infant Death** – A diagnosis designated for infants (children under the age of 1 year). Sudden and Unexpected Infant Death (SUID) is a diagnosis made in cases

in which autopsy does not reveal a definitive medical or traumatic cause of death and the circumstances surrounding the death suggest that there is an associated risk factor for dying, such as unsafe bedding or co-sleep, or some other external factor, but the contribution of this factor cannot be determined with certainty. The diagnosis may also be used in the situation where a medical disease is identified, but it is uncertain that this disease caused death.

## Toxicology Terms:

**Ethanol** – An alcohol, which is the principal intoxicant in beer, liquor, and wine. A person with an alcohol concentration in blood of 0.08 percent by weight by volume (0.08%) is legally intoxicated in the District of Columbia.

**Ethanol Present** – Deaths in which toxicological tests reveal a reportable level of *ethanol* (0.01% W/V or greater) at the time of death.

**Opiate** – A class of drugs derived from the opium poppy plant (*Papaver somniferum*). "Opioid" is often used interchangeably with opiates, and describes chemical/pharmaceutical narcotics that bind to the opiate receptors of the brain and work very similarly to opiates.

**Poison** – Any substance, either taken internally or applied externally, that is injurious to health or dangerous to life, and with no medicinal benefit.

## Notes



GOVERNMENT OF  
THE DISTRICT OF COLUMBIA

# OFFICE OF THE CHIEF MEDICAL EXAMINER ANNUAL REPORT



## OFFICE OF THE CHIEF MEDICAL EXAMINER

401 E Street, SW , Washington, DC 20024

Phone: (202) 698-9000

Fax: (202) 698-9101

TTY: (202) 442-8797

Email: [ocme@dc.gov](mailto:ocme@dc.gov)