Government of the
District of Columbia

OFFICE OF THE CHIEF MEDICAL EXAMINER

2019 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.

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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 2019 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 about 12 million dollars in FY2019, the agency investigated nearly 6,009 deaths and performed 1,343 post-mortem examinations, including 164 homicides. We performed 1,250 toxicological tests, processed 6,738 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 2019.

- 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.

- The District established the Maternal Mortality, Violence Fatality and Opioid Fatality Reviews to be administered by the agency. The agency coordinated the necessary steps to stand-up the reviews to include hiring staff, providing resources, and assisting with the Mayoral appointment of review members and establishing policies and procedures. The work of the reviews will strengthen the District's ability to address systemic issues toward preventing deaths amongst these populations.

- The agency continued its quest towards ISO accreditation with the completion of an ISO checklist evaluation and "next steps" preparation for application, to include a Quality and Training Manuals.

- The agency Forensic Toxicology Division, Investigations Unit and the Forensic Pathology Unit not only successfully completed proficiency testing but also updated standard operating procedures regarding such testing to ensure industry standard compliance.

- The Office of the Chief Medical Examiner hosted an interfaith ceremony to recognize our District residents who received a Public Disposition -- a District of Columbia funded cremation and burial. This interfaith ceremony allowed the families to attend a service that memorializes their loved ones as they were laid in their final resting place.

- 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 2019, it published surveillance reports on Elderly Falls, Hyper- & Hypothermia, Violent Deaths (Homicides, Firearm-related Homicides, and Suicide), Opioid Overdoses, Synthetic Cannabinoids, Unsafe Sleep, and Public Dispositions.

- Of note, the agency managed approximately $2,520,000 in grant funding to support fatality management, toxicological testing, the opioid crises, 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 6,009 deaths that occurred in the District of Columbia (DC) during the Calendar Year (CY) 2019. 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, DC Councilmembers and the public at large.

The OCME serves the citizens of DC and the Metropolitan 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.

OVERVIEW OF CASES REPORTED AND INVESTIGATED

During the Calendar Year (CY) 2019, **6,009** 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 increased since last year. However, the percentage of accepted cases remained steady at 40%.

Medical Examiner Caseload

<u>Accepted Cases</u> - The OCME accepted jurisdiction of 1,343 decedent cases, of which 936 cases were autopsied.

<u>Declined Cases</u> - The OCME declined jurisdiction of 1,844 decedent cases, of which 77 became Storage Requests.

<u>Storage Requests</u> - The D.C. OCME provides a unique service to area nursing homes, hospices, and other like facilities by accommodating requests to store deceased bodies. One hundred and four of the reported cases were Storage Requests only, and seventy seven of the storage requests were previously "Declined" cases, so as a result the agency had a total of 181 Storage Requests, of which 174 were approved (See section 8.0 for additional statistics)

<u>Cremation Requests:</u> The D.C. OCME must review all cremations for deaths that occur in the District of Columbia. There were 3,370 Cremation requests made to the DC OCME in 2019; 729 were OCME cases, 2,641 were "New Reports" submitted from area hospitals, clinics and nursing homes, the OCME took jurisdiction of 16 of these "New Reports" for further investigation and certification. (See section 8.0 for details).

<u>Scene Visits and Body Transport</u> - OCME investigation staff reported to 816 scenes. The OCME transported the bodies of 1,437 decedents, of which, 807 were transported directly from scenes of death to the agency.

<u>Organ/Tissue Donations</u> - There were 188 organ donation requests during CY 2019.

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

2019 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	451	0	72	55	0	0	578
Homicide	164	0	0	0	0	0	164
Natural	242	0	253	26	0	0	521
Stillbirth	0	0	0	0	0	0	0
Suicide	61	0	0	0	0	0	61
Undetermined	18	0	1	0	0	0	19
Other	0	0	0	0	0	0	0
Total	936	0	326	81	0	0	1343

SUMMARY OF FINDINGS FOR MANNER OF DEATH

HOMICIDES: The OCME investigated 164 homicides in CY 2019. 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 January and July.

> **Toxicology Findings:** Toxicology testing was performed on 163 of 164 homicide cases investigated. Drugs/substances were present in 129 cases. The most commonly detected substances were: Marijuana Metabolites (90), Ethanol (31), Fentanyl (17), Phencyclidine (13), and Cocaine Metabolites (9).

SUICIDES: The OCME investigated 61 suicides in CY 2019. In contrast to last year, this report reveals that suicides were more prevalent in Black males and in persons between the ages of 30-39. Hanging was the most common cause of suicide. Peak incidents occurred in July.

> **Toxicology Findings:** Toxicology testing was performed on all of the 61 suicide cases investigated. Drugs/substances were present in 40 cases. The most commonly detected substances were: Ethanol (17), Marijuana Metabolite (7), Alprazolam (5), Diphenhydramine (5), and Cocaine Metabolites (4).

ACCIDENTS: The OCME investigated 578 accidents in CY 2019. Of the 578 cases investigated, 385 of the accidental deaths occurred as a direct result of prescription and/or illicit drug use. Additionally, 140 deaths were the result of blunt force injuries: 58 were traffic-related deaths, 79 were due to falls, and 3 were categorized as "other" as a cause of death due to blunt force injuries. Peak incidents for accidental deaths overall occurred in December.

> **Toxicology Findings for Accidents:** Toxicology testing was performed on 464 of the 524 accident cases investigated. Drugs/substances were present in 420 cases. The most commonly detected substances were: Fentanyl (268), Cocaine Metabolites (173), Ethanol (166), Despropionyl-Fentanyl (4-ANPP) (147), Naloxone (112), Morphine/a-cetylmorphine/ Codine (110/103/59), Marijuana Metabolite (71), Phencyclidine (52), Acetyl Fentanyl (25) and Buprenorphine Metabolite (24).

> **TRAFFIC-RELATED ACCIDENTS**: The majority of the 58 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 32 of the 58 traffic-related accidents. Drugs/substances were present in 19 cases. The most commonly detected substances were: Ethanol (9), Marijuana Metabolite (5), Fentanyl (3), Buprenorphine Metabolite (2), and Phencyclidine (2).

> In the 12 traffic deaths positive for ethanol, 6 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 0.14 g/100 mL.

NATURAL DEATHS: The OCME investigated 521 natural deaths in CY 2019. This report reveals that the leading cause of death in natural cases is Cardiovascular Disease with 373 deaths, followed by Respiratory Disease with 25 deaths. The majority of natural deaths occurred in October for 2019.

> **Toxicology Findings:** No toxicology reporting for natural deaths is being provided for 2019.

UNDETERMINED: The OCME investigated 19 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 18 of the 19 undetermined deaths investigated. Drugs/substances were present in 12 cases. The most commonly detected drugs were: Ethanol (2), Fentanyl (2), Hydromorphone (2), Naloxone (2), and Marijuana Metabolites.

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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 2019, 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 Department of 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 Medico Legal 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. An 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 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 the 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.
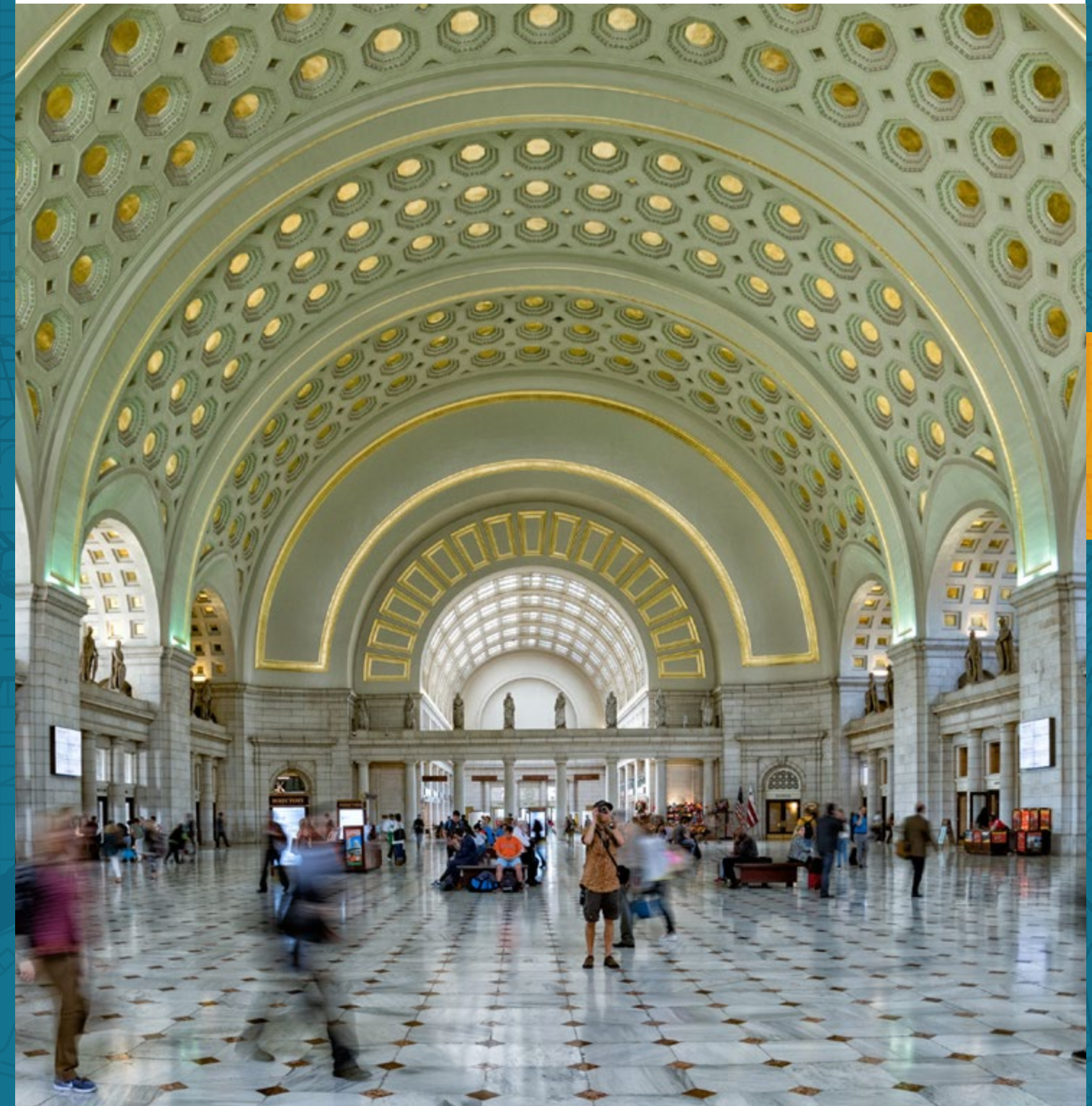
2.0

ME INVESTIGATIONS AND MEDICAL LEGAL AUTOPSIES

Overview of Cases Reported and Investigated

During the Calendar Year (CY) 2019, there were **6,009** deaths that <u>occurred</u> 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 **3,368 or 56%** 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 (See pages 26).

<u>Accepted Cases</u> - The OCME accepted jurisdiction of **1,343** decedent cases, of which **936 cases were autopsied**. There were scene visits for 807 of the 1,343 accepted cases.

<u>Declined Cases</u> - The OCME declined jurisdiction of **1,844** decedent cases, of which 77 became Storage Requests. There were scene visits for 7 of the 1,844 declined cases.

<u>Storage Requests</u> - The OCME provides a unique service to area nursing homes, hospices, and other like facilities by accommodating requests to store deceased bodies. **One hundred and four** (104) of the reported cases were Storage Requests only, and **77** of the storage requests were previously "Declined" cases, so as a result, the agency had a total of 181 Storage Requests, of which **174** were approved (See section 8.0 for additional statistics).

<u>Cremation Requests:</u> The OCME must review all cremations for deaths that occur in the District of Columbia. There were **3,370** Cremation requests made to the OCME in 2019; 729 were OCME cases, 2,641 were *"New Reports"* submitted from area hospitals, clinics and nursing homes, the OCME took jurisdiction of 16 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	3,368
Total Number of Declined Cases	1844
Percent of Cases Reported & Investigated	55%
Total Number of Cases Accepted for Further Investigation	1343
Percent of Cases Reported & Investigated	40%
Total Number of Autopsies *Full – 935; Partial –0; Performed in a University Hospital – 1*	936
Percent of Cases Accepted for Further Investigation	70%
Number of Scene Visits by a Medical Examiner or Medico Legal/Forensic Investigator	816
Percent of Cases Accepted for Further Investigation	61%
Total Number of Bodies/Cases Transported by OCME or by Order of the OCME: *Transported by Pick-up Service -0* *Transported by Office Personnel –1435 (METT: 1435)* *Transported by Others -2 (Funeral Home - 2)*	1437
Total Number of Organ/Tissue Donation Requests: *(See Section 3 for breakdown)*	188

BREAKDOWN OF ACCEPTED CASES BY EXAM TYPE

Total Number of Cases Accepted and Investigated Further	1,343
Total Number of Autopsies Full – 935 Partial –0 *Performed at a University Hospital – 1*	936
Percent of Cases Accepted	70%
Number of External Examinations *On-site -326* *Off-site - 0*	326
Percent of Cases Accepted	24%
Number of Medical Record Reviews *	81
Percent of Cases Accepted	6%

Total Number of Cases Accepted and Investigated Further	1,343
Number of Non-Human Remains *	0
Percent of Cases Accepted	0%
Number of Anatomical Specimen Disposal	0
Percent of Cases Accepted	0%
Number of Exhumations/Disinterment	0
Percent of Cases Accepted	0%

Definition of Unfamiliar Exam Type Classifications:

»   **Autopsy Performed at a Area Hospital:** During Calendar Year 2019 there was one 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 Reviews**: 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	106	74
February	95	65
March	97	66
April	97	68
May	107	81
June	101	70
July	124	84
August	124	80
September	109	79
October	128	83
November	125	84
December	130	102
Total	**1343**	**936**

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	451	0	72	55	0	0	578
Homicide	164	0	0	0	0	0	164
Natural	242	0	253	26	0	0	521
Stillbirth	0	0	0	0	0	0	0
Suicide	61	0	0	0	0	0	61
Undetermined	18	0	1	0	0	0	19
Other	0	0	0	0	0	0	0
Total	**936**	**0**	**326**	**81**	**0**	**0**	**1343**

PIE CHART - MEDICAL EXAMINER CASES BY MANNER OF DEATH

- Accident — 43%
- Homicide — 12%
- Natural — 39%
- Stillbirth — 0%
- Suicide — 5%
- Undetermined — 1%

TRENDS IN DEATHS REPORTED TO THE MEDICAL EXAMINER

	2012	2013	2014	2015	2016	2017	2018	2019
Accepted	1077	1089	1120	1085	1267	1353	1319	1343
Declined	1879	2012	1812	1933	1926	1890	1931	1844
Total Deaths Reported	3009	3221	3063	3149	3362	3536	3414	3368
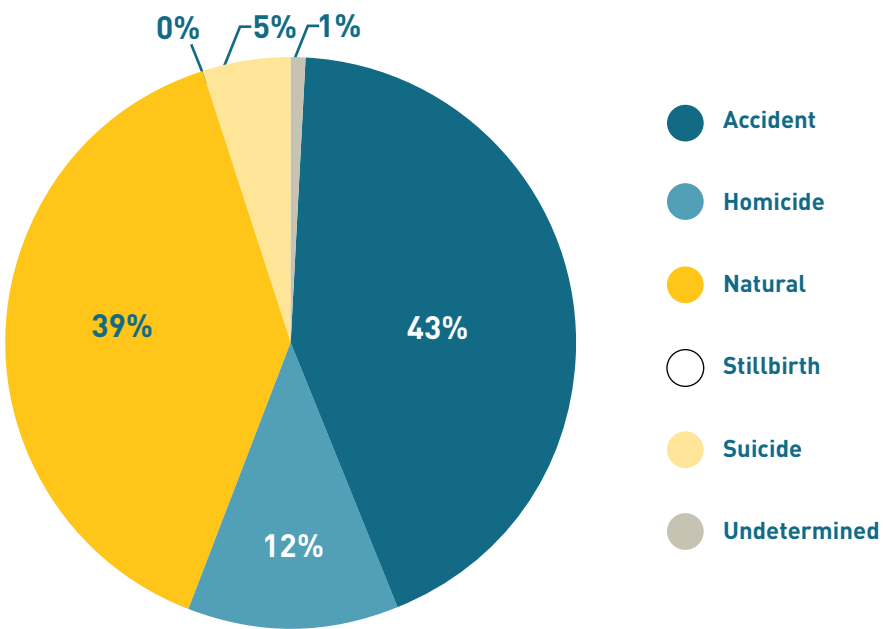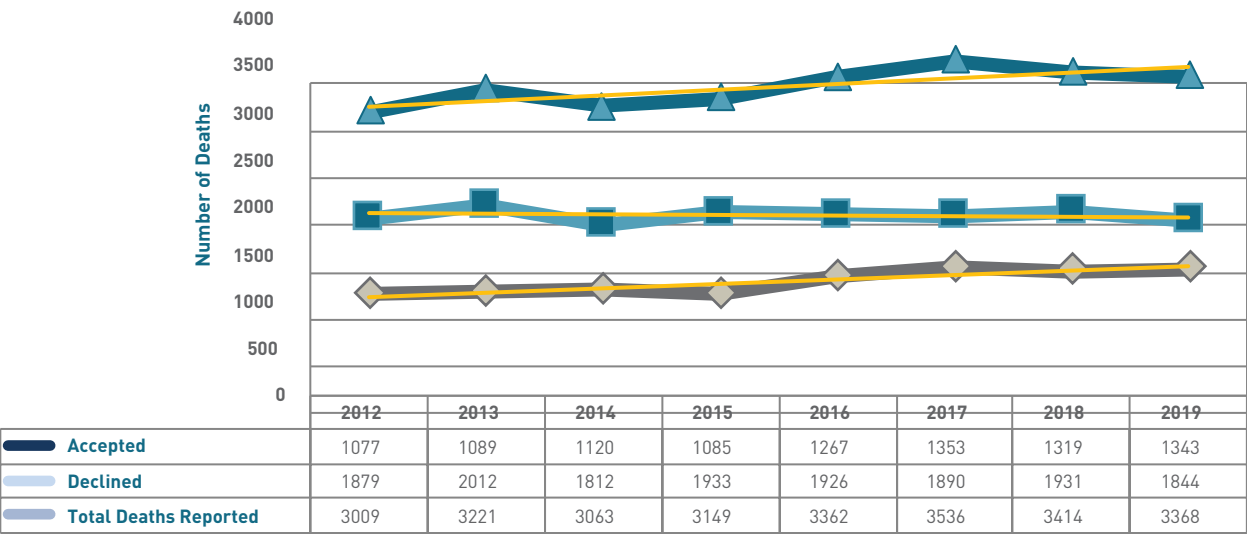
Note: All accepted cases and all declined cases will not equal Total Deaths Reported, because there are other types of cases "Death Reports" not included in this illustration.

