GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF THE CHIEF MEDICAL EXAMINER

2016

ANNUAL REPORT

Roger A. Mitchell, Jr., MD
Chief Medical Examiner
Office of the Chief Medical Examiner

OCME • ACCREDITED • SINCE • 2018

DISTRICT OF COLUMBIA
OFFICE OF THE CHIEF MEDICAL EXAMINER

MISSION:

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

Executive Management

(2016)

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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 2016 OCME Annual Report which outlines our achievements and key statistical data regarding our critical work in death investigation and certification over the year.

You will note, as you review this report, that we have made strides in strengthening the organization with enhanced statistical reporting, updated policies and procedures, recruitment of new staff, expanded training opportunities, and continued commitment to premier death investigation and certification.

With 83 employees and a budget of about 10 million dollars in 2016, the agency investigated nearly 3,362 and performed 1,267 post-mortem examinations, including 139 homicides. We performed 1,211 toxicological tests, processed 6,440 records and resolved numerous legal matters. These accomplishments were performed in a climate of fiscal responsibility and public stewardship.

I would like to highlight a few of our key accomplishments during 2016.

- The agency achieved full accreditation by the National Association of Medical Examiners (NAME) for the first time in its history! The inspection which, held February 16-17, 2016, is a rigorous process involving the physical facility and review of office practices and policies and procedures, and it only revealed Six (6) Phase I and Zero (0) Phase II deficiencies out of 351 accreditation checklist items. The accreditation is effective February 16, 2016 through February 16, 2021.

- The agency supported two Mayoral initiatives. First, the agency co-chaired the Safer Stronger D.C. Advisory Initiative along with the Department of Health (DOH). The impact of the initiative can be recognized in the development of community partnerships, identification of job opportunities, and real-time interaction of social service agencies following incident of violence involving District residents. The second initiative, the Synthetic Drug Surveillance Program involved the agency's forensic toxicology facilitating the testing of specimens captured from

individuals reporting to a District hospital with potential overdoses on synthetic marijuana. Over the course of the initiative, over 425 synthetic drug specimens were processed with results reported to DOH.

- The agency gained significant visibility with its sponsorship of its First Annual Fatality Management Symposium and Full-Scale Exercise held September 26-30, 201. The event focused on the development of a District-wide mass fatality plan, as well as fatality incident management training. International guests included representatives from Paris and San Bernardino who discussed experiences from mass fatality incidents in those jurisdictions.

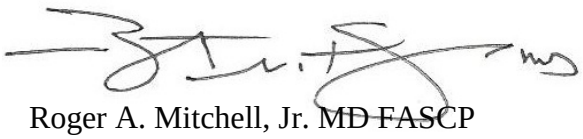
- The agency's Data Analysis Fusion Center was established in 2015 to provided mortality data to stakeholders toward prevention, detection and law enforcement. The Center was quite active in 2016 publishing reports on opioids, myocarditis, accidental drownings, in-custody deaths, homelessness and hypothermia, public dispositions, infant mortalities, and traffic mortalities.

- Of note, the agency managed approximately $1.3 million in grant funding to support fatality management, toxicological testing, violence prevention, and the review of fatalities of specified populations.

- On the international front, I participated in the International Conference for Chief Coroners held in London, England where I conducted a presentation on Active Shooter Response. I also participated in the U.S. Department of Justice-International Criminal Investigative Assistance Program (ICITAP) in providing forensic pathology and death investigation and certification training to the Egyptian Ministry of Justice's Forensic Medical Authority Facility.

Our mission is to serve the families, residents, and visitors of our nation's capital at a time when they are most vulnerable and grief stricken. The OCME operates 24 hours a day, 7 days a week, 365 days a year. As such, each day we will continue to serve as a voice for those who have experienced a loss, while working toward our mission of public safety and justice, academic advancement and public health surveillance.

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 5,765 deaths that occurred in the District of Columbia (DC) during the Calendar Year (CY) 2016. 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 of all OCME units. The agency hopes that the information contained in the report will be useful to the Executive Office of the Mayor, Councilmembers and the public at large.

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

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

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

Under the District Response Plan (DRP), the OCME is responsible for coordination of mass fatality efforts and is a support agency to several Emergency Support Functions (ESF's), including ESF's 4, 8, 9, 10 and 13. A unified approach is required as OCME works with law enforcement, firefighters, emergency management staff and public health officials for investigation of scenes, which may include remains, in an emergency incident. As such, OCME staff must report to such scenes during inclement weather, pandemic disasters or terrorism/emergency response events. Examples include OCME's response during: 1) the 2011

Metrorail incident in which staff were deployed for hours, alongside law enforcement officers, firefighters and emergency management personnel, in order to recover remains, conduct death scene investigation and allow for prompt autopsies and release of loved ones remains to the families; and 2) the 2014 Navy Yard Active Shooter incident in which staff was again deployed for hours, alongside law enforcement officers, in order to recover remains, conduct scene investigation and allow for prompt autopsies, so that decedents could be released to their loved ones as prompt as possible.

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. An example of this work is the agency provides the US Consumer Product Safety Commission with information regarding defects in equipment, machines, devices or products that are responsible for a death. Information on deaths related to hypo/hyperthermia and deaths of homeless individuals are immediately communicated to appropriate officials so corrective and/or preventative action can be promptly instituted. Additionally, real-time data surveillance has helped the District identify and develop a response to issues such as an increase in violence and the opioid epidemic.

Accomplishments in 2016

Human Resources

- Recruitment efforts resulted in critical additions to a highly experienced and educated staff, including a Medical Examiner, Forensic Toxicologists and Mortuary unit staff.

Accreditation

- The agency underwent the National Association of Medical Examiners (NAME) accreditation inspection in February 2016. For the first time in agency history, the agency received FULL NAME accreditation.

Public Health Surveillance

- The Data Fusion and Analysis Center was able identity trends in mortality and develop several critical reports and collaborations, including:
    - National Violent Death Reporting System
    - Opioid-related Fatal Overdoses
    - CJCC Homicide Data Reporting

- Negative Effects of Co-sleeping/Bedsharing
- Elderly Falls

Operational

- The Forensic Toxicology Laboratory was reaccredited by the American Board of Forensic Toxicology. The laboratory processed 494 Driving under the Influence cases for outside agencies. In addition, staff members were trained to provide interpretive services and expert testimony on a variety of drug and alcohol related matters.

- On behalf of the Department of Forensic Services (DFS), the OCME was able to publish the final notice of rulemaking, which was approved by the DC Council and published in September 2016 (63 DCR 11161). The rulemaking remedies an approximately two year deficiency to Title 50 of the DC Official Code for the admissibility of Breath Alcohol testing results, which required collaborations between OCME, DFS and the Office of the Attorney General.

- The agency participated in the District-wide full scale mass fatality event in May 2016. The exercise provided the agency the opportunity to utilize the newly Mobile Command Unit and other emergency response vehicles/resources. In addition, the agency sponsored a Fatality Management Symposium and Full Scale Exercise in September 2016 to test mass fatality plans and train District and regional stakeholders.

- In preparation for ISO accreditation, managers and staff completed the ISO 17020 and 17025 courses in order to improve the quality of services provide.

Educational

- The agency provided and participated in numerous industry specific training or courses, including
  - Sudden Unexpected Infant Death Investigation: What's My Role? (October 25-26, 2016). The course was attended by more than 50 participants from DC OCME, MPD, CFSA, DFS, Wendt Center, PG County Sheriff's Office, USAO, and CNMC.

- Arlington Career Center (October 28, 2016). A Medicolegal Investigator was invited to speak to students about her duties as an MLI.
- OCME Homicide School (November 9-10, 2016). The course was attended by more than 20 new detectives from MPD
- Highlight of some of the agency presentations and publications:
    - Publication: Skeletal Trauma: An Anthropological Review. *Academic Forensic Pathology*. 6(3):463-477.
    - Publication: The Value of Anthropology in Medicolegal Death Investigation of Pediatric Non-accidental Injury. *Academic Forensic Pathology*. 6(3):478-485. Love JC, Wiersema JM.
    - Presentation by the Forensic Toxicology Laboratory Division on the monitoring of synthetic cannabinoids in the District of Columbia at the *Annual Society of Forensic Toxicologists Meeting* (October 2016).
    - Presentation Beynon ME, Soto Martinez ME, Peterson JE, Love JC, Wolf DA, Sandberg GD. Nerve root and dorsal root ganglia (NR/DRG) hemorrhage as an indicator of pediatric traumatic head injury (THI). Proceedings *American Academy of Forensic Sciences*, Las Vegas; Feb 22-27;733.
    - Presentation by Mitchell R. Violence as Public Health Issue. Congressional Black Caucus Annual Legislative Conference; *Platform Presentation – National Medical Association (NMA). 2016.*
    - Presentation by Mitchell R. Emerging Toxicity: The Impact of Fentanyl and Acetyl Fentanyl on Opioid Drug Deaths in Washington DC, Platform Presentation – *National Association of Medical Examiners (NAME).* 2016.
    - Presentation Mitchell R. Deaths in Custody: Establishing a Public Health Surveillance Infrastructure in Washington DC; *Platform Presentation – National Association of Medical Examiners (NAME). 2016.*
    - Presentation by Tolliver S. Monitoring Synthetic Cannabinoid Usage in Washington, DC – *Society of Forensic Toxicology Meeting. 2016*

OVERVIEW OF CASES REPORTED AND INVESTIGATED

During the Calendar Year (CY) 2016, **5,765** cases were reported to and investigated by the District of Columbia - Office of the Chief Medical Examiner (DC OCME). Overall, the number of deaths reported to the DC OCME has remained relatively consistent over the past five years, with approximately 37% of the total deaths reported being accepted cases.

Medical Examiner Caseload

Accepted Cases - The OCME accepted jurisdiction of **1,267** decedent cases, of which 891 cases were autopsied.

Declined Cases - The OCME declined jurisdiction of **1,926** decedent cases, of which 67 became Storage Requests.

Storage Requests - 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 two** of the reported cases were Storage Requests only, and **sixty-seven** of the storage requests were previously "Declined" cases, so as a result the agency had a total of 169 Storage Requests, of which **159** were approved (See section 8.0 for additional statistics)

Cremation Requests: The D.C. OCME must review all cremations for deaths that occur in the District of Columbia. There were **3,065** Cremation requests made to the DC OCME in 2016; 662 were OCME cases, 2,403 were *"New Reports"* submitted from area hospitals, clinics and nursing homes, the OCME took jurisdiction of 6 of these *"New Reports"* for further investigation and certification. (See section 8.0 for details).

Scene Visits - OCME investigation staff reported to **840** scenes.

Body Transport - The OCME transported the bodies of **1,408** decedents from scenes of death to the agency.

Organ/Tissue Donations - There were **120** organ donation requests during CY 2016.

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

2016 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	393	0	106	14	0	0	**513**
Homicide	139	0	0	0	0	0	**139**
Natural	276	0	242	1	0	0	**519**
Stillbirth	2	0	0	0	0	0	**2**
Suicide	42	0	2	0	0	0	**44**
Undetermined	39	0	2	0	0	0	**41**
Other	0	0	1[1]	0	8	0	**9**
Total	**891**	**0**	**353**	**15**	**8**	**0**	**1267**

[1] This external exam was a case from a previous year with a Cause and Manner of Death of Natural, Respiratory Disease

AGENCY STATISTICS

Number of accepted cases increased

↑ 17%

2015 to 2016

Number of drug overdoses increased

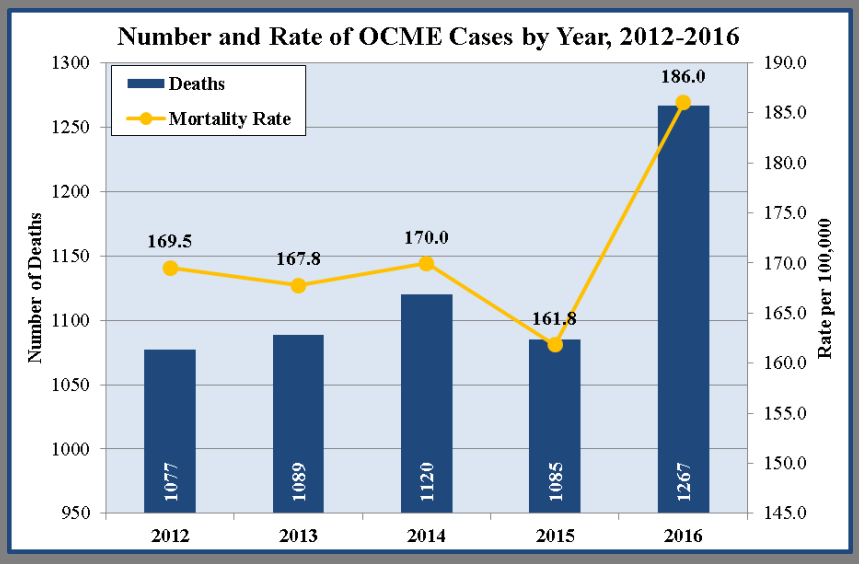
↑ 45%

2015 to 2016

Number of homicides decreased

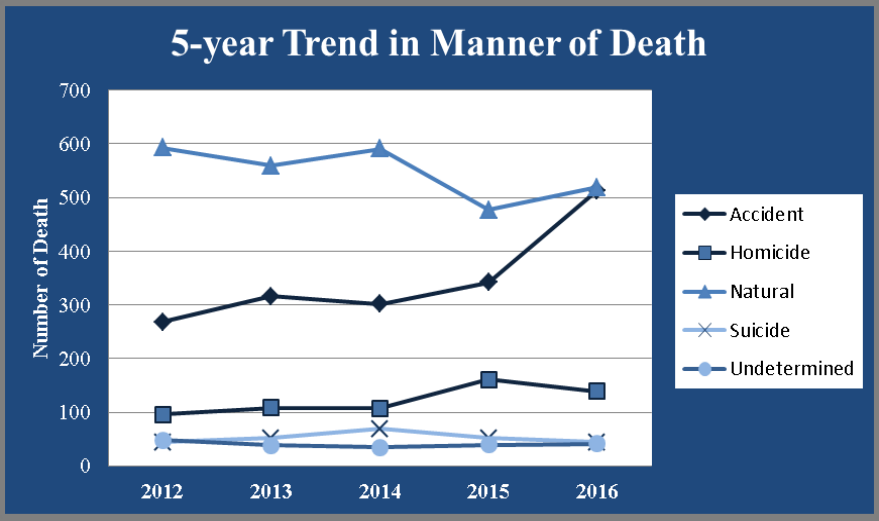
↓ 14%

2015 to 2016



Mortality Rate: 186.0 per 100,000

Number of Accidents and Naturals Increased



***Note: The data presented in this report represents deaths occurring in DC for which OCME has jurisdiction. The decedent's place of residence or location of injury may be outside of the District.

SUMMARY OF FINDINGS FOR MANNER OF DEATH

HOMICIDES: The OCME investigated 139 homicides in the CY 2016. 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 weapon of choice was firearms. The peak incidents occurred in **September**.

Toxicology Findings: Toxicology testing was requested in137 of 139 homicide cases investigated. Drugs were present in 101 of the homicide cases investigated. The most commonly detected drugs in homicide cases were: Ethanol (34); Marijuana Metabolites (32); Cannabinoids (21); Phencyclidine (8); Cocaine and metabolites (8); Oxycodone (8); Morphine (6); Codeine (4), Fentanyl (4) and Heroin (2).

SUICIDES: The OCME investigated 44 suicides in the CY 2016. This report reveals that suicides were more prevalent in white males and in persons between the ages of 20-39. Overall whites represented 45.45% of the decedents (N=20) this year. Peak incidents occurred in December.

Toxicology Findings: Toxicology testing was requested for 42 of 44 suicide cases investigated. Overall, drugs were present in 34 of the suicide cases investigated. The most commonly detected drugs were: Ethanol (13); Alprazolam (6); Diphenhydramine (5); Sertaline (4); Nordiazepam (4).

ACCIDENTS: The OCME investigated 513 accidents in the CY 2016. Of the 513 cases investigated, 302 of the accidental deaths occurred as a direct result of prescription and/or illicit drug used. Also 152 deaths were the result of blunt force trauma, of which 58 were traffic-related deaths and 89 were directly related to falls. Peak incidents for accidental deaths overall occurred in November.

*Toxicology Findings for Accidents***:** Toxicology testing was requested for 402 of the 513 Accident cases investigated, and drugs were present in 369 of these cases. The most commonly detected drugs were: Morphine (174)/Heroin (153); Ethanol (146); Codeine (118); Benzoylecgonine (113); Fentanyl (96); Cocaine (92); Phencyclidine (51); Marijuana Metabolites (43).

Traffic-related Accidents: The majority of traffic accident deaths occurred in the following categories: males, blacks, and drivers between the ages of 20-29. Peak incidents for traffic accidents only occurred in October.

Toxicology Findings for Traffic-related accidents: Toxicology testing was requested for 52 of the 58 Traffic-related Accidents, and drugs were present in 26 of these cases. The most commonly detected drugs were: Ethanol (14); Phencyclidine (5); Marijuana Metabolite (4); Cocaine Metabolite (4); Morphine (2)/Heroin (1); Alprazolam (2) and Oxycodone (2).

In the 14 traffic deaths positive for ethanol, 13 were greater than the legal limit (0.08 g/100 mL) for driving under the influence in the District of Columbia. The average breath alcohol concentration of the positive results is approximately 0.14 g/100 mL.

NATURAL DEATHS: The OCME investigated 519 Natural deaths in CY 2016. This report reveals that the leading cause of death in Natural cases is Cardiovascular Disease with 378 deaths, followed by Alcoholism with 37 deaths. The majority of Natural deaths occurred in July for 2016.

Toxicology Findings: No toxicology reporting for natural deaths is being provided for 2016.

UNDETERMINED: The OCME investigated 41 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 inconclusive examination results. As additional information is received, the death may be appropriately re-certified. Note: Sudden Unexpected Deaths in Infancy (SUID) carry an "Undetermined" manner of death.

Toxicology Findings: Toxicology testing was requested for 39 of the 41 Undetermined deaths investigated. Drugs were present in 25 of the Undetermined cases investigated. The most commonly detected drugs were: Ethanol (5); Morphine (4)/Heroin (1); 7-aminoclonazepam (2); Phenobarbital (2); Lorazepam (2); Clonazepam (2); Marijuana Metabolite (2).

STILLBIRTHS: The OCME investigated 2 Stillbirth deaths in CY 2016.
Toxicology Findings: Toxicology testing was performed on all of the stillbirths and was positive in one of the cases.

SUMMARY OF APPENDICES

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

A. 2016 OCME Organizational chart
B. Agency Management Updates: Which includes updates on personnel management, contracting and procurement, and Information Technology
C. Program Legislation
D. Internal Partnerships
E. Glossary


Pathology
Chief
Medicolegal
Manner
Management
Certification
Identification
Anthropology
Records
Medical
Mass
of
Examiner
Review
Cremation
Histology
Toxicology
Autopsy
Epidemiology
Forensics
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- OCME, DC Law 13-172, codified at DC Official Code §5-1401 et seq. (2001)

Appendix D – Grief Support Services
Appendix E – Glossary

1.0 - INTRODUCTION

The Office of the Chief Medical Examiner (OCME) is required by DC Code §5-1412 to produce an annual report that provides statistical data summarizing the results of investigations conducted by the OCME during a calendar year. This information is a reflection of the status of health of the District of Columbia residents, the level and types of violence to which the population is subjected, the prevalence of drug use and its association with homicides and/or traffic accidents. The Executive Office of the Mayor, the Office of the City Administrator, the Office of the Deputy Mayor for Public Safety and Justice, the Department of Health, the D.C. Office of the Attorney General, the United States Attorney's Office, the Public Defender Service and other entities can use the data for research purposes and for the development of preventative and corrective policies.

In 2016, 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. 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. This service was provided through a contractual agreement with the Wendt Center for Loss and Healing.

In preparation for possible terrorist attacks and mass disaster, 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. To practically accomplish this goal the agency's staff participates in local and federal exercises to determine scenarios not considered, additional resources that may be necessary, and policies and procedures that must be established.

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 professional staff teaches the Forensic Pathology and Medical Investigation sections of the GWU Graduate Program in Forensic 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) 2016, there were **7,036** deaths that occurred in the District of Columbia (DC) as reported by the Department of Health, Center for Policy, Planning and Evaluation for the District of Columbia, of which **5,765 or 82%** of these deaths were reported to and investigated by the Office of the Chief Medical Examiner (OCME). The following is a breakdown of where jurisdiction was "Accepted", "Declined", "Storage" or "Cremation" was requested of the Medical Examiner. **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 11 and 15).**

Accepted Cases - The OCME accepted jurisdiction of **1,267** decedent cases, of which **891 cases were autopsied**. There were scene visits for 724 of the 1,267 accepted cases.
Declined Cases - The OCME declined jurisdiction of **1,926** decedent cases, of which 67 became Storage Requests. There were scene visits for 112 of the 1,926 declined cases.
Storage Requests - The OCME provides a unique service to area nursing homes, hospices, and other like facilities by accommodating requests to store deceased bodies. **One hundred and two** of the reported cases were Storage Requests only, and **sixty-seven** of the storage requests were previously "Declined" cases, so as a result the agency had a total of 169 Storage Requests, of which **159** were approved (See section 8.0 for additional statistics). There were scene visits for 4 of the 169 storage cases.
Cremation Requests: The OCME must review all cremations for deaths that occur in the District of Columbia. There were **3,065** Cremation requests made to the OCME in 2016; 662 were OCME cases, 2,403 were *"New Reports"* submitted from area hospitals, clinics and nursing homes, the OCME took jurisdiction of 6 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	**3,362**
Total Number of Declined Cases	**1926**
Percent of Cases Reported & Investigated	*57%*
Total Number of Cases Accepted for Further Investigation	**1267**
Percent of Cases Reported & Investigated	*38%*
Total Number of Autopsies *Full – 891; Partial –0; Performed in a University Hospital – 0*	**891**
Percent of Cases Accepted for Further Investigation	*70%*
Number of Scene Visits by a Medical Examiner or Medico Legal/Forensic Investigator	**840**
Percent of Cases Accepted for Further Investigation	*66%*
Total Number of Bodies/Cases Transported by OCME or by Order of the OCME: *Transported by Pick-up Service -808* *Transported by Office Personnel –590* *(Investigations:8; Mortuary*: 581; *Anthropologist: 1)* *Transported by Others -10 (Funeral Home -8 and Police – 1)*	**1408**
Total Number of Organ/Tissue Donation Requests: *(See Section 3 for breakdown)*	**120**

Breakdown of Accepted Cases by Exam Type

Total Number of Cases Accepted and Investigated Further	**1,267**
Total Number of Autopsies *Full – 891* *Partial –0* *Performed at a University Hospital – 0*	**891**
Percent of Cases Accepted	*70%*
Number of External Examinations *On-site -352* *Off-site - 0*	**353**
Percent of Cases Accepted	*28%*
Number of Medical Record Reviews *	**15**
Percent of Cases Accepted	*1%*
Number of Non-Human Remains *	**8**
Percent of Cases Accepted	*1%*
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 University Hospital:** During Calendar Year 2016 there weren't any cases 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.

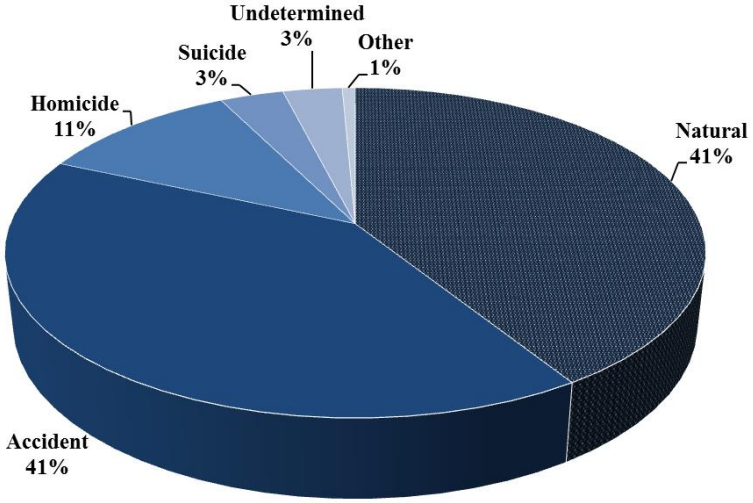
Breakdown of Accepted Cases and Autopsies by Month

Month	Case Investigations	Autopsies Full and Partials
January	83	57
February	76	50
March	97	65
April	93	68
May	106	74
June	94	66
July	113	83
August	131	90
September	114	83
October	107	74
November	130	97
December	123	84
Total	**1267**	**891**

Medical Examiner Case Examinations by Manner of Death

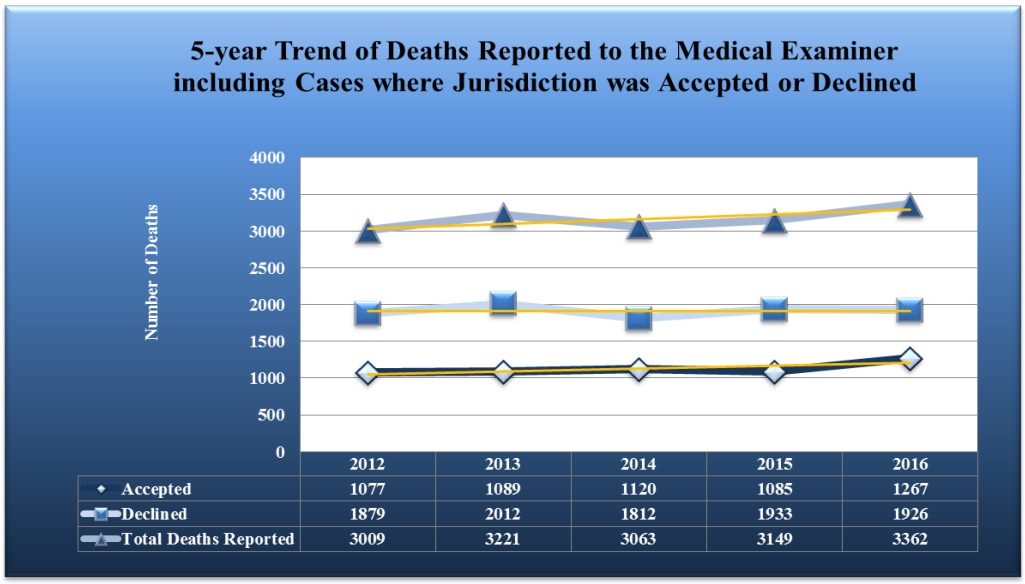
Manner	Full Autopsy Examinations	Partial Autopsy Examinations	External Examinations	Review of Medical Records	Non-Human	Anatomical Specimen Disposal	Total
Accident	393	0	106	14	0	0	**513**
Homicide	139	0	0	0	0	0	**139**
Natural	276	0	242	1	0	0	**519**
Stillbirth	2	0	0	0	0	0	**2**
Suicide	42	0	2	0	0	0	**44**
Undetermined	39	0	2	0	0	0	**41**
Other	0	0	1[1]	0	8	0	**9**
Total	**891**	**0**	**353**	**15**	**8**	**0**	**1267**

Pie Chart - Medical Examiner Cases by Manner of Death



[1] This external exam was an archaeological specimen that did not have a Cause and Manner of Death

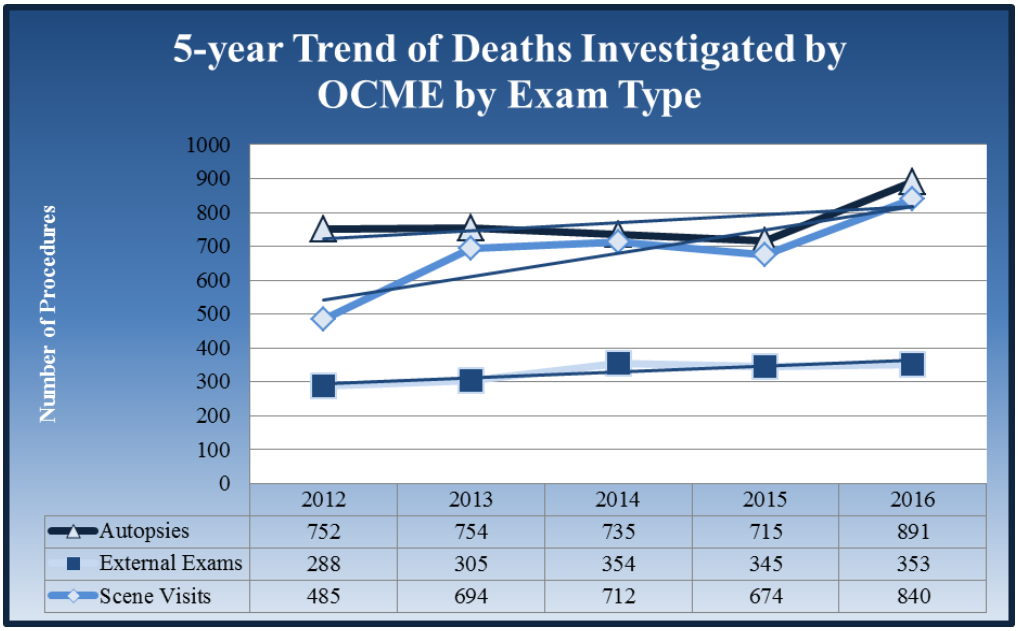
Five-year Overview of Deaths Reported to the Medical Examiner (2012– 2016)



	2012	2013	2014	2015	2016
Accepted	1077	1089	1120	1085	1267
Declined	1879	2012	1812	1933	1926
Total Deaths Reported	3009	3221	3063	3149	3362

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.