TRENDS IN DEATHS REPORTED AND INVESTIGATED BY EXAM TYPE

	2012	2013	2014	2015	2016	2017	2018	2019
Autopsies	752	754	735	715	891	963	901	936
External Exams	288	305	354	345	353	360	376	326
Scene Visits	485	694	712	674	840	805	819	816
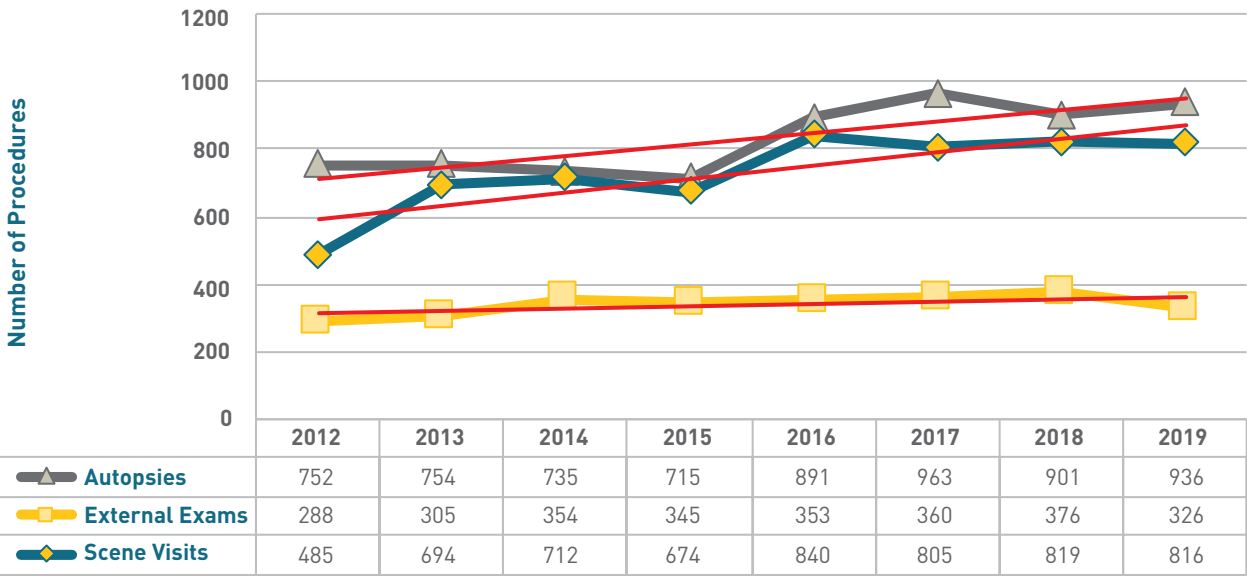
Breakdown of Accepted Cases by Residence of Decedents

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

- DC
- MD
- VA
- Other
- Undomiciled
- Unknown
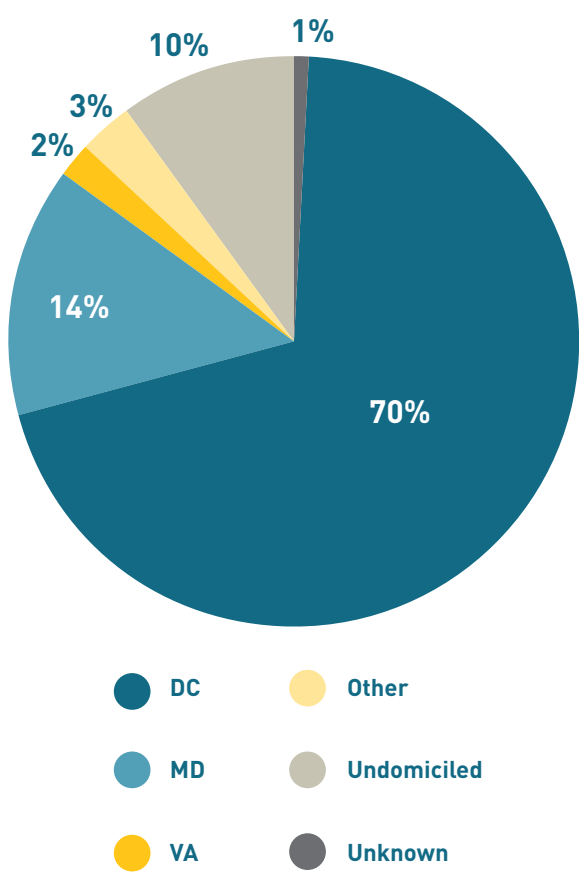
TABLE: MEDICAL EXAMINER CASES BY RESIDENCE AND MANNER OF DEATH

DC Deaths by Jurisdiction of Residence and Manner of Death								
Ward	# of Deaths	Accident	Homicide	Natural	Stillbirth	Suicide	Undetermined	Other
Ward 1	74	22	7	41	0	4	0	0
Ward 2	39	14	0	21	0	4	0	0
Ward 3	35	12	3	18	0	2	0	0
Ward 4	101	34	4	52	0	9	2	0
Ward 5	153	67	17	64	0	5	1	0
Ward 6	120	31	15	65	0	7	1	0
Ward 7	166	63	25	73	0	2	4	0
Ward 8	254	97	49	101	0	6	0	0
DC	942	340	120	435	0	39	8	0
MD	186	114	25	27	0	15	5	0
VA	31	23	3	4	0	1	0	0
Other	34	13	1	17	0	3	0	0
Unknown	14	3	6	4	0	1	0	0
Undomiciled	136	85	9	35	0	2	5	0
Total	1343	578	164	522	0	61	18	0

TOTAL NUMBER AND PERCENT OF 2019 DEATHS BY AGE

	<1	1 to 5	6 to 12	13 to 15	16 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90+
Total Deaths	26	8	6	7	23	138	156	159	275	284	155	74	32
% of Deaths	1.9%	0.6%	0.4%	0.5%	1.7%	10.3%	11.6%	11.8%	20.5%	21.1%	11.5%	5.5%	2.4%
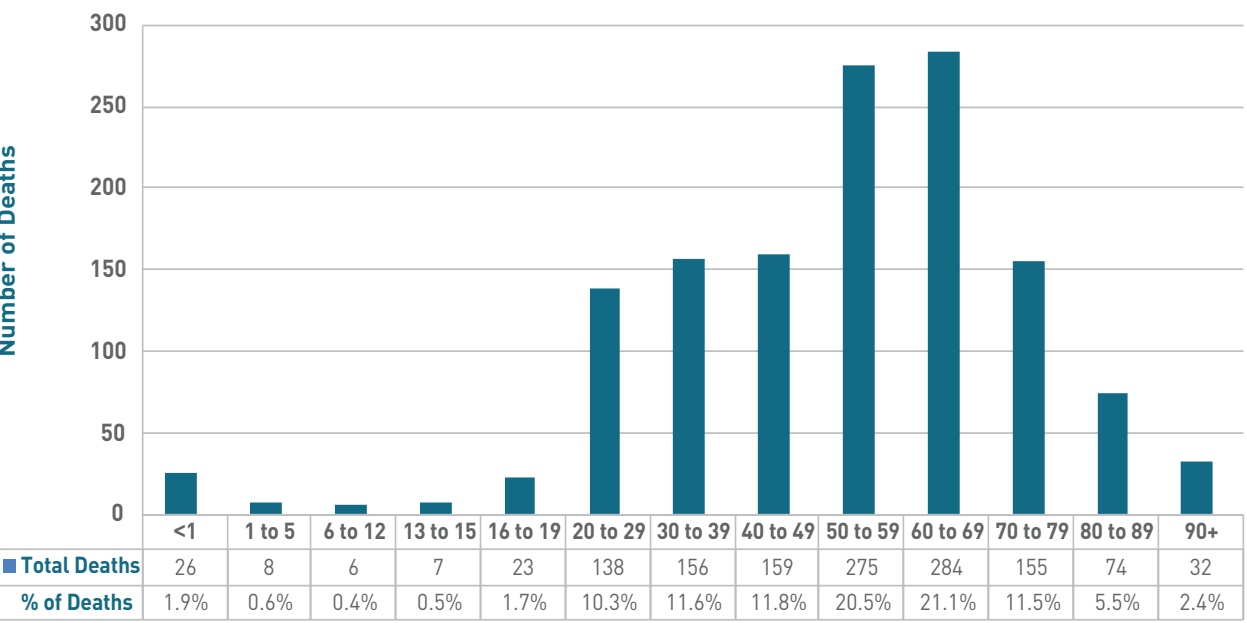
TOTAL NUMBER OF 2019 DEATHS BY GENDER AND RACE/ETHNICITY

Race/Ethnicity	Female	Male	Total
American Indian	1	1	2
Asian	7	9	16
Black	293	742	1035
Hispanic	11	34	45
Other	3	5	8
Unknown	1	1	2
White	80	155	235
Total	**396**	**947**	**1343**

TOTAL NUMBER OF 2018 DEATHS BY MANNER OF DEATH AND GENDER[1]

Gender	Natural	Accident	Homicide	Suicide	Undetermined	Total	Percent
Female	171	12	186	23	4	396	29.50%
Male	407	152	335	38	15	947	70.50%
Total	**578**	**164**	**521**	**61**	**19**	**1343**	**100.00%**

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 <u>NOT</u> represent District residents only.

1   In this report reflective of ALL Manners, gender in this context means sex at birth.

3.0

MANNER AND CAUSE OF DEATH

3.1 HOMICIDES

The OCME investigated **164** homicides in CY 2019. This is a 4.5% increase from CY 2018. 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. Firearm injuries were most frequent amongst the 2019 homicides. In 2019, **January** and **July** had the most homicides.

TOTAL NUMBER OF HOMICIDES (2004-2019)
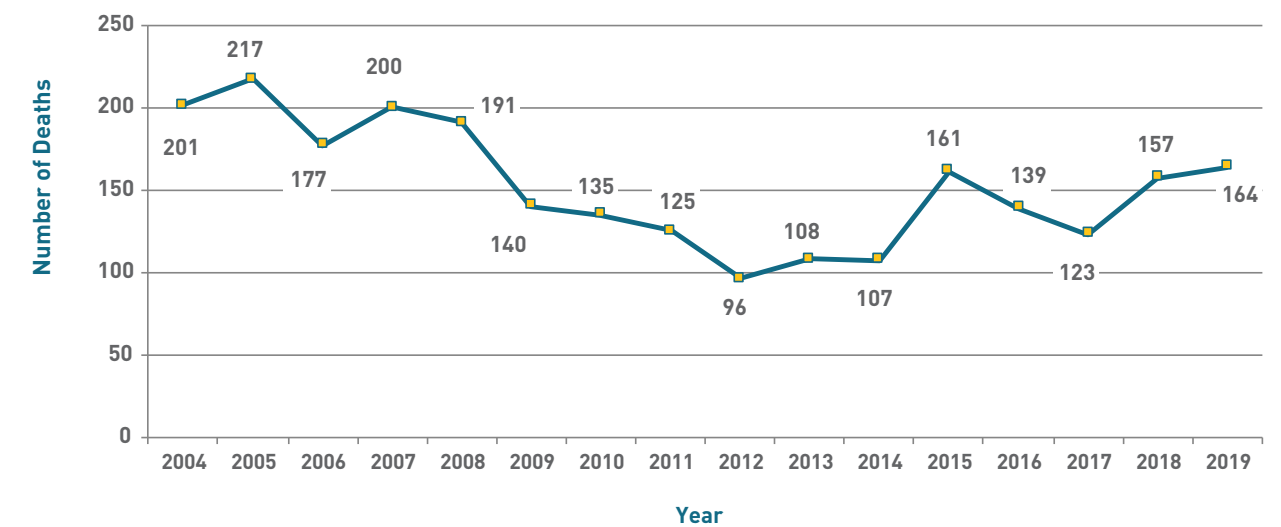
HOMICIDES BY JURISDICTION OF INCIDENT OF INJURY

Incident Jurisdiction	# of Homicides	% of Homicides
District of Columbia	152	92.68%
Maryland	6	3.66%
Virginia	0	0%
Unknown	6	3.66%
Total	**164**	**100%**

HOMICIDES BY CAUSE OF DEATH

Cause of Death	Number of Homicides	Percent of Homicides
Drowning	1	0.6%
Blunt Impact	18	11.0%
Firearm	129	78.7%
Other	2	1.2%
Sharp Force	14	8.5%
Total	**164**	**100%**

PIE CHART – HOMICIDES BY CAUSE OF DEATH

- Drowning
- Blunt Impact
- Firearm
- Other
- Sharp Force
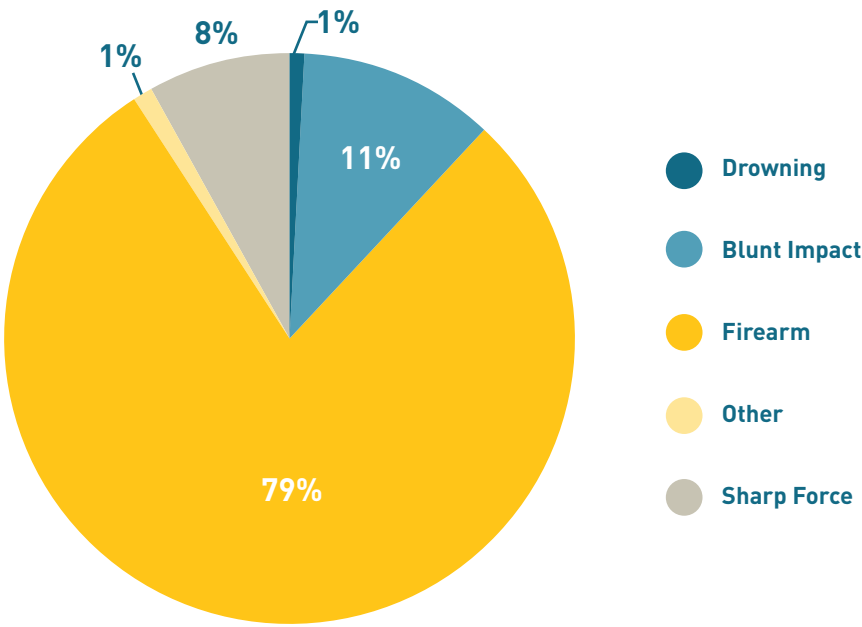
Note: The percentages in the Pie Chart are rounded Up to the Nearest Whole Number

GRAPH - HOMICIDES BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
# of Deaths	20	10	11	12	14	16	20	12	13	13	11	12
% of Deaths	12%	6%	7%	7%	9%	10%	12%	7%	8%	8%	7%	7%
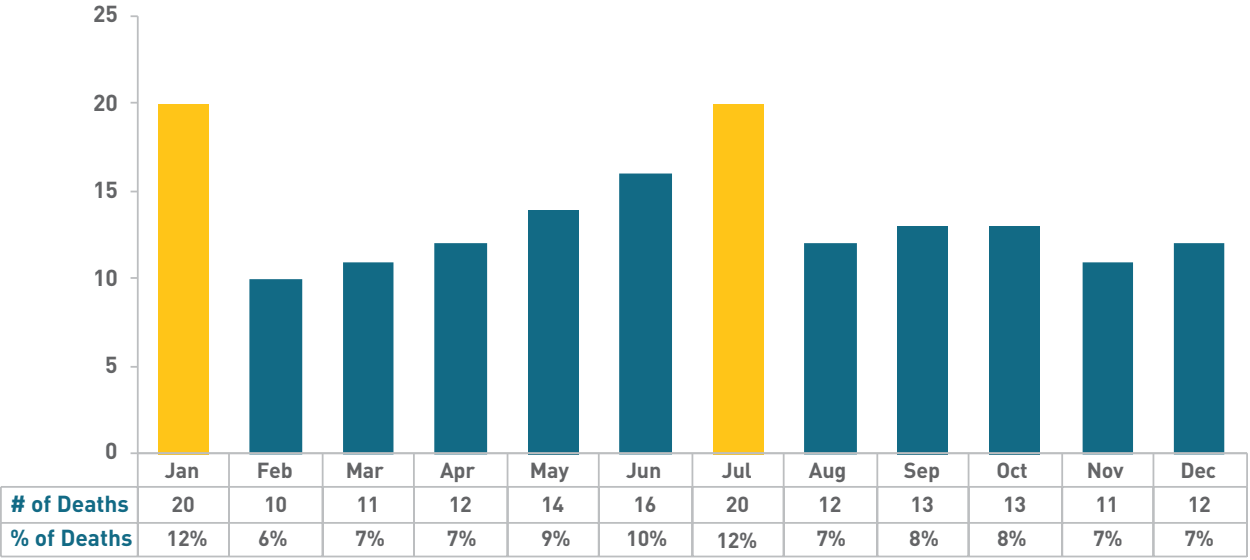
HOMICIDES BY RACE/ETHNICITY AND GENDER

Homicides by Race/Ethnicity and Gender				
	Female	Male	Total	Percent of Race/ Ethnicity
Black	9	140	149	91%
Hispanic	1	4	5	3%
Other	0	2	2	1%
White	2	6	8	5%
Total	12	152	0	
Percent of Gender	**7%**	**93%**	**164**	**100%**

CHART - HOMICIDES BY AGE GROUP

	< 1	1 to 5	6 to 12	13 to 15	16 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79
#of Deaths	2	3	1	3	11	73	32	18	16	5	0
% of Deaths	1%	2%	1%	2%	7%	45%	20%	11%	10%	3%	0%

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

- ● Firearm
- ● Non-Firearm

98%
2%
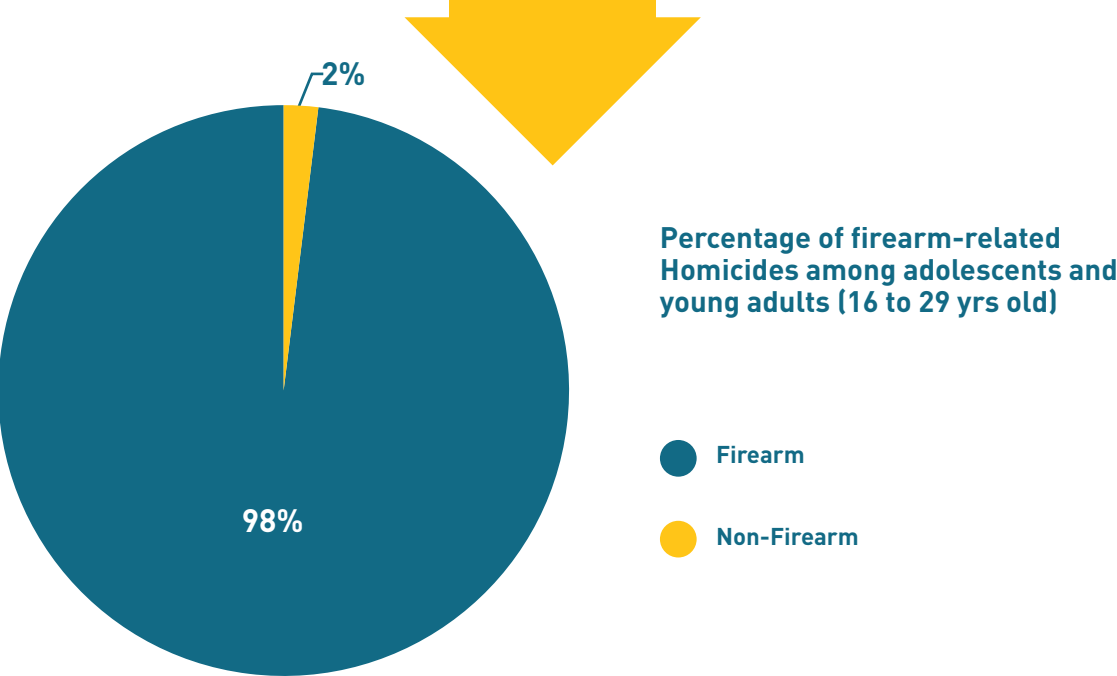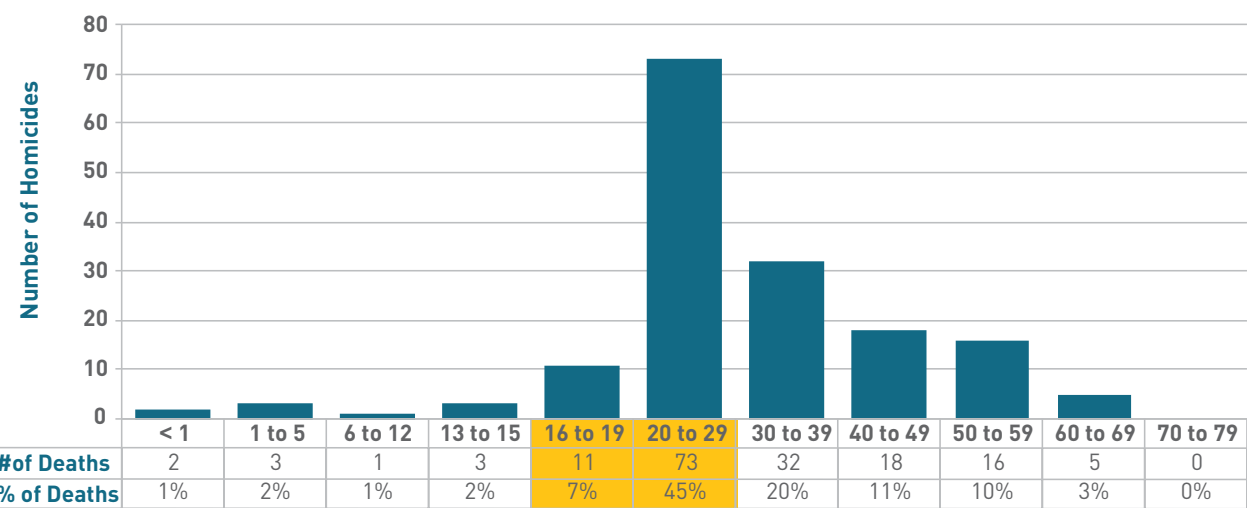
3.2 SUICIDES

The OCME investigated **62** suicides in CY 2019, which represents a **1.6%** increase from CY 2017 **(61)**. Deaths by suicidal acts were more prevalent in Black males and in persons between the ages of 30 to 39 years. In 2018, White males aged from 30 to 39 were amongst the leading age group affected by suicide. Hanging was the leading cause of suicidal deaths. More incidents occurred in **July** than in any other month.

TOTAL NUMBER OF SUICIDES, 2004-2019
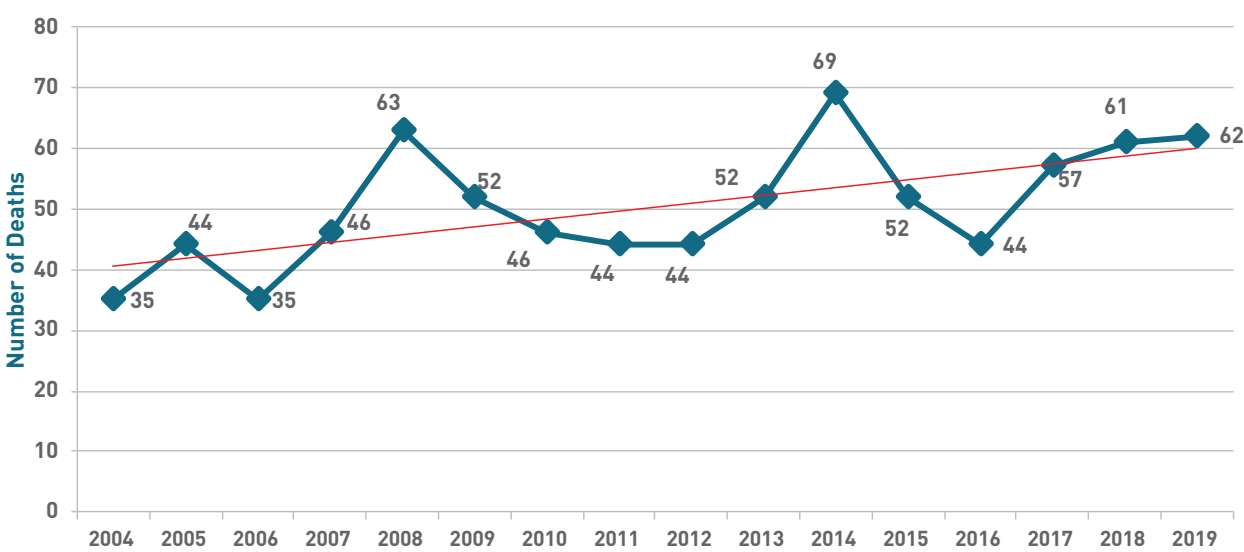
SUICIDES BY JURISDICTION OF INCIDENT THAT CAUSED DEATH

Incident Jurisdiction	Number of Suicides	% of Suicides
District of Columbia	52	83.87%
Maryland	9	14.52%
Virginia	1	1.61%
Total	**62**	**100%**

SUICIDES BY CAUSE OF DEATH

Cause	Number of Suicides
Hanging	19
Blunt Impact Trauma Building- 11 Bridge- 1 Train- 2	14
Intoxication	9
Firearms	15
Sharp Force	2
Thermal Injury	2
Drowning	1
Total	**62**

- 22.58%
- 1.61%
- 24.19%
- 3.23%
- 30.65%
- 14.52%
- 5%

Legend:
- Blunt Impact Trauma
- Drowning
- Firearms
- Thermal Injury
- Hanging
- Intoxication
- Sharp Force
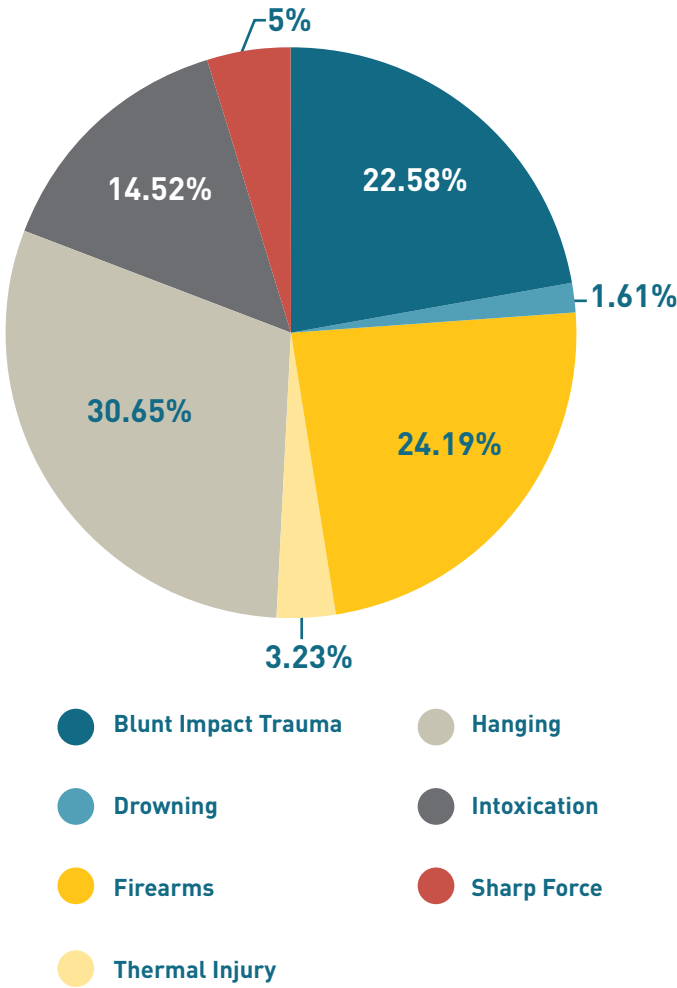
CHART - 7-YEAR TREND OF SUICIDES BY FIREARMS AND HANGING

	2013	2014	2015	2016	2017	2018	2019
Hanging	33%	32%	23%	23%	37%	41%	31%
Firearm	15%	25%	29%	14%	12%	16%	24%

SUICIDES BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
# of Suicides	2	2	5	7	6	6	8	6	2	6	6	6
% of Suicides	3%	3%	8%	11%	10%	10%	13%	10%	3%	10%	10%	10%
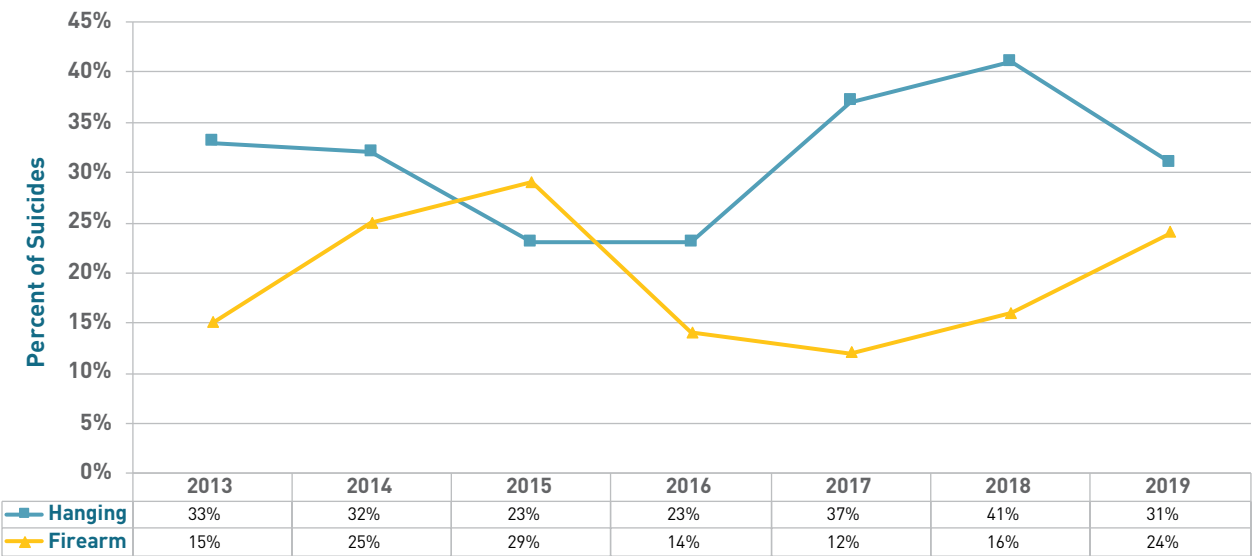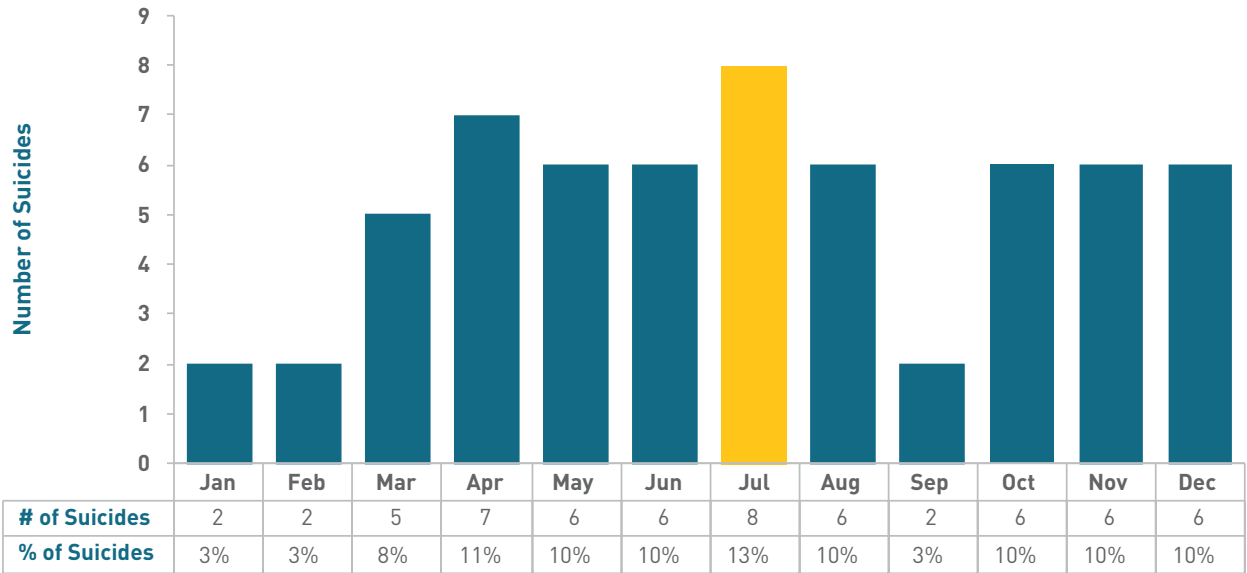
SUICIDES BY RACE/ETHNICITY AND GENDER

Suicides by Race/Ethnicity and Gender				
	Female	Male	Total	Percent of Race/Ethnicity
Asian	1	1	2	3%
Black	11	20	31	50%
Hispanic	3	1	4	6%
White	8	17	25	40%
Total	23	39	62	
Percent of Gender	**37%**	**63%**		**100%**

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

	2013	2014	2015	2016	2017	2018	2019
Black	33%	33%	42%	43%	44%	26%	50%
White	50%	61%	48%	45%	47%	61%	40%
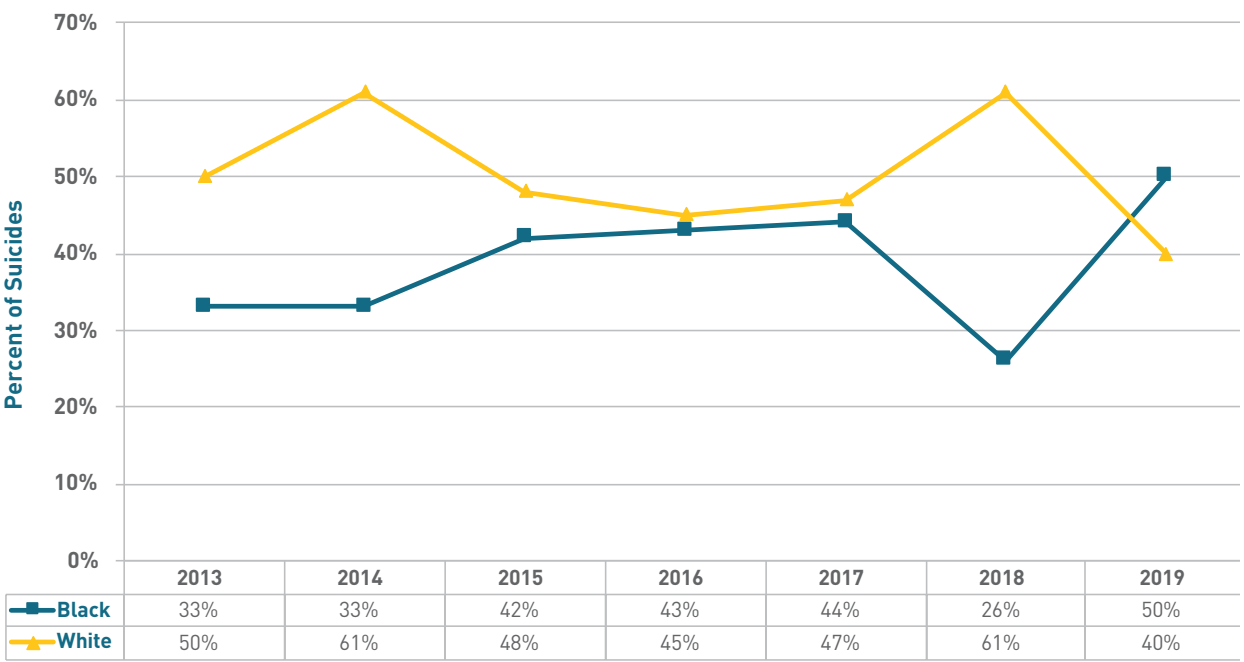
CHART - SUICIDES BY AGE GROUP