Five-year Trends in Deaths Reported and Investigated by Exam Type (2012 – 2016)



	2012	2013	2014	2015	2016
Autopsies	752	754	735	715	891
External Exams	288	305	354	345	353
Scene Visits	485	694	712	674	840

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, residence of these decedents can be anywhere in the world. Nonetheless, the majority of the cases accepted by the OCME were decedents that reside 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.

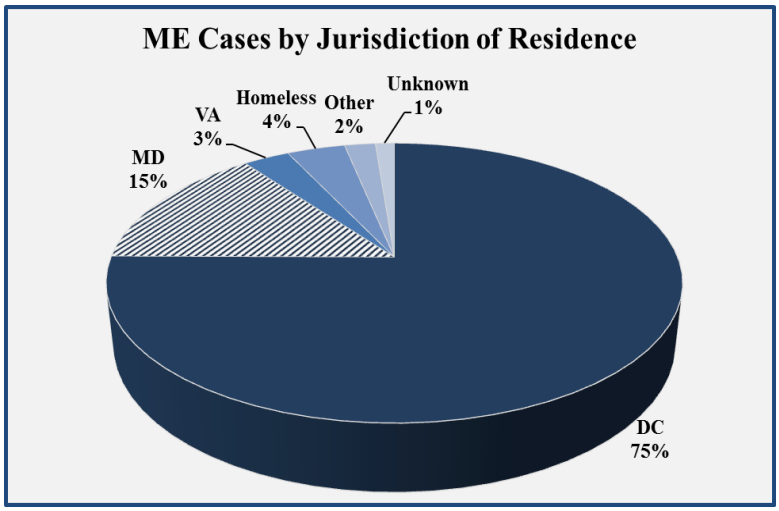


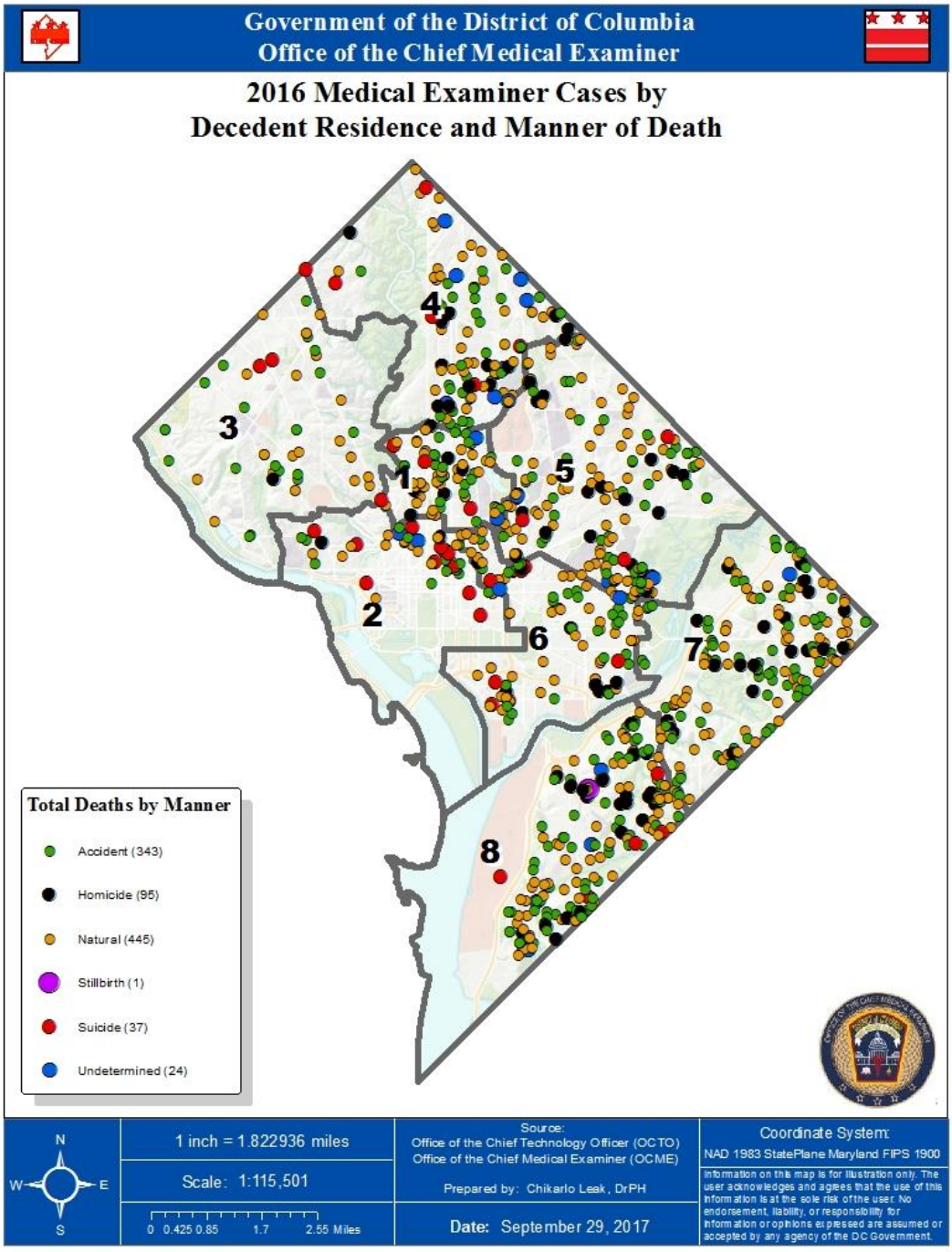
Table: Medical Examiner cases by Residence and Manner of Death

DC Deaths by Jurisdiction of Residence and Manner of Death								
Ward	**# of Deaths**	**Accidents**	**Homicides**	**Natural**	**Stillbirth**	**Suicide**	**Undetermined**	**Other**
Ward 1	84	27	6	45	0	4	2	0
Ward 2	62	22	2	25	0	10	3	0
Ward 3	49	23	1	23	0	2	0	0
Ward 4	105	32	13	46	0	6	8	0
Ward 5	162	48	20	88	0	3	3	0
Ward 6	117	41	8	59	0	7	2	0
Ward 7	177	72	21	82	0	0	2	0
Ward 8	189	78	24	77	1	5	4	0
DC	**945**	**343**	**95**	**445**	**1**	**37**	**24**	**0**
MD	183	98	31	36	1	5	12	0
VA	39	25	6	5	0	2	1	0
Other	26	10	2	13	0	0	1	0
Unknown	16	7	4	3	0	0	2	0
Undomiciled	49	30	1	17	0	0	1	0
Total	1258	513	139	519	2	44	41	0

Note: The above table does not include Non-Human Remains (8) and one archaeological specimen.

Map of OCME Decedents by DC Ward and Manner of Death

Of the **1,267** decedent deaths investigated by the OCME, **945 (75%)** were DC residents at the time of their death. Of the remaining 322 decedents, 57% were residents of MD and 12% were residents of VA. The map below illustrates the deaths by DC ward and manner of death. The data presented within this report represents deaths occurring exclusively within the District of Columbia for which the OCME has jurisdiction. The data does not represent ALL deaths of DC residents. The decedent's place of residence or location of injury may be outside of the District.



Postmortem Toxicology Summary 2016

In 2016, the Washington, OCME Toxicology Division received and inventoried 9,674 postmortem specimens (1,211 cases including one archeological specimen) yielding 2,847 reported results. This is an increase from 2015's 5,617 postmortem specimens, 780 cases and 2,126 reported results received by the toxicology laboratory.

All postmortem specimens received for routine toxicological testing was 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.

Total number of postmortem cases analyzed:

Description	Number of Cases	% of Cases
***N*=**	1,211	
Negative	222	18.3%
Positive	700	57.8 %
No testing requested or assigned	289	23.8%

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

Postmortem Toxicology - Most Commonly Detected Drugs

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

The most prevalent drugs in the postmortem cases overall were[2]:

Drug Name	Number of Cases	% of Cases
Ethanol	254	27.5%
Morphine/Heroin	207/158	22.4%/17.1%
Cocaine Metabolites	136	14.7%
Codeine	133	14.4%
Fentanyl	114	12.3%
Marijuana Metabolites	103	11.1%
Phencyclidine	63	6.8%
Furanyl Fentanyl	57	6.1%
Cannabinoids	47	5.0%
Diphenhydramine	43	4.6%
Oxycodone	42	4.5%
Alprazolam	34	3.6%
Naloxone	27	2.9%
Methadone	26	2.8%
Hydrocodone	18	1.9%
Nordiazepam	17	1.8%
Hydromorphone	15	1.6%
Oxymorphone	11	1.1%

[2] This data does suggest individual cases and the majority of cases include mixed drug toxicity.

2.1 Breakdown of Medical Examiner Investigations

The US Census estimates that during 2016, the total population within the District of Columbia was **681,170**[3] inhabitants, which comprised primarily of the following ethnic groups: White, Black, Hispanic, Asian and Other. There were a total of **7,036** deaths within the District of Columbia in 2016. In 2016, the OCME investigated **3,362** deaths that occurred in the District of Columbia or were wards of the District and died in another jurisdiction. Of those cases, **1,258** were accepted under the jurisdiction of the Medical Examiner for further investigation; of which **945** of them were known to be residents in the District of Columbia. The following table and charts summarize the manner of death by racial composition. *Although a death occurs in the District of Columbia, the decedent's place of residence can be anywhere in the world.*

2016 Manner of Death* by Race with 2010 Census Data

Race	2010 Census	ME Cases DC Residents Only	BY MANNER OF DEATH						
			Total ME Cases	Nat.	Sui.	Hom.	Acc.	Und.	Stillbirths
Black (non-Hispanic)[4]	301,053	**752**	**940**	399	19	119	373	29	1
White (non-Hispanic)	209,464	**145**	**237**	86	20	12	110	8	1
Hispanic (any single race)	54,749	**32**	**49**	21	2	7	17	2	0
Asian (non-Hispanic)	20,818	**8**	**19**	7	1	1	10	0	0
Two or more races	12,650	**0**	**0**	0	0	0	0	0	0
Other (non-Hispanic)	1,451	**4**	**7**	2	1	0	3	1	0
American Indian and Alaska Native (non-Hispanic)	1,322	**3**	**3**	2	1	0	0	0	0
Pacific Islander (non-Hispanic)	216	**1**	**1**	1	0	0	0	0	0
Unknown	n/a	**1**	**2**	1	0	0	0	1	0
Total Population	**601,723**								
Total # of ME Cases		**945**	**1,258**[5]	**519**	**44**	**139**	**513**	**41**	**2**
2016 Data – Center for Policy, Planning and Evaluation, DC DOH[6]	**7,036**	**5,037**	**1,253**	**6,165**	**49**	**183**	**558**	**63**	**0**

*The following accepted cases are not represented in the table: Non-Human Remains (11).

Legend for Manner of Death:

1. Nat. = Natural Deaths
2. Sui. = Suicide
3. Hom. = Homicide
4. Acc. = Accident
5. Und. = Undetermined
6. Stillbirth = Fetal Deaths

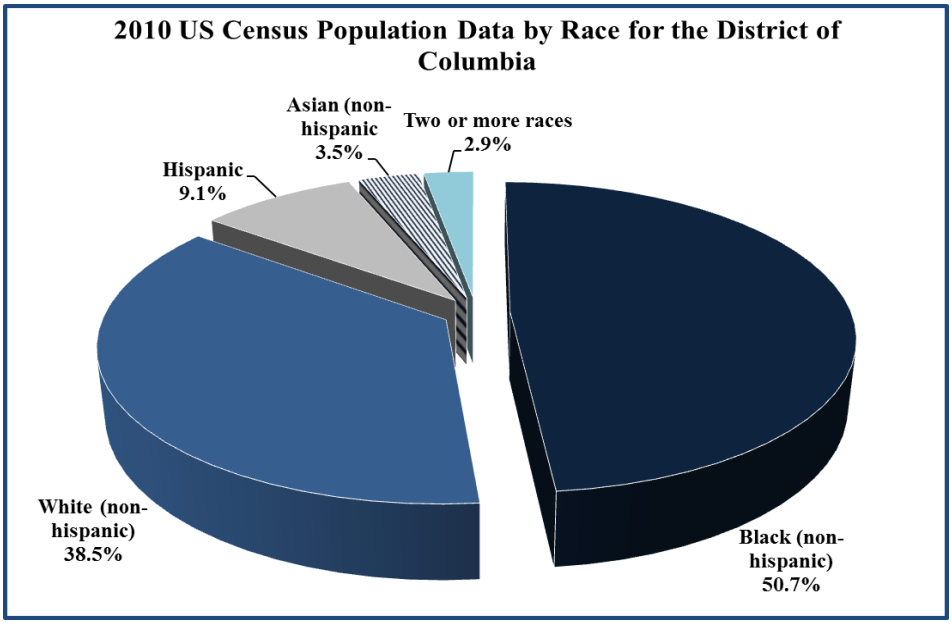
[3] Source: US Census Bureau at http://quickfacts.census.gov/qfd/states/11000.html.

[4] The (non-Hispanic) attribute only applies to the 2010 Census data and does not apply to the OCME statistics for race by "Manner of Death"

[5] This total does not include the eight Non-Human Remains and one archeological specimen.

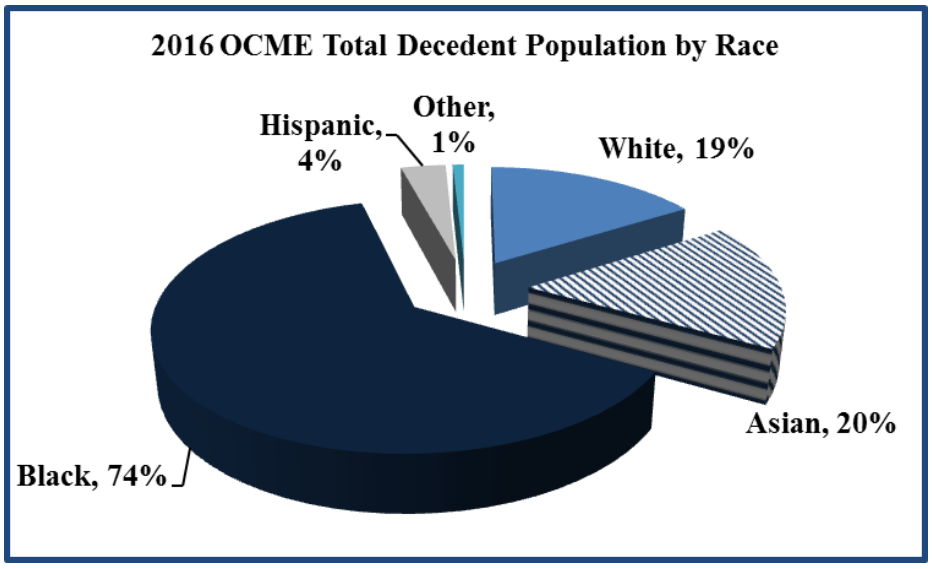
[6] The DC DOH Center for Policy, Planning and Evaluation had 7 cases that were "Pending Investigation" and 218 cases that was missing manner of death at the time of submitting this data to the DC OCME. In addition, the total number of deaths reported by DOH includes all DC residents, including deaths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

2.2 - Total Population



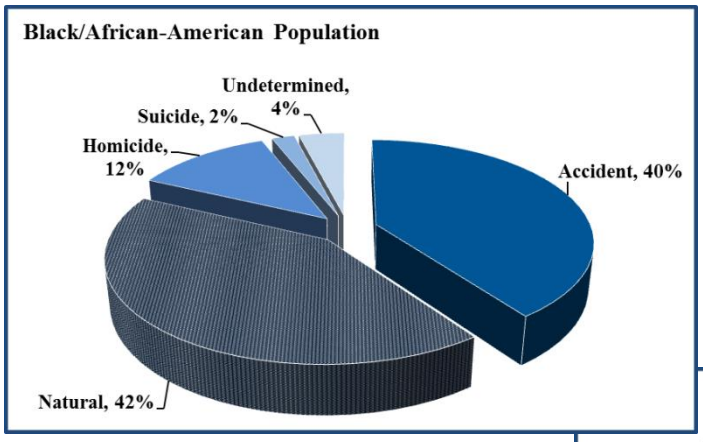
Note: The race categories American Indian/Alaska Native and Pacific Islander/Native Hawaiian are not represented in the above graph because they are both less than 1% of the total population in the District of Columbia. On the other hand, Hispanics are represented in this graph; although this classification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

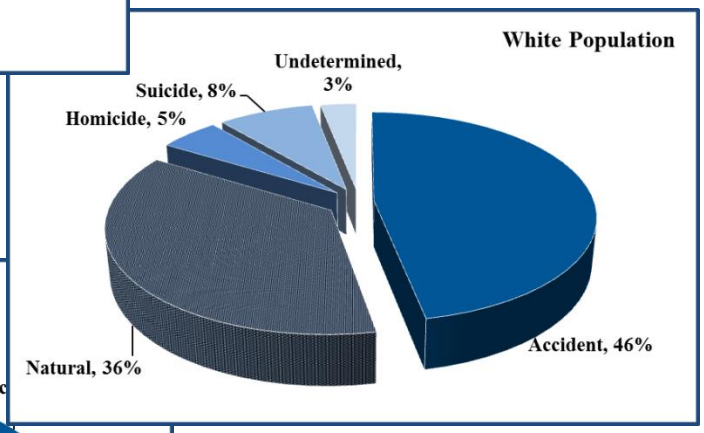
2.3 - Total ME Cases by Demographics and Manner of Death

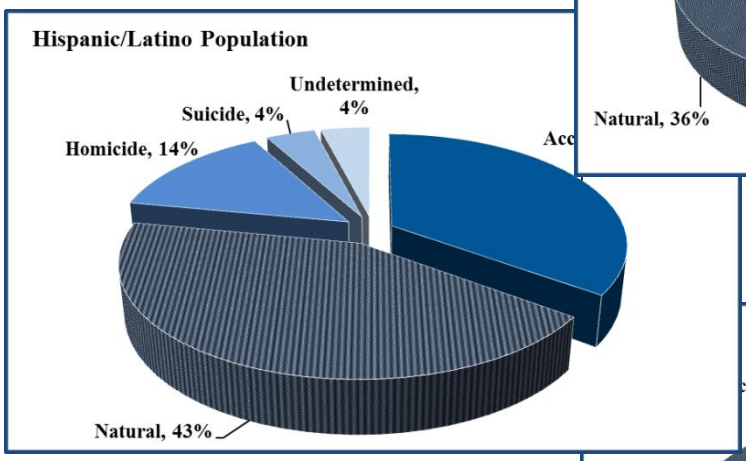


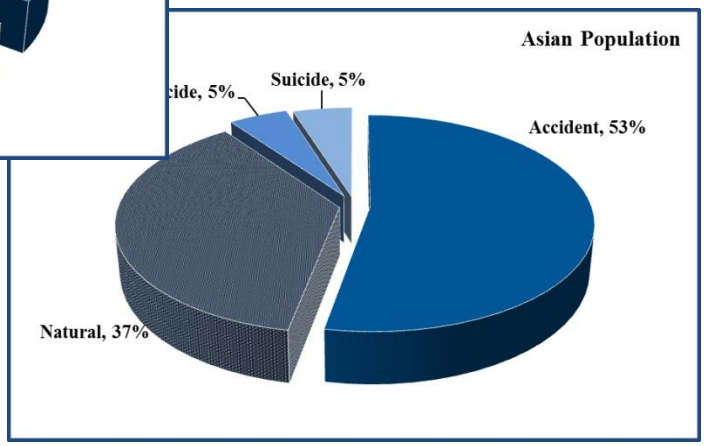
Note: Race is recorded by the District of Columbia OCME as reported by the decedent's next of kin. Also, for illustrative purposes those races that are less than 1% are not included in the OCME Total Population chart.

By Race and Manner of Death[7]









[7] The graphs above represent all accepted Medical Examiner cases, but these decedents do NOT represent District residents only.

2016 Totals by Age

Age Group	Total Deaths	Percent
Fetus	4	0.3%
Under 1	36	2.8%
1 to 5	8	0.6%
6 to 12	5	0.4%
13 to 15	4	0.3%
16 to 19	16	1.2%
20 to 29	119	9.4%
30 to 39	118	9.3%
40 to 49	139	11%
50 to 59	298	23.5%
60 to 69	272	21.5%
70 to 79	123	9.7%
80 to 89	80	6.3%
90 and Over	35	2.8%
Unknown	11	0.9%
TOTAL	**1258**	**100%**

2016 Gender[8] by Race

Race	Males	Females	Total
American Indian	1	2	3
Asian	11	8	19
Black	673	267	940
Hispanic	38	11	49
Other	5	2	7
Pacific Islander	1	0	1
Unknown[18]	0	1	1
White	163	74	237
TOTAL	**892**	**365**	**1257[9]**

2016 Manner of Death by Gender[8]

Gender	Naturals	Suicide	Homicides	Accident	Undetermined	Stillbirth	Totals	Percent
Female	172	9	19	154	11	1	**366**	**29.1%**
Male	347	35	120	359	29	1	**891**	**70.9%**
Totals	**519**	**44**	**139**	**513**	**40[9]**	**2**	**1257**	**100%**

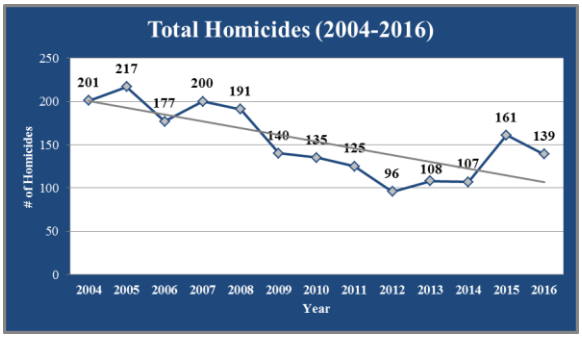
Note: The above tables does not include – Non-Human Remains (8) and one archeological specimen
The tables above represent all accepted Medical Examiner cases, but these decedents do NOT represent District residents only.

[8] In this report, gender in this context means sex at birth.
[9] There was one decedent missing race and gender

3.0 – MANNER AND CAUSE OF DEATH

3.1 Homicides

The OCME investigated **139** homicides in the CY 2016. The following tables and graphs provide a distribution by cause of death, month, race, gender and age group. Death by homicidal acts is more prevalent in black males and in the age group 20 to 29 years than any other group presented. The weapon of choice is firearms. In 2016 there were more homicides observed in **September** than any other months.



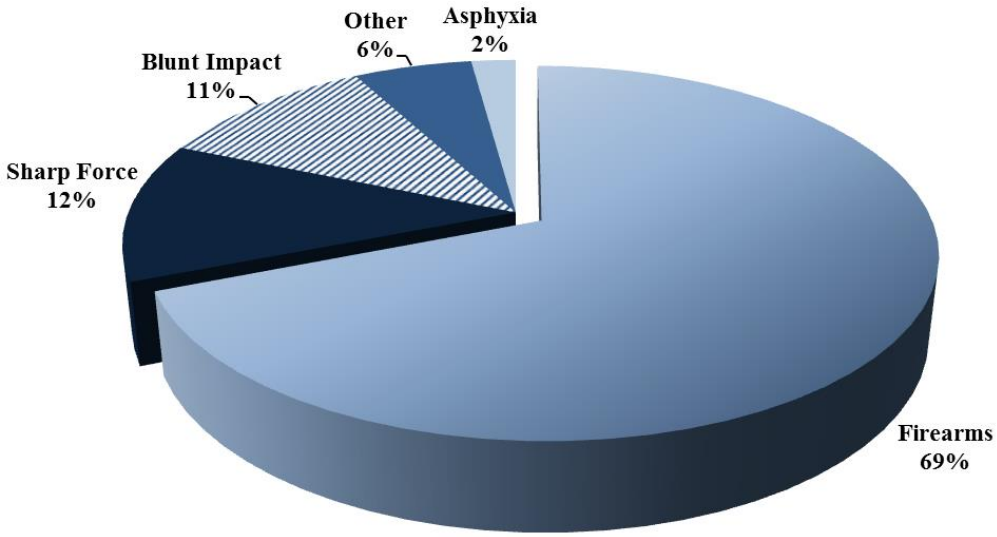
Homicides by Jurisdiction of Incident that Caused Death

Jurisdiction	Number of Homicides	% of Homicides
District of Columbia	110	79.1%
Maryland	14	10.1%
Virginia	4	2.9%
Unknown	11	7.9%
Total	**139**	**100%**

Homicides by Cause of Death

Cause	Number of Homicides	% of Total Homicides
Firearms	96	69%
Sharp Force	17	12%
Blunt Impact	15	11%
Other	8	6%
Asphyxia	3	2%
Total	**139**	**100%**

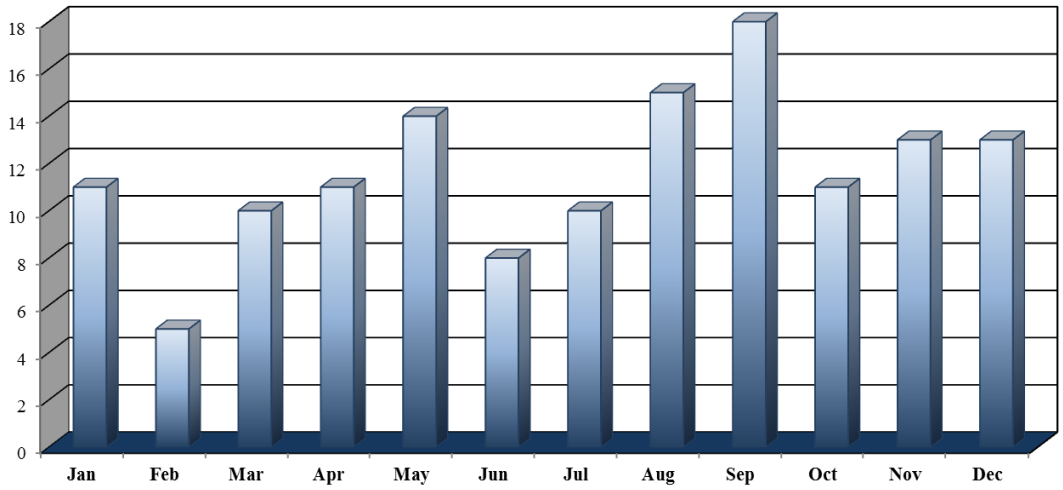
Pie Chart – Homicides by Cause of Death



Homicides by Month

Month	Number of Homicides	% of Homicides
January	11	8%
February	5	4%
March	10	7%
April	11	8%
May	14	10%
June	8	6%
July	10	7%
August	15	11%
September	18	13%
October	11	8%
November	13	9%
December	13	9%
Total	**139**	**100.00%**

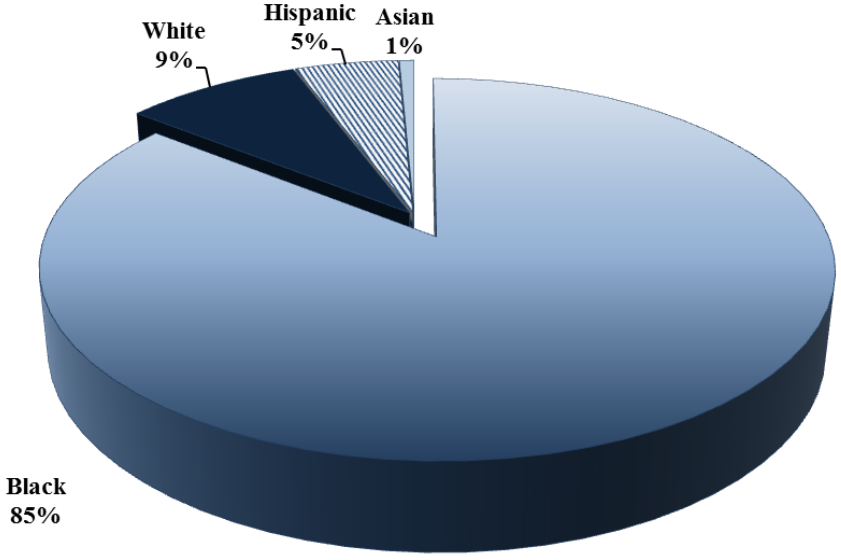
Graph - Homicides by Month



Homicides by Race

Race/Ethnicity	Number of Homicides	% of Homicides
Black	119	86%
White	12	9%
Hispanic	7	5%
Asian	1	1%
Total	**139**	**100%**

Chart – Percentage of Homicides by Race



Homicides by Gender

Gender	Number of Homicides	% of Homicides
Female	19	14%
Male	120	86%
Total	**139**	**100%**

Homicides by Race/Ethnicity and Gender

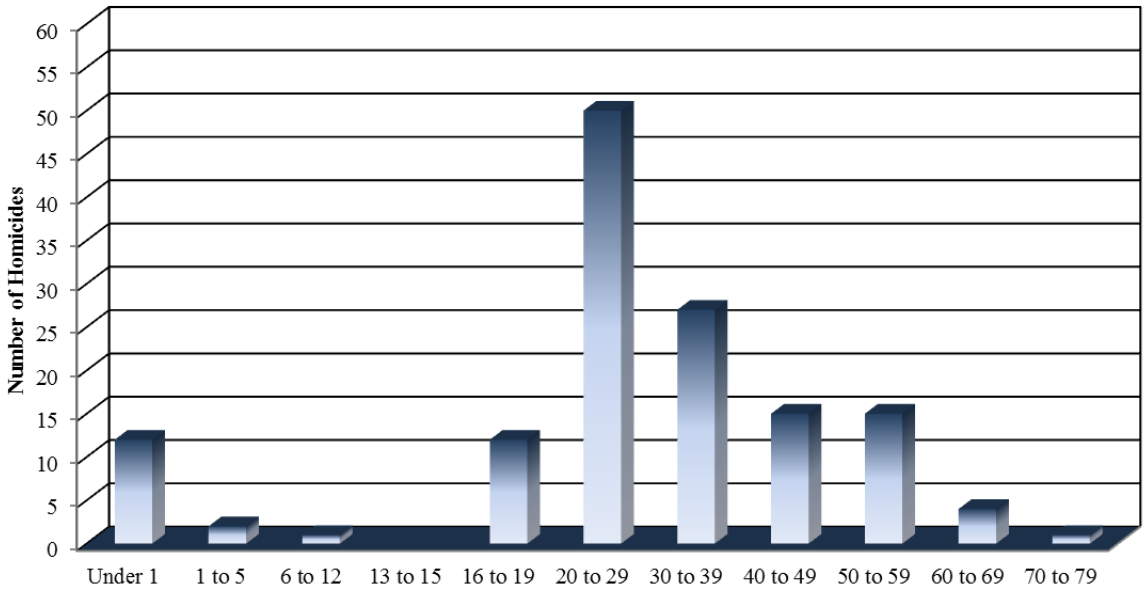
Race/Ethnicity by Gender	Number of Homicides
Black	**119**
Female	15
Male	104
White	**12**
Female	4
Male	8
Hispanic	**7**
Female	0
Male	7
Asian	**1**
Female	0
Male	1
Total	**139**

Homicides by Age

Age	Number of Homicides	% of Homicides
Under 1	12	9%
1 to 5	2	1%
6 to 12	1	1%
13 to 15	0	0%
16 to 19	12	9%
20 to 29	50	36%
30 to 39	27	19%
40 to 49	15	11%
50 to 59	15	11%
60 to 69	4	3%
70 to 79	1	1%
80 to 89	0	0%
90 +	0	0%
Total	**139**	**100%**

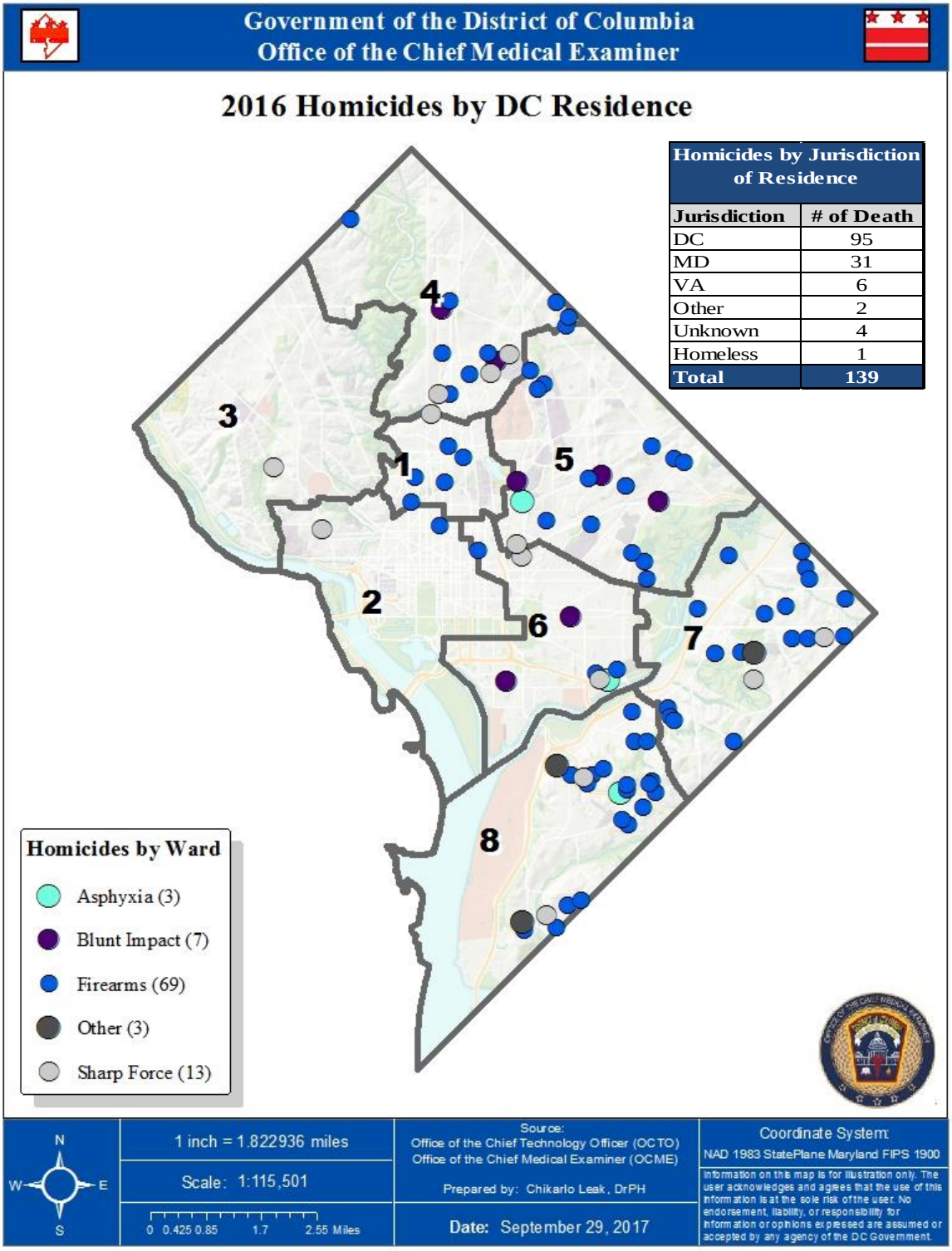
	Adolescent and Young Adults	
	16 to 19	**20 to 29**
Blunt Impact	0	1
Firearms	11	45
Other	0	1
Sharp Force	1	3
Undetermined	0	0
Total	**12**	**50**

Chart - Homicides by Age Group



Map of Homicides by DC Ward and Cause of Death

Of the 139 homicides in the District of Columbia, 95 (68%) of these decedents were District residents at the time of their death, as reported by their next of kin. The map below illustrates the residence location by District ward at the time of their death.



T

oxicology Findings for Homicide Cases

Toxicology was performed on 137 of 139 homicide cases investigated by OCME. All cases were screened for alcohol and major drugs of abuse, ethanol being the most prominent substance in all homicide case. Drugs were absent in 36 homicide cases. The percentage of homicide cases tested by the laboratory and found to be negative has decreased from 32% in 2015 to 25% in 2016.

Description	Number of Cases	% of Cases
N=	139	
Negative	36	25.8%
Positive	101	72.6%
No testing requested or assigned[10]	2	1.4%

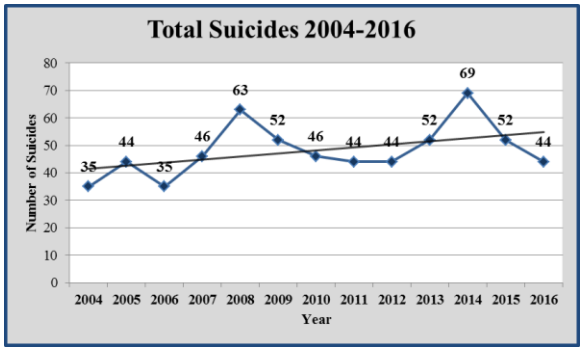
The most commonly detected drugs in the homicide cases were:

Name of Drug	Number of Cases	% of Homicide Cases
Ethanol	34	24.8 %
Marijuana Metabolites	32	23.3 %
Cannabinoids	21	15.3%
Phencyclidine (PCP)	8	5.8 %
Cocaine and metabolites	8	5.8 %
Oxycodone	8	5.8 %
Morphine/Heroin	6/2	4.3%/1.4%
Codeine	4	2.9%
Fentanyl	4	2.9%

[10] There were two babies that were born prematurely and did not receive toxicology testing.

3.2 Suicides

The OCME investigated **44** suicides in CY 2016, which represents a **15.4%** decrease from CY 2015 **(52)**. The number of DC residents that died by suicidal acts remained relatively the same between 2015 (38) and 2016 (37). Deaths by suicidal acts were more prevalent in white males and in persons between the ages of 20 to 39 years. Hanging and intoxication were the leading causes of suicidal deaths. More incidents occurred in **December** than in any other month.



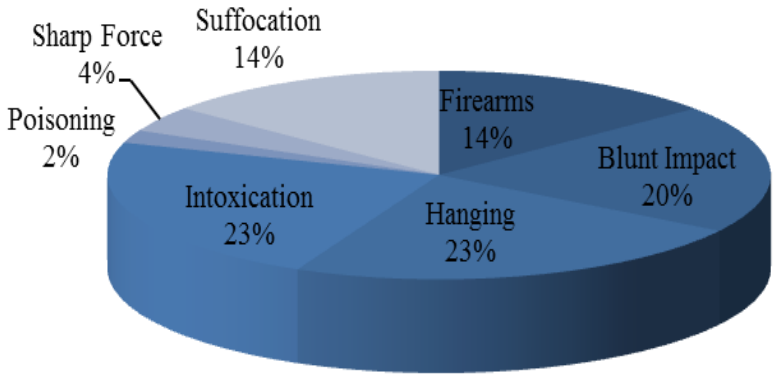
Suicides by Jurisdiction of Incident that Caused Death

Jurisdiction of Incident	Number of Suicides	% of Suicides
District of Columbia	36	81.82%
Maryland	5	11.36%
Undomiciled	1	2.27%
Unknown	2	4.55%
Total	**44**	**100%**

Suicides by Cause of Death

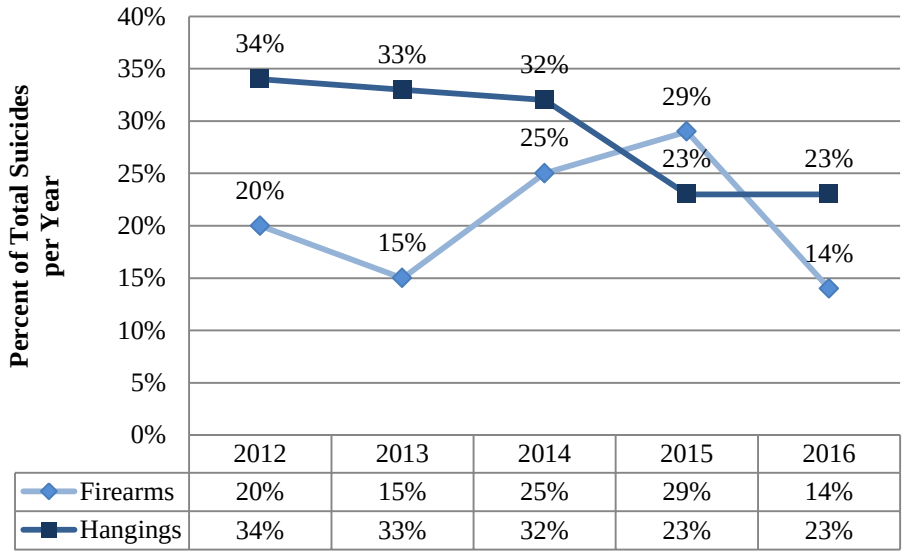
Cause	Number of Suicides	% of Total Suicides
Intoxication	10	22.73%
Hanging	10	22.73%
Blunt Impact Trauma • Building – 4 • Bridge - 4 • Other-1	9	20.45%
Firearms	6	13.64%
Sharp Force	2	4.55%
Suffocation	6	13.63%
Poisoning	1	2.27%
Total	**44**	**100.00%**

Suicides by Cause of Death



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

Chart - 5-year Trend of Suicides by Firearms and Hanging

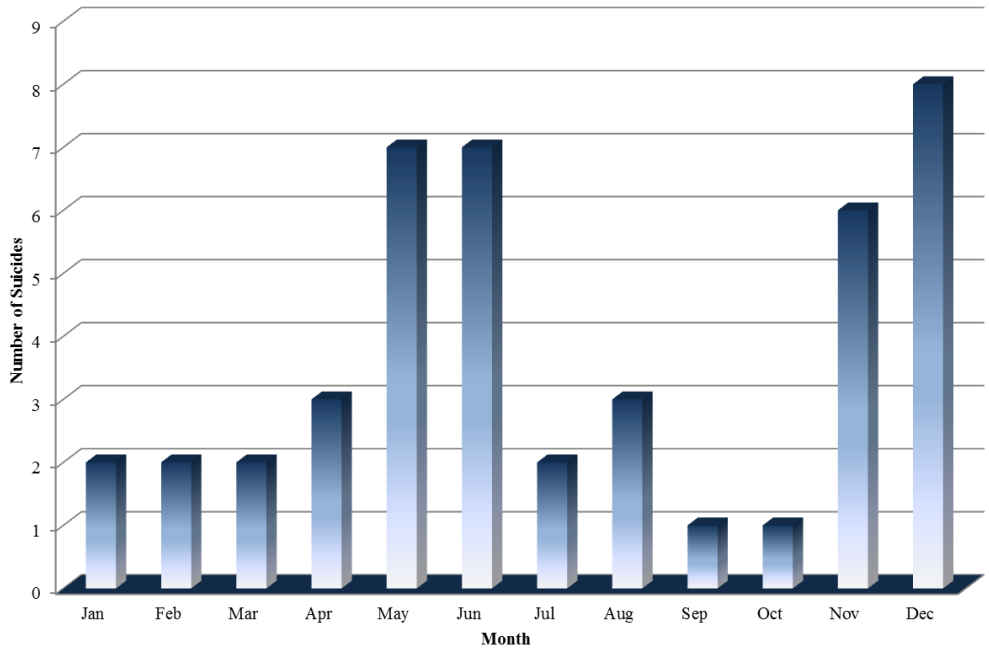


	2012	2013	2014	2015	2016
Firearms	20%	15%	25%	29%	14%
Hangings	34%	33%	32%	23%	23%

Suicides by Month

Month	Number of Suicides	% of Suicides
January	2	4.55%
February	2	4.55%
March	2	4.55%
April	3	6.81%
May	7	15.91%
June	7	15.91%
July	2	4.55%
August	3	6.81%
September	1	2.27%
October	1	2.27%
November	6	13.64%
December	8	18.18%
Total	**44**	**100%**

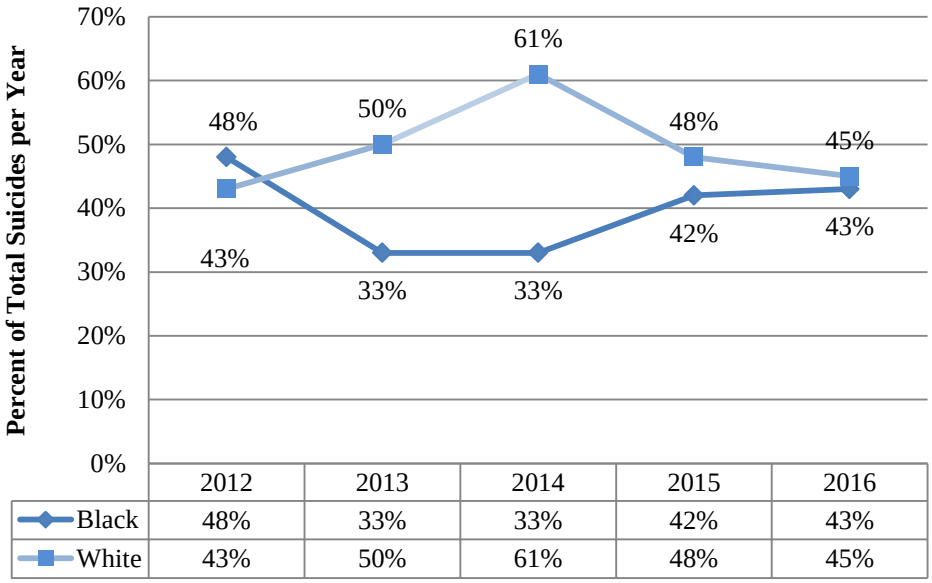
Suicides by Month



Suicide by Race/Ethnicity

Race/Ethnicity	Number of Suicides	% of Suicides
White	20	45.46%
Black	19	43.19%
Hispanic	2	4.54%
Asian	1	2.27%
American Indian	1	2.27%
Other	1	2.27%
Total	**44**	**100%**

5-year Trend of Suicide by Race/Ethnicity



	2012	2013	2014	2015	2016
Black	48%	33%	33%	42%	43%
White	43%	50%	61%	48%	45%

Suicides by Gender

Gender	Number of Suicides	% of Suicides
Female	9	20.45%
Male	35	79.55%
Total	**44**	**100%**

Suicides by Race/Ethnicity and Gender

Race/Ethnicity by Gender	Number of Suicides
White	**20**
Female	3
Male	17
Black	**19**
Female	4
Male	15
Hispanic	**2**
Female	0
Male	2
Asian	**1**
Female	1
Male	0
American Indian	**1**
Female	1
Male	0
Other	**1**
Female	0
Male	1
Total	**44**

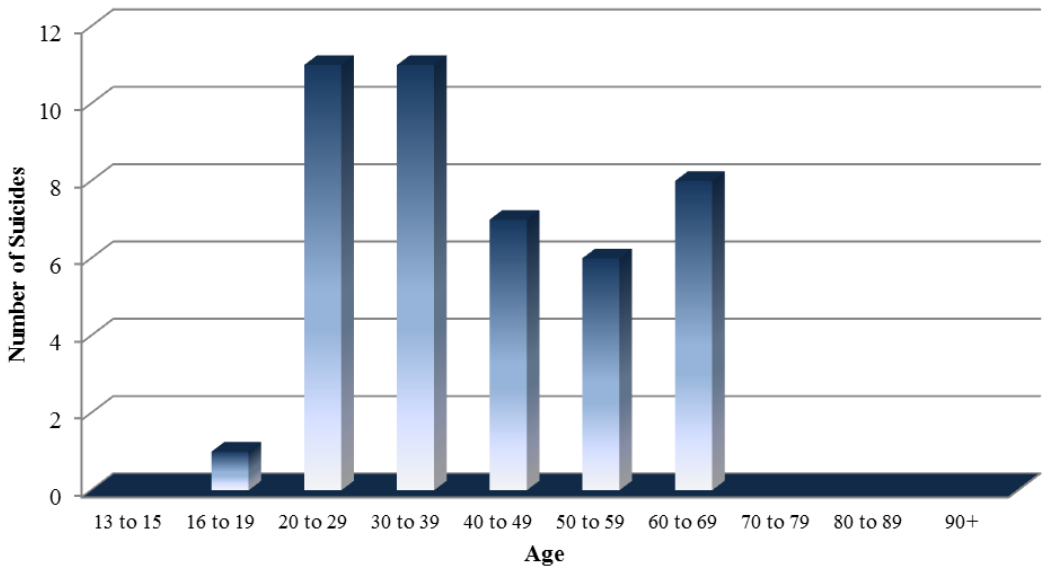
Suicide by Age

Age	Number of Suicides	% of Suicides
13 to 15	0	0%
16 to 19	1	2.27%
20 to 29	11	25%
30 to 39	11	25%
40 to 49	7	15.91%
50 to 59	6	13.64%
60 to 69	8	18.18%
70 to 79	0	0%
80 to 89	0	0%
90 +	0	0%
Total	**44**	**100%**

Adolescent and Young Adult Suicides by Cause of Death

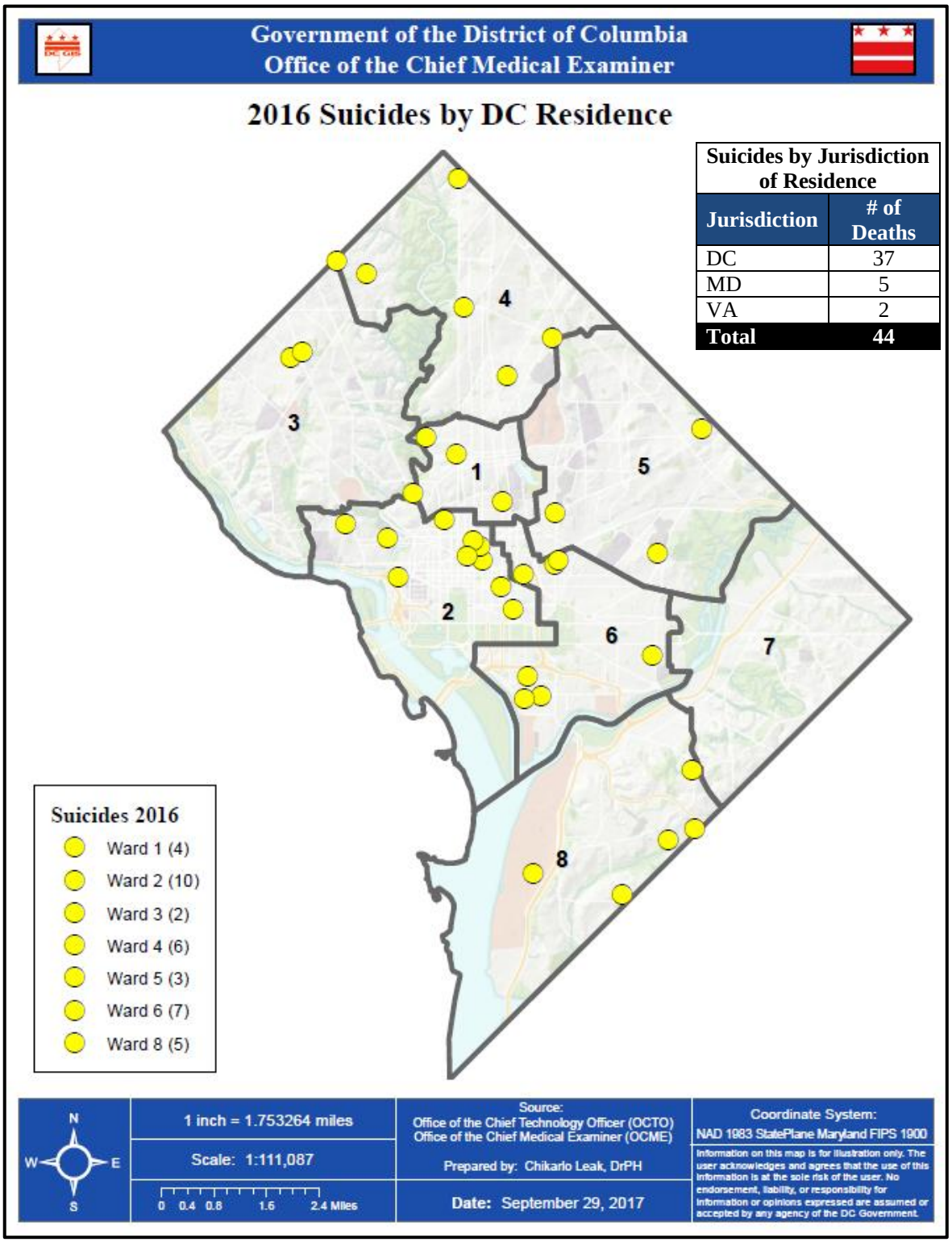
	13 to 15	16 to 19	20 to 29
Blunt Impact	0	0	3
Suffocation	0	0	1
Firearms	0	0	2
Hanging	0	0	3
Intoxication	0	1	2
Total	**0**	**1**	**11**

Suicides by Age



Map of Suicide by DC Ward

Of the **44** suicides in the District of Columbia, 37 (84%) of these decedents were District residents at the time of their death, as reported by their next of kin. The map below illustrates the residence location by ward at the time of their death.



Toxicology Findings for Suicide Cases

Toxicology analysis was performed on 42 of the 44 suicide cases investigated by OCME. Drugs were absent in 8 suicide cases. The percentage of suicide cases tested by the laboratory and found to be negative has decreased from 23% in 2015 to 18% in 2016. Of the positive cases, ethanol is the most prominent substance in all suicide case. In 2016, there were 10 suicide cases in which the cause of death was drug intoxication. Prescription or over the counter (OTC) drugs were intentionally used in 9 of the 10 cases and 5 of these 9 cases had multiple drugs present. Of the cases with a manner of death of suicide, the prevalent drug classes consisted of antidepressants (e.g. amitriptyline, bupropion, mirtazapine, and fluoxetine), heart medications (e.g. amlodipine and metoprolol), and opiates (e.g. hydrocodone, oxycodone, and codeine). Other prevalent drug classes were the anxiolytics (diazepam, alprazolam, and oxazepam) as well as diphenhydramine and acetaminophen.

Description	Number of Cases	% of Cases
N=	44	
Negative	8	18.1%
Positive	34	77.2%
No testing requested or assigned	2	4.5%

The most notable detected drugs in suicide cases were:

Name of Drug	Number of Cases	% of Suicide Cases
Ethanol	13	30.9%
Alprazolam	6	14.2%
Diphenhydramine	5	11.9%
Sertaline	4	9.5%
Nordiazepam	4	9.5%
Codeine	3	7.1%
Oxazepam	3	7.1%
7-aminoclonazepam	3	7.1%
Cannabinoids	3	7.1%
Hydrocodone	3	7.1%
Oxycodone	3	7.1%
Fluoxetine	2	4.7%
Phencyclidine	2	4.7%

3.3 Accidents

OCME investigated **513** accidental deaths in CY 2016. Of the **513** cases investigated, **58** were related to motor vehicle accidents, **89** were related to falls and **306** of the accidental deaths were the direct result of prescription and/or illicit drug use. There was a drastic increase in the total number of deaths due to accidents in 2016. The difference is largely driven by the increase in the number of accidental intoxications (drug overdoses). The number of accidental intoxication deaths doubled since 2015. A special report section highlights the increase in the number of opioid-related fatal overdoses seen at the OCME.

Accidents by Jurisdiction of Residence	
Jurisdiction	**# of Deaths**
DC	343
MD	98
VA	25
Other	10
Unknown	7
Undomiciled	30
Total	**513**

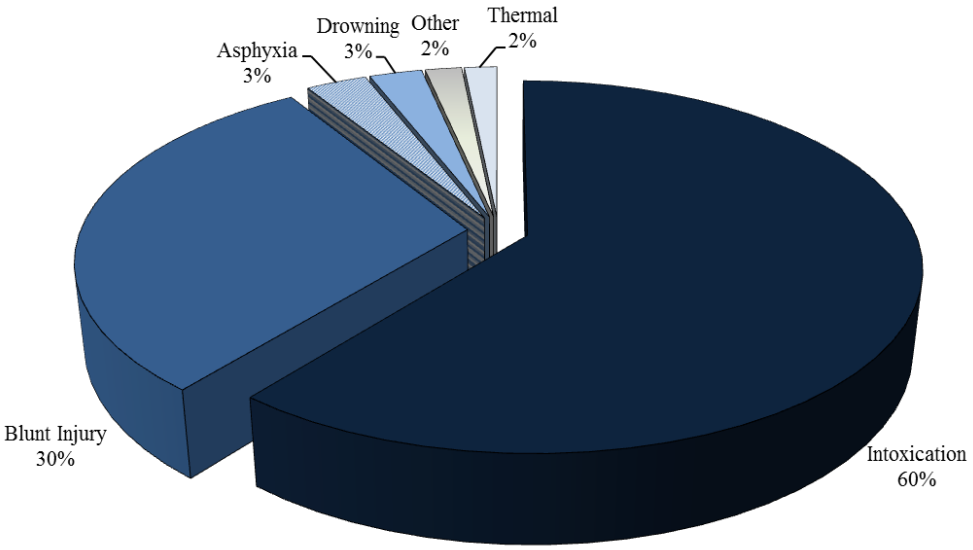
Accidents by Cause of Death

Cause	# of Deaths	% Accidents
Intoxication	306	59.65%
Blunt Injury - Due to Fall (89) - Due to Traffic (58) - Due to Other (5)	152	29.63%
Asphyxia	15	2.92%
Drowning	13	2.53%
Other	9	1.75%
Thermal	8	1.56%
Hypothermia	5	0.97%
Sharp Force	2	0.39%
Therapeutic Complication	2	0.39%
Hyperthermia	1	0.19%
Total	**513**	**100%**

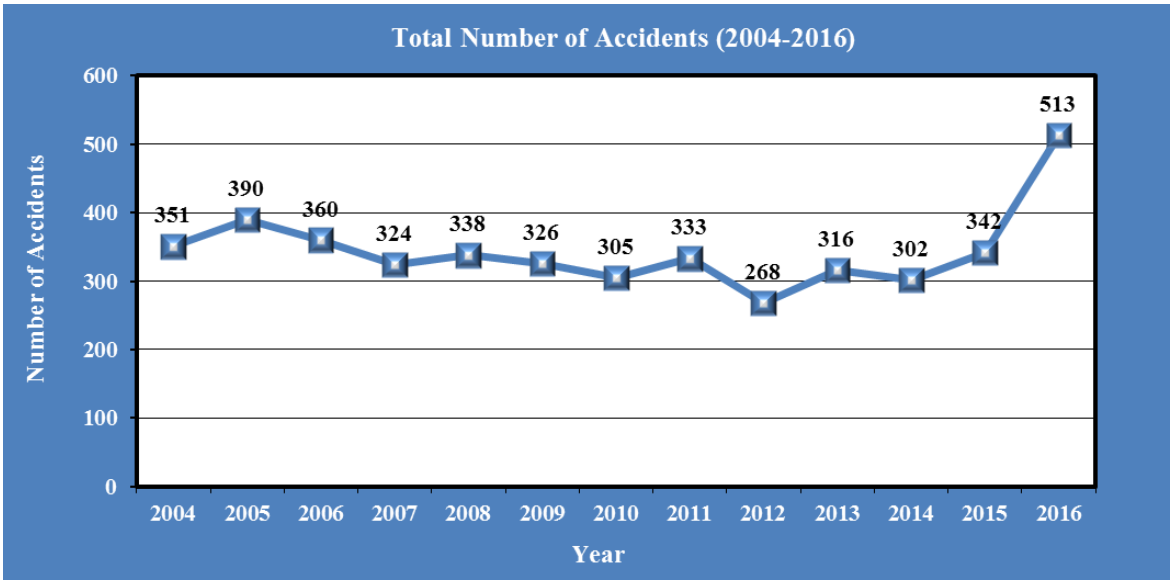
Age Group	Number of Deaths from Accidental Falls
Under 20	0
20 to 29	0
30 to 39	0
40 to 49	4
50 to 59	2
60 to 69	14
70 to 79	20
80 to 89	29
90 and over	20
Total	**89**

Decedents 60 and over represented 93% of all Accidental Deaths due to Falls

Pie Chart - Accidents by Cause of Death[11]



Graph – Eleven-year Overview of Accidents

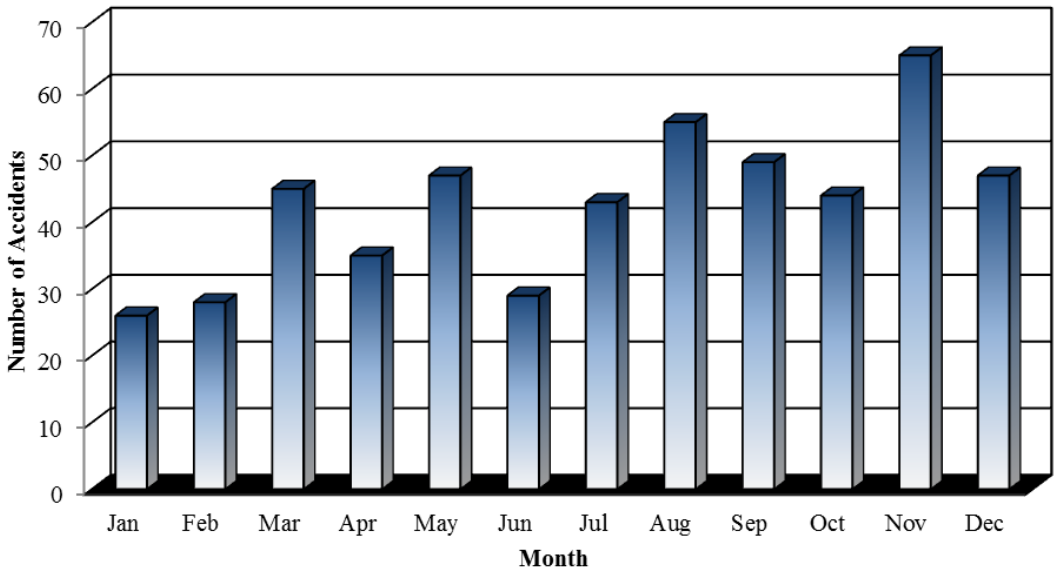


[11] For illustrative purposes this pie chart does not include causes of death that are 2% or less of the total number of deaths.