Age Range Comparison of Suicide Victims between 2018 and 2019
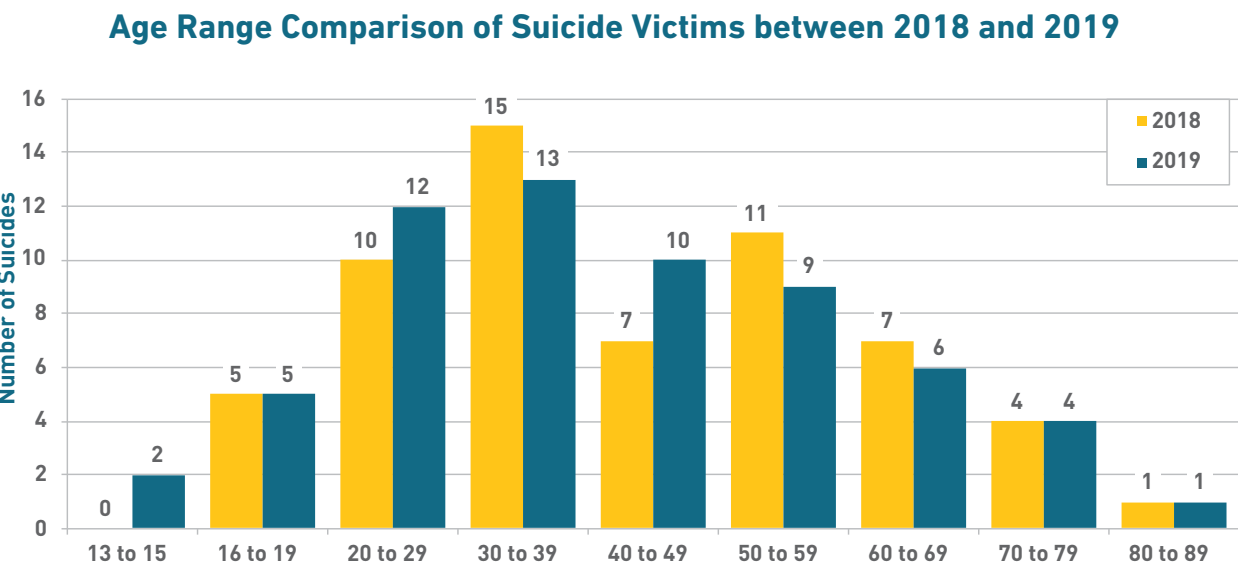
3.3 ACCIDENTS

OCME investigated **578** accidental deaths in CY 2019. Of the **578** cases investigated, **58** were related to motor vehicle accidents, **79** were related to falls and **385** of the accidental deaths were the direct result of prescription and/or illicit drug use. There was an increase in the total number of deaths due to accidents in 2019. December of 2019 saw the most overall accidental deaths in comparison to any other month.

ACCIDENTS BY CAUSE OF DEATH[2]

Causes of Accidental Deaths	# of Deaths	% of Deaths
Intoxication	385	66.61%
Blunt Injury - Due to Fall (79) - Due to Traffic (58) - Due to Other (3)	140	24.22%
Asphyxia	24	4.15%
Other	7	1.21%
Thermal	7	1.21%
Hypothermia	5	0.87%
Drowning	3	0.52%
Inhalation of Combustible Product	3	0.52%
Electrocution	1	0.17%
Hyperthermia	1	0.17%
Sharp Force	1	0.17%
Therapeutic Complication	1	0.17%
Total	**578**	**100%**

- Intoxication
- Blunt Injury
- Asphyxia
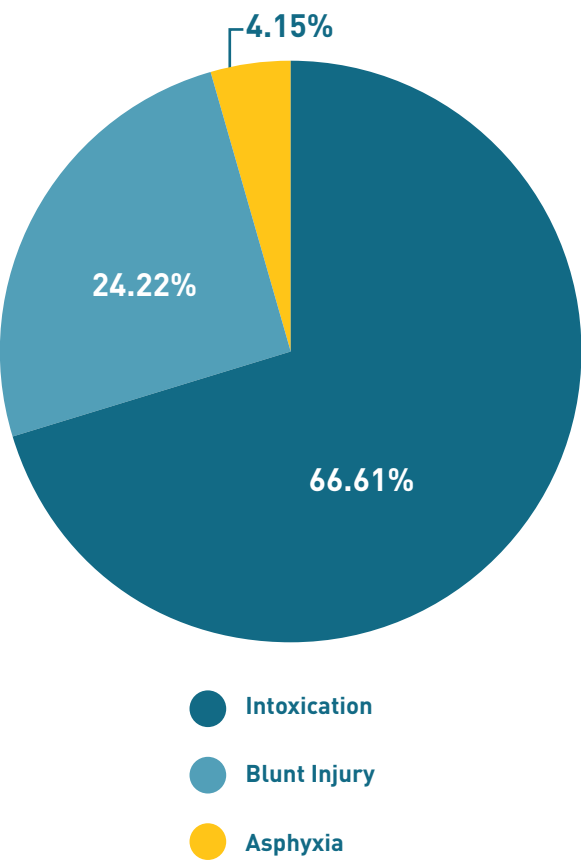
2   For illustrative purposes, this pie chart does not include causes of death that are 2% or less of the total number of deaths.

BREAKDOWN OF FALLS BY AGE GROUP

Bar chart — Number of Deaths by Age Group:
- Lesss than 50: 7
- 50 to 59: 8
- 60 to 69: 8
- 70 to 79: 18
- 80 to 89: 21
- 90+: 17
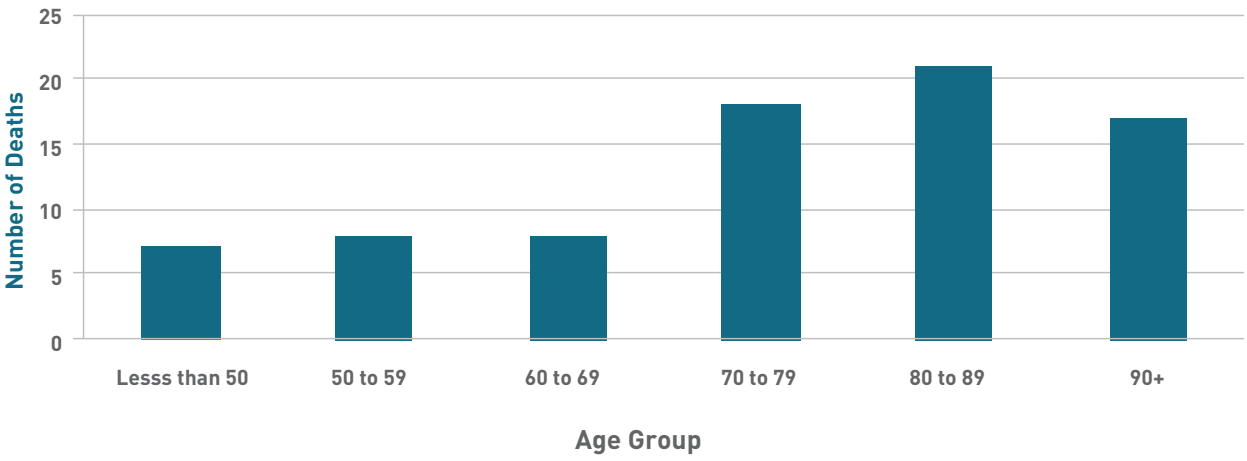
GRAPH – FIFTEEN-YEAR OVERVIEW OF ACCIDENTAL DEATHS

Line graph — Number of Deaths by year:
- 2005: 390
- 2006: 360
- 2007: 324
- 2008: 338
- 2009: 326
- 2010: 305
- 2011: 333
- 2012: 268
- 2013: 316
- 2014: 302
- 2015: 342
- 2016: 513
- 2017: 592
- 2018: 536
- 2019: 578
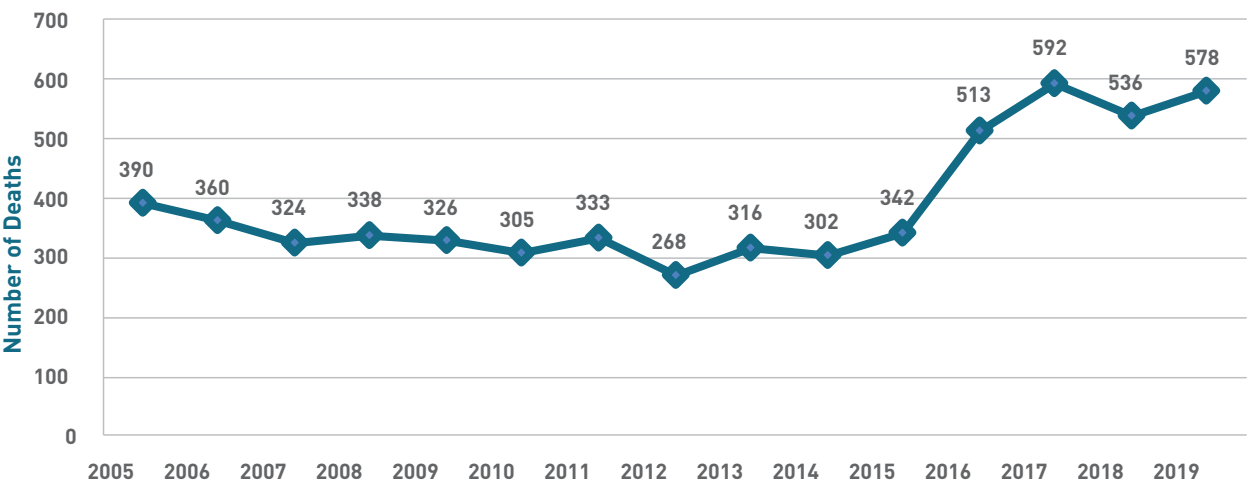
CHART – ACCIDENTAL DEATHS BY MONTH

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Number of Deaths	36	45	34	40	51	40	45	54	56	53	58	66
% of Accidents	6.2%	7.8%	5.9%	6.9%	8.8%	6.9%	7.8%	9.3%	9.7%	9.2%	10.0%	11.4%
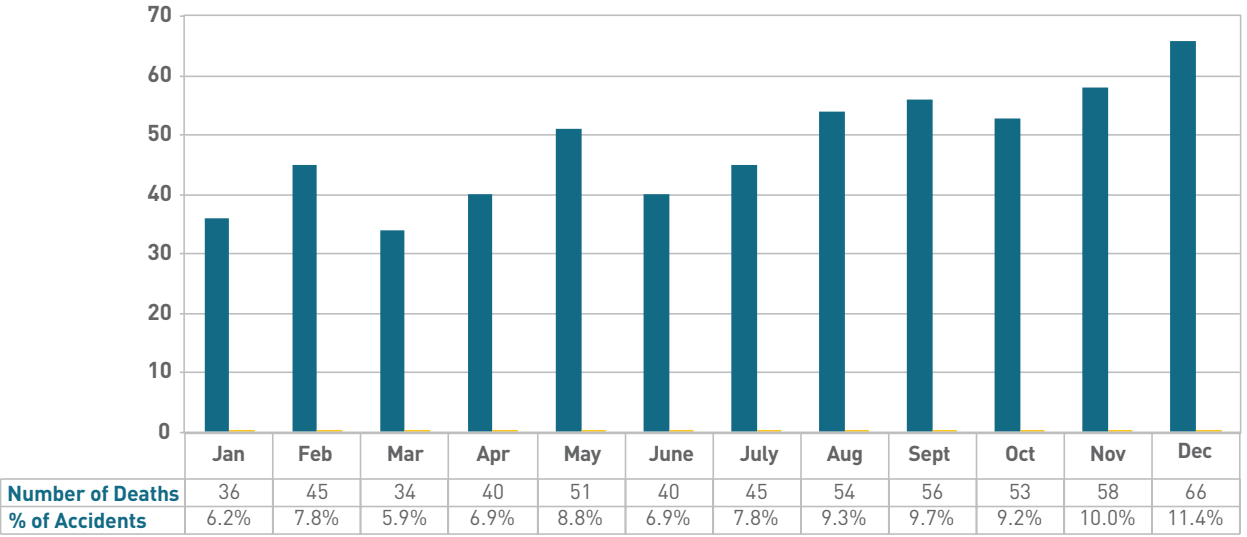
ACCIDENTAL DEATHS BY RACE/ETHNICITY AND GENDER

Accidents by Race/Ethnicity and Gender				
	Female	Male	Total	Percent of Race/Ethnicity
Black	115	303	418	72.32%
White	45	77	122	21.11%
Hispanic	5	19	24	4.15%
Asian	2	4	6	1.04%
Other	4	4	8	1.38%
Total	171	407	578	
Percent of Gender	29.58%	70.42%		100%

ACCIDENTAL DEATHS BY AGE

	Less than 5	5 to 12	13 to 15	16 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90+
# of Deaths	18	4	1	5	38	82	73	139	127	42	29	20
% of Accidents	3.1%	0.7%	0.2%	0.9%	6.6%	14.2%	12.6%	24.0%	22.0%	7.3%	5.0%	3.5%
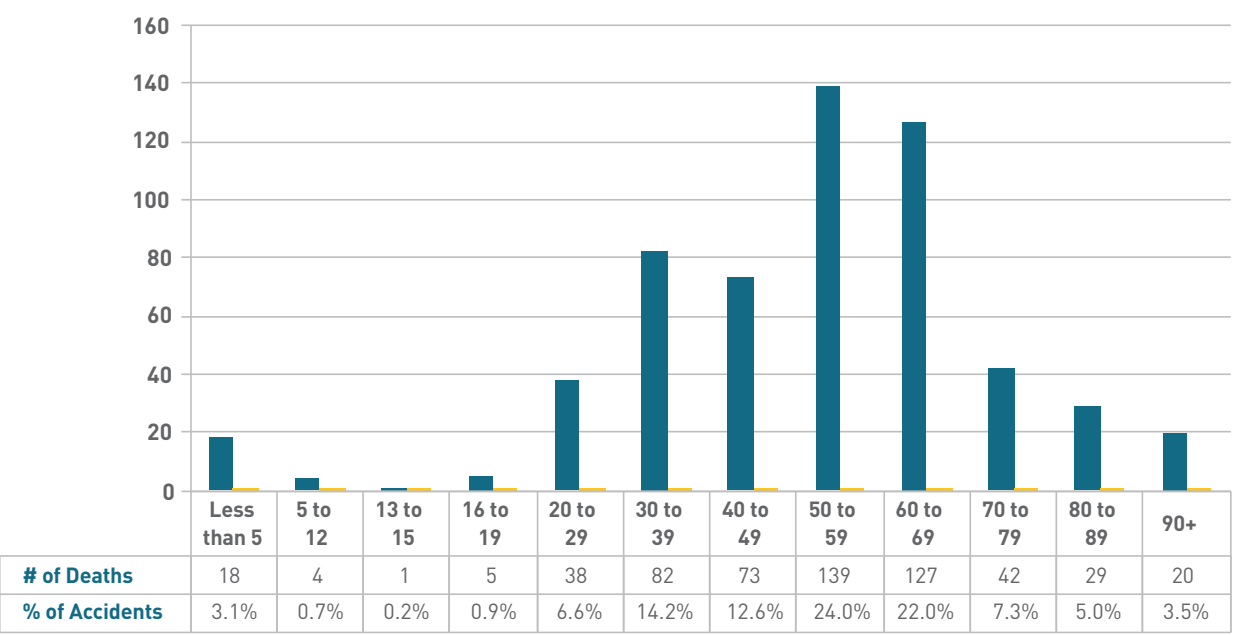
3.4 – NATURAL DEATHS

Natural deaths continue to account for a large majority of cases reported to and accepted by the OCME. In 2019, **521** deaths were determined to be a result of natural disease. Deaths caused by Cardiovascular Diseases continue to dominate in this category with **373** fatalities. Deaths due to the respiratory disease were the second highest (**25**) cause of natural deaths. Blacks were most prevalent in this category representing **80.81%** of the population affected. More natural deaths occurred in **October** than in any other month.
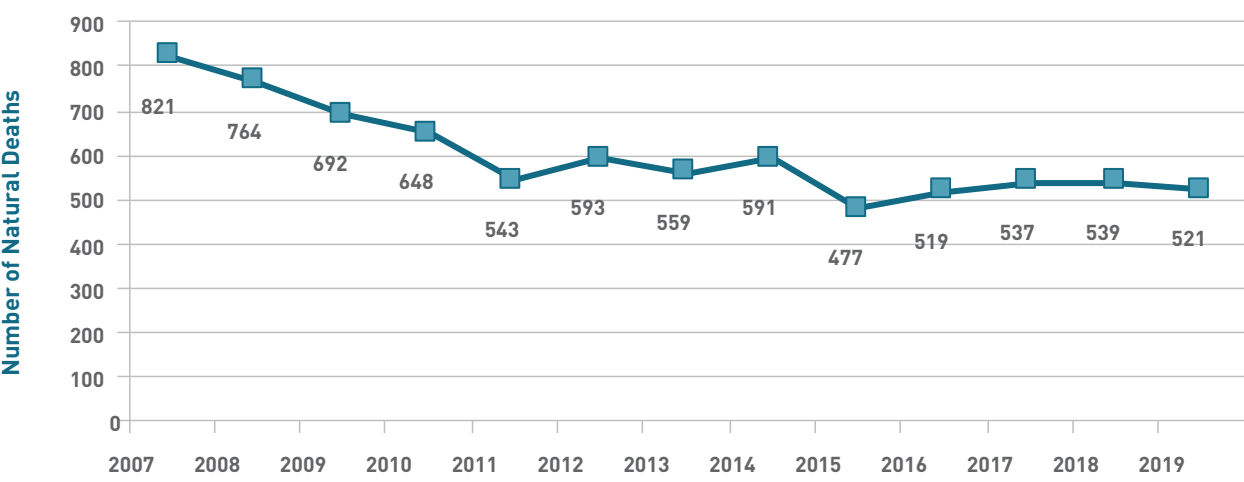
NATURAL DEATHS BY CAUSE