Accidents by Month

Month	Number of Deaths	% of Accidents
January	26	5%
February	28	5%
March	45	9%
April	35	7%
May	47	9%
June	29	6%
July	43	8%
August	55	11%
September	49	10%
October	44	9%
November	65	13%
December	47	9%
Total	**513**	**100%**

Chart - Accidents by Month of Death



Accidental Deaths by Race

Race/Ethnicity	Number of Accidents	% of Accidents
Black	372	72.51%
White	108	21.05%
Hispanic	20	3.90%
Asian	10	1.95%
Other	3	0.58%
Unknown	0	0.00%
Total	**513**	**100%**

Accidental Deaths by Gender

Gender	Number of Accidents	% of Accidents
Female	153	29.82%
Male	360	70.18%
Total	**513**	**100%**

Accidental Deaths by Age

Age	Number of Accidents	% of Accidents
Under 1	6	1.17%
1 to 5	4	0.78%
6 to 12	4	0.78%
13 to 15	2	0.39%
16 to 19	2	0.39%
20 to 29	35	6.82%
30 to 39	58	11.31%
40 to 49	66	12.87%
50 to 59	138	26.90%
60 to 69	114	22.22%
70 to 79	31	6.04%
80 to 89	30	5.85%
90 +	23	4.48%
Total	**513**	**100%**

Toxicology Findings for Accident Cases

Of the 513 accident deaths investigated by OCME, toxicology analysis was performed in 402 cases. Drugs were absent in 33 accident cases. There were 14 cases of medical records review where toxicology testing was not applicable. The percentage of accident cases tested by the laboratory and found to be negative has decreased from 11% in 2015 to 7% in 2016. Of the positive cases, morphine is the most prevalent substance in all accident case.

Description	Number of Cases	% of Cases
N=	499	
Negative	33	6.6%
Positive	369	73.9%
No testing requested or assigned	97	19.4%

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

Name of Drug	Number of Cases	% of Accident Cases
Morphine/Heroin	174/153	43.2%/38.0%
Ethanol	146	36.3%
Codeine	118	29.3%
Benzoylecgonine	113	28.1%
Fentanyl	96	23.8%
Cocaine	92	22.8%
Phencyclidine	51	12.6%
Marijuana Metabolites	43	10.6%
Diphenhydramine	31	7.7%
Methadone	23	5.7%
Naloxone	21	5.2%
Alprazolam	19	4.7%
Oxycodone	17	4.2%
Nordiazepam	11	2.7%
Cannabinoids	10	2.4%

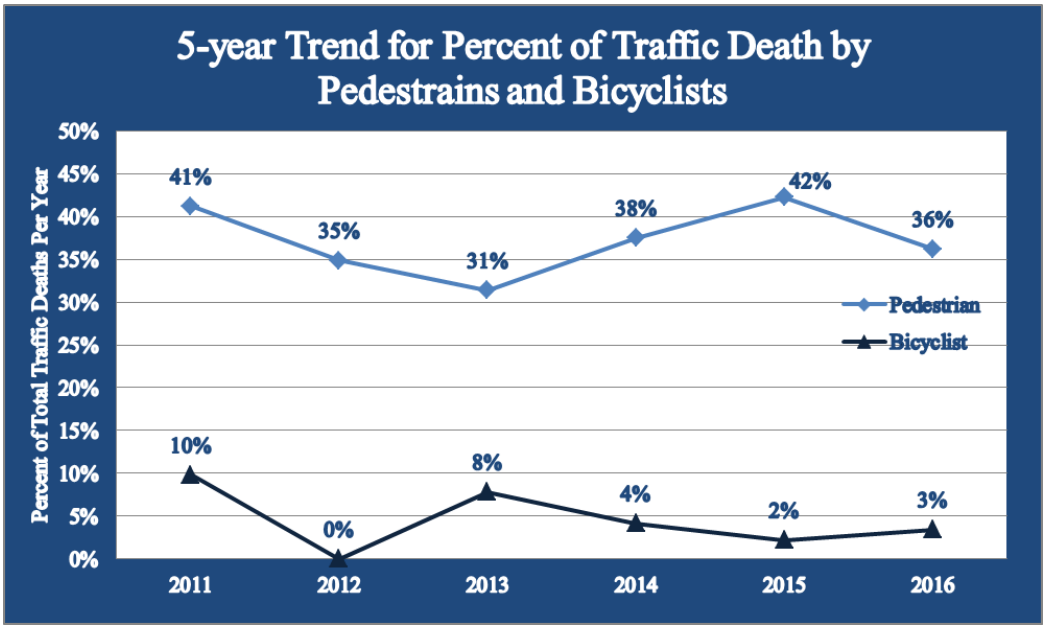
3.3.1. Traffic Deaths

Of the **58** traffic related deaths certified by the OCME in Calendar Year 2016 the majority involved drivers of motor operated vehicles (all types). The majority of decedents were between the ages of 20 to 39. Traffic fatalities were most prevalent in the month of July.

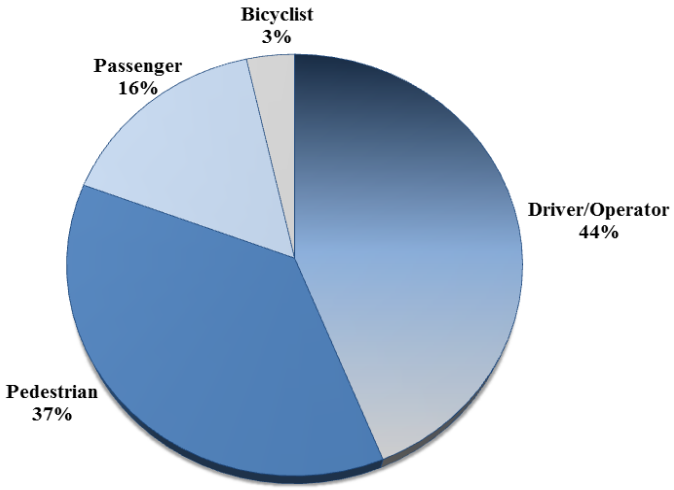
Role of the Decedent in Traffic Death

Role	Traffic Deaths	% of Traffic Deaths
Driver *- Motor Vehicle(15)* *- Motorcycle (10)*	25	43.10%
Pedestrian	21	36.21%
Passenger *- Motor Vehicle (8)* *- Motorcyle (1)*	9	15.52%
Bicyclist	2	3.45%
Other	1	1.72%
Total	**58**	**100%**

Chart - 5-year Trend of Role of Decedent in Traffic Accident



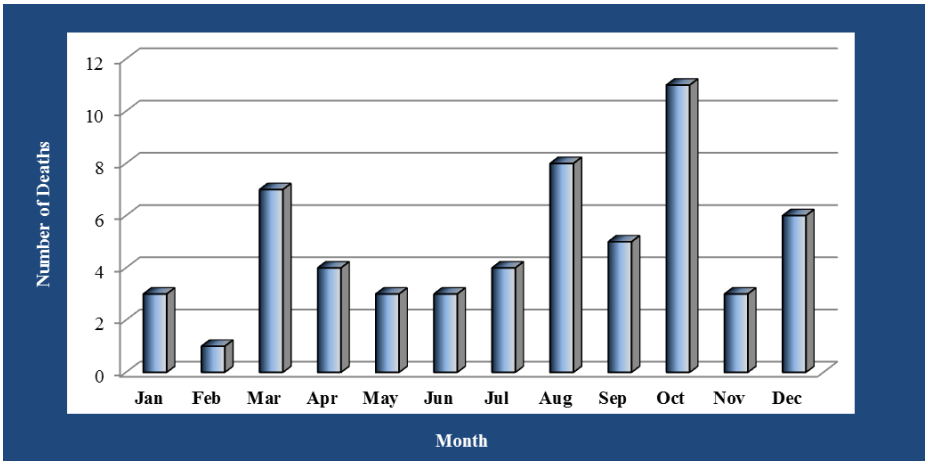
Pie Chart - Role of Decedent in Traffic Accident



Traffic Deaths by Month

Month	Number of Traffic Accidents	% of Traffic Accidents
January	3	5.17%
February	1	1.72%
March	7	12.07%
April	4	6.90%
May	3	5.17%
June	3	5.17%
July	4	6.90%
August	8	13.79%
September	5	8.62%
October	11	18.97%
November	3	5.17%
December	6	10.34%
Total	**58**	**100.00**

Chart - Traffic Deaths by Month



Traffic Deaths by Race

Race	Number of Traffic Deaths	% of Traffic Deaths
Black	32	55.2%
White	17	29.3%
Hispanic	4	6.9%
Asian	4	6.9%
Other	1	1.7%
Total	**58**	**100%**

Traffic Deaths by Gender

Gender	Number of Traffic Deaths	% of Traffic Deaths
Female	18	31.0%
Male	40	69.0%
Total	**58**	**100%**

Traffic Deaths by Age

Age	Number of Traffic Deaths	% of Traffic Deaths
6 to 12	2	3.4%
13 to 15	2	3.4%
16 to 19	2	3.4%
20 to 29	12	20.7%
30 to 39	12	20.7%
40 to 49	7	12.1%
50 to 59	7	12.1%
60 to 69	9	15.5%
70 to 79	2	3.4%
80 to 89	2	3.4%
90+	1	1.7%
Total	**58**	**100%**

Traffic Deaths by Jurisdiction of Incident that caused Death

Jurisdiction of Incident	Number of Traffic Deaths	% of Traffic Deaths
District of Columbia	29	50.0%
Maryland	22	37.9%
Virginia	6	10.3%
Unknown	1	1.7%
Total	**58**	**100%**

Toxicology Findings for Traffic Accident Cases

There were a total of 58 traffic-related fatalities. However, only 52[12] qualified for toxicology testing. Of the 52 Traffic-related deaths investigated by OCME, toxicology analysis was performed in 36 cases. Drugs were absent in 10 traffic accident cases. There were 16 cases in which no toxicology testing was requested. The percentage of traffic accident cases tested by the laboratory and found to be negative has decreased from 30% in 2015 to 19% in 2016. Of the positive cases, ethanol is the most prevalent substance in all traffic accident case. Of the remaining positive cases, 30% had more than one drug present.

Description	Number of Cases	% of Cases
N=	52	
Negative	10	19.2%
Positive	26	50.0%
No testing requested or assigned	16	30.7%

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

Name of Drug	Number of Cases	% of Traffic Cases
Ethanol	14	38.8%
Phencyclidine	5	13.8%
Marijuana Metabolite	4	11.1%
Cocaine Metabolite	4	11.1%
Morphine/Heroin	2/1	5.5%/2.7%
Alprazolam	2	5.5%
Oxycodone	2	5.5%

In the 14 traffic deaths positive for ethanol, 13 were greater than the legal limit (0.08 g/100 mL) for driving under the influence in the District of Columbia. The average breath alcohol concentration of the positive results is approximately 0.14 g/100 mL.

[12] There were a total of 6 cases that were excluded from toxicology testing. Of which, 3 of the cases were reviews of medical records and 3 were external exams (2 of the cases involved passengers of a motor vehicle and 1 case involved a pedestrian).

3.3.2 – Toxicology Findings for Deaths due to Accidental Drug Overdose

There were 306 OCME cases where death was directly related to drug abuse and toxicology analysis was performed in 304 of these cases. Two cases were not tested, one was an external exam and the other was a review of medical records. The most prevalent drug in the population was heroin alone or in combination with other drugs. Of the positive cases, more than 84% had more than one drug present. Additional information regarding accidental intoxications can be found on page 64, Section 4: Special Report.

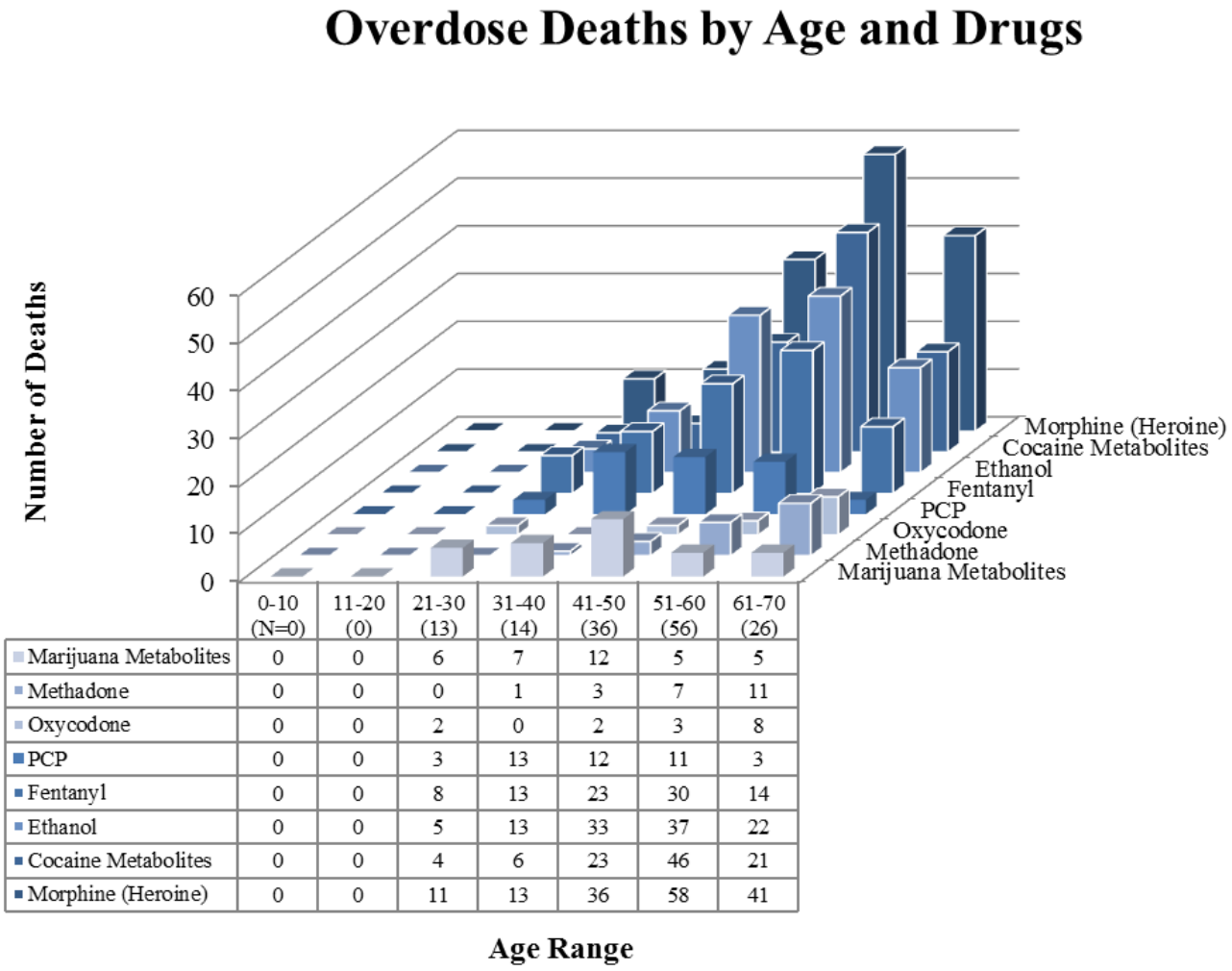
Description	Number of Cases	% of Cases
N=	306	
Negative	3	0.9 %
Positive	301	98.3 %
Storage	2	0.6%

The most commonly detected drugs in drug overdose cases were:

Contributing Drugs	Number of Cases	% of Cases
Morphine/Heroin	166/150	54.6%/49.3%
Ethanol	119	39.1%
Cocaine Metabolites	108	35.5%
Codeine	114	37.5%
Fentanyl	94	30.9%
Furanyl-Fentanyl	57	18.7%
Phencyclidine	42	13.8%
Marijuana Metabolites	35	11.5%
Diphenhydramine	31	10.1%
Methadone	22	7.2%
Naloxone	21	17.7%
Despropionyl-Fentanyl	20	6.5%
Alprazolam	15	4.9%

Accidental Drug Overdose Fatalities by Age

The majority of overdose deaths occurred in decedents between the ages of 41 and 60 years. Opiates (Heroin, morphine) were the most frequent class of detected drug in most of these age groups, followed by ethanol, cocaine then fentanyl. The prevalence of phencyclidine, oxycodone, methadone, and marijuana metabolites has been included.

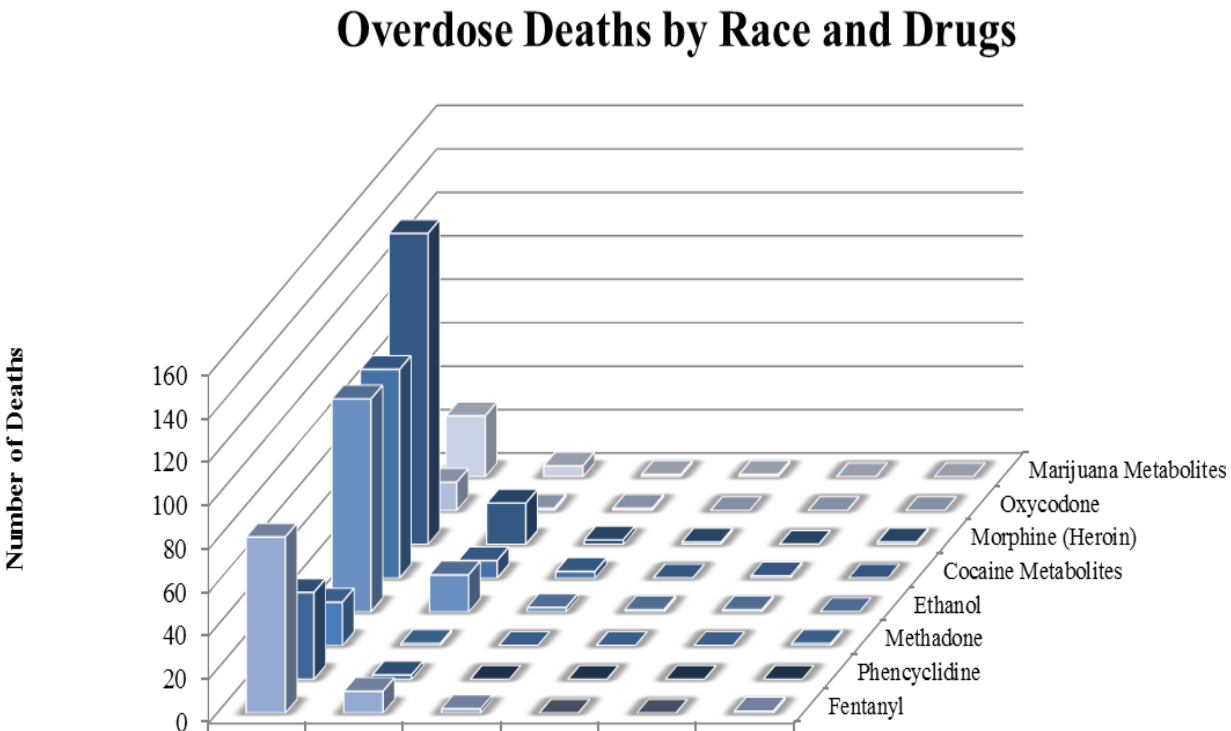


	0-10 (N=0)	11-20 (0)	21-30 (13)	31-40 (14)	41-50 (36)	51-60 (56)	61-70 (26)
Marijuana Metabolites	0	0	6	7	12	5	5
Methadone	0	0	0	1	3	7	11
Oxycodone	0	0	2	0	2	3	8
PCP	0	0	3	13	12	11	3
Fentanyl	0	0	8	13	23	30	14
Ethanol	0	0	5	13	33	37	22
Cocaine Metabolites	0	0	4	6	23	46	21
Morphine (Heroine)	0	0	11	13	36	58	41

Note: "N" represents the total number of deaths found within the stated age group.

Accidental Drug Overdose Fatalities by Race

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

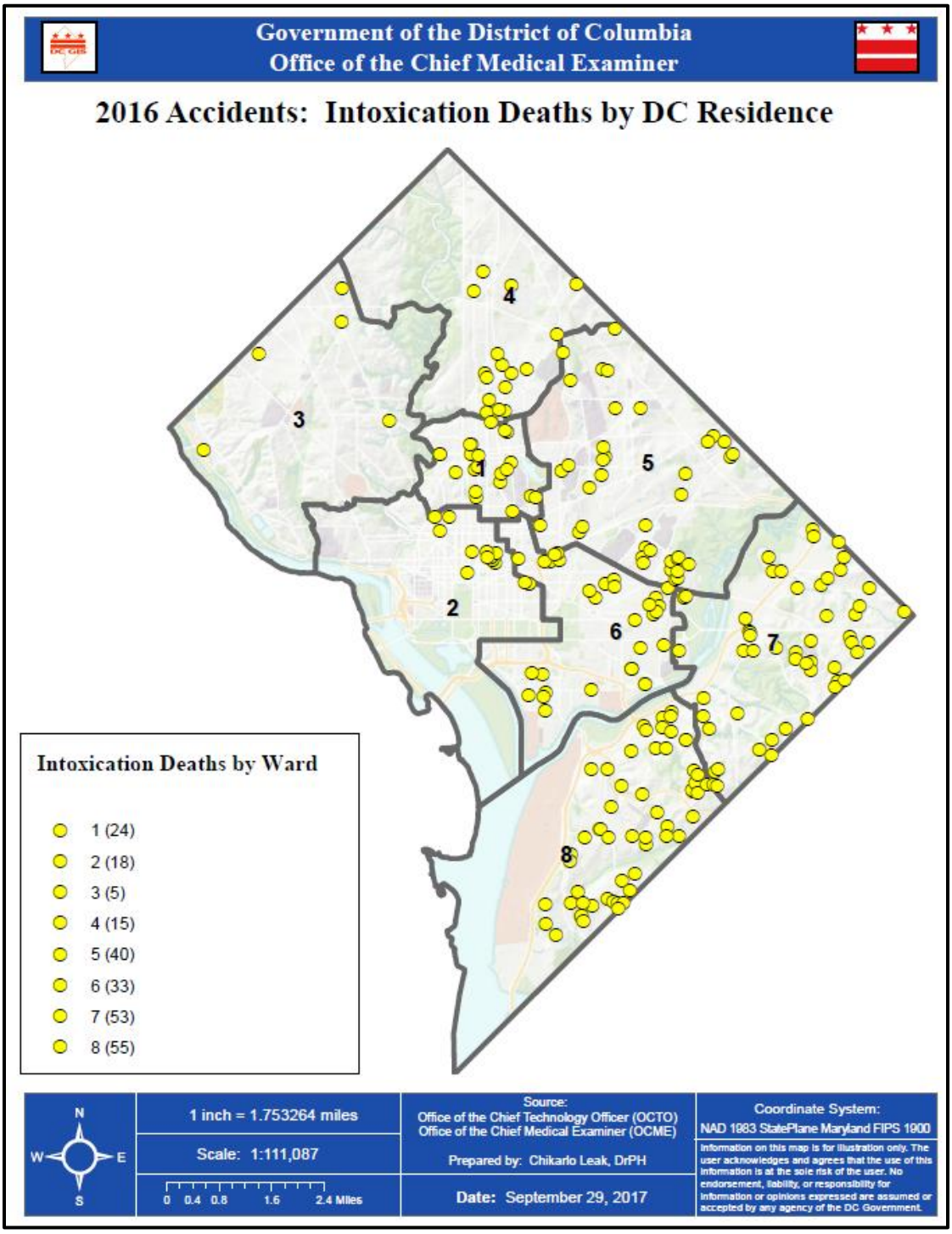


	Black (N=257)	White (39)	Hispanic (6)	Asian (1)	Other Asian (1)	Unknown (2)
Fentanyl	81	10	2	0	0	1
Phencyclidine	40	2	0	0	0	0
Methadone	20	1	0	0	0	1
Ethanol	98	17	2	1	1	0
Cocaine Metabolites	96	8	3	0	1	0
Morphine (Heroin)	143	19	2	1	0	1
Oxycodone	13	1	1	0	0	0
Marijuana Metabolites	28	5	1	1	0	0

Note: "N" represents total number of deaths found within the stated race

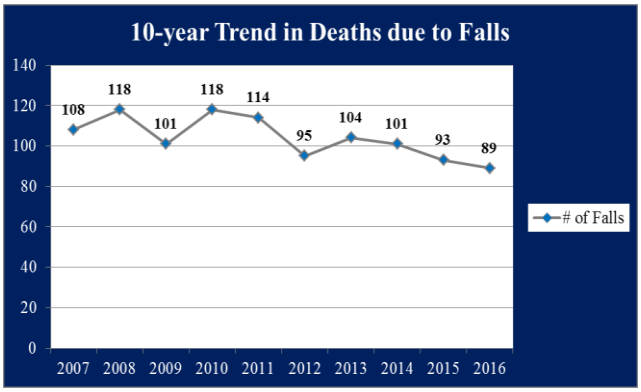
Map of Accidental Drug Overdoses by DC Ward

Of the 513 accidental, 343 were DC residents. There were a total of **306** accidental intoxication deaths in the District of Columbia in 2016, of which 238 (78%) were residents of the District of Columbia. The map below illustrates the location of the decedent's residence by ward at the time of their death, as reported by the decedent's next of kin. Additional information regarding accidental intoxications can be found on page 64, Section 4: Special Report.



3.3.3. Accidental Blunt Injuries due to Falls

Of the **89** blunt injuries due to falls certified by the OCME in Calendar Year 2016 the majority involved decedents 60 and above. There were no deaths due to falls of persons younger than 43 years of age. The majority of decedents were black and male. Deaths due to falls were most prevalent in August.



Accidental Falls by Month

Month	Number of Traffic Accidents	% of Traffic Accidents
January	7	7.87%
February	9	10.11%
March	6	6.74%
April	5	5.62%
May	9	10.11%
June	3	3.37%
July	6	6.74%
August	12	13.48%
September	9	10.11%
October	4	4.49%
November	10	11.24%
December	9	10.11%
Total	**89**	**100**

Accidental Falls by Race

Race	Number of Traffic Deaths	% of Traffic Deaths
Black	47	52.81%
White	37	41.57%
Hispanic	1	1.12%
Asian	3	3.37%
Other	1	1.12%
Total	**89**	**100%**

Accidental Falls by Gender

Gender	Number of Accidents	% of Accidents
Female	43	48.31%
Male	46	51.69%
Total	**89**	**100%**

Accidental Falls by Age

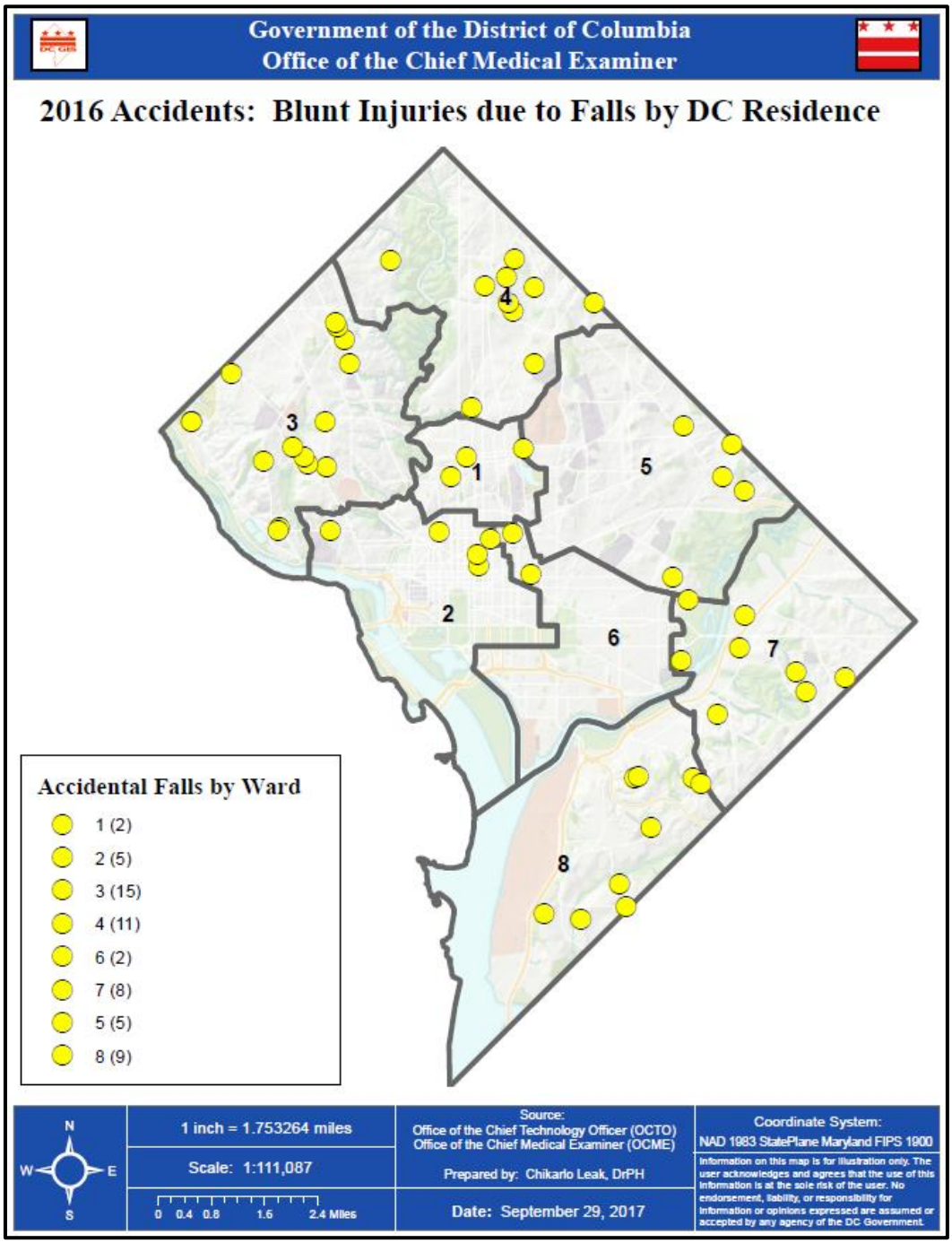
Age	Number of Traffic Deaths	% of Traffic Deaths
6 to 12	0	0.00%
13 to 15	0	0.00%
16 to 19	0	0.00%
20 to 29	0	0.00%
30 to 39	0	0.00%
40 to 49	4	4.49%
50 to 59	2	2.25%
60 to 69	14	15.73%
70 to 79	20	22.47%
80 to 89	29	32.58%
90+	20	22.47%
Total	**89**	**100%**

Accidental Falls by Jurisdiction of Residence

Jurisdiction of Residence	Number of Suicides	% of Suicides
District of Columbia	57	64.04%
Maryland	23	25.84%
Virginia	4	4.49%
Other	2	2.25%
Undomiciled	1	1.12%
Unknown	2	2.25%
Total	**89**	**100%**

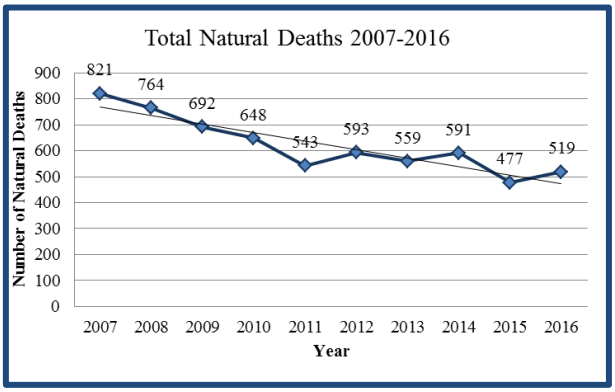
Map of Blunt Injuries due to Falls by DC Ward

There was a total of **89** accidental deaths caused by blunt injuries due to falls in the DC in 2016, of which 57 (64%) were residents of the DC. The map below illustrates the location of the decedent's residence by ward at the time of their death, as reported by the decedent's next of kin.



3.4 – Natural Deaths

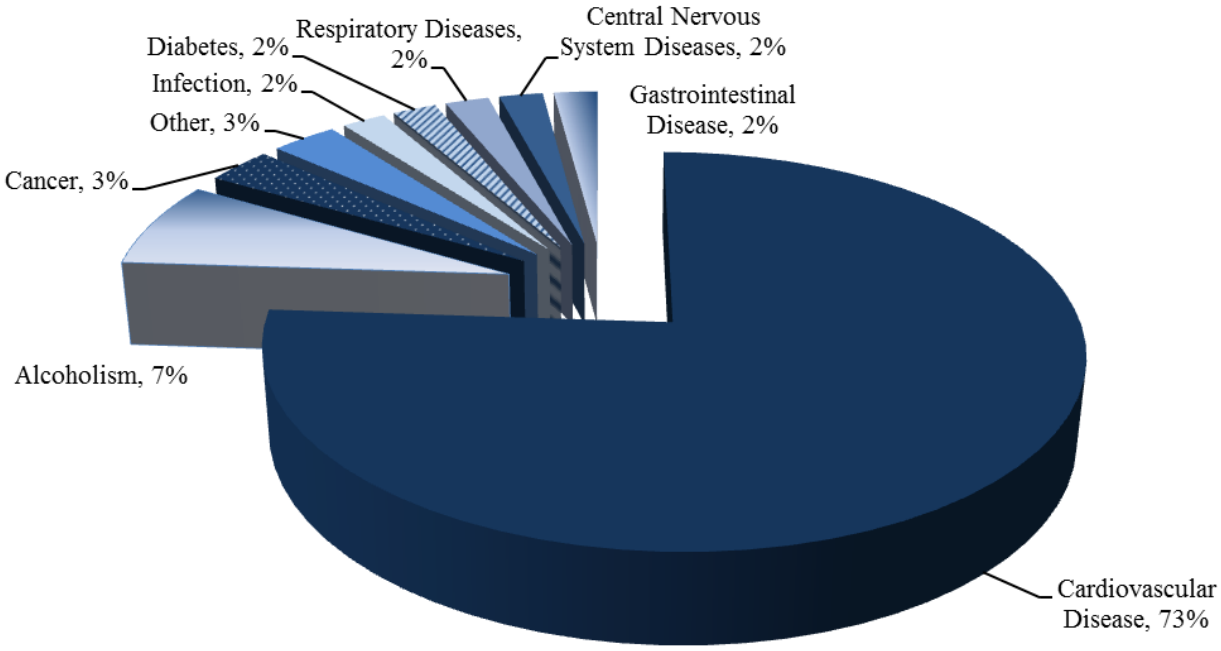
Natural deaths continue to account for the majority of cases reported to and accepted by the OCME. In 2016, **519** deaths were determined to be a result of natural disease. Deaths caused by Cardiovascular Diseases continue to dominate in this category with **378** fatalities. Deaths due to the alcoholism were the second highest cause with **37** deaths. Blacks were more prevalent in this category representing **76.8%** of the population affected. More Natural deaths occurred in **July** than in any other month.



Natural Deaths by Cause

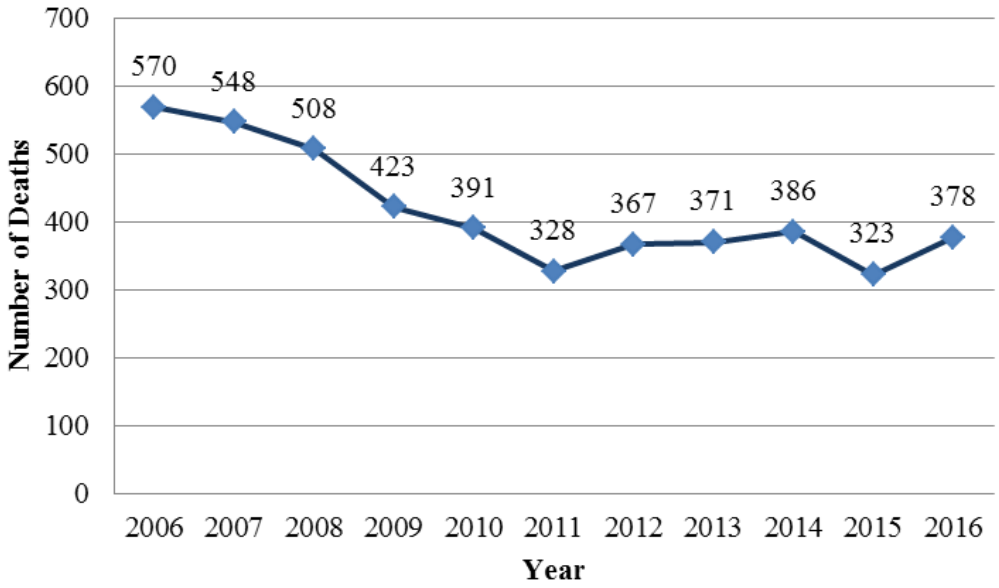
Cause	Number of Deaths	% Of Total Natural Deaths
Cardiovascular Disease	378	72.83%
Alcoholism	37	7.13%
Cancer	15	2.89%
Other	14	2.70%
Infection	11	2.11%
Diabetes	11	2.11%
Respiratory Diseases	10	1.93%
Central Nervous System Diseases	9	1.73%
Gastrointestinal Disease	9	1.73%
Infectious Disease	5	0.96%
Obesity	4	0.77%
Auto Immune/Immune System Disease	4	0.77%
Therapeutic Complications	4	0.77%
Pulmonary Embolism (PE)	3	0.57%
Blood Disease/Hemopoietic System	3	0.57%
Connective Tissue	2	0.38%
Total	**519**	**100**

Natural Deaths by Cause



Note: This graph does not include causes of death that are less than 1%.

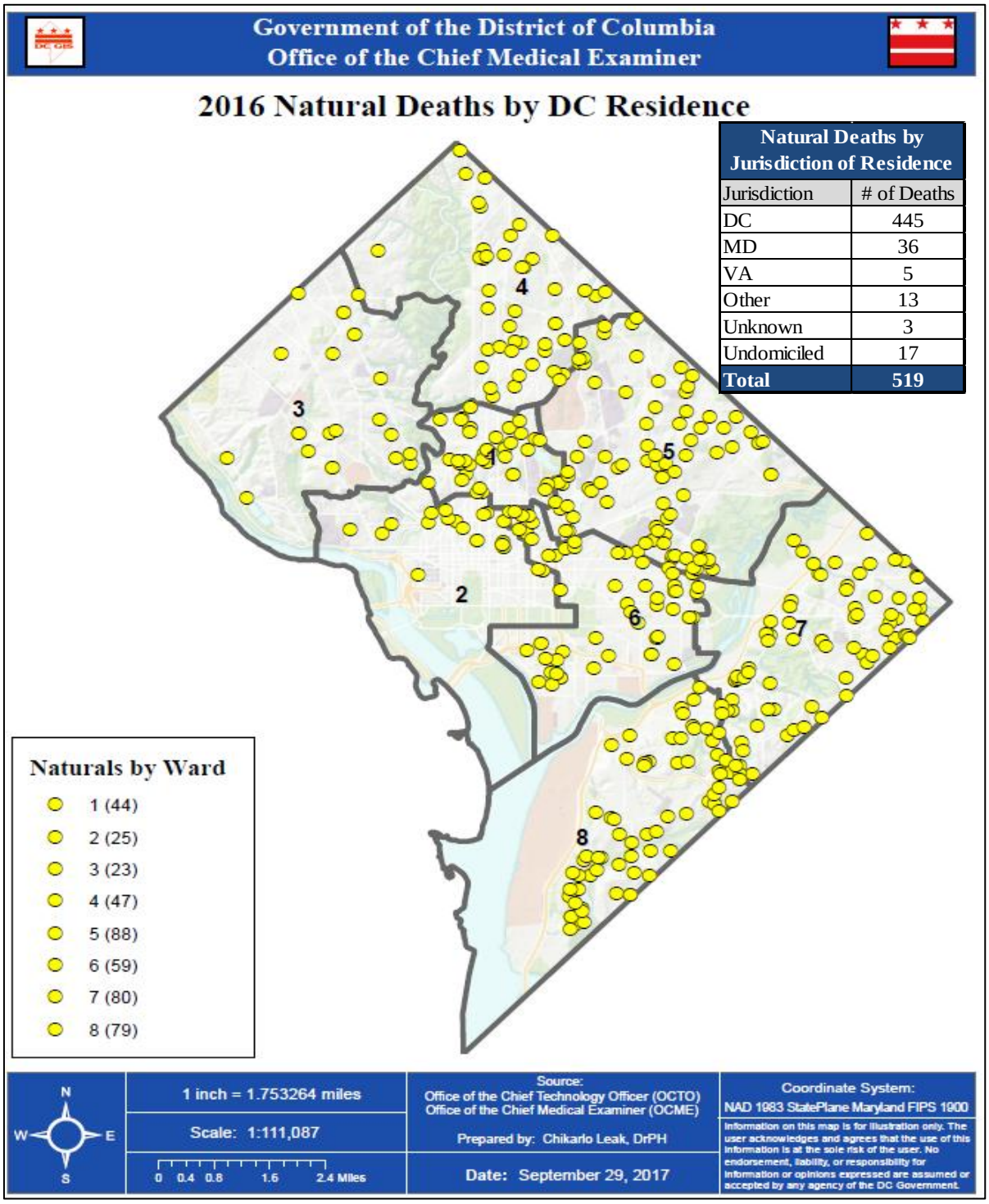
Total Natural Deaths Due to Cardiovascular Disease Reported to the OCME (2006 – 2016)[10]



[10]This includes 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.

Map of Natural Deaths by DC Ward

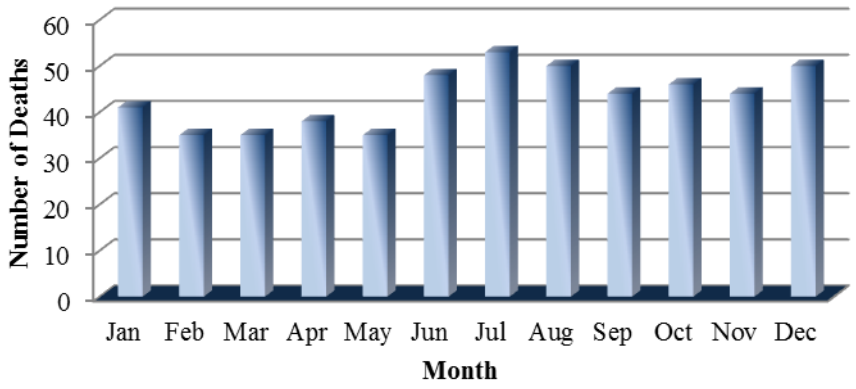
Of the **519** Natural deaths in the District of Columbia, 445 (86%) of these decedents were District residents at the time of their death, as reported by their next of kin. The map below illustrates the residence location by ward at the time of their death.



Natural Deaths by Month

Month	Number of Deaths	% of Naturals
January	41	7.9%
February	35	6.74%
March	35	6.74%
April	38	7.32%
May	35	6.74%
June	48	9.25%
July	53	10.21%
August	50	9.64%
September	44	8.48%
October	46	8.86%
November	44	8.48%
December	50	9.64%
Total	**519**	**100%**

Natural Deaths by Month



Natural Deaths by Exam Type

Exam Type	Number of Natural Deaths	% of Natural Deaths
Autopsy	276	53.18%
External Exam	242	46.63%
Review Medical Records	1	0.19%
Total	**519**	**100%**

Natural Deaths by Race

Race	Number of Natural Deaths	% of Natural Deaths
Black	399	76.88%
White	86	16.57%
Hispanic	21	4.05%
Asian	8	1.54%
American Indian	2	0.38%
Other	2	0.38%
Unknown	1	0.20%
Total	**519**	**100%**

Natural Deaths by Gender

Gender	Number of Natural Deaths	% of Natural Deaths
Female	172	33.14%
Male	347	66.86%
Total	**519**	**100%**

Natural Deaths by Age

Age	# of Natural Deaths	% of Natural Deaths
Under 1	2	0.39%
1 to 5	2	0.39%
6 to 12	0	0.00%
13 to 15	2	0.39%
16 to 19	1	0.20%
20 to 29	19	3.65%
30 to 39	18	3.46%
40 to 49	47	9.06%
50 to 59	133	25.63%
60 to 69	144	27.75%
70 to 79	90	17.34%
80 to 89	50	9.63%
90 +	11	2.11%
Total	**519**	**100%**

3.4.1 - Body Mass Index (BMI)

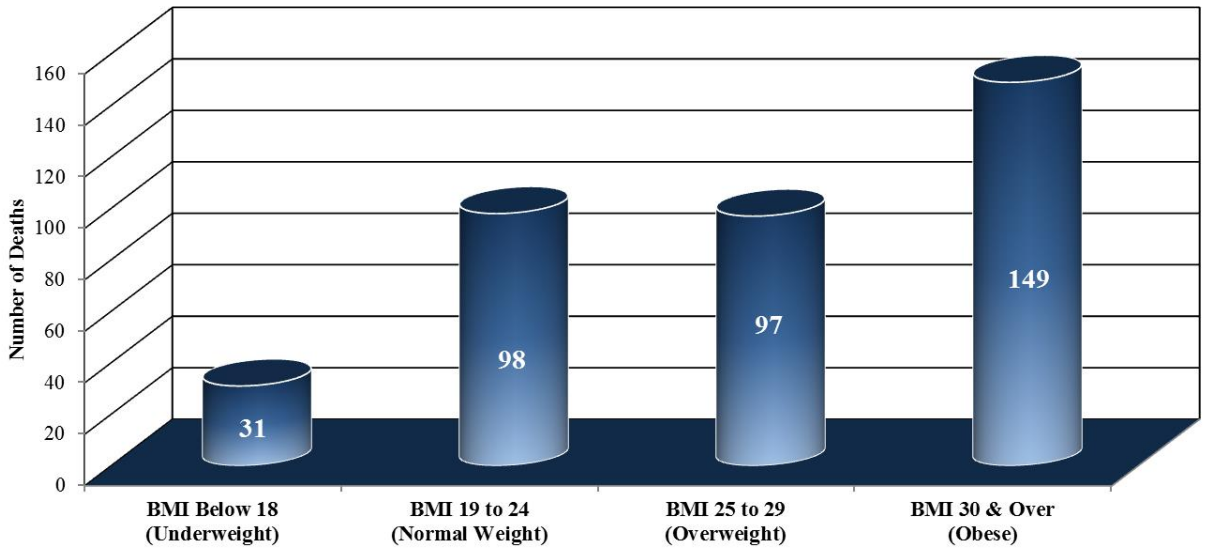
The World Health Organization (WHO) defines Body Mass Index (BMI) as a "simple index of weight-for-height that is commonly used to classify overweight and obesity in adults. According to the National Institutes of Health (NIH) a normal BMI range is from 18.5 to 24.9. Obesity has emerged as a leading public health concern in the United States. This section will report on BMI data for OCME adult decedents as related to those deaths associated with cardiovascular disease.

There were a total of **519** adult decedents that the OCME certified as natural deaths, of which **375** were due to cardiovascular disease.

BMI and Deaths Associated with Cardiovascular Disease[13]

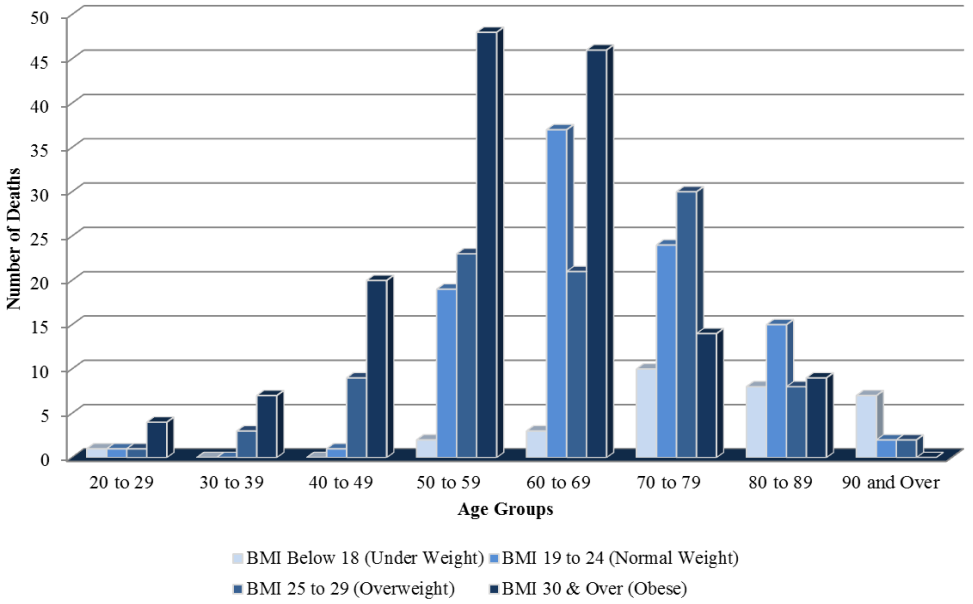
(Adults only)

The charts below provide a breakdown of all adult decedents by BMI classification, by age and by race as related to the prevalence of cardiovascular disease. Of the adult decedents that died of complications of cardiovascular disease **149** were classified as obese and **97** were classified as over-weight.



[13] The BMI statistics only include OCME cases where the body came into the office and a height and weight was obtained; therefore cases with following exam types are not included: Review of Medical Records.

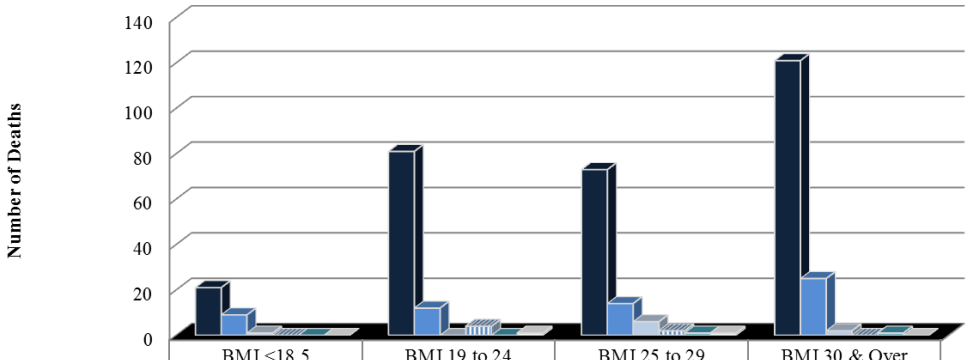
Body Mass Index (BMI) and Deaths Associated with Cardiovascular Disease by Age Groups



BMI for Adult Decedents with Heart Disease by Race

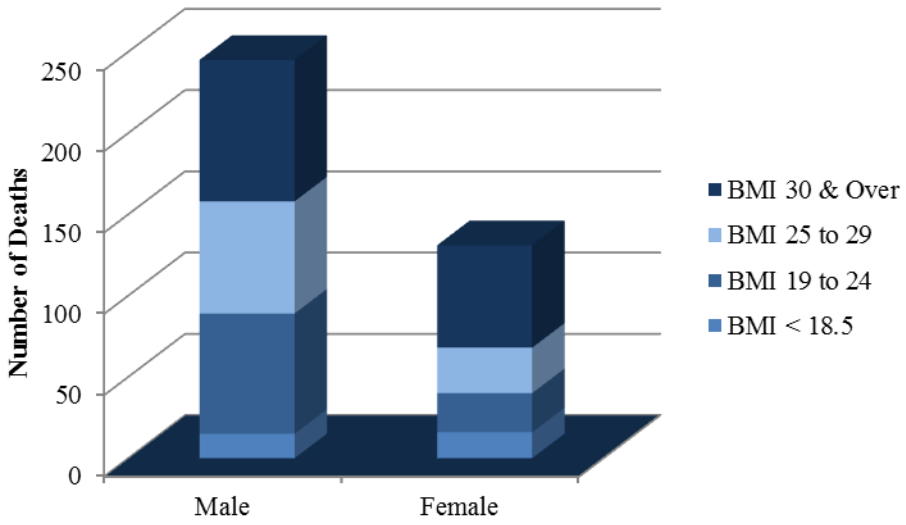
Of the **246** decedents above the normal weight in 2016, **78%** were Black/African American, **16%** were White, **4 %** were Hispanic, **2%** were Asian/Pacific Islander and those that were Other were less than **2%**. The charts below display the BMI data by race and gender.

Body Mass Index (BMI) and Deaths Associated with Cardiovascular Disease by Race/Ethnicity



	BMI <18.5	BMI 19 to 24	BMI 25 to 29	BMI 30 & Over
Black	21	81	73	121
White	9	12	14	25
Hispanic	1	0	6	2
Asian/PI	0	4	2	0
American Indian	0	0	1	1
Other	0	1	1	0

Body Mass Index (BMI) and Deaths Associated with Cardiovascular Disease by Gender



3.5 – Undetermined Deaths

The OCME investigated **41** cases (3.24% of total Accepted Cases) in which the manner of death was concluded to be "Undetermined," and of these **17** cases or **41.46%** also had a cause of death classified as "Undetermined".

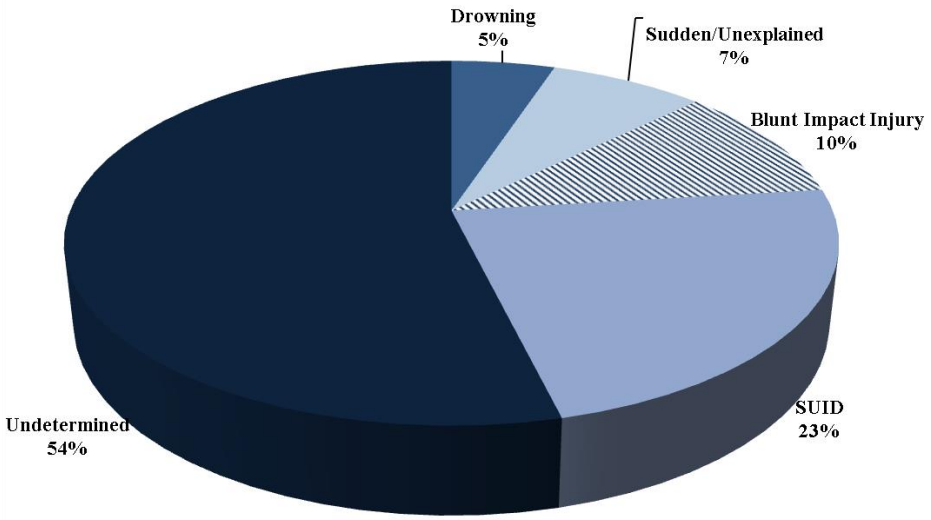
An "Undetermined" manner of death is determined when there is inconclusive evidence or investigatory efforts as to the circumstances of the death. This manner of death can be amended as additional information is received as it infers a continuous investigation/search for clarification of the events surrounding 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 involve infants whose deaths are associated with unsafe sleep environments to include 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 Deaths	% of Total Accepted Cases
Undetermined	17	41.46%
Sudden Unexpected Infant Death (SUID)	2	4.88%
Blunt Impact Injuries	2	4.88%
Other	3	7.32%
Drowning	1	2.44%
Skeletal Remains	1	2.44%
Intoxication	1	2.44%
Total	**41**	**100%**

There were no deaths classified as "Undetermined" in the following age groups, **13 to 15 and 16 to 19** years. Peak incidents occurred in **April and August**.