Causes of Natural Deaths	# of Natural Deaths	% of Natural Deaths
Cardiovascular Disease	373	71.59%
Respiratory Disease	25	4.80%
Alcoholism	22	4.22%
Infection	20	3.84%
Diabetes	18	3.45%
Other	14	2.69%
Cancer	12	2.30%
Central Nervous System (Brain)	11	2.11%
AIDS	6	1.15%

Causes of Natural Deaths	# of Natural Deaths	% of Natural Deaths
Gastrointestinal Disease	6	1.15%
Obesity or Complications of Obesity	4	0.77%
Blood Disease/Hemopoietic System	2	0.38%
Complications of Drug Abuse	2	0.38%
Complications of Pregnancy	2	0.38%
Genetic Disorder	2	0.38%
Therapeutic Complications	2	0.38%
Total	**521**	**100%**

NATURAL DEATHS BY CAUSE
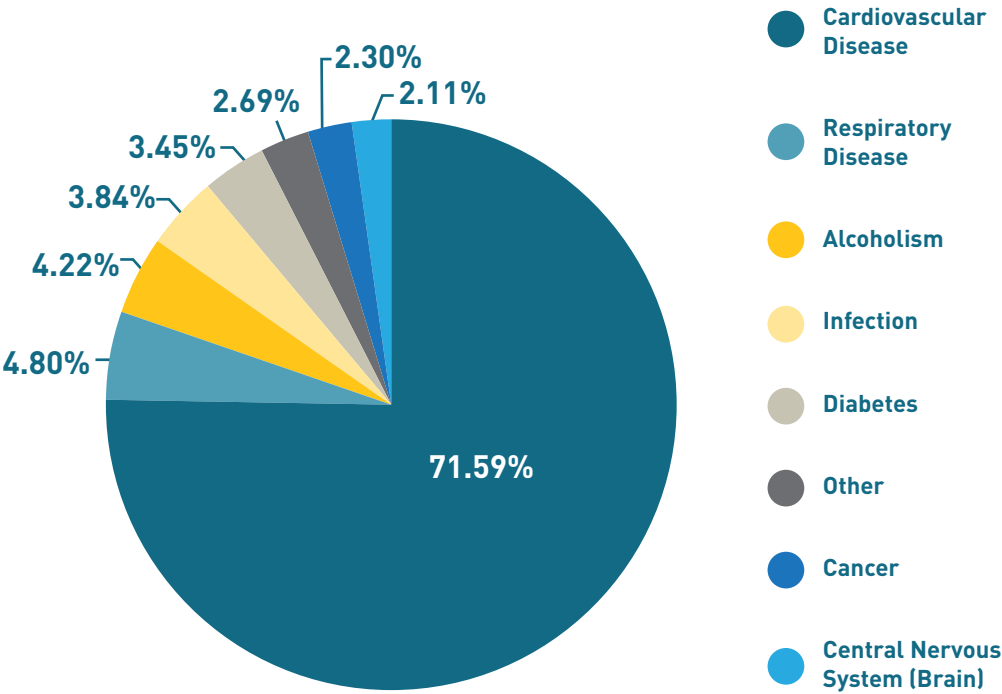
Note: This graph does not include causes of death that are less than 2%.

YEARLY TREND IN NATURAL DEATHS DUE TO CARDIOVASCULAR DISEASE REPORTED TO THE OCME (2006-2019)[3]

NATURAL DEATHS BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
# of Deaths	48	37	44	38	37	39	48	50	33	55	50	42
% of Deaths	9.2%	7.1%	8.4%	7.3%	7.1%	7.5%	9.2%	9.6%	6.3%	10.6%	9.6%	8.1%
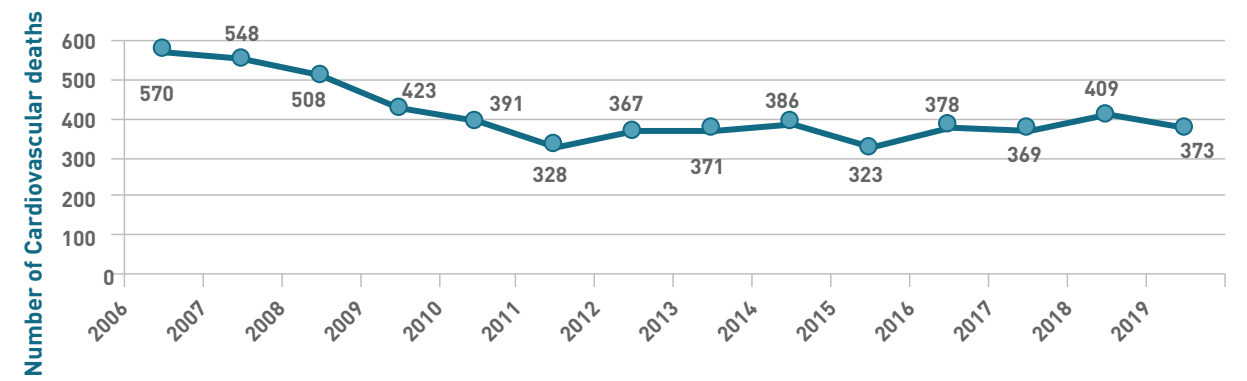
NATURAL DEATHS BY EXAM TYPE

Exam Type	Number of Natural Deaths	% of Natural Deaths
Autopsy	242	46.45%
External Exam	253	48.56%
Review Medical Records	26	4.99%
Total	**521**	**100%**

3   This is the total number of natural deaths due to cardiovascular disease that have been reported to the Medical Examiner. Not all natural deaths are reported to the Medical Examiner.

NATURAL DEATHS BY RACE/ETHNICITY AND GENDER

Natural Deaths by Race/Ethnicity and Gender				
	Female	**Male**	**Total**	**Percent of Race/ Ethnicity**
Asian	4	3	7	**1.34%**
Black	154	267	421	**80.81%**
Hispanic	2	10	12	**2.30%**
Other	0	1	1	**0.19%**
Unknown	1	1	2	**0.38%**
White	25	53	78	**14.97%**
Total	186	335	521	
Percent of Gender	**35.70%**	**64.30%**		**100%**

NATURAL DEATHS BY AGE

	Less than 5	5 to 12	13 to 15	16 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90+
# of Deaths	6	1	1	2	12	27	53	110	146	107	44	12
% of Deaths	1.15%	0.19%	0.19%	0.38%	2.30%	5.18%	10.17	21.11	28.02	20.54	8.45%	2.30%
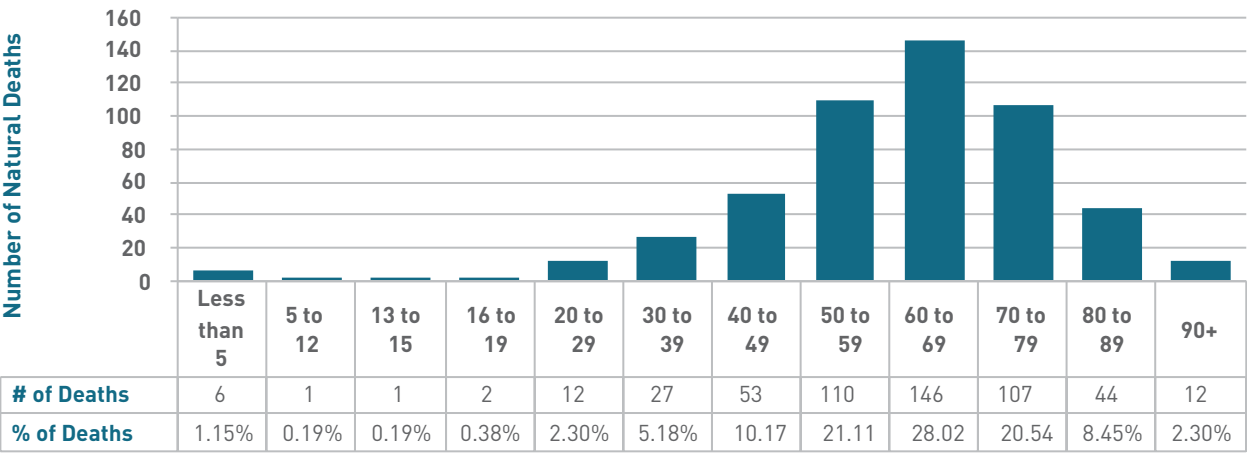
3.5 – UNDETERMINED DEATHS

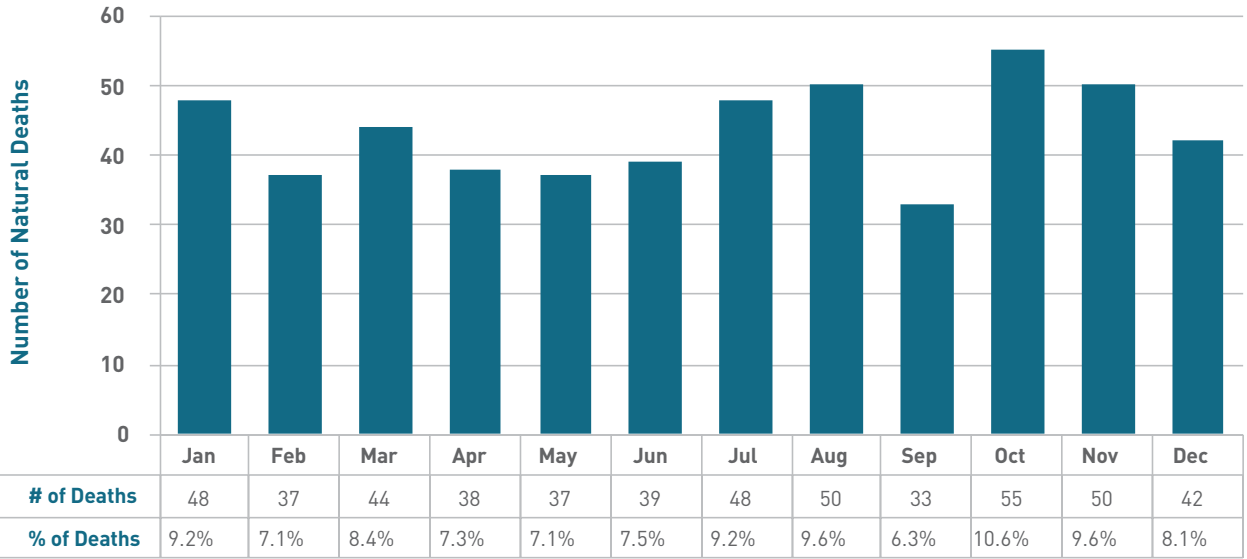The OCME investigated 19 cases (1% of total Accepted Cases) in which the manner of death was concluded to be "Undetermined," and of these, 11 cases or 58%, also had a cause of death classified as "Undetermined". Peak incidents occurred in August.

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.

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.

Cause of Death	Number of Undetermined Deaths	% of Undetermined Deaths
Asphyxia	1	5.3%
Blunt Impact	1	5.3%
Drowning	1	5.3%
Firearms	1	5.3%
Thermal Injury	4	21.1%
Undetermined	11	57.9%
Total	**19**	**100%**

UNDETERMINED DEATHS BY MONTH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
# of Deaths	0	2	2	0	1	1	3	4	1	1	2	2
% of Deaths	0.0%	10.5%	10.5%	0.0%	5.3%	5.3%	15.8%	21.1%	5.3%	5.3%	10.5%	10.5%
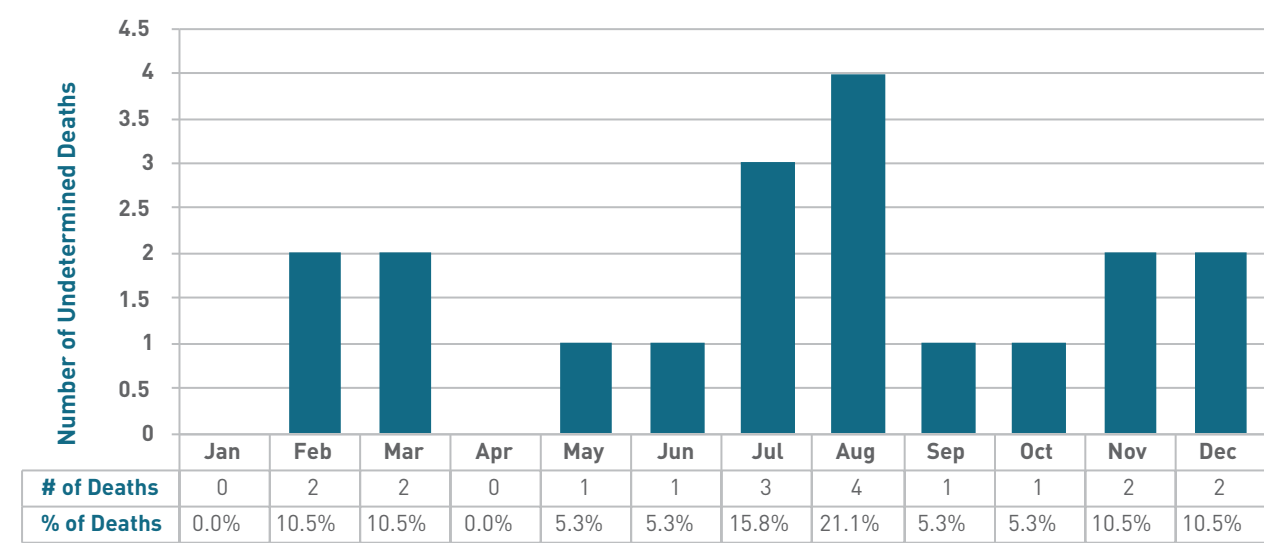
UNDETERMINED DEATHS BY RACE/ETHNICITY AND GENDER

Undetermined Deaths by Race/Ethnicity and Gender				
	Female	Male	Total	Percent of Race/ Ethnicity
Black	4	13	17	89.47%
White	0	2	2	10.53%
Total	4	15	19	
Percent of Gender	**21.05%**	**78.95%**		**100%**

UNDETERMINED DEATHS BY AGE

Age	Number of Undetermined Deaths
Under 1	3
1 to 5	1
6 to 12	1
16 to 19	1
20 to 29	3
30 to 39	2
40 to 49	5
50 to 59	1
60 to 69	0
70 to 79	2
80 to 89	0
90+	0
Total	**19**

4.0

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 a 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.
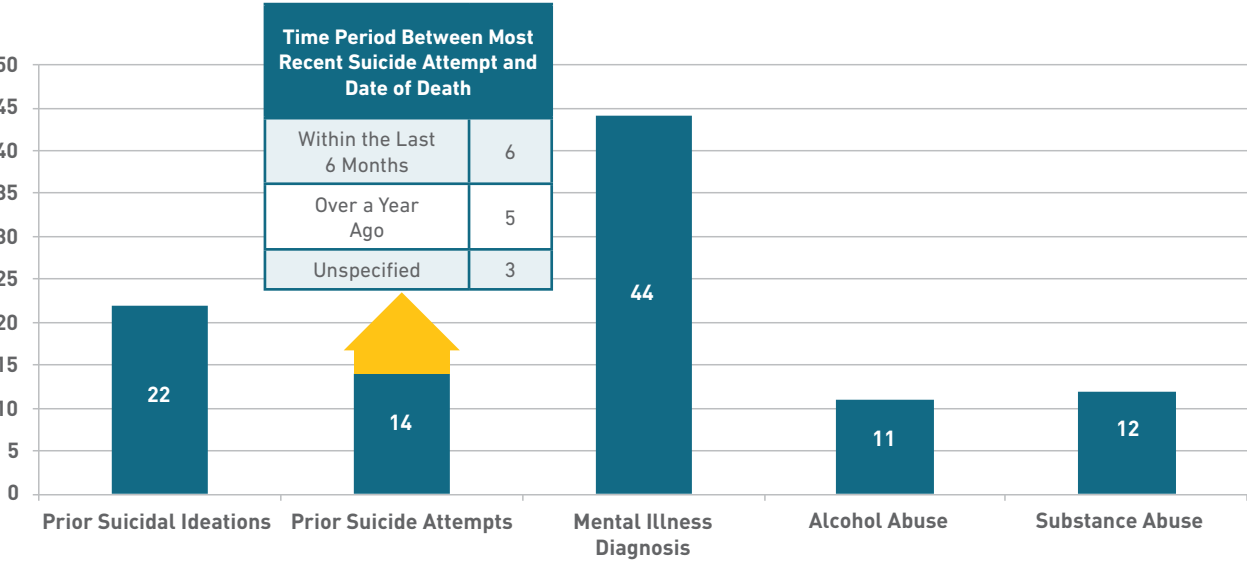
The following report reflects DCVDRS data from 2019.

DCVDRS SUICIDE DATA

In 2019, 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-four (44) of the 62 suicide victims in 2019 had at least one mental illness diagnosis with depression being the most common (n=33). Thirty-five (35) 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. Fourteen (14) of the 62 suicide victims for 2019 had made at least one suicide attempt prior to death; six (6) of those 14 victims made a prior suicide attempt within 1 year of their death. Twenty-three (23) decedents had a history of suicidal thoughts or ideations prior to death, and Fourteen (14) had a history of a suicide attempt prior to death.

BEHAVORIAL HEALTH HISTORY OF SUICIDE VICTIMS

Time Period Between Most Recent Suicide Attempt and Date of Death	
Within the Last 6 Months	6
Over a Year Ago	5
Unspecified	3

Bar chart values:
- Prior Suicidal Ideations: 22
- Prior Suicide Attempts: 14
- Mental Illness Diagnosis: 44
- Alcohol Abuse: 11
- Substance Abuse: 12

Number of Mental Illness Diagnoses Amongst Suicide

	Asian	Black	Hispanic	White	Total
Anxiety	0	4	1	5	10
Bipolar	1	5	0	1	7
Depression	2	14	2	15	33
Hyperactivity Disorder	1	0	1	1	3
PTSD	0	2	0	2	4
Schizophrennia	0	8	0	1	9
Other/ Unspecified Diagnosis	0	3	0	1	4

HISTORY OF TREATMENT FOR MENTAL HEALTH DIAGNOSES: SUICIDES

Bar chart (Number of Decedents):
- None Mentioned: 27
- Past Treatment- None Current: 8
- Receiving Treatment around Time of Death: 27
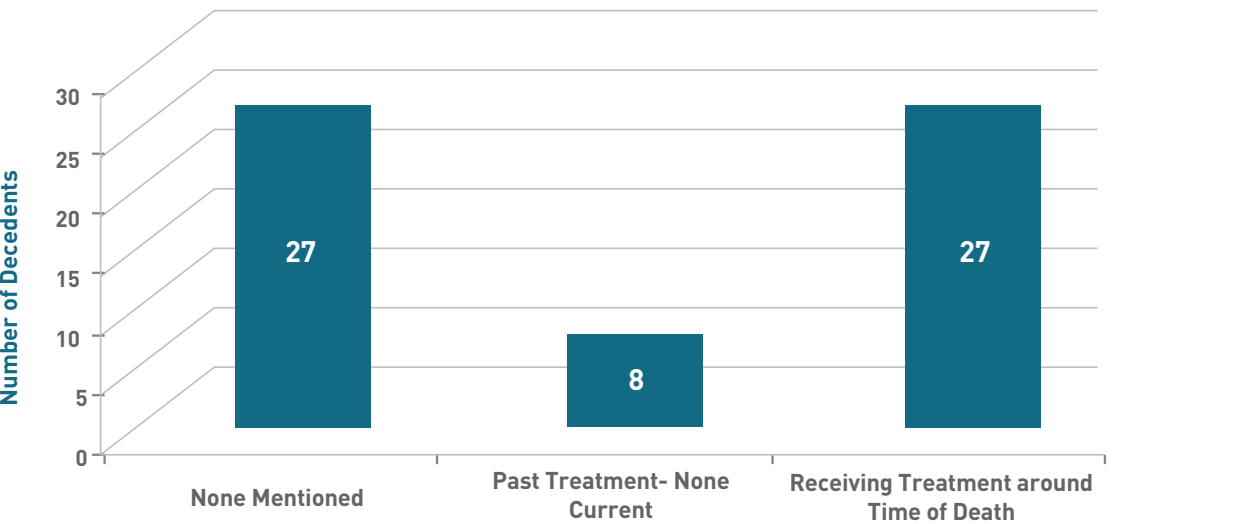
DCVDRS HOMICIDE DATA

In 2019, the District of Columbia OCME saw 164 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 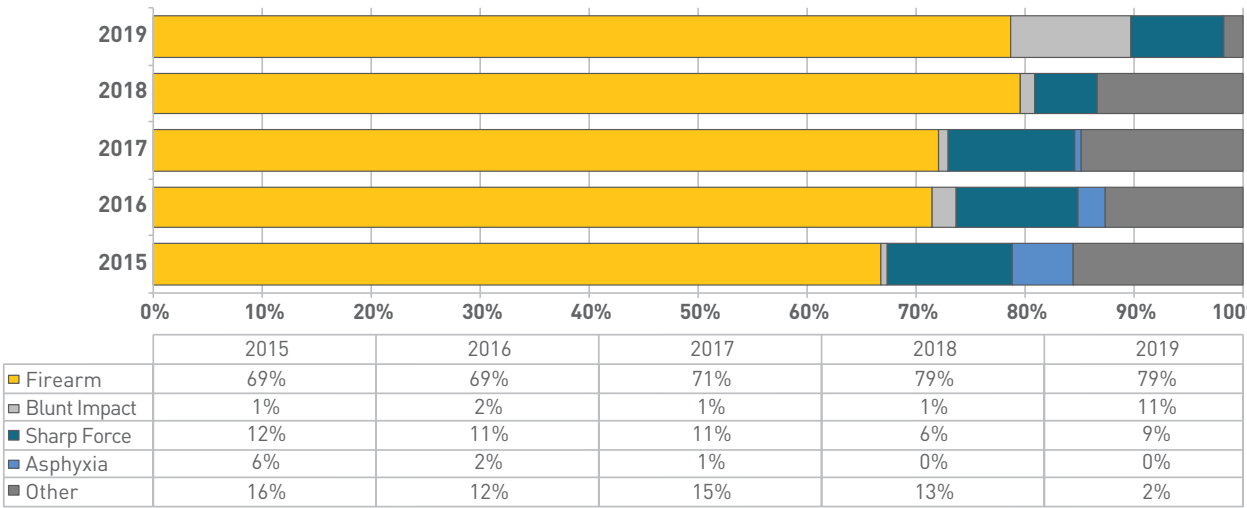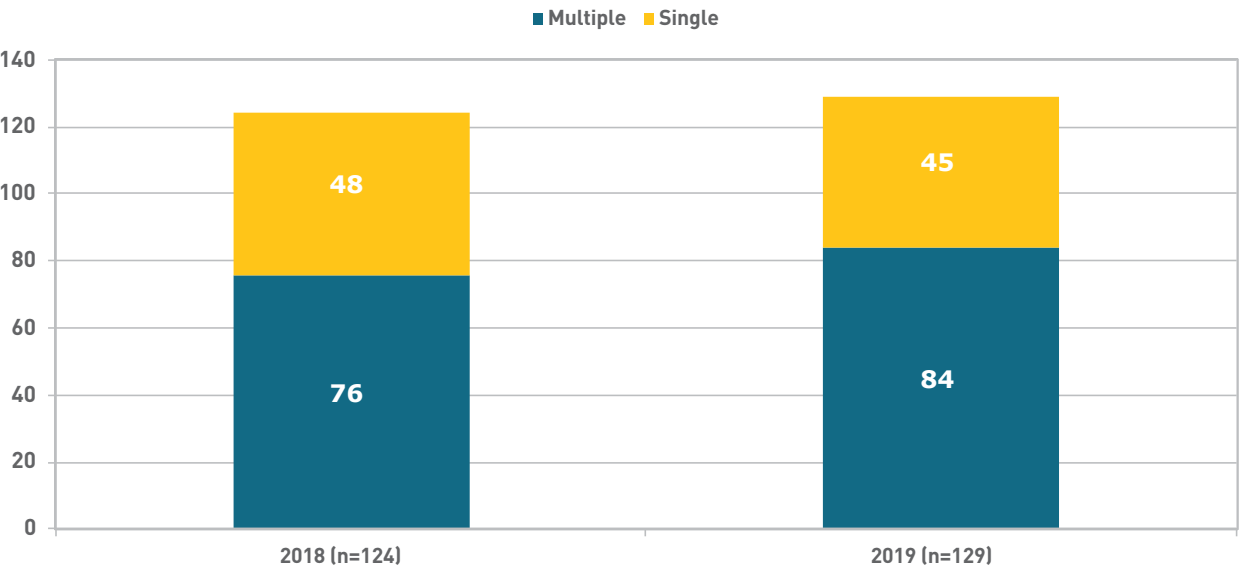incorporated legwork surrounding homicides for the District of Columbia, there are incidents where no circumstances could be recorded to give reason or understanding to the homicide. Overtime, as new evidence presents itself to investigative parties, circumstances surrounding homicides may not be currently available.

The data below highlights severity trends in firearm related homicides as 129 of the 164 homicides seen in the district for CY 2019 were due to firearms. Between 2015 and 2019, the percentage of firearm-related homicides has steadily increased from 69% in 2015 to 79% in 2019. Among multiple gunshot wound homicides, the average number of gunshot wounds decreased slightly from 5.33 in 2017 to 6.24 in 2019. Note: there are a number of decedents amongst 2018 and 2019 where the firearm injury occurred a year or more prior to the year of death.

5 YEAR TREND OF HOMICIDES BY CAUSE OF DEATH AND YEAR

	2015	2016	2017	2018	2019
Firearm	69%	69%	71%	79%	79%
Blunt Impact	1%	2%	1%	1%	11%
Sharp Force	12%	11%	11%	6%	9%
Asphyxia	6%	2%	1%	0%	0%
Other	16%	12%	15%	13%	2%

FIREARM-RELATED HOMICIDES BETWEEN 2018 VS 2019 SINGLE VS. MULTIPLE GUNSHOT WOUNDS

■ Multiple ■ Single

	2018 (n=124)	2019 (n=129)
Single	48	45
Multiple	76	84

AVERAGE NUMBER OF WOUNDS IN HOMICIDES DUE TO MULTIPLE GUNSHOTS BY YEAR

Year	Number of "Multiple Gunshot Wounds" Deaths	Average Number of Wounds
2017	57	5.33
2018	76	6.38
2019	84	6.24
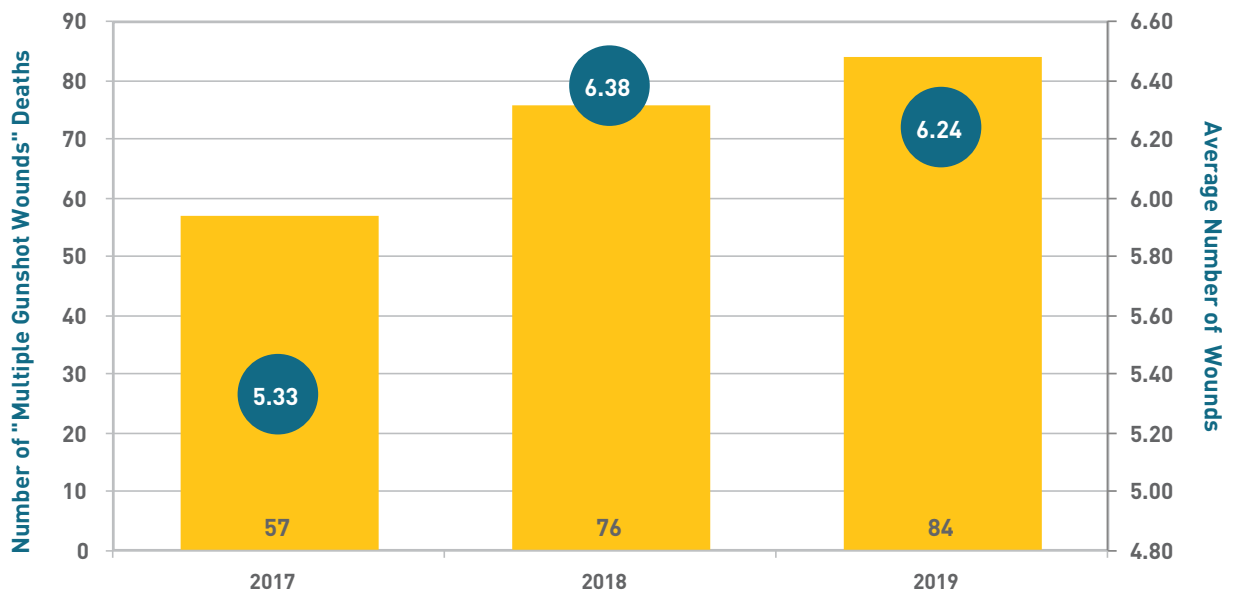
Of the 164 homicides in 2019, fifty-nine relationship variables were recorded amongst victims. Forty-seven had a prior acquaintance with the suspect, with 18 victims having an intimate or familial/friend-like association with the suspect. Fourteen incidents reportedly had drug involvement; 18 were drive-by shootings and 13 were walk-by assaults. The 4 cases where V was an intervener/bystander communicate V had no direct association with the assault/homicide and may not have been an intended/direct target.

PERSONAL HISTORY OF HOMICIDE DECEDENTS
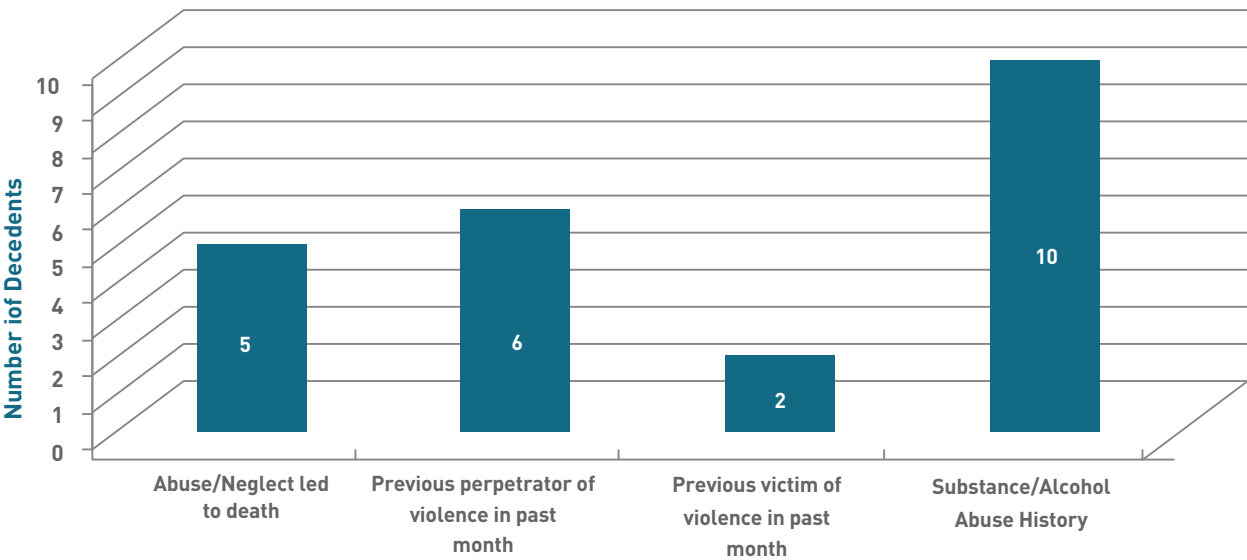
Relaitonship Between Suspect(s) and Victim(s)	
Intimate Partner (Previous or Current)	9
Boyfriend/Girlfriend	5
Ex-Partner of V's Current Living Partner	2
Current Spouse	2
Family Member/Care taker	5
Friend/Close Associate	4
Proximity Association	8
High-Risk Association	4
Stranger	11
Other, Known to Victim	17
Legal Intervention	1
Total Relationships Recorded	59

CIRCUMSTANTIAL DATA SURROUNDING HOMICIDES

Demographic Breakdown of Decedents: Firearm vs. Non-Firearm

Approximately 72% of all homicides happened among adults between the ages of 20-39 years old. In 2018, 53% of all firearm-related homicides were among decedents age 20 to 29, however, the percentage of firearm-related homicides among that age range increased slightly to 56% in 2019. Blacks accounted for 1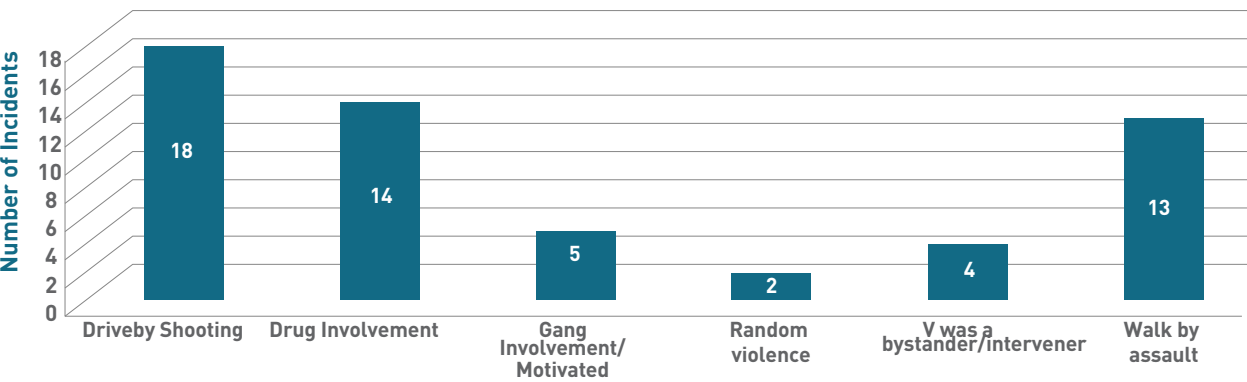49 or 91% of all homicides. This observation remains true for firearm-related homicides, with 94% to 95% of the firearm-related homicides occurring among Blacks.

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 2019 at 50%. Given the small number of homicides among women (18 in 2018 and 12 in 2019), 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 AMONG THE MOST PREVALENT AGE CATEGORIES BY YEAR

	16 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69
2018 (n=124)	10	66	19	17	4	3
2019 (n=129)	10	72	26	10	7	1
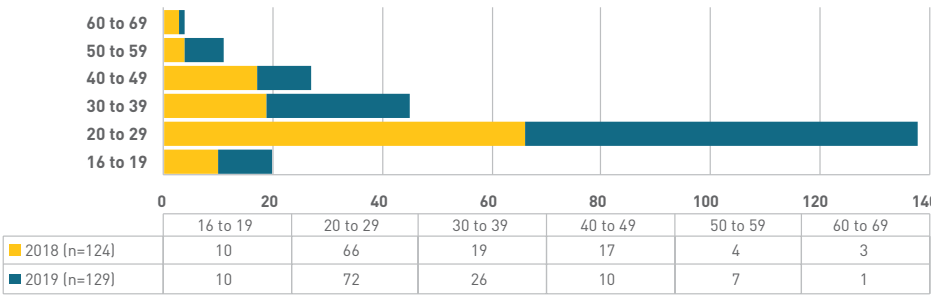
*Legend reflects the sum of total homicides by year (e.g. n=x) includes other ages not displayed in this graph.