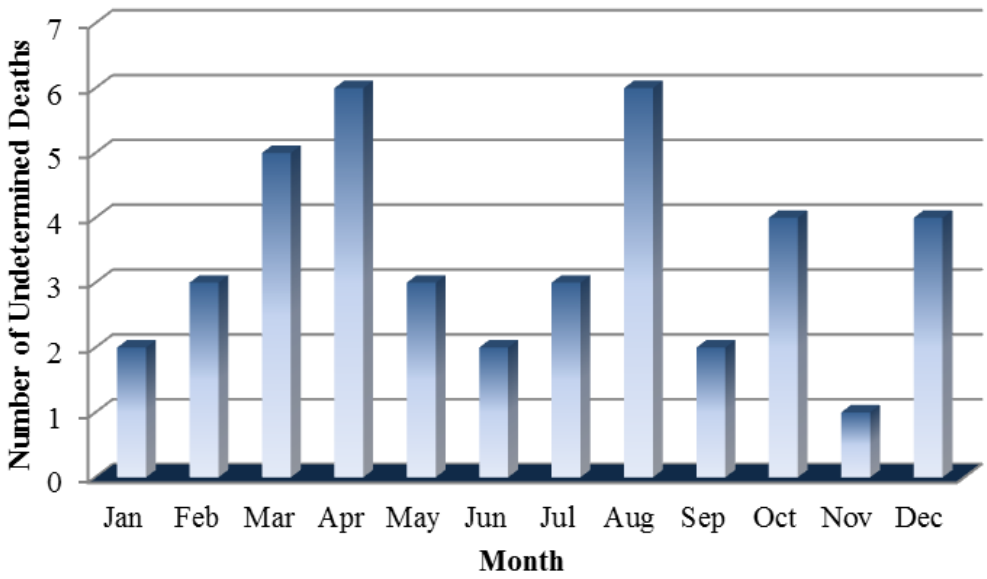
Undetermined by Cause of Death



Undetermined Deaths by Month

Month	Number of Deaths
January	2
February	3
March	5
April	6
May	3
June	2
July	3
August	6
September	2
October	4
November	1
December	4
Total	**41**

Undetermined Deaths by Month



Undetermined Deaths by Race

Race	Number of Undetermined Deaths	% of Undetermined Deaths
Black	29	70.73%
White	8	19.51%
Hispanic	2	4.88%
Other	1	2.44%
Unknown	1	2.44%
Asian	0	0.00%
Total	**41**	**100%**

Undetermined Deaths by Gender

Gender	Number of Undetermined Deaths	% of Undetermined Deaths
Female	11	26.83%
Male	29	70.73%
Unknown	1	2.44%
Total	**41**	**100%**

Undetermined Deaths by Age

Age	Number of Undetermined Deaths
Under 1	18
1 to 5	0
6 to 12	0
16 to 19	0
20 to 29	4
30 to 39	4
40 to 49	4
50 to 59	6
60 to 69	2
70 to 79	1
80 to 89	0
90+	1
Unknown	1
Total	**41**

→

Breakdown of Cause of Deaths for Infants	
Cause of Death	**# of Deaths**
Undetermined	14
SUID	2
Blunt Impact Injury	1
Other	1
Total	18

Note: All of the infant decedents were less than 1 year old (age range between 5 days and 10 months old).

Toxicology Findings by Undetermined Deaths

Of the 41 Undetermined Deaths investigated by OCME, toxicology analysis was performed on 39 cases. There were two external exams with a manner of death of undermined that were not submitted for toxicology testing. Drugs were absent in 14 undetermined deaths.

Description	Number of Cases	% of Cases
N=	39	
Negative	14	35.8 %
Positive	25	64.1 %

The most commonly detected drugs in the undetermined cases were:

Name of Drug	Number of Cases	% of Undetermined Cases
Ethanol	5	12.8%
Morphine/ Heroin	4/ 1	10.2/ 2.5%
7-aminoclonazepam	2	5.1%
Phenobarbital	2	5.1%
Lorazepam	2	5.1%
Clonazepam	2	5.1%
Marijuana Metabolite	2	5.1%

2016 Overview of Infant Sleeping Deaths That Occurred in the District of Columbia by Jurisdiction of Residence

Although a death of an infant may occur in the DC, the infant's place of residence can be anywhere in the world. For the purpose of this annual report, infant deaths are defined as babies that are age one year old or less at the time of death. This report will identify the residential jurisdiction of the infant by using the parental residence at the time of the infant's death.

Co-sleeping/Bedsharing

There were a total of **4** co-sleeping/bed-sharing infant fatalities that were certified with a Manner of Death as "***Undetermined***" in calendar year 2016, of which, three had parents that were residents of the District of Columbia, and one had parents that lived outside of the District (Maryland). Ward eight had the highest prevalence of co-sleeping deaths in 2016. Within this review period, there were no co-sleeping/bedsharing fatalities where the parental residence was in the DC wards 1, 2, 3, or 6. In addition, there were **four** cases were certifed with a Manner of Death as ***"Accident"***. These accidential infant fatalities were caused by Asphyxia due to overlay (asphyxia due to overlay was the result of a co-sleeping environment).

Unsafe sleeping environment or Inappropriate bedding

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

There were **seven** cases in 2016 where the infant died as a result of unsafe sleeping or inappropriate bedding, yet was NOT attributed to co-sleeping or bed-sharing based on the investigation. All of these cases had a Manner of Death of "Undetermined.

Undetermined/Crib Death

Based on the investigation by the OCME, there were **2** deaths where the sleeping environment of the infant was a crib and therefore the cause and manner of death were classified as either "SUID/Undetermined" or "Undetermined/Undetermined."

Infant Deaths by Cause of Death, Manner of Death and Contributing Factors				
Cause of Death	**Manner**	**Co-sleeping/ Bed-sharing**	**Unsafe Sleep Environment/ Inappropriate Bedding**	**Total**
Asphyxia	Accident	4	0	**4**
SUID	Undetermined	2	0	**2**
Undetermined	Undetermined	4	7	**11**
Total		**10**	**7**	**17**

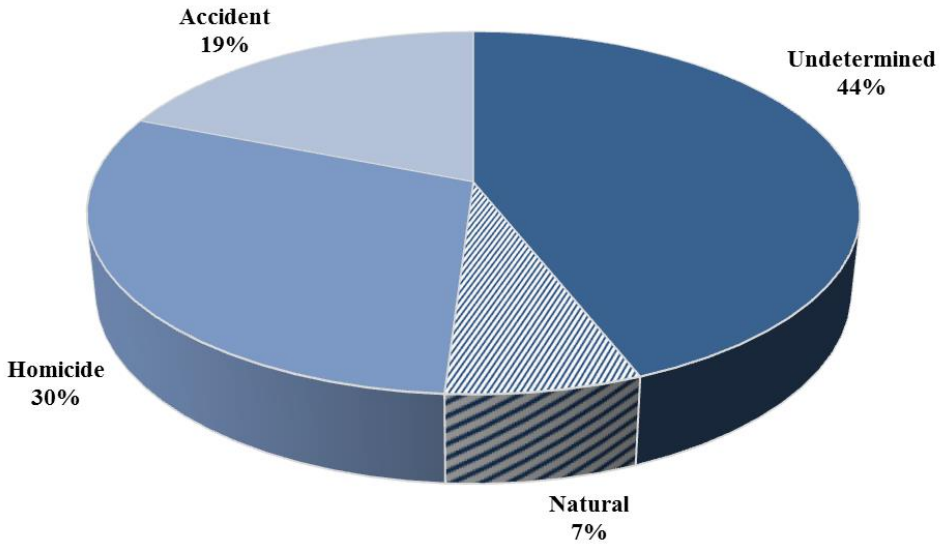
Jurisdiction of Parental Residence and Manner of Death

In 2016 there were a total of **40** infant deaths investigated by the OCME. The below table provides a breakdown by manner of death and the parental residence at the time of the infant's death.

	Total Infant Deaths by Jurisdiction and Manner of Death				
Jurisdiction of Parental Residence	**Total**	**Accident**	**Homicide**	**Natural**	**Undetermined**
DC	15	2	5	1	6
MD	23	3	6	2	11
VA	1	0	1	0	0
Other	3	1	2	0	1
Unknown	1				0
TOTALS	**40**	**8**	**13**	**3**	**18**

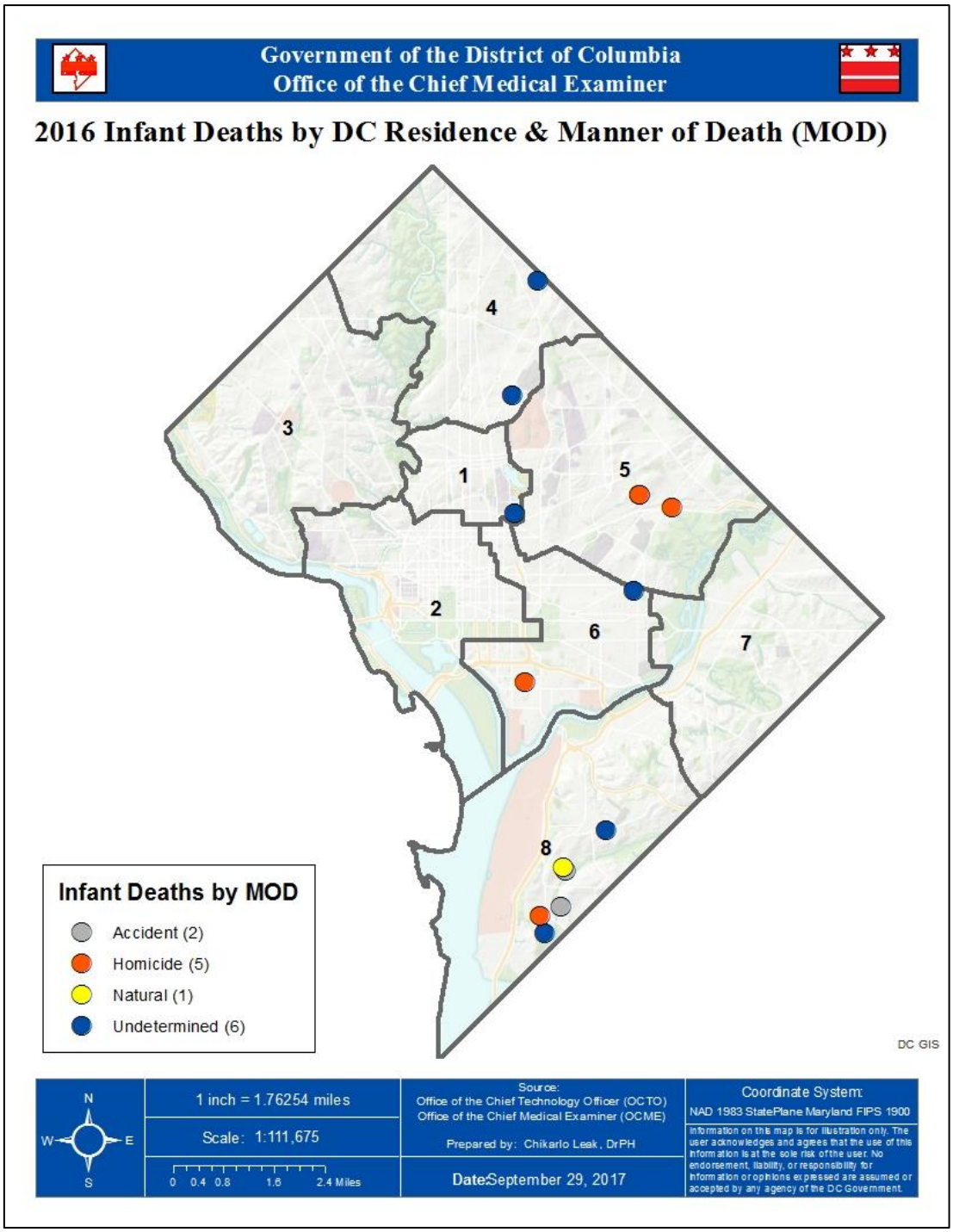
Note: The table does not include two stillbirths (1 in DC and 1 in MD)

Infants < 1 Year by Manner of Death



Map of Infant Deaths by Ward and Manner of Death

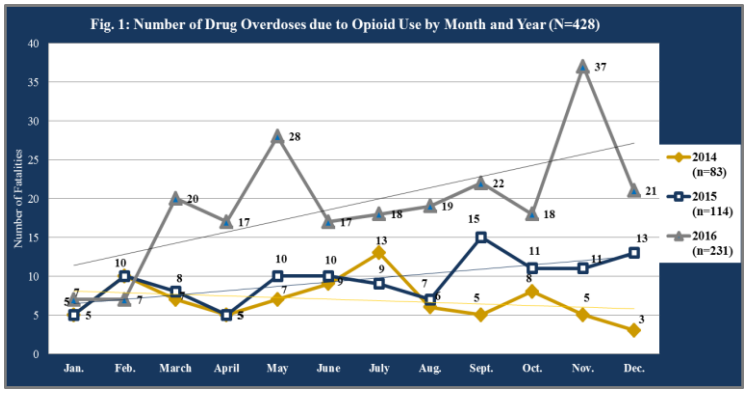
The CDC defines infants as those children 1 year old or less; whereas the OCME reports children "Under 1" and children "1 to 5" separately throughout this report. The map below illustrates those decedents who are 1 year old or less as defined by the CDC and whose parents were residents of the District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



4.0 – Special Report

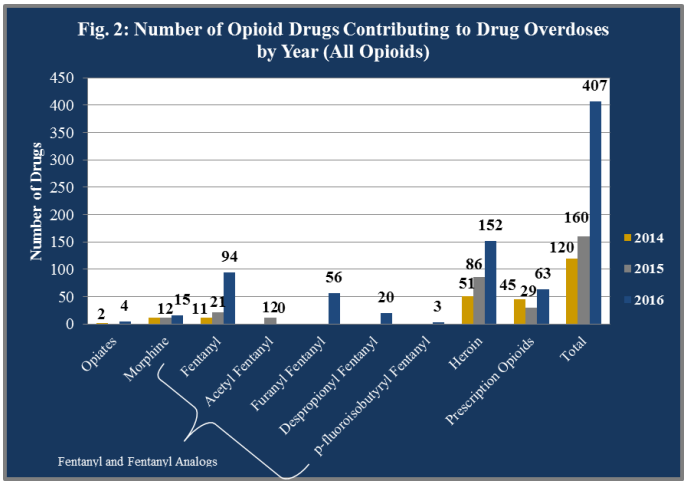
Deaths due to Opioid Drug Use: January 1, 2014 to December 31, 2016

The DC Office of the Chief Medical Examiner (OCME) investigated a total of **428**[14] deaths due to use of opioids from Jan. 1, 2014 through December 31, 2016: **83** deaths in CY 2014, **114** in CY 2015, **231** deaths to in CY 2016 respectively. This report examines the presence of opioids (*heroin, fentanyl, fentanyl analogs, morphine, prescription opioids and the general category of opiates*) in deaths observed at OCME. Tables and graphs below present decedent information by trends, demographics and jurisdiction of residence.



Trends in Deaths due to Opioid Use

The number of deaths due to opioid use in November 2016 (n=37) was higher than any other month over the past three years (Fig. 1). Overall, there was a **178%** increase in fatal overdoses due to opioid use from 2014 (n=83) to 2016 (n=231).



Incidence of Opioids by Year

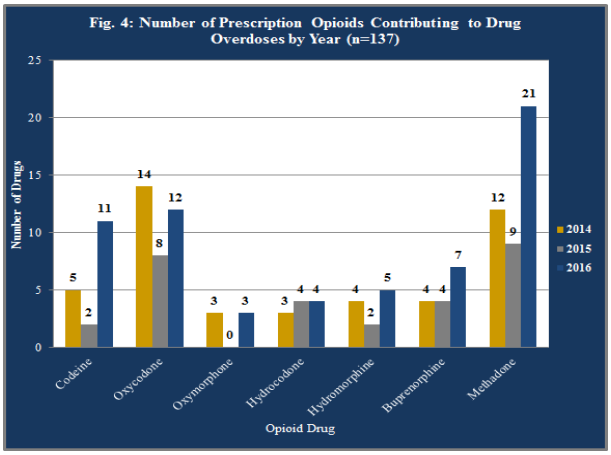
Each drug is counted independently in fatalities involving more than one of these drugs and ranged from 1 to 7 opioids identified per death. Therefore, there were a total of **120** opioids[15] found in the 83 deaths in 2014, **160** opioids found in the 114 deaths in 2015 and **407** opioids found in the 231 deaths in 2016. As depicted in Figure 2, the total number of opioids that caused a death increased from 2014 to 2016. Important to note is the increase in the presence of fentanyl and fentanyl analogs. In 2016, **62%** of cases involved fentanyl or a fentanyl analog (fentanyl, furanyl-fentanyl, despropionyl-fentanyl, or p-fluoroisobutyryl-fentanyl). This noticeable increase in the presence of fentanyl and fentanyl analogs began in March 2016 (n=11).

[14] The data presented in this report includes 11 cases with a Manner of Death other than Accidental Intoxication- three cases in 2014, one case in 2015, and one case in 2016 in which the Manner of Death was Undetermined but the Cause of Death was due to opioid drug use. Additionally there were two cases with Manner of Death of Suicide in 2014, one case in 2015 and three cases in 2016.

[15] Morphine and fentanyl can both be prescribed. However, for the sake of this report, they are included under the illicit opioids.

Prescription Opioids

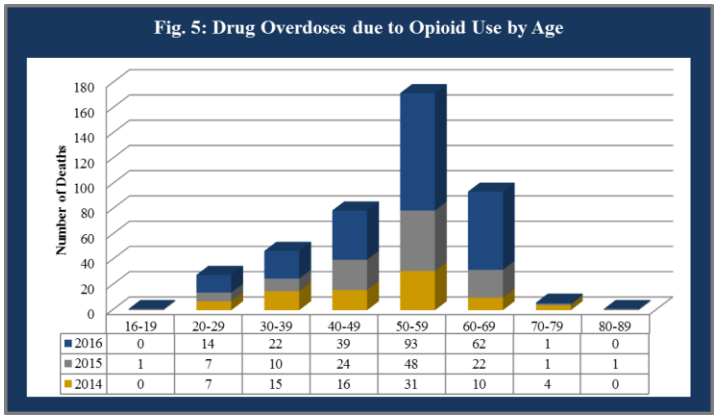
There were **137** prescription opioids found in the 428 drug overdoses between January 2014 and December 2016. Despite the downward trend in the number of fatal overdoses related to prescription opioids between 2014 and 2015, the number of fatal overdoses involving prescription opioids in 2016 (n=63) was higher than the number of fatal overdoses involving prescription opioids over the past two years (2014, n=45) and (2015, n=29).



Demographics

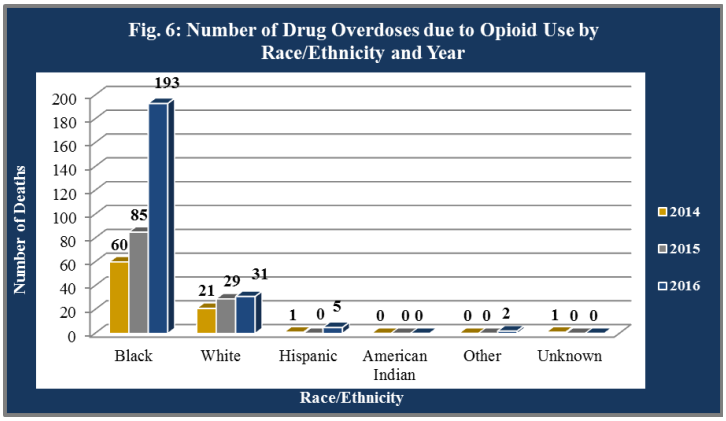
Age

Approximately **80%** of all overdoses due to opioid drug use happen among adults between the ages of 40-69 years old. Deaths due to opioid use were most prevalent among people ages 50 to 59 (n=40%). There were no deaths from the use of opioids among people younger than 16 or older than 89.



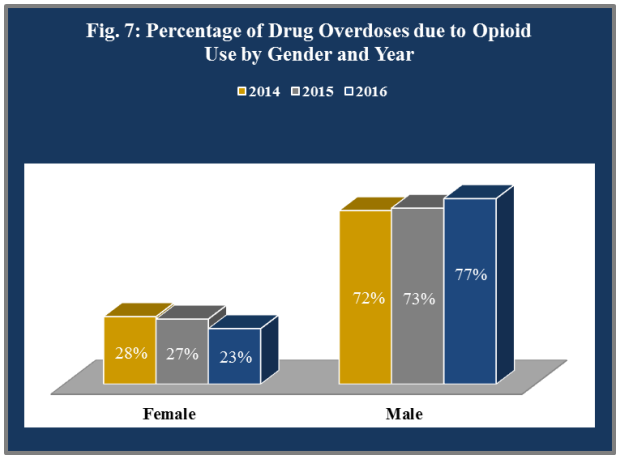
Race/Ethnicity

Overall, **338** or **79%** of all deaths due to opioid use were among Blacks. This trend remains across years. Deaths among Blacks increased 127% from 2015 to 2016.



Gender

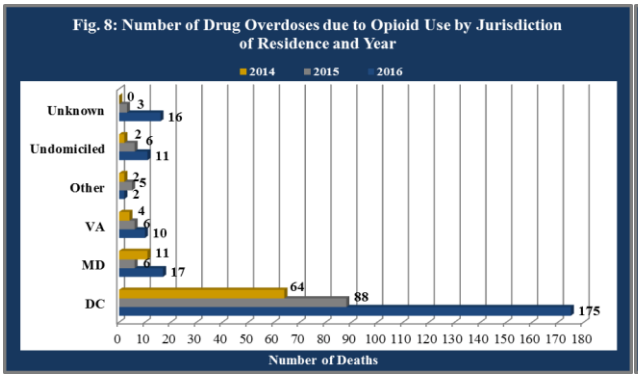
Fatal overdoses due to opioid drug use were more common among **males**.

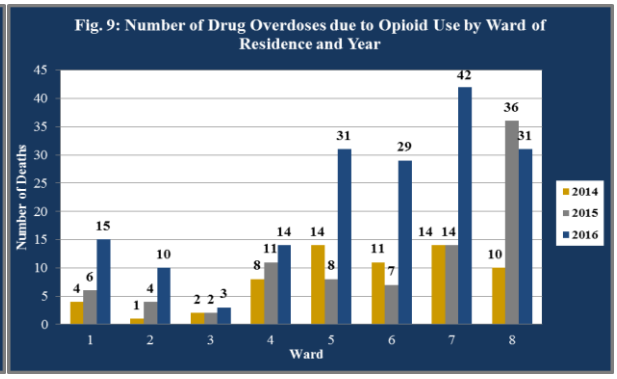


Jurisdiction of Residence

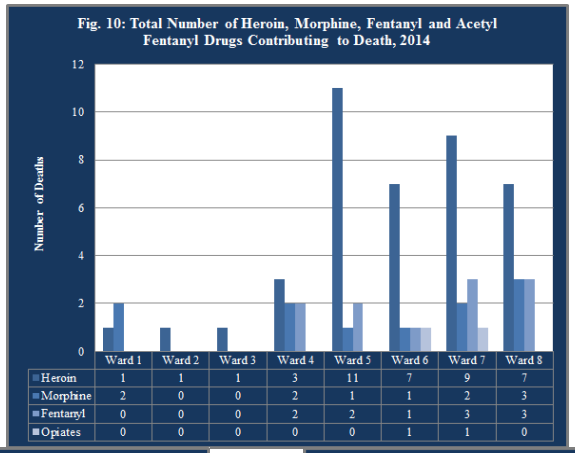
From 2014 to 2016, opioid-related fatal overdoses were most prevalent in **Wards 7 & 8** (n=147). However, there are variations across years. For example, opioid-related fatal

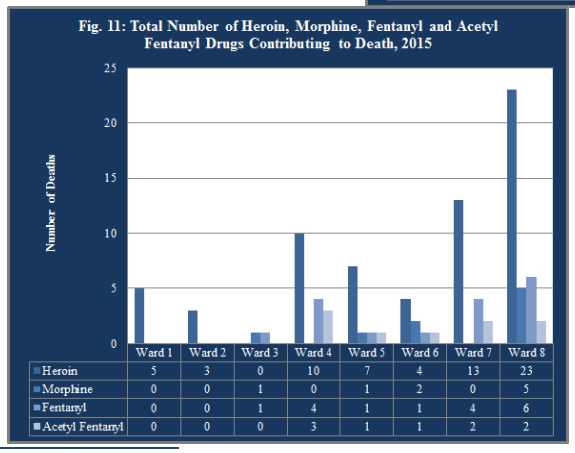
overdoses were most prevalent in Wards 7 and 8 in 2015 yet Wards 5 and 7 in 2014. In 2016, opioid-related overdoses were most prevalent in **Ward 7**.

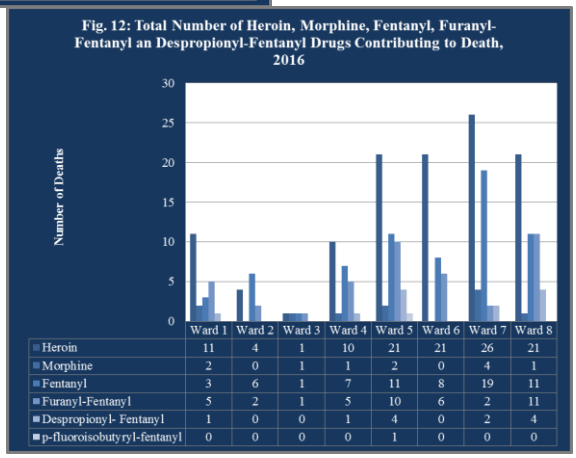




The graphs below depict the total number of heroin, morphine, fentanyl, and fentanyl analogs that contributed to overdose deaths by Ward of Residence. Each drug is counted independently in fatalities involving more than one of these drugs. The total number of opioids found in fatal overdoses increased between 2014 and 2016. Overall, in the District, there were a total of **64** counts of heroin, morphine, and fentanyl that contributed to fatal overdoses in 2014. In 2015, the number of opioids that contributed to a fatal overdose in the District increased to a total of **100** opioids (heroin, morphine, fentanyl, and acetyl fentanyl). There were zero cases of fentanyl analogs in 2014.[16] Nine of the twelve cases of acetyl fentanyl found in 2015 were among decedents that were residents of the District. In 2016, there were a total of **247** illicit opioids (heroin, morphine, fentanyl, furanyl-fentanyl despropionyl-fentanyl, p-flouroisobutyryl-fentanyl) identified. Although, there are zero cases of acetyl fentanyl in 2016, new, equally potent, fentanyl analogs have emerged.



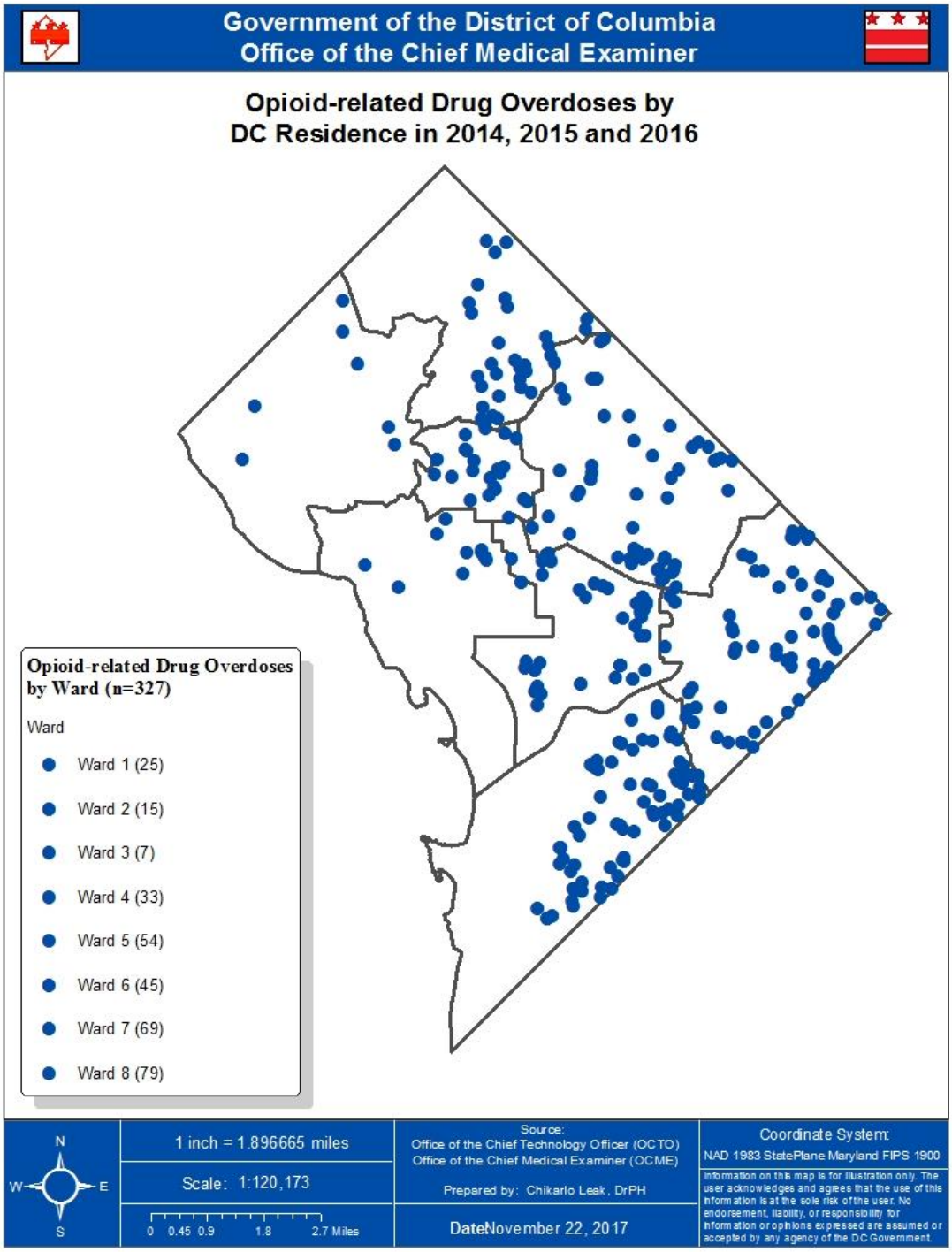




[16] OCME began screening for fentanyl analogs in 2015.

Map of Opioid related Deaths by Jurisdiction of Residence

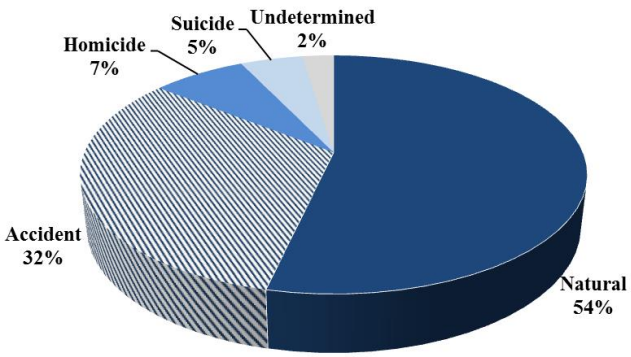
The map below displays the drug overdoses due to Opioid use by jurisdiction of residence. The jurisdiction of residence is not known for all decedents reported to and investigated by OCME. This map includes all decedents that died in the District of Columbia where the address was known, which is approximately **78%** of all Opioid related drug deaths between 2014 and 2016.