NUMBER OF HOMICIDES BY RACE/ETHNICITY AND YEAR

■ 2018 ■ 2019

Number of Homicides

	Black (n=290)	Non-Black (n=31)
2018	141	16
2019	149	15
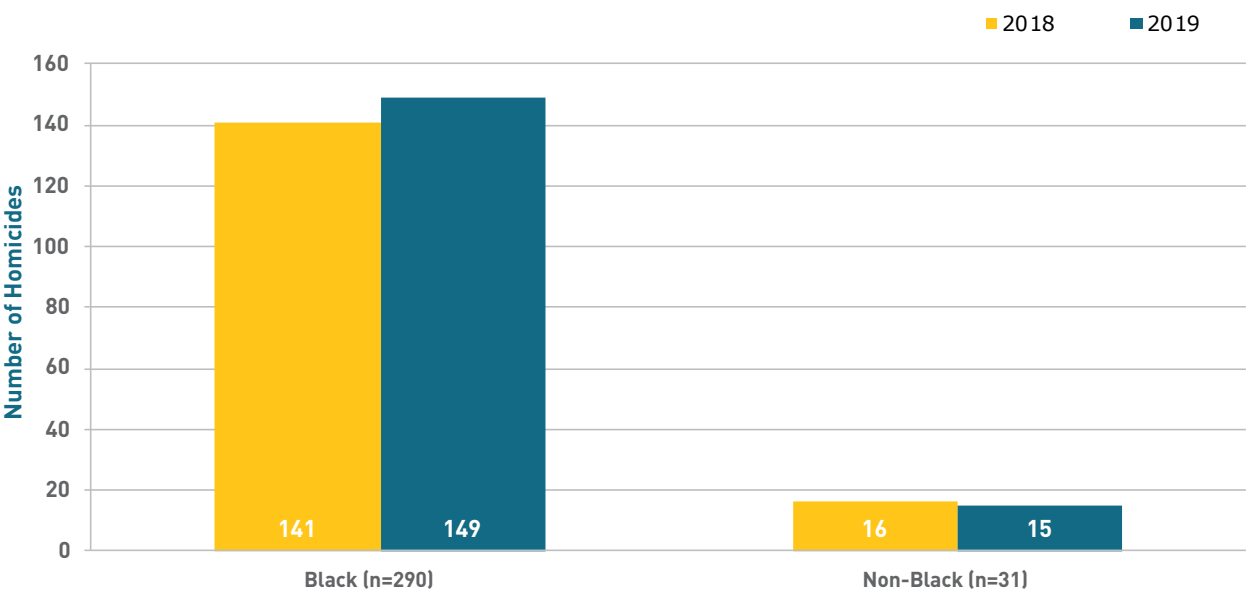
COMPARISON OF NON-FIREARM VS FIREARM RELATED HOMICIDES BY GENDER AND YEAR

2019
50% | 19% | 81%

2018
67% | 33% | 19% | 81%

■ Female Firearm ■ Male Firearm ■ Female Non-Firearm ■ Male Non-Firearm
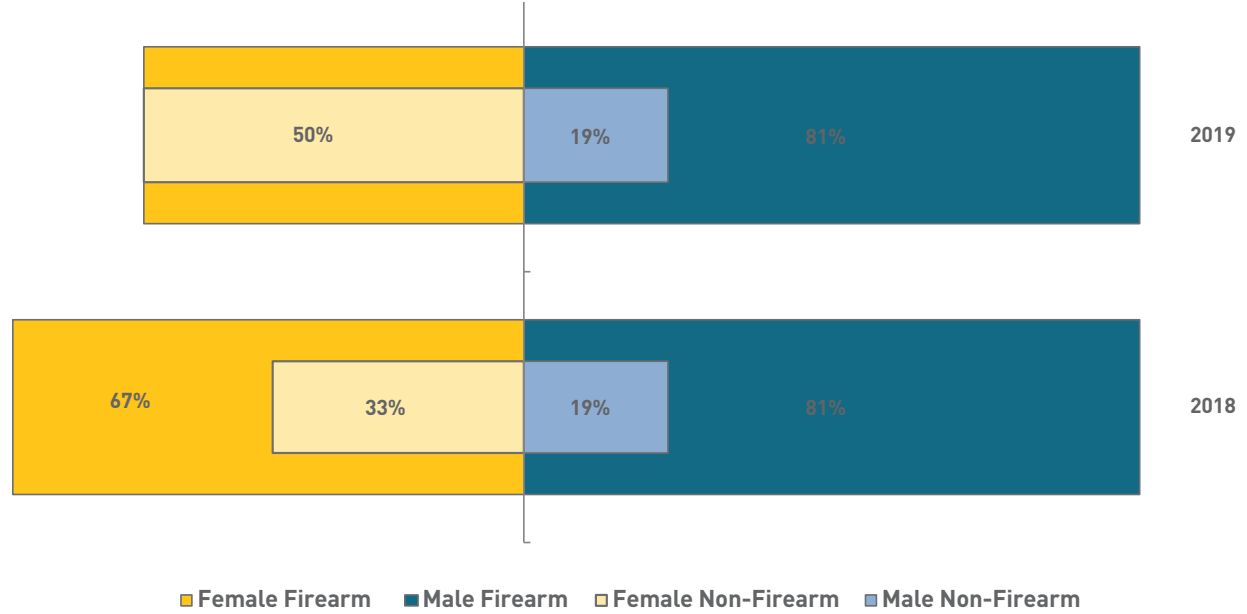
6.0
Organ Procurement

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	45
No	9	0
Request Abandoned	0	0
Not Required	0	0
Total Requests	172	45

POSTMORTEM TOXICOLOGY SUMMARY 2019

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 include blood, urine, bile, vitreous, liver, brain, and gastric contents. In 2019, the Washington, D.C. Office of the Chief Medical Examiner's Toxicology Division received and inventoried 10,032 postmortem specimens (1,260 cases) yielding 4,465 reported results. By comparison, in 2018 the Toxicology Division received 9,654 postmortem specimens, 1,271 cases and 4,718 reported results.

A negative case refers to the <u>absence</u> of any alcohol or detectable drug. A positive case refers to the <u>presence</u> 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) are present in homicides, suicide, accident, and undetermined cases.

Total number of postmortem cases processed:

Description	Number of Cases	% of Cases
N=	1260	
Negative	196	15.5%
Positive	765	60.7%
Storage (no testing requested or assigned)	299	23.7%

Total number of postmortem cases tested:

Description	Number of Cases Tested	% of Cases Tested
N=	961	
Negative	196	20.3%
Positive	765	79.6%

Number of Cases Received			
	DFSA	DUI	Postmortem
2012	115	874	708
2013	145	518	714
2014	127	451	739
2015	144	368	780
2016	119	468	1211
2017	116	464	1304
2018	116	535	1271
2019	104	477	1260

The top 10 most prevalent drugs in postmortem cases[4]:

Drug Name	Number of Cases	% of Cases (n=961)
Fentanyl	300	31.2%
Ethanol	259	26.9%
Marijuana Metabolite	205	21.3%
Cocaine Metabolite	201	20.9%

4 The list does not include caffeine (123), cotinine (93), and nicotine (33).

Drug Name	Number of Cases	% of Cases (n=961)
Despropionyl-Fentanyl (4-ANPP)	152	15.8%
Naloxone	132	13.7%
Morphine/6-acetylmorphine/Codeine	123/109/65	12.7%/11.3%/6.7%
Phencyclidine	70	7.2%
Oxycodone	36	3.7%
Methadone	32	3.3%

POLYSUBSTANCE USE AMONG POSTMORTEM CASES IN 2019

Major Illicit Drug	Total # Positive Major Illicit Drug Cases	Most Common Combination	% of Total # of Positive Major Illicit Drug Cases	Second Most Common Combination	% of Total # of Positive Major Illicit Drug Cases	Third most Common Combination	% of Total # of Positive Major Illicit Drug Cases
Fentanyl	300	Despropionyl-Fentanyl (4-ANPP)	50.3%	Cocaine Metabolite	44.0%	Morphine	34.6%
Ethanol	259	Fentanyl	38.2%	Cocaine Metabolite	25.0%	Marijuana Metabolite	18.1%
Marijuana Metabolite	205	Fentanyl	25.3%	Ethanol	22.9%	Cocaine Metabolite	15.1%
Cocaine Metabolite	201	Fentanyl	65.6%	Despropionyl-Fentanyl (4-ANPP)	35.8%	Ethanol	32.3%
Despropionyl-Fentanyl (4-ANPP)	152	Fentanyl	100.0%	Cocaine Metabolite	47.3%	Morphine	37.5%
Naloxone	132	Fentanyl	68.1%	Cocaine Metabolite	38.6%	Despropionyl-Fentanyl (4-ANPP)	34.0%
Morphine	123	Fentanyl	84.5%	Despropionyl-Fentanyl (4-ANPP)	46.3%	Cocaine Metabolite	43.0%
Phencyclidine	70	Ethanol	41.4%	Cocaine metabolite	32.8%	Fentanyl	31.4%
Oxycodone	36	Fentanyl	30.5%	Marijuana Metabolite	25.0%	Despropionyl-Fentanyl (4-ANPP)	19.4%
Methadone	32	Fentanyl	68.7%	Despropionyl-Fentanyl (4-ANPP)	40.6%	Morphine	40.6%

Toxicology Findings for Homicide Cases

The toxicology division received 164 homicide cases and toxicological analysis was performed on 163 of those cases. All cases were screened for alcohol and major drugs of abuse, Marijuana being the most prominent substance in all homicide cases. Drugs were absent in 34 homicide cases. Approximately 20.7% of the homicide cases received by the laboratory were negative for drugs and alcohol.

Description	Number of Cases	% of Cases
N=	164	
Negative	34	20.7%
Positive	129	78.6%
Storage	1	0.6%

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

Name of Drug	Number of Cases	% of Homicide Cases (n=163)
Marijuana Metabolite	90	55.2%
Ethanol	31	19.0%
Fentanyl	17	10.4%
Phencyclidine	13	7.9%
Cocaine Metabolite	9	5.5%

Toxicology Findings for Suicide Cases

Toxicological analysis was performed on all 61 suicide cases. Drugs were absent in 21 suicide cases. Of the positive cases, ethanol is the most prominent substance in all suicide cases.

Description	Number of Cases	% of Cases
N=	61	
Negative	21	34.4%
Positive	40	65.5%

The 5 most notably detected drugs in suicide cases were[5]:

Name of Drug	Number of Cases	% of Suicide Cases tested (n=61)
Ethanol	17	27.8%
Marijuana Metabolite	7	11.4%
Alprazolam	5	8.1%
Diphenhydramine	5	8.1%
Cocaine Metabolite	4	6.5%

Toxicology Findings for Accident Cases

The toxicology division received 524 accident cases and toxicological analysis was performed on 464 of the cases received. Of the analyzed cases, drugs were absent in 44 accident cases. Fentanyl is the most prominent substance in all accident cases.

Description	Number of Cases	% of Cases
N=	524	
Negative	44	8.3%
Positive	420	80.1%
Storage	60	11.4%

The 10 most commonly detected drugs in the accident cases were[6]:

Name of Drug	Number of Cases	% of Accident Cases (n=464)
Fentanyl	268	57.7%
Cocaine Metabolite	173	37.2%
Ethanol	166	35.7%
Despropionyl-Fentanyl (4-ANPP)	147	31.6%
Naloxone	112	24.1%

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5   The list does not include caffeine (16), cotinine (11), and nicotine (4).
6   The list does not include caffeine (60) and cotinine (57).

Name of Drug	Number of Cases	% of Accident Cases (n=464)
Morphine/6-acetylmorphine/codeine	110/103/59	23.7%/22.1%/12.7%
Marijuana Metabolite	71	15.3%
Phencyclidine	52	11.2%
Acetyl Fentanyl	25	5.3%
Buprenorphine metabolite (norbuprenorphine)	24	5.1%

Toxicology Findings for Traffic Accident Cases

The toxicology division received 55 traffic accident cases and toxicological analysis was performed on 32 cases. Drugs were absent in 19 traffic accident cases. Of the positive cases, ethanol was the most prominent substance in all traffic accident cases.

Description	Number of Cases	% of Cases
N=	55	
Negative	19	18.3%
Positive	13	50.0%
Storage	18	31.6%

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

Name of Drug	Number of Cases	% of Traffic Cases (n=37)
Ethanol	9	24.3%
Marijuana Metabolite	5	13.5%
Fentanyl	3	8.1%
Buprenorphine Metabolite (norbuprenorphine)	2	5.4%
Phencyclidine	2	5.4%

In the 12 traffic deaths positive for ethanol, 6 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 0.14 g/100 mL.

3.3.2 – Toxicology Findings for Deaths due to Accidental Drug Overdose

The toxicology division received 375 accidental drug overdose cases. Of the 375 cases received, testing was performed on 366 cases. The most prevalent drug in the population was fentanyl.

Description	Number of Cases	% of Cases
N=	375	
Negative	0	0.0 %
Positive	366	97.6%
Storage	9	2.4 %

The 10 most commonly detected drugs in drug overdose cases were[7]:

Contributing Drugs	Number of Cases	% of Cases (n=366)
Fentanyl	261	71.3%
Cocaine Metabolite	168	45.9%
Despropionyl-Fentanyl (4-ANPP)	147	40.1%
Ethanol	147	40.1%
Naloxone	111	30.3%
Morphine/6-acetylmorphine/codeine	106/103/57	28.9%/28.1%/15.5%
Marijuana Metabolite	63	17.2%
Phencyclidine	48	13.1%
Acetyl Fentanyl	25	6.8%
Methadone	22	6.0%

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. The prevalence of cocaine metabolite, ethanol, morphine (heroin), phencyclidine, oxycodone, methadone, and marijuana metabolites has also been included.

7   The list does not include caffeine (51) and cotinine (49).

NUMBER OF OVERDOSE DEATHS BY AGE AND DRUGS

	Age							
	0-10 (n[8]=0)	11-20 (n=5)	21-30 (n=25)	31-40 (n=68)	41-50 (n=67)	51-60 (n=113)	61-70 (n=93)	71-80 (n=4)
Methadone (n=22)	0	0	0	1	2	8	10	1
Fentanyl (n=261)	0	4	22	43	43	84	62	3
Ethanol (n=147)	0	2	7	31	21	50	35	1
Morphine (n=106)	0	1	4	15	16	28	41	1
Phencyclidine (n=48)	0	0	1	17	9	18	3	0
Cocaine Metabolite (n=168)	1	2	8	19	25	63	48	2
Oxycodone (n=9)	0	1	0	0	2	3	3	0
Marijuana Metabolite (n=63)	0	2	5	21	13	14	8	0

(Drugs shown in leftmost column)

8 "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 the most frequently detected drugs in both black and white decedents was fentanyl. The prevalence of ethanol, cocaine metabolite, morphine phencyclidine (PCP), oxycodone, marijuana, and methadone has been included.

NUMBER OF OVERDOSE DEATHS BY RACE AND DRUGS

	Race			
	Black (n[9]=312)	Hispanic (n=14)	Other (n=4)	White (n=45)
Fentanyl (n=261)	221	9	4	27
Phencyclidine(n=48)	47	0	0	1
Methadone (n=22)	20	0	0	2
Ethanol (n=147)	115	11	2	19
Cocaine Metabolite (n=168)	152	2	3	11
Morphine (n=106)	94	2	1	9
Oxycodone (n=9)	8	0	0	1
Marijuana Metabolite (n=63)	54	1	1	7

(Drug shown in leftmost column)

Toxicology Findings by Undetermined Deaths

The toxicology division received 18 undetermined death cases and analysis was performed on 17 cases. Drugs were absent in 5 undetermined deaths.

Description	Number of Cases	% of Cases
N=	18	
Negative	5	27.7%
Positive	12	66.7%
Storage	1	4.1%

9 "N" represents the total number of deaths due to accidental drug overdose found within the stated race group or drug category.

The 5 most commonly detected drugs in the undetermined cases were[10]:

Name of Drug	Number of Cases	% of Undetermined Cases (n=17)
Ethanol	2	11.7%
Fentanyl	2	11.7%
Hydromorphone	2	11.7%
Naloxone	2	11.7%
Marijuana Metabolite	2	11.7%

Toxicology Findings for SUID

The toxicology division did not receive a Sudden Unexpected Infant Death (SUID).

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10   The list does not include cotinine (5), caffeine (4), and nicotine (2).

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 2019, the laboratory received 368 cases from the Metropolitan Police Department (MPD), 73 cases from the United States Parks Police (USPP), 21 specimens from the United States Capitol Police (USCP), and 15 specimens from the United States Secret Service (USSS). Specimens received were either blood or urine, and multiple specimens could be received with each of the 477 cases. A total of 619 specimens were received in 2019.

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	Number of Cases	% of Cases
N=	477	
Negative	27	5.6 %
Positive	450	94.3 %

The 5 most commonly detected drugs in the driving under the influence cases were:

Drug	Number of Cases	% of Cases
Ethanol	293	61.4%
Marijuana Metabolite	180	37.7%
Phencyclidine (PCP)	92	19.2%
Cocaine Metabolite	58	12.1%
Fentanyl	41	8.5%

Note: Additional information regarding driving under the influence of controlled substances can be found in Section 4.3 - Breath Testing Progrm.