5.0 – Ward Highlights

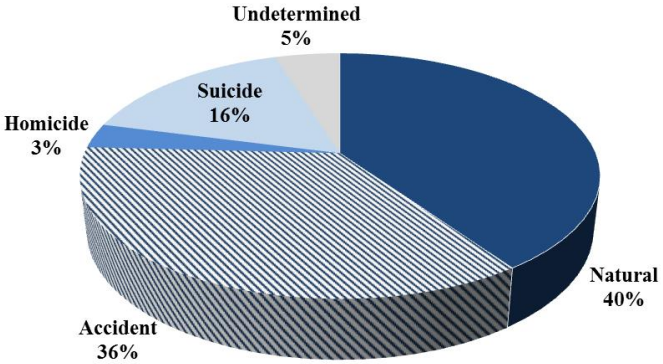
Overall, **945** or **76%** of all decedents were residents of the District of Columbia. This section highlights cause of death by Ward.

Leading Cause of Death in 2016, Ward 1



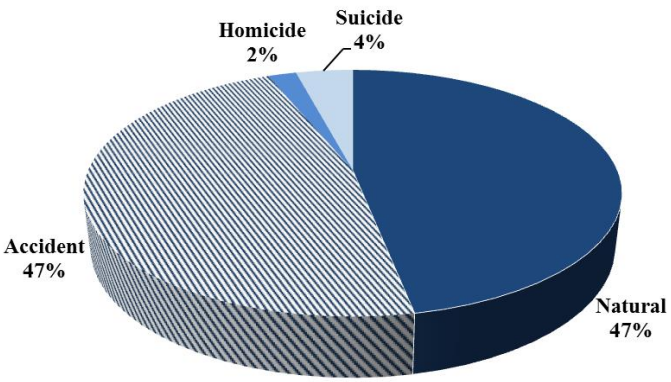
There were 84 decedents from Ward 1. With the exception of Ward 5, there were more deaths with a manner of death of natural than any other Ward. The most prevalent cause of death was cardiovascular disease (28) followed by intoxications (23) and alcoholism (4).

Leading Cause of Death in 2016, Ward 2



There were 62 decedents from Ward 2. There were more deaths with a manner of death of suicide (10) than any other Ward. The most prevalent cause of death was cardiovascular disease (18) followed by intoxications (17), blunt injury due to falls (5) and suffocation (5).

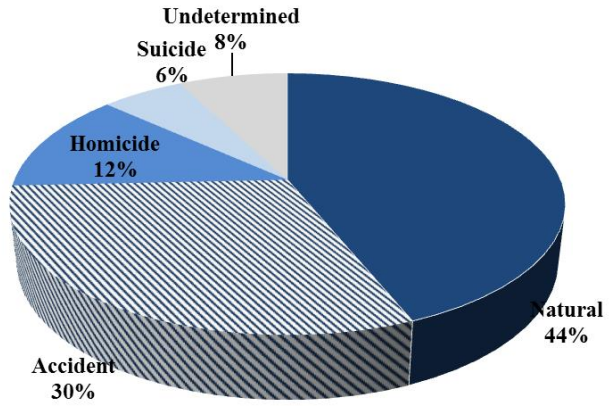
Leading Cause of Death in 2016, Ward 3



There were 49 decedents from Ward 3. This was the fewest of any District Ward. In addition, there were no deaths with a manner of death of undetermined and Ward 3 had more deaths with a manner of death of accident than any other Ward. The most prevalent cause of death was cardiovascular disease (16) followed by, blunt injury due to falls (15) and intoxication (5). More

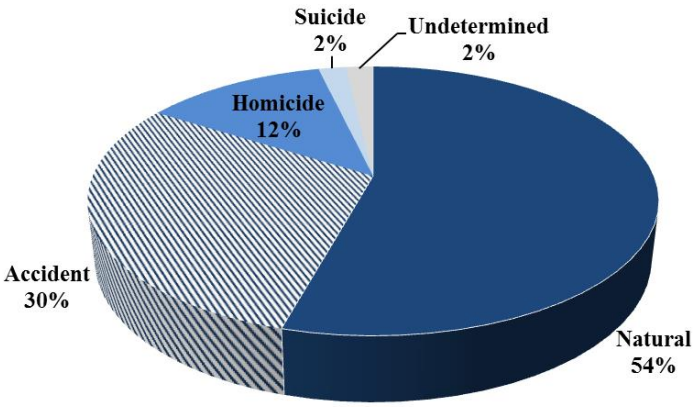
deaths due to falls were experienced by residents of Ward 3.

Leading Cause of Death in 2016, Ward 4



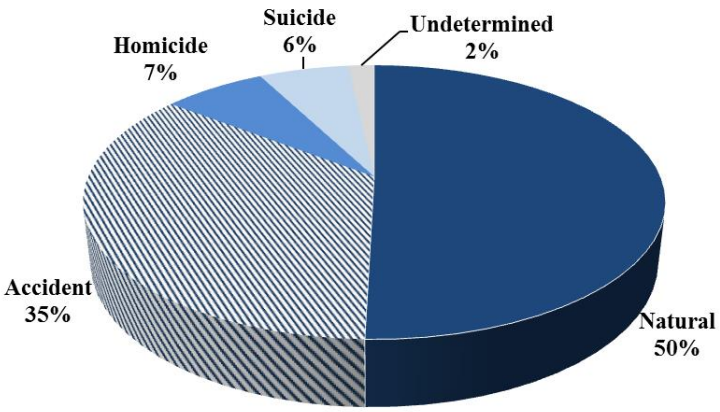
There were 105 decedents from Ward 4. There were more deaths with a manner of death of undetermined (8) than any other Ward. The most prevalent cause of death was cardiovascular disease (33) followed by intoxications (17), blunt injury due to falls (10).

Leading Cause of Death in 2016, Ward 5



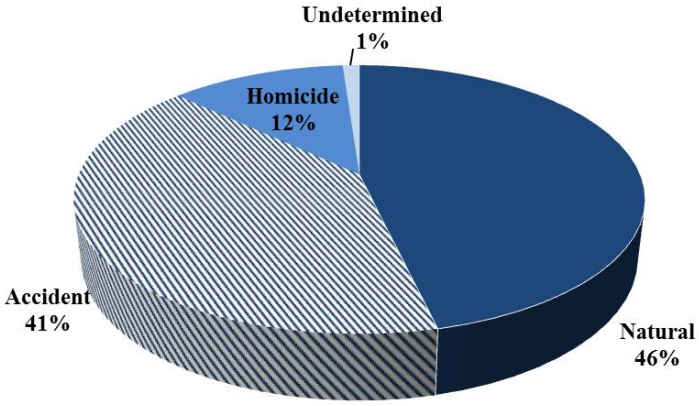
There were 162 decedents from Ward 5. There were more deaths with a manner of death of natural (88) than any other Ward. In addition, the third highest number of homicides (20) was experienced by residents of Ward 5. The most prevalent cause of death was cardiovascular disease (59) followed by intoxications (37), blunt injury due to falls (5) and firearms. (16).

Leading Cause of Death in 2016, Ward 6



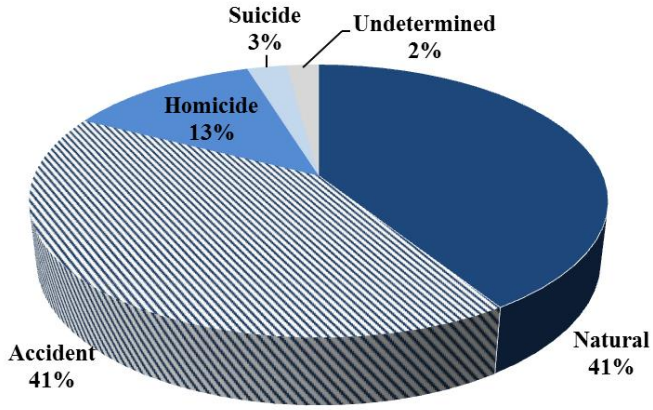
There were 117 decedents from Ward 6. The majority of decedents from Ward 6 had a manner of death of natural. The most prevalent cause of death was cardiovascular disease (42) followed by intoxications (36), and firearms (5).

Leading Cause of Death in 2016, Ward 7



There were 177 decedents from Ward 7. There were zero deaths with a manner of death of suicide in this Ward, the only Ward to experience zero suicides. In addition, the second highest number of accidents (77), homicides (21) and natural (82) deaths were experienced by residents of Ward 7. The most prevalent cause of death was cardiovascular disease (57) followed by intoxications (53), and suffocation (18).

Leading Cause of Death in 2016, Ward 8



There were 189 decedents from Ward 8. There were more deaths with a manner of death of accident (78) and homicide (24) than any other Ward. Ward 8 was the only Ward to have more deaths with a manner of death of accident than natural. The most prevalent cause of death was intoxications (56) followed by cardiovascular disease (54), and firearms (22).

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 request 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	106	26
No	2	1[17]
Request Abandoned	11	0
Not Required	1	0
Total Requests	**120**	**27**

[17] This case was declined but WRTC retrieved the organ donation before permission was requested.

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 2016, the laboratory received 343 cases from the Metropolitan Police Department (MPD), 95 cases from the United States Parks Police (USPP), 19 specimens from the United States Capitol Police (USCP), 9 specimens from the United States Secret Service (USSS), and 2 specimens from the Central Intelligence Agency (CIA). Specimens received were either blood or urine, and multiple specimens could be received with each of the 468 cases.

A negative case refers to the absence of any alcohol or detectable drug. A positive case refers to the presence of alcohol and/or drug(s), noting that a case can be positive for more than one substance. Drugs that are excluded from typical 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=	468	
Negative	36	7.6 %
Positive	432	92.3 %

The prevalence of ethanol, phencyclidine, marijuana, cocaine, morphine, and synthetic cannabinoids in the DUI casework submitted by all enforcement agencies:

Drug	Number of Cases	% of Cases
Ethanol	266	56.8 %
Marijuana Metabolite	142	30.3 %
Phencyclidine (PCP)	141	30.1 %
Cocaine Metabolite	45	9.6 %
Morphine/Heroin	19/12	4.0 %/2.5%
Alprazolam	18	3.8 %
6-acetylmorphine	12	2.5 %

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

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 2016, the laboratory received 119 cases from District government agencies including the Metropolitan Police Department and Office of Victim Services. Specimens received were either blood or urine, and multiple specimens could be received with each of the 119 cases.

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

Description	Number of Cases	% of Cases
N=	119	
Negative	7	5.8 %
Positive	112	94.1 %

The most commonly types of detected drugs in DFSA cases were

Drug Class	% Prevalence
Ethanol	33.6 %
Marijuana	23.5 %
Cocaine Metabolite	11.7 %
Illicit Stimulant	8.4 %
Acetone	8.4 %
Antidepressants	8.4 %
PCP	7.5 %
Over the Counter	6.7 %
Opioids	5.0 %
None were detected	5.8%

Subject demographics for DFSA cases were:

Average Age (years)	28

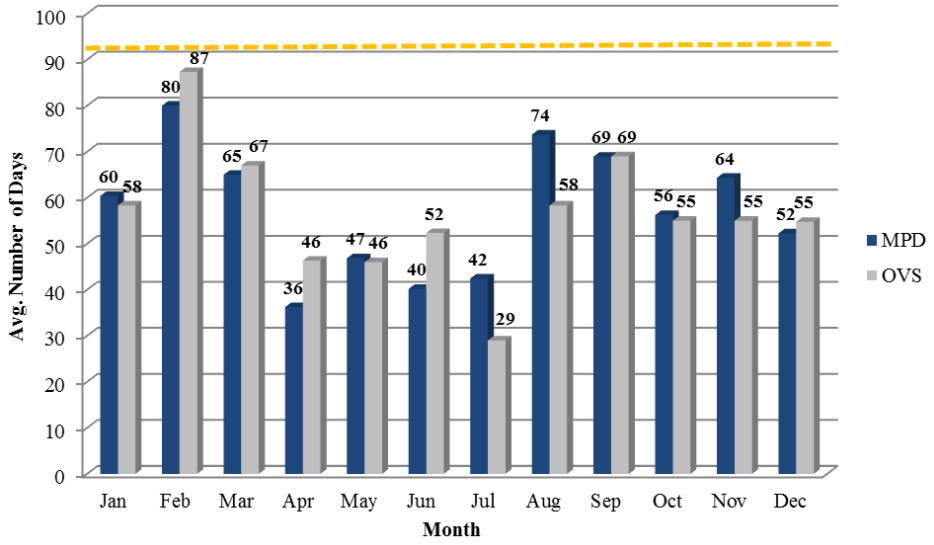
Gender	% of Total
Male	7.5%
Female	92.4%
Total	**100%**

Age Range	# of Cases
Ages ≥10 and <15	0
Ages ≥15 and <20	11
Ages ≥20 and <25	37
Ages ≥25 and <30	35
Ages ≥30 and <35	18
Ages ≥35 and <40	9
Ages ≥40 and <50	8
Ages ≥50 and <70	1
Total	**119**

Cases submitted by Agency and cases processed:

Agency	Cases Received	% Processed
MPD	67	100%
OVSJG (DC SANE)	52	100%

Average Monthly Turnaround Time for DFSA Cases Submitted to OCME



Turnaround Time (TA) for Each Case submitted to OCME:

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

Turnaround Time for Cases Submitted to OCME by Agency

Submitting Agency	Received Date	Report Date	TAT (Days)	Submitting Agency	Received Date	Report Date	TAT (Days)
MPD	1/12/2016	3/15/2016	63	OVS	7/27/2016	8/25/2016	29
MPD	1/14/2016	3/16/2016	62	MPD	7/28/2016	8/25/2016	28
OVS	1/20/2016	3/16/2016	56	MPD	7/28/2016	9/9/2016	43
OVS	1/20/2016	3/16/2016	56	MPD	8/1/2016	9/9/2016	39
MPD	1/20/2016	3/16/2016	56	MPD	8/1/2016	11/21/2016	112
OVS	1/20/2016	3/23/2016	63	MPD	8/4/2016	10/11/2016	68
MPD	1/20/2016	3/23/2016	63	MPD	8/12/2016	11/14/2016	94
MPD	1/26/2016	3/24/2016	58	MPD	8/15/2016	10/11/2016	57
MPD	2/2/2016	3/23/2016	50	MPD	8/15/2016	12/15/2016	122
OVS	2/2/2016	5/13/2016	101	OVS	8/19/2016	9/22/2016	34
OVS	2/2/2016	5/18/2016	106	OVS	8/19/2016	9/22/2016	34
MPD	2/4/2016	5/13/2016	99	OVS	8/19/2016	9/22/2016	34
MPD	2/11/2016	5/12/2016	91	OVS	8/19/2016	10/4/2016	46
OVS	2/18/2016	4/13/2016	55	OVS	8/19/2016	12/15/2016	118
MPD	3/1/2016	5/5/2016	65	MPD	8/29/2016	9/22/2016	24
OVS	3/24/2016	6/20/2016	88	OVS	8/29/2016	11/21/2016	84
OVS	3/28/2016	5/13/2016	46	MPD	9/1/2016	10/22/2016	51
MPD	4/4/2016	5/13/2016	39	MPD	9/1/2016	11/5/2016	65
MPD	4/7/2016	5/18/2016	41	MPD	9/12/2016	11/5/2016	54
OVS	4/11/2016	5/25/2016	44	MPD	9/12/2016	1/3/2017	113
MPD	4/12/2016	5/11/2016	29	MPD	9/15/2016	11/21/2016	67
MPD	4/12/2016	5/18/2016	36	MPD	9/15/2016	11/21/2016	67
OVS	4/18/2016	5/12/2016	24	MPD	9/19/2016	11/16/2016	58
OVS	4/18/2016	5/25/2016	37	OVS	9/20/2016	11/28/2016	69
OVS	4/18/2016	5/25/2016	37	OVS	9/20/2016	11/28/2016	69
OVS	4/29/2016	7/1/2016	63	MPD	9/26/2016	12/2/2016	67
OVS	4/29/2016	7/11/2016	73	MPD	9/27/2016	12/2/2016	66
MPD	5/9/2016	6/24/2016	46	MPD	9/29/2016	12/6/2016	68
OVS	5/12/2016	7/1/2016	50	MPD	9/29/2016	12/20/2016	82
OVS	5/12/2016	7/1/2016	50	MPD	10/3/2016	12/6/2016	64
OVS	5/12/2016	7/1/2016	50	OVS	10/11/2016	12/6/2016	56
MPD	5/12/2016	7/1/2016	50	OVS	10/11/2016	12/6/2016	56
OVS	5/12/2016	7/1/2016	50	OVS	10/11/2016	12/6/2016	56
MPD	5/16/2016	6/20/2016	35	OVS	10/20/2016	12/20/2016	61
MPD	5/16/2016	7/1/2016	46	OVS	10/20/2016	12/20/2016	61
MPD	5/16/2016	7/1/2016	46	MPD	10/24/2016	12/20/2016	57
OVS	5/24/2016	7/1/2016	38	MPD	10/27/2016	12/20/2016	54
OVS	5/24/2016	7/1/2016	38	OVS	10/31/2016	12/20/2016	50
MPD	5/27/2016	7/20/2016	54	OVS	10/31/2016	12/20/2016	50
MPD	5/31/2016	7/21/2016	51	OVS	10/31/2016	12/20/2016	50
OVS	6/3/2016	8/15/2016	73	MPD	10/31/2016	12/20/2016	50
MPD	6/14/2016	7/20/2016	36	MPD	11/3/2016	12/15/2016	42
OVS	6/16/2016	8/1/2016	46	MPD	11/3/2016	1/29/2017	87
MPD	6/20/2016	8/22/2016	63	MPD	11/14/2016	1/17/2017	64
OVS	6/24/2016	8/1/2016	38	OVS	11/15/2016	1/17/2017	63
MPD	6/27/2016	8/1/2016	35	OVS	11/28/2016	12/22/2016	24
MPD	6/27/2016	8/1/2016	35	OVS	11/28/2016	2/14/2017	78
MPD	6/30/2016	8/1/2016	32	MPD	12/2/2016	1/29/2017	58
OVS	7/12/2016	8/4/2016	23	MPD	12/5/2016	1/27/2017	53
OVS	7/12/2016	8/5/2016	24	MPD	12/8/2016	1/27/2017	50
OVS	7/12/2016	8/21/2016	40	MPD	12/12/2016	1/26/2017	45
MPD	7/14/2016	8/5/2016	22	OVS	12/14/2016	1/26/2017	43
MPD	7/14/2016	8/15/2016	32	OVS	12/14/2016	2/13/2017	61
MPD	7/18/2016	8/25/2016	38	MPD	12/19/2016	2/13/2017	56
MPD	7/18/2016	8/25/2016	38	MPD	12/19/2016	2/13/2017	56
MPD	7/25/2016	8/25/2016	31	OVS	12/22/2016	2/13/2017	53
MPD	7/25/2016	8/25/2016	31	OVS	12/22/2016	2/22/2017	62
MPD	7/25/2016	11/21/2016	119	MPD	12/27/2016	2/15/2017	50
OVS	7/27/2016	8/25/2016	29	MPD	12/27/2016	2/15/2017	50
OVS	7/27/2016	8/25/2016	29				

7.3 - Breath Alcohol Program

In 2016, two 40-hour Operator Training Courses were offered, licensing a total of 26 operators. Twenty-five operators were recertified; therefore there were a total of 133 licensed operators. This resulted in 3,568 evidential breath tests being administered through the deployment of 8 instruments into the field.

Program Facts

- Total 40-hour Operator Trainings Provided in 2016: 2
- Total New Breath Test Operators Trained in 2016: 26
- Total Recertification Trainings in 2015: 9
- Total Operators Recertified in 2015: 25
- Recertification Rate: 62%
- Total Licensed Operators since September 2012: 180
- Total Licensed Operators in 2016: 133
- Breath Alcohol Technicians Trained: 2
- Total Certified Technicians: 4
- Number of evidential instruments in the field (cumulative): 8
- Total Evidential Tests Taken from 2012-2016: 3,568

Tests Taken in 2016 by District:

1D: 103

2D: 105

3D: 179

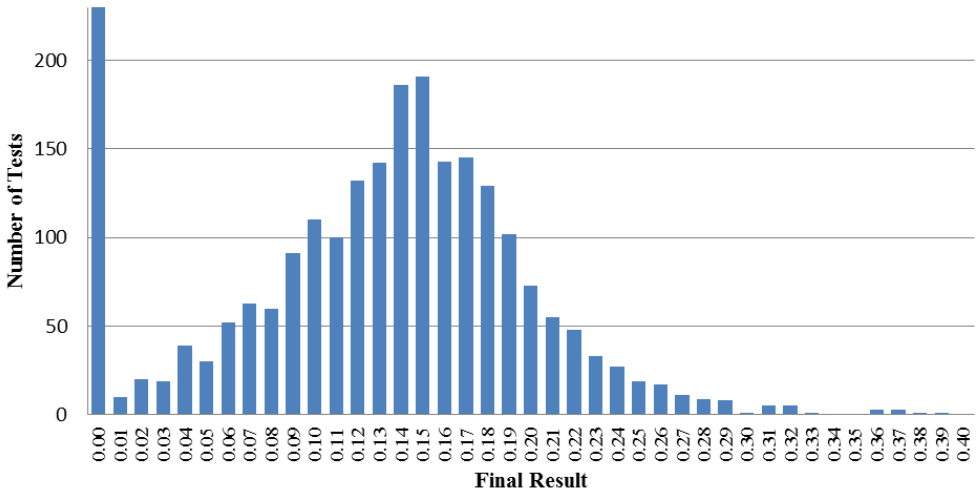
4D: 77

5D: 97

6D: 57

7D: 42

MPD Alc.
Van: 4



Total: 664

Final Results from all Districts from 2012 – 2016: The most prevalent final result is 0.00 g/210L. This can be due to the impairment of a subject by a substance other than ethanol. The most prevalent breath alcohol concentrations range from 0.13 – 0.19 g/210L.

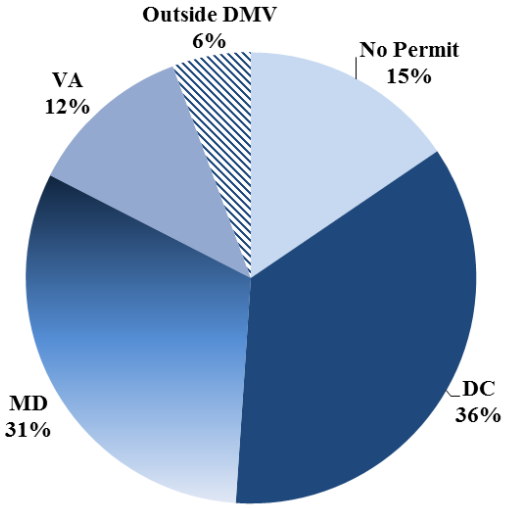
Total Number of Breath Alcohol Tests by District and Year

Evidential Breath Tests Taken by MPD District						
Serial Number	**2012**	**2013**	**2014**	**2015**	**2016**	**Totals**
011678 (1D)	40	192	151	106	103	592
012586 (2D)	0	100	126	99	105	430
011676 (3D)	83	330	281	131	179	1004
012583 (4D)	0	55	76	54	77	262
012587 (5D)	0	102	149	111	97	459
011677 (6D)	0	46	99	37	57	239
010812 (7D)	96	255	128	55	42	576
012941 (Alcohol Van)	N/A	N/A	N/A	2	4	6
Total Evidential Tests as of 12/31/2016	**219**	**1080**	**1010**	**595**	**664**	**3568**

Additional Facts:

Overall, the program maintains an average of 19% refusals (a refusal is when someone elects to not take an evidential breath test). These statistics do not include refusals of the PD 29 Implied Consent form. These are refusals captured by the breath testing instrument due to a deficient sample or refusal during the breath test. These statistics do not include refusals of the MPD Implied Consent form.

Evidential Tests by License State of Issuance



8.0 – Other Major Activities

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

8.1 - Court-related Activities

A parameter not often considered in evaluating the Medical Examiners workload is time spent in pre-trial conferences, depositions and expert testimony provided in family, civil and criminal litigations. This annual report presents tabulated data for these expert services provided in OCME calendar year 2016.

Type of Judicial Service	Number of Court related Activities
Court Testimony	6
Depositions	0
Grand Jury	1
Pre-trial Conference	17
Other	8
Total	**32**

Court Services by Type	Number of Court related Activities
Civil	0
Criminal	29
Other	3
Total	**32**

Court Services by Jurisdiction	Number of Court related Activities
DC	25
Maryland	6
Virginia	1
Total	**32**

For calendar year 2016 the above data represents approximately **50** hours of Medical Examiner time. In general the least amount of time spent on this activity was 45 minutes, and the maximum recorded time spent on a court-related activity was 6.5 hours.

8.2 - Identifications

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.**

ID Method	# of ID's
ID By Visual • at OCME – 560 • at Scene - 244	804
ID By Fingerprints	234
ID By X-ray	52
ID Waived	149
ID By Dental X-ray	9
ID By Circumstantial Evidence	5
ID by DNA	1
ID Other	4
Unidentified	1
ID Not Required[18]	8
Total	**1267**

Fingerprint: When the physical state of the decedent allows, fingerprints are captured. These fingerprints are sent to the FBI 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 Metropolitan Police Department for a search at the local level as well as 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.**

[18] 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.

8.3 - Public Dispositions

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

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

The process for which unclaimed bodies are handled is called "Public Dispositions." After a 30-day waiting period and after all efforts to locate family members are exhausted the OCME makes final arrangements for these bodies through a contracted local funeral home. Unclaimed decedents (whether identified or unidentified) are cremated and the cremains are buried. One exception is skeletal unidentified decedents. 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 **157** Public Disposition cases, of which **67** were Medical Examiner cases and 90 were Storage cases. There were no unidentified decedents that were released for Public Disposition in 2016. The breakdown by Adult, Children and Fetuses:

Description	# of Public Disposition
Adults	150
Infants	5
Fetus	2
Total	**157**

Breakdown of Public Dispositions and the Associated Costs

Public Disposition by type	Number of Unclaimed Remains
Cremations – identified adults	150
Cremations – infants	5
Cremations – fetal remains	2
Transport to Quantico National Cemetery – identified US Military Veteran	0
TOTAL	**157 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 2016 there were **169** Storage Requests made to the DC OCME

APPENDIX A
OCME Organizational

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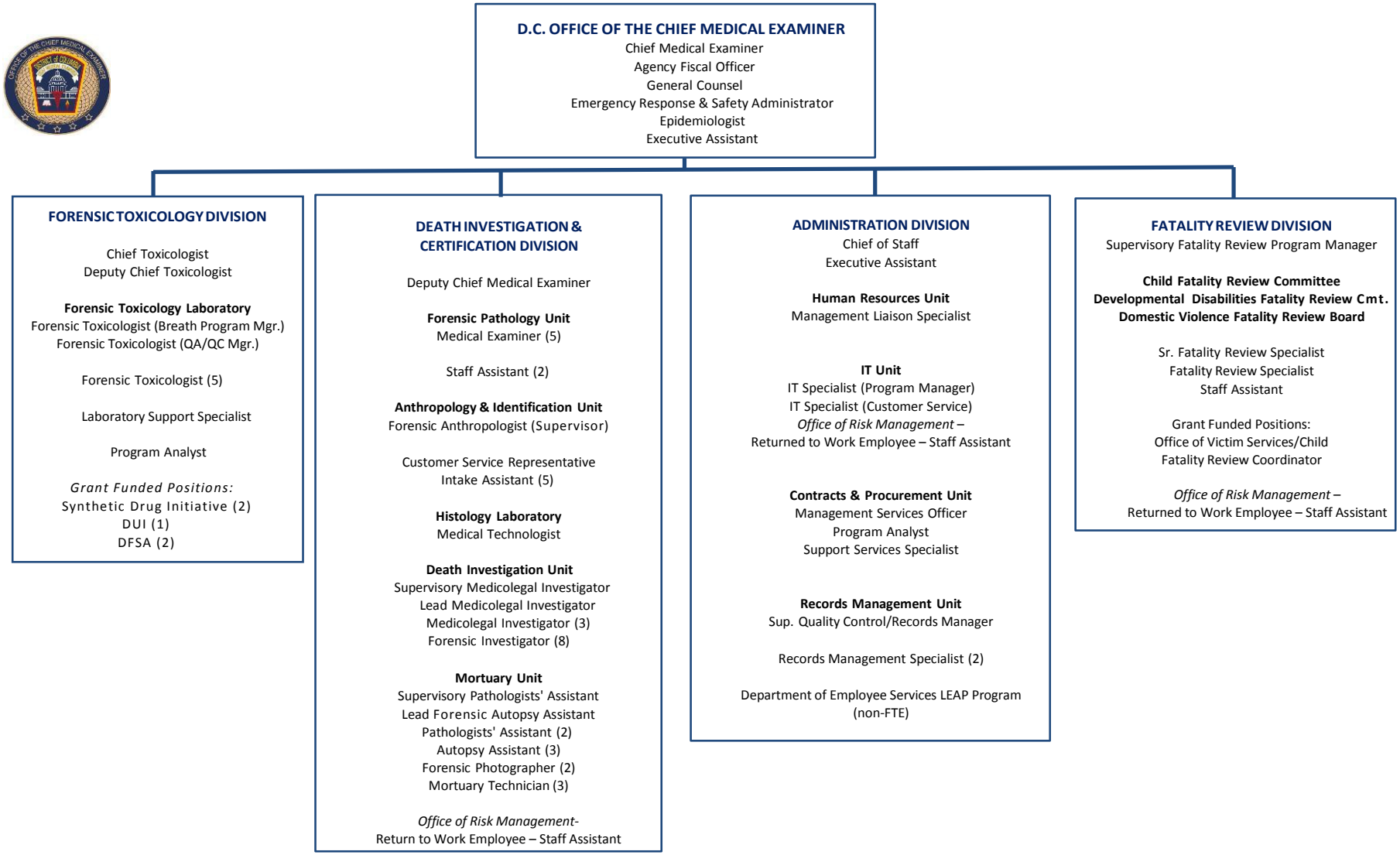
APPENDIX A: OCME Organizational Chart



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APPENDIX B
AGENCY MANAGEMENT

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AGENCY MANAGEMENT

Agency-wide and Mayoral Initiatives

Synthetic Drugs: In partnership with the Department of Health (DOH), in 2015, the agency supported the Administration's Synthetic Drug Surveillance Initiative which focuses on area hospitals and comprehensive laboratory analysis. The project involves the hospitals capturing specimens from individuals who have potentially overdosed on synthetic marijuana which contains unknown active ingredients which can cause dangerous side effects including seizures and heart problems. The agency's forensic toxicology laboratory facilitates the testing of the specimens and reporting of testing results to DOH. In 2015, the toxicology laboratory processed approximately over 350 synthetic drug specimens. Two Forensic Toxicologist positions were also funded via the 2016 Supplemental Budget Act and will be hired.