Driving Under the Influence Urine Ethanol Concentration Distribution in 2019

Urine Ethanol Concentration (g/100mL)	Number of DUI cases	Urine Ethanol Concentration (g/100mL)	Number of DUI cases
0.01	6	0.23	5
0.02	6	0.24	7
0.03	6	0.25	12
0.04	7	0.26	12
0.05	7	0.27	10
0.06	4	0.28	7
0.07	6	0.29	7
0.08	4	0.3	8
0.09	4	0.31	8
0.1	5	0.32	2
0.11	7	0.33	5
0.12	7	0.34	3
0.13	5	0.35	4
0.14	7	0.36	2
0.15	2	0.37	2
0.16	2	0.39	2
0.17	6	0.4	3
0.18	9	0.41	2
0.19	7	0.42	1
0.2	6	0.47	1
0.21	6	0.52	1
0.22	9	0.57	1

DRIVING UNDER THE INFLUENCE BLOOD ETHANOL CONCENTRATION DISTRIBUTION IN 2019

Blood Ethanol Concentration (g/100mL)	Number of DUI cases
0.02	1
0.03	3
0.04	2
0.06	2
0.07	1
0.08	2
0.09	1
0.1	5
0.13	4
0.14	5
0.15	1
0.16	2
0.17	5
0.18	3
0.19	5
0.2	4
0.21	3
0.22	4
0.24	1
0.25	2
0.29	3
0.33	1
0.57	1

TURNAROUND TIME FOR DRIVING UNDER THE INFLUENCE CASES

Turnaround Time in Days	Number of DUI Cases
7	4
10	5
11	3
12	6
13	1
14	12
15	12
16	8
17	7
18	8
19	11
20	27
21	28
22	16
23	31
24	28
25	24
26	17
27	12
28	16
29	5
30	13

Turnaround Time in Days	Number of DUI Cases
31	16
32	5
33	13
34	38
35	21
36	4
37	3
38	5
39	7
40	1
41	14
42	3
43	2
44	2
45	3
46	2
47	1
48	6
49	6

Turnaround Time in Days	Number of DUI Cases
50	3
51	3
54	1
59	1
60	2
61	3
63	3
66	1
67	1
68	1
74	4
76	1
78	1
81	1
83	2
85	1
92	1
103	1

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 2019, the laboratory received cases from District government agencies including 64 cases from Metropolitan Police Department and 40 cases from the Office of Victim Services. Specimens received were blood and urine, and multiple specimens were received with each of the 264 cases. A total of 264 specimens were received in 2019.

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	Number of Cases	% of Cases
N=	104	
Negative	0	0.0 %
Positive	104	100.0 %

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

Drug	# of Cases	% of Cases
Ethanol	40	38.4%
Marijuana Metabolite	37	35.5%
Cocaine Metabolite	16	15.3%
Acetone	14	13.4%
Diphenhydramine	10	9.6%

Subject demographics for DFSA cases were:

Average Age (years)	27
Gender	% of Total
Male	9.6%
Female	89.4%
Total	**99.9%**

Age Range	# of Cases
Ages ≥40 and <50	6
Ages ≥50 and <70	4
Unreported	2
Total	**104**

Age Range	# of Cases
Ages ≥10 and <15	1
Ages ≥15 and <20	11
Ages ≥20 and <25	39
Ages ≥25 and <30	18
Ages ≥30 and <35	15
Ages ≥35 and <40	8

Cases submitted by Agency and cases processed:

Agency	Cases Received	% Processed
MPD	64	100%
OVSJG (DC SANE)	104	100%

AVERAGE MONTHLY TURNAROUND TIME FOR DFSA CASES SUBMITTED TO OCME

Turnaround Time for Each DFSA Case submitted to OCME

Average Number of Days — Goal Under 90 Days

Month	MPD	OVS
Jan	29	25
Feb	41	24
Mar	20	40
Apr	31	24
May	35	30
Jun	45	26
Jul	30	33
Aug	60	25
Sep	30	33
Oct	44	42
Nov	35	31
Dec	58	0
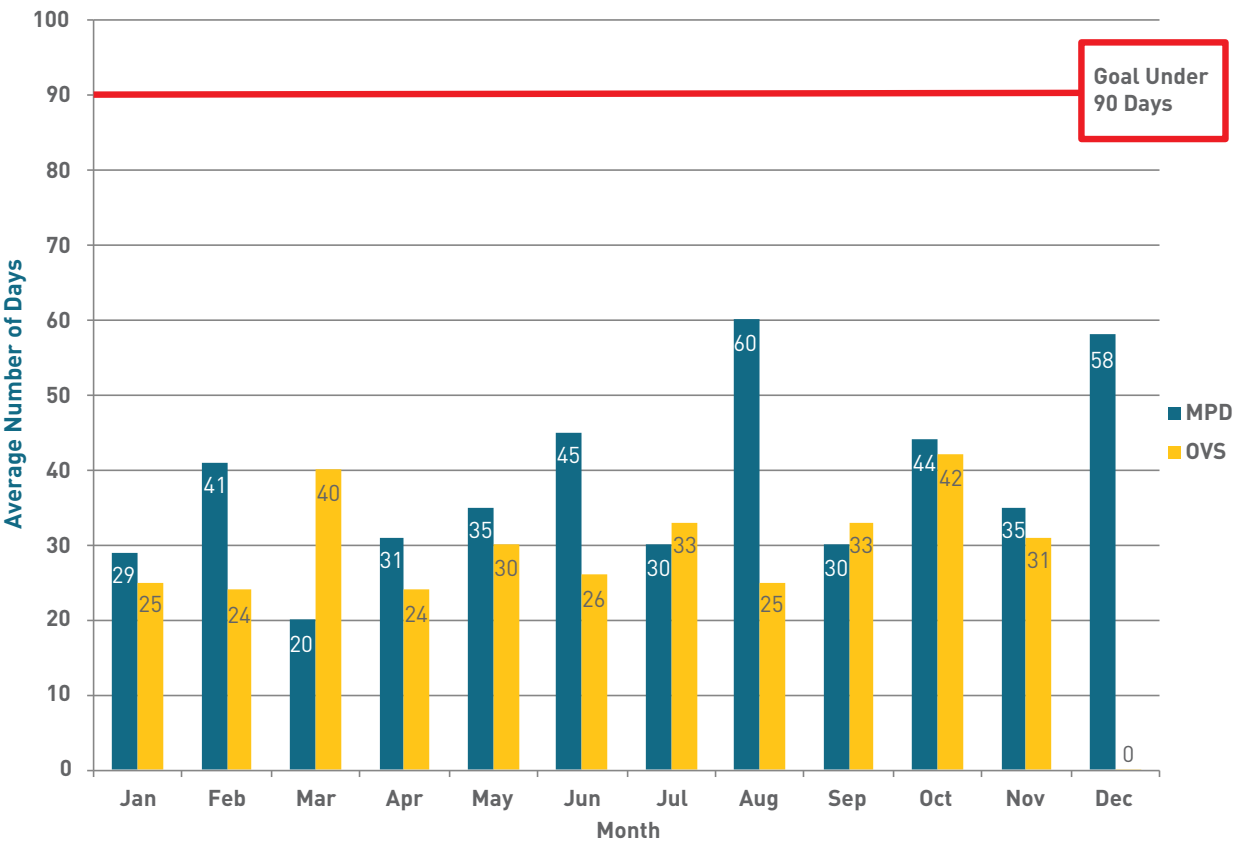
Turnaround Time (TA) for Each Case submitted to OCME:

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)	Submitting Agency	Received Date	Report Date	TAT (Days)	Submitting Agency	Received Date	Report Date	TAT (Days)
MPD	8/22/19	3/18/20	209	OVS	7/5/19	8/13/19	39	OVS	11/18/19	12/18/19	30	OVS	5/24/19	6/18/19	25
MPD	10/7/19	2/19/20	135	OVS	7/5/19	8/13/19	39	OVS	11/18/19	12/18/19	30	OVS	5/24/19	6/18/19	25
MPD	6/25/19	9/26/19	93	OVS	7/5/19	8/12/19	38	MPD	5/6/19	6/4/19	29	OVS	8/19/19	9/13/19	25
MPD	5/13/19	7/30/19	78	MPD	2/11/19	3/19/19	36	MPD	7/15/19	8/13/19	29	MPD	9/16/19	10/11/19	25
MPD	12/6/19	2/19/20	75	MPD	5/16/19	6/21/19	36	MPD	8/6/19	9/4/19	29	MPD	3/18/19	4/10/19	23
MPD	12/12/19	2/19/20	69	MPD	12/30/19	2/4/20	36	MPD	10/3/19	11/1/19	29	MPD	3/18/19	4/10/19	23
MPD	2/14/19	4/21/19	66	OVS	3/25/19	4/29/19	35	OVS	1/16/19	2/13/19	28	MPD	4/15/19	5/8/19	23
MPD	12/23/19	2/25/20	64	OVS	7/5/19	8/9/19	35	OVS	9/30/19	10/28/19	28	MPD	8/12/19	9/4/19	23
MPD	12/16/19	2/12/20	58	OVS	9/6/19	10/11/19	35	OVS	10/4/19	11/1/19	28	MPD	10/10/19	11/1/19	22
OVS	10/4/19	11/27/19	54	OVS	9/6/19	10/11/19	35	MPD	5/15/19	6/11/19	27	OVS	1/16/19	2/6/19	21
MPD	12/18/19	2/8/20	52	MPD	9/23/19	10/28/19	35	MPD	6/20/19	7/17/19	27	MPD	3/21/19	4/10/19	20
MPD	12/18/19	2/8/20	52	MPD	3/7/19	4/10/19	34	OVS	2/21/19	3/19/19	26	MPD	8/15/19	9/4/19	20
OVS	11/18/19	1/8/20	51	MPD	2/14/19	3/19/19	33	OVS	5/3/19	5/29/19	26	MPD	10/31/19	11/20/19	20
OVS	5/3/19	6/21/19	49	OVS	5/3/19	6/4/19	32	MPD	5/23/19	6/18/19	26	MPD	10/31/19	11/20/19	20
MPD	10/2/19	11/20/19	49	MPD	5/20/19	6/21/19	32	MPD	5/23/19	6/18/19	26	MPD	5/29/19	6/17/19	19
MPD	10/28/19	12/14/19	47	MPD	11/12/19	12/14/19	32	OVS	6/21/19	7/17/19	26	OVS	2/1/19	2/19/19	18
MPD	8/26/19	10/11/19	46	MPD	2/4/19	3/7/19	31	OVS	6/21/19	7/17/19	26	OVS	7/22/19	8/9/19	18
OVS	10/4/19	11/18/19	45	MPD	4/18/19	5/19/19	31	MPD	10/7/19	11/2/19	26	OVS	4/15/19	5/2/19	17
OVS	3/25/19	5/8/19	44	OVS	7/22/19	8/22/19	31	OVS	11/18/19	12/14/19	26	OVS	4/15/19	5/2/19	17
OVS	4/15/19	5/29/19	44	MPD	8/26/19	9/26/19	31	OVS	11/18/19	12/14/19	26	OVS	4/15/19	5/2/19	17
MPD	5/6/19	6/17/19	42	MPD	1/7/19	2/6/19	30	OVS	11/18/19	12/14/19	26	MPD	1/28/19	2/13/19	16
MPD	1/3/19	2/13/19	41	MPD	4/1/19	5/1/19	30	MPD	11/18/19	12/14/19	26	MPD	3/11/19	3/27/19	16
MPD	2/5/19	3/18/19	41	MPD	4/1/19	5/1/19	30	OVS	11/18/19	12/14/19	26	MPD	3/11/19	3/27/19	16
MPD	4/8/19	5/19/19	41	MPD	4/29/19	5/29/19	30	OVS	2/21/19	3/18/19	25	MPD	3/25/19	4/10/19	16
MPD	11/4/19	12/14/19	40	MPD	7/29/19	8/28/19	30	OVS	2/21/19	3/18/19	25	MPD	3/18/19	4/1/19	14
MPD	11/8/19	12/18/19	40	MPD	9/9/19	10/9/19	30	OVS	5/24/19	6/18/19	25	MPD	6/3/19	6/17/19	14

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**

Identifications

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 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.

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.

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[11]	0
Total	**1309**

11 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.

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.

8.2 - 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 231 Public Disposition cases, of which 122 were Medical Examiner cases and 109 were Storage cases. There were no unidentified decedents that were released for Public Disposition in 2019. The breakdown by Adults, Children and Fetuses:

Description	# of Public Disposition
Adults	224
Children	4
Fetus	1
Cremains	2
Total	**231**

*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	Number of Unclaimed Remains
Cremations – identified adults	218
Cremations – child	3
Cremations – fetal remains	1
Buried children	1
Buried adults	1
Transport to Quantico National Cemetery – identified US Military Veteran	5
Cremains	2
Total	**231 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 2019 there were 181 Storage Requests made to the DC OCME

APPENDIX A

OCME ORGANIZATIONAL CHART

DC OFFICE OF THE CHIEF MEDICAL EXAMINER

CHIEF MEDICAL EXAMINER

AGENCY FISCAL OFFICER

GENERAL COUNSEL

EPIDEMIOLOGIST

GRANTS MANAGEMENT SPECIALIST

SPECIAL ASSISTANT
STAFF ASSISTANT (3): NVDRS,
MIMIC, ESOS/SUDOR GRANTS

FORENSIC TOXICOLOGY DIVISION

Chief Toxicologist
Deputy Chief Toxicologist
Staff Assistant

Forensic Toxicology Laboratory
Forensic Toxicologist (Breath Program
Manager)
Forensic Toxicologist (QA/QC Manager)

Forensic Toxicologist (7)

Laboratory Support Specialist

Forensic Toxicologist. (2):
DUI/DDOT - Grant

Forensic Toxicologist (2):
DFSA - Grant

DEATH INVESTIGATION & CERTIFICATION DIVISION

Deputy Chief Medical Examiner
Pathologist Coordinator

Forensic Pathology Unit
Medical Examiner (5)

Anthropology & Identification Unit
Forensic Anthropologist (Supervisor)
Customer Service Representative
Forensic Identification Specialist (4)

Histology Laboratory
Medical Technologist

Death Investigation Unit
Supervisory Medicolegal Investigator
Lead Medicolegal Investigator
Medicolegal Investigator (3)
Lead Forensic Investigator
Forensic Investigator (8)
Emergency Planning Specialist – Grant

Mortuary Unit
Supervisory Pathologists' Assistant
Pathologists' Assistant
Forensic Autopsy Technician (4)
Lead Forensic Photographer
Forensic Photographer (2)

METT Unit
Supervisory Forensic Mortuary Technician
Forensic Autopsy Assistant (12)

ADMINISTRATION DIVISION

Chief of Staff
Executive Assistant
Administrative Services Coordinator

Human Resources Unit
Management Liaison Specialist

IT Unit
Chief Information Officer
IT Specialist (Customer Service)

Contracts & Procurement Unit
Program Analyst
Support Services Specialist

Records Management Unit

Sup. Quality Control/Records Manager
Quality Assurance Specialist (2)
Records Management Specialist (2)

FATALITY REVIEW DIVISION

Supervisory Fatality Review Program
Manager

Child Fatality Review Committee

Developmental Disabilities Fatality Review Cmte

Maternal Fatality Review Cmte

Violence Fatality Review Cmte

Sr. Fatality Review Specialist
Fatality Review Program Specialist (5)
Staff Assistant (2)

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APPENDIX B

GRIEF SUPPORT SERVICES

Wendt Center for Loss and Healing

January 2019- December 2019

The Wendt Center for Loss and Healing dramatically shifted its delivery of services at the OCME during fiscal year 2019. Since 1999, the Wendt Center's RECOVER program supported the community through the process of decedent identification by providing crisis and early intervention bereavement support, education, and resources to all individuals who came 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 end of fiscal year 2018, the program changed to accommodate the needs of a differing identification protocol.

Fiscal year 2019 began with RECOVER training OCME staff and marketing a new pilot program being offered at the Consolidated Forensic Laboratory. The new program would offer support groups to individuals whose loved ones had come through the OCME. Brochures were created and disseminated by all appropriate teams within the OCME. Each week beginning in February, 2019 two groups were offered on a weekday and a weekend. An educational group (Managing the First few Days- Logistical Support) and a support group (Connect with other adults who are also grieving) was offered on each of these days. Attendance was very low. During the 8 month pilot- 128 groups were offered in which 19 groups had at least one participant; 16 different people attended. The majority of participants were women, had experienced a death in the past weeks to 6 months (prior to group,) identified as the mother or partner/spouse of the deceased and acknowledged the cause of death as suicide or homicide. Most participants sought a space to better understand trauma and acute grief reactions, share the death narrative, learn coping and self regulating skills, tips for talking to and supporting children and teens and accessing resources. Due to the lack of substantial physical participation in this program, the support and educational groups ceased to be provided on October 1, 2019. Recommendations were provided to the Chief Medical Examiner for future provision of services.

The importance of recognizing the impact of vicarious trauma on OCME staff remained paramount during this fiscal year. An increased effort to engage all team members was made, by offering a full day of dedicated scheduling once a month to providing stress release activities, educational materials and an outlet for support and connecting. Forty- six (46) staff wellness groups were offered this year. The program integrated the use of a support/therapeutic dog which was a huge success with many staff. The unconditional love shown by the dog to staff returning from death scenes, to the way the dog helped to ground and contain anxious and stress staff by laying on their legs was amazing to witness. Activities included creating affirmation boxes, succulent gardens, yarn wrapped hearts, mask making and mindful breathing bottles. Music, mindful breathing and body awareness was integrated into each session. Thematic educational material and snacks were provided. The staff verbalized great

benefit from these sessions and often explored ways of expanding programming. One to one support for staff continued to be offered, yet followed an appointment scheduling approach to maximize need and time. Twenty (27) sessions were provided this year. Thematic support focused on stress, vicarious trauma, violence at home and in the community, parenting, substance misuse and communication.

During this fiscal year- specialized support and training was provided to OCME teams to address stress, communication, toxic stress and vicarious trauma. These trainings were crafted specifically to meet the needs of the team and their roles at the OCME.

The Wendt Center team continued to provide data information for the Fatality Review meetings, though did not have a presence at the table. Information provided included clinic based intakes, attendance in therapy, attendance at camp, and/or request for a community based vigil.

As of December 2019, the Wendt Center's RECOVER program no longer had a presence at the DC Office of the Chief Medical Examiner.

APPENDIX
C

GLOSSARY

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.

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District of Columbia

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