Safer Stronger DC: The Safer Stronger D.C. Advisory Initiative, co-chaired by OCME along with DOH, was established The Advisory Committee of 31 members was established to explore evidence-based practices and national models through four subcommittees: Community Outreach, Community Building, Community Stabilization and Economic Opportunity. The Committee made approximately 55 recommendations to the District's Administration regarding violence prevention focused on investments, infrastructure and intervention. The impact of the initiative can be recognized in the development of community partnerships, identification of job opportunities, and real-time interaction of social service agencies following incident of violence involving District residents.

ICITAP: The agency has established a partnership with the United States Department of Justice, Criminal Division, and International Criminal Investigative Training Assistance Program (ICITAP). The purpose of the partnership with ICITAP is to improve knowledge and understanding of criminal justice issues through death investigation with a focus on the establishment of cause and manner of death. The OCME in part provides medical and scientific expertise to assist criminal justice agencies in identifying the role of forensic pathology and toxicology in solving crime in support of ICITAP's work with foreign governments to develop professional and transparent law enforcement institutions that protect human rights, combat, corruption and reduce the threat of transnational crime and terrorism.

The OCME's Chief Medical Examiner, Dr. Mitchell, participated in an ICITAP program in Cairo, Egypt to provide forensic pathology and death investigation training to the Egyptian Ministry of Justice's Forensic Medical Authority Facility.

International Conference for Chief Coroners: In May 2016, Dr. Mitchell participated in the International Conference for Chief Coroners held in London, England where I conducted a presentation on Active Shooter Response. The conference is an opportunity for medical examiners and coroners from around the world to engage in information exchange surrounding agency operations specific to forensic pathology and death investigation.

Administration Performance Management

The agency's Administrative Division provides support to the work discussed within this annual report in the areas of: strategic planning; finance and procurement; human resources; information technology; quality assurance and control; legal management; risk management; labor management; and incident management. The agency's administration and key managers also facilitate key strategic partnerships in the fields of forensic services, education, emergency services, health care, research, grants and law enforcement. The agency also continues to offer internship opportunities for students in forensic science and physician assistant programs throughout the nation.

The Administrative Division is responsible for monitoring and ensuring efficient operations via establishment and compliance of an agency performance plan that includes key performance indicators – the performance component of agency management. The agency performance accountability per performance plan objectives and KPIs is included herein. Agency Management underwent a transition in 2014 with the hiring of a Chief Medical Examiner that is fully board-certified and a highly experienced and educated managerial staff. This management team was successful in shepherding the initiatives outlined herein.

I. Strategic Planning:

A. Mission Statement

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

The mission is achieved through:

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

II. Accreditation

The OCME underwent a NAME accreditation inspection on February 16 - 17, 2016. This involved a NAME Inspector visiting the agency to inspect operations, resources, the facility, standard operation procedures and to interview staff. The inspection is based on a NAME inspection and accreditation guideline checklist that consists of 351 items. The agency prepared for the inspection

by revising its SOPs, preparing the facility and ensuring that work processes and procedures were in compliance, staff were trained in work processes and procedures, and undergoing a self-inspection. The agency also enlisted the assistance of the **Office of the Inspector General** during FY15 to conduct an independent evaluation and based on its Pre-Evaluation report was able to cure certain deficiencies prior to the application for accreditation.

The DC Office of the Chief Medical Examiner is proud to report that the agency has successfully achieved FULL ACCREDITATION by the National Association of Medical Examiners for the first time in its history! The inspection, which is a rigorous process involving the physical facility and review of office practices and policies and procedures, only revealed Six (6) Phase I and Zero (0_ Phase II deficiencies out of 351 accreditation checklist items. AS stated within the official certification letter by the Name Inspection and Accreditation Co-Chairman, "NAME accredited offices represent the highest quality of death investigation systems. The citizens can be proud of the hard work, dedication, and leadership made by you and your staff in attaining this accreditation." The accreditation is effective February 16, 2016 through February 16, 2021.

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

III. Fiscal Accountability

Financial management plays a vital role in the success of the agency. As such during 2016, budgetary standard operating procedures were developed that include the requirement to conduct meetings on a routine basis with managers, the executive management and the fiscal officer regarding budgetary issues. The purpose of the meetings is to evaluate day to day programmatic operations with the status of budget and procurement line items, as well as needs and/or challenges. The executive team then conducts meetings to evaluate operations, the budget, procurements and any issues in order to ensure continuity of operations and, ultimately, programmatic success.

IV. Incident Management Planning

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

The OCME participated in District-wide exercises, such as a full-scale event held on May 18, 2016. The exercise provided the agency an opportunity to exercise its newly procured Mobile Command Unit and other emergency response vehicles/resources. OCME continues to facilitate the National Capital Region's Mass Fatality Working Group meetings which focus on the development of an Interstate Compact of regional stakeholders to include: mission/goals, roles and responsibilities of stakeholders, sharing of resources, training and exercises, timelines and funding.

Of note, the OCME sponsored a Fatality Management Symposium and Full-Scale Exercise from September 26-30, 2016. The event focused on District-wide mass fatality plans and training for all District and regional stakeholders. International guests included representatives from Paris and San Bernardino, California who shared experiences from mass fatality incidents in those jurisdictions. Emergency response local and regional stakeholders participated in workshops and table top and full fatality management exercises over the 4 day period. This included involvement agency's forensic pathology, death investigation, mortuary, identification and anthropology and records units, as well as agency appointed emergency liaison officers and Medical Examiner Transport Team (METT).

The OCME has taken significant strides towards planning and preparation for mass fatality management and response, while greatly increasing its capacity for optimal situational awareness within the region. The Chief Medical Examiner's vision of a Fatality Management Operations Center (FMOC) has been the driving force of the newly established FMOC Situation Room, the cornerstone of the eventual full FMOC build-out. Utilizing the existing foundation at the Consolidated Forensics Laboratory, OCME has leveraged OCTO's infrastructure, pairing it with groundbreaking Cisco technology and internal expertise, to create a fully-realized environment supportive to the secured sharing of real-time data, streaming video, and voice content. Now functional, the FMOC Situation Room affords the OCME:

- Up-to-the minute, real-time data streams from all national and local news outlets and emergency information services.
- A secured, concentrated, and fully integrated management epicenter where the Chief ME can receive and disseminate data within the agency as well as with other mission critical endpoints.
- The ability to share myriad data across an array of high-definition monitors with the swipe of a touch panel.
- Greater situational awareness and management of remote staff and other field assets through real-time voice and video.

V. Public Surveillance

With the hire of an Epidemiologist in 2015, who identifies and evaluates data in order to determine outcomes and trends in mortality statistics toward the improvement of public health and safety, the agency was able to focus on its public surveillance efforts through its Data Fusion and Analysis Center. Several critical trend reports were published.

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

significant spike in opiate related deaths involving fentanyl and fentanyl analogs (acetyl, furanyl and despropionyl) as noted by the DEA National Heroin Threat and should be elevated as a public safety and justice emergency.

CJCC Homicide Data Reporting: The purpose of the CJCC data reporting is to identify homicides in an effort to improve programs and services for victims and services. The purpose of the initiative is to gain a better understanding of the fluctuations in homicides and individual patterns of system involvement from years past to now, and to conduct an examination of systemic processes from arrest to disposition for homicide cases. Phase I of the project involves a Homicide Snapshot from 2012 to present; and Phase II involves individual and case analysis of 2015 homicides in the District.

Other public surveillance reports published in 2016 include: Myocarditis; Accidental Drownings; In-custody Deaths; Homeless/Hypothermia; Public Dispositions; Infant Mortality; and Traffic Mortalities.

During 2016, the agency modernized its website and included a Data Fusion and Analysis Center section. All agency and fatality review committee annual reports were uploaded and the "information" section enhanced.

VI. Risk Management

The agency's Risk Assessment Control Committee ("RACC") met on a quarterly basis to discuss and evaluate various facility, employee and other incidents that potentially bring risk or liability to employees, the facility or the District overall. During 2016, meetings focused on the risk associated with safety and health aspects of work processes and laboratory operations. As a result of the Safety and Health Subcommittee, the agency has increased efforts for laboratory equipment inspections, staff training in safety procedures in laboratories and the mortuary, as well as health and wellness. The Office of Risk Management (ORM) provides requirements for a successful agency risk assessment and control program, including: conducting quarterly meetings; submittal of cost of risk reports; developing and implementing Agency Risk Management Plans; updating the agency's Continuity of Operations Plan (COOP); providing training for the agency's revised Emergency Response Plan (ERP); and conducting emergency response drills. The agency met all requirements.

VII. Legal Management

The agency continues to work with the Department of Health (DOH) to publish a death pronouncement regulation under DOH's authority to allow first responders to pronounce death at the time of termination of resuscitation. This regulation, if passed, will satisfy an Office of the Inspector General (OIG) directive and will impact Fire and Emergency Management Services (FEMS) and the Board of Funeral Directors.

The OCME, on behalf of the Department of Forensic Sciences (DFS), finalized a regulation for admissibility of Breath Alcohol testing results in support of the District's breath testing program. This will remedy an approximately two-year deficiency impacting the admissibility of breath test results in the District.

VIII. Academic Activities

The provision of industry specific training or continuing education opportunities was a key priority of the OCME management. As such, staff received in-house training or attended seminars/conferences in: forensic pathology; digital imaging; root cause analysis; medicolegal death investigation, including SUIDI training; Qualtrax (an electronic document management system) software use and application and electronic documents management; forensic toxicology method development and forensic laboratory practices; alcohol pharmacology and traffic safety; anthropology; and geospatial technology. There was a specific focus on fatality management with hazmat, post-blast investigation and overall mass fatality incidence response training, including the table top and full scale exercise conducted by the agency in September. Further, in keeping with an agency vision to obtain ISO accreditation, managers and toxicology staff completed ISO 17020 and 17025 courses.

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

Death Investigation and Certification Management

The OCME's Death Investigation and Certification Division is responsible for forensic pathology, forensic investigation and mortuary services. The forensic pathology, investigation, identification and mortuary staff work toward the determination of cause and manner of death and completion of postmortem examination reports. This entails ensuring that appropriate death scene response and investigation, investigative reporting, postmortem examination reporting, public disposition and other factors that are measured by agency performance management.

The Identification Unit administers the agency's Decedent Identification Program ensuring that identifications are made in an accurate and efficient manner according to agency and District policies and procedures and utilizing principles of medicolegal death investigation and forensic anthropology. Further, the OCME's Histology Laboratory became fully operational in 2015 led by a Medical Technologist.

The statistical data within this report represents the work of the Death Investigation and Certification, as well as Forensic Toxicology Divisions.

Forensic Toxicology Laboratory Management

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

Moreover, the laboratory continues to provide testing services to external local and federal agencies. For example, during FY2016[1], the laboratory processed 494 Driving Under the Influence (DUI) cases for outside agencies. Members of the toxicology laboratory staff are also trained to provide interpretive services and expert testimony on a variety of drug and alcohol related matters and provides such service to the Office of the Attorney General (OAG), the Public Defenders Service, and the United States Attorney's Office (USA).

During 2016, the agency worked to transition the District's Breath Alcohol Testing and Calibration Program to new protocols to ensure the integrity and continuity of the program. All forensic toxicology staff were trained on such protocols and procedures. And due to a successive staffing plan that was implemented and staff training conducted, several staff have the capacity to perform this work ensuring continuity of the program. All MPD's Breathalyzers (in all Districts), as well as the Mobile Unit, were recertified and are continuously monitored. Law enforcement operator certification classes were also held and are ongoing. Toxicologists underwent Maintenance Technician training and the Chief Toxicologist was certified as a Breath Alcohol Technician.

Further, the OCME, on behalf of DFS, published a final notice of rulemaking, that was approved by the DC Council, and published in the DCR on September 12, 2016 (63 DCR 11161). Finalizing this rulemaking was critical as it is obligated by Title 50 of the DC Official Code for the admissibility of Breath Alcohol testing results. This rulemaking remedies an approximately two-year old deficiency that required collaboration with OCME, DFS and OAG to promulgate.

The toxicology laboratory provides DFSA testing for victims of rape, sexual assault, and other sex crimes. Biological samples are obtained through the Metropolitan Police Department (MPD) and DC SANE and are submitted to the agency. Cases from individuals who initially reported to law enforcement that they were victims of sexual assault are termed "reports." Cases from individuals who decided against or were unable to officially report the crime to MPD are termed "non-reports". Report and non-report specimens submitted through chain of custody are tested by the Toxicology Unit within OCME and results are released to MPD or DC SANE depending on their report/non-report classification.

Lastly, the Office of Victim Services (OVS) awarded the laboratory funding in the amount of $180,640 for *Victim Report and Non-Report Drug Facilitated Sexual Assault Testing: Service Provision and Improvements* for FY2016. Additionally, the laboratory received grant funding in the amounts of $100,000 from OVS for DUI testing.

Fatality Review Management

The Fatality Review Division (FRD) has historically been tasked with fulfilling statutory mandates for the operation of two committees and one board: Child Fatality Review Committee (CFRC), which includes the Infant Mortality Review Team subcommittee; Developmental Disabilities Fatality Review Committee (DDFRC); and the Domestic Violence Review Board (DVRB). These committees and boards conduct reviews of to provide analysis and recommendations to the public and District entities serving defined populations, so they can address systemic problems, provide better services and be held accountable. In 2016, these reviews were held and recommendations to

[1] The number of DUI cases processed by the toxicology laboratory, are based on FY2016 -- the time period between October 1, 2015 through September 30, 2016.

prevent deaths were developed for other agencies and entities with respect to policies and procedures and operations.

Mayor's Order 2015-270, published December 31, 2015, delegated authority to the District's Office of Victim Services (OVS) for the administration of the DVRB. The OVS has broader access than OCME to stakeholders, community representatives and the victims of domestic violence themselves to review instances of domestic violence fatality. As such, it was determined that the transfer of administration to OVS would allow for a more holistic approach to serving the domestic violence community.

With regard to the other committees/boards, the FRD convened monthly meetings for the purposes of fatality review and assisted in the development of recommendations to address systemic issues within the defined populations. Per statutory mandate, the FRD worked diligently to publish the 2015 CFRC Annual Report in December 2016. The FRD also continued to provide critical administrative support and facilitation of the developmental disabilities fatality review committee via arranging the committee review meetings and preparation of minutes. The FRD interacts with the Mayor's Office of Talent of Appointments in monitoring and filling committee/board vacancies for the DDFRC and CFRC.

The OCME heeded the call of community members and stakeholders, such as American College of Obstetricians and Gynecologists (ACOG), to create a District Maternal Mortality Review Committee (MMRC) in support of the national trend to review maternal deaths that have increased across the country. The OCME engaged stakeholders from various jurisdictions including Maryland and Virginia to develop draft legislation for the MMRC. It is anticipated that such legislation will be submitted to the Administration for consideration by the end of this fiscal year.

The FRD secured grant funding from the Office of Victim Services (OVS) – Fatality Prevention: Strengthening the Recommendation Process of the District Violence Fatality Review Board and Child Fatality Review Committee – in the amount of $100,000 to bring education and training to the committees/board on improving the recommendation process and to serve as the community education arm. While initially granted to support both DVFRB and CFRC, the funding was actually allocated to support CFRC given the transfer of DVFRB to OVS. The FRD secured a second grant from OVS for a total of $100,000 for a Male Survivors of Crime Project – Project Change. The OCME's role is to provide administrative support and facilitation of case conferences and fatality reviews of male survivors and victims of crime in conjunction with OVS.

On September 15, 2016, the Office of the D.C. Auditor initiated a study of child fatalities in the District. The purpose of the study is to address the trends in child fatalities over time with regard to the number of fatalities, demographics of child decedents, and the cause and manner of death; how the Child Fatality Review Committee (CFRC) recommendations align with the trends in child fatalities and service delivery issues identified by the CFRC in its annual reports; and how selected CFRC recommendations have been implemented. The study will be ongoing into 2017.

Lastly, per statutory mandate, the FRD worked diligently to publish the 2015 CFRC Annual Report in December 2016. The FRD also continued to provide critical administrative support and facilitation of the developmental disabilities fatality review committee via arranging the committee review meetings and preparation of minutes. The FRD interacts with the Mayor's Office of Talent of Appointments in monitoring and filling committee/board vacancies for the DDFRC and CFRC.

APPENDIX C
PROGRAM LEGISLATION

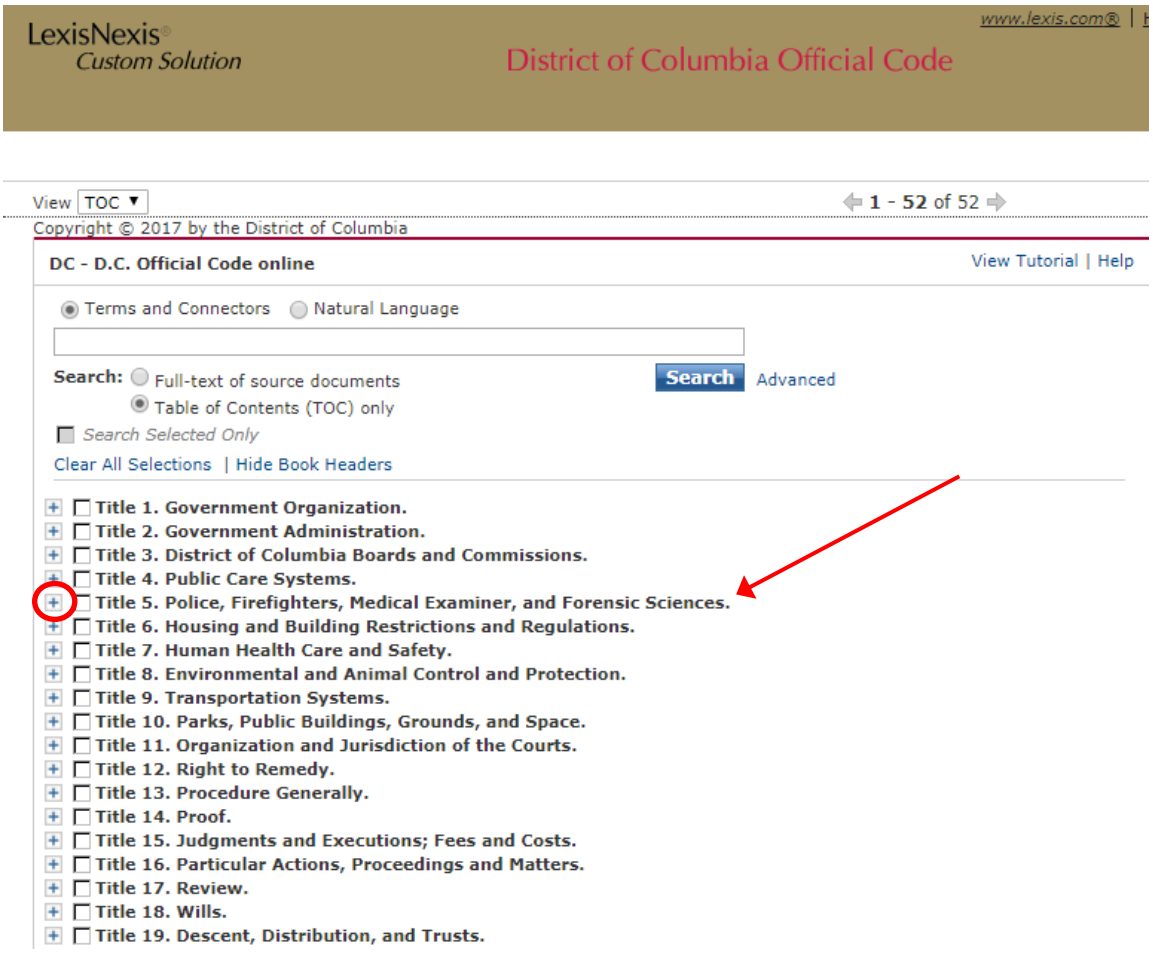
OCME, DC Law 13-172, codified at DC Official Code §5-1401 et seq. (2001)

APPENDIX C

All of the DC Code for District of Columbia Government agencies can be found at:
http://www.lexisnexis.com/hottopics/dccode/

Follow these steps to access the DC Code for the Office of the Chief Medical Examiner:

1) Click the "+" sign next to: **TITLE 5. POLICE, FIREFIGHTERS, CHIEF MEDICAL EXAMINER, AND FORENSIC SCIENCES**



2) Then select: **Chapter 14. Chief Medical Examiner**

3) Then click the appropriate portion of the DC Code you prefer to review.

(i.e. § 5-1402. Establishment of the Office of the Chief Medical Examiner; appointments, qualifications, and compensation.)

APPENDIX D
INTERNAL SERVICES

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Wendt Center for Loss and Healing
RECOVER Program
January 2016- December 2016

The Wendt Center's RECOVER program continued to work collaboratively with the Office of the Chief Medical Examiner to support the community through the process of decedent identification by providing crisis and early intervention bereavement support, education and resources to all individuals who come to the office to complete decedent identification. The RECOVER staff works closely with the OCME staff as policies change and to best meet the needs of families in the community. Ensuring a positive identification and the emotional well-being of surviving family members are both of critical importance. Recognizing the impact of vicarious trauma, monthly stress release workshops and the option to schedule 1:1 support sessions continued to be offered to all OCME staff members.

The RECOVER team is comprised of counselors, social workers and masters graduate interns who are trained in grief, trauma, loss and crisis intervention. Staff counselors are present at the OCME 7 days a week, 365 days a year to provide support, education and resources to individuals and families as they navigate the decedent identification process. The RECOVER staff believes in empowering survivors through education, normalization and compassionate emotional support. All individuals completing decedent identifications are treated with respect and dignity. Staff counselors work closely with OCME investigators, communications staff and medical examiners to provide families with appropriate and helpful information in an effort to decrease the anxiety and stress that can often accompany sudden death and the identification process. Staff assists families in thinking about next steps, preparing children for funerals and recognizing acute reactions to crisis and trauma. It is within the identification suite that RECOVER staff will often teach individuals grounding and stabilizing techniques to manage the overwhelming feelings experienced during an ID. Educational resources (in Spanish and English) are displayed in the family ID rooms with full permission to families to take what they need or want. Themes of the educational material include grief, trauma, violence, supporting children and self – care.

This year Wendt Center expanded the RECOVER team to include a RECOVER Field Crisis Response Team that specifically was working to respond to families in the community whom have experienced death to homicide. This team helped deescalate family members at the scene, understand next steps and normalize crisis reactions.

RECOVER Staff provided informational packets and support to nearly twelve hundred people (1167) who presented to complete 531 identifications. The informational packets provide families with a better understanding of the policies and procedures of the OCME, how to talk to children and teens about trauma, understanding grief and loss, preparing for a funeral or memorial service, accessing a community based vigil program, identifying common reactions to death, identifying concrete recommendations for taking care of oneself after a death and resources for crisis, burial assistance and social services. Informational handouts were made available in both English and Spanish. Follow up phone calls are made to the majority of families for continuity of care and to increase awareness of the continued impact of trauma and grief beyond the identification. During this year follow up letters were eliminated from the RECOVER program protocol.

During this year 5 members of the Wendt Center participated in a 2 day mass fatality exercise in which they worked closely with the OCME identification team to staff a Family Support Center. The role playing and exercise debriefing provided opportunities to explore how the Wendt Center's mental health team can work within the infrastructure of the OCME during the critical first few hours and

days of a community crisis.

While Wendt Center staff no longer actively attends the CFRC meetings, clinical program information is provided on each case being reviewed. As Wendt Center staff meets families at the OCME for identification, provides follow phone calls, facilitates vigils and offers a variety of therapeutic interventions following a death it has made sense to integrate this information as to the continuum of care to surviving family members. The Wendt Center has provided consultation and support to the Fatality Unit in exploring program expansion to mothers of deceased infants and toddlers.

Each month, a RECOVER staff counselor facilitated a staff stress relief session to OCME staff. Sessions provide educational material on issues including vicarious trauma, loss, self - care, stress, mindfulness and grief. Utilizing art, music, food and talk, staff members are invited to explore the impact on their body, mind and spirit of working in a high stress environment and focus and learn healthy ways of taking care of themselves. In an effort to reach staff that work evening shifts, an additional staff support is now offered earlier in the day Outreach is made to staff members whose schedules do not allow attendance at the support sessions in an effort to make certain support is given to all individuals who work within the agency. There has been extremely positive feedback from all different team members who find the educational material provided very supportive and helpful. Outside of the group support, staff has requested 1:1 sessions to debrief about difficult situations and emotional experiences.

APPENDIX E
GLOSSARY

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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.

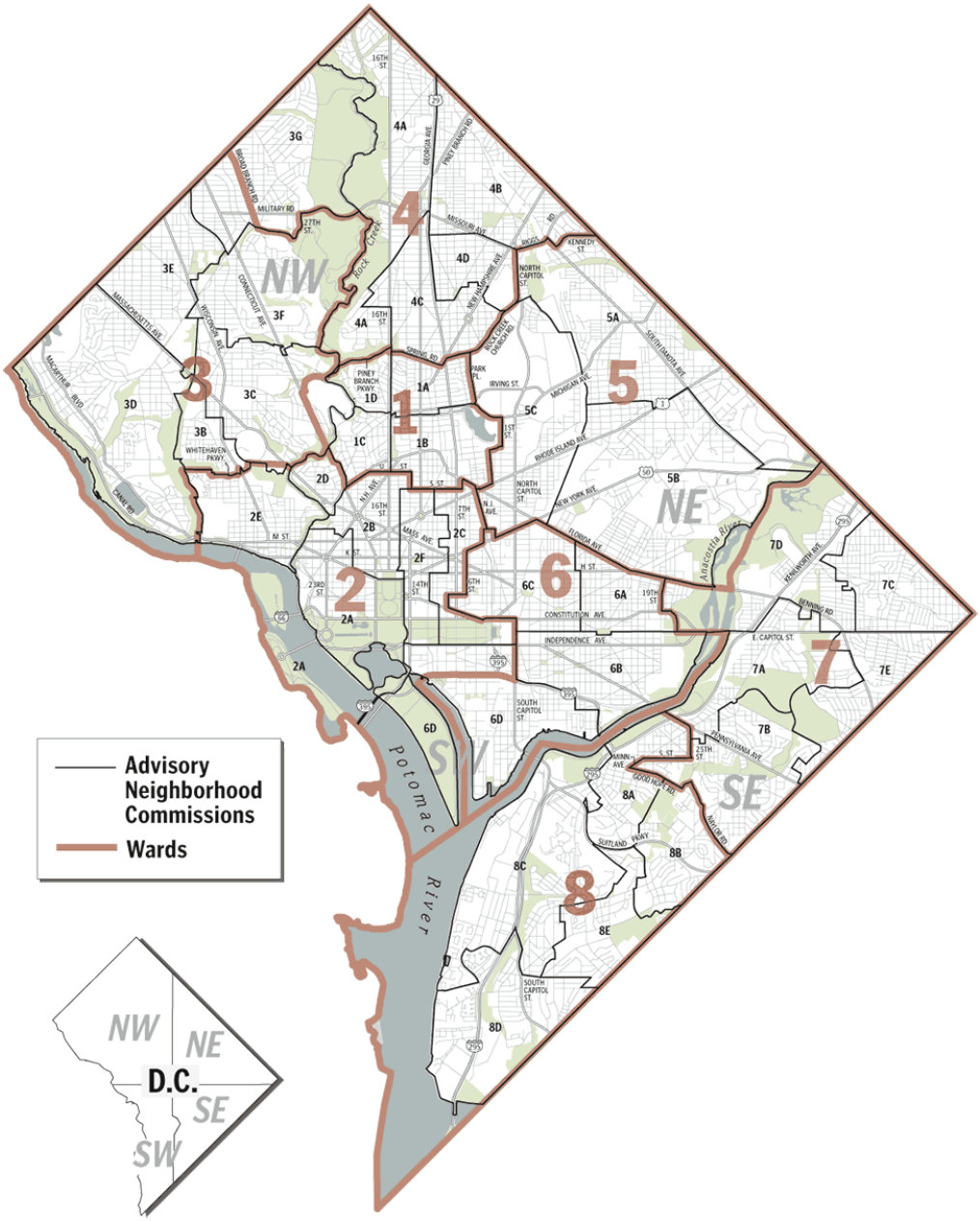
Ethanol Present – Deaths in which toxicological tests reveal a reportable level of *ethanol* (0.01% W/V or greater) at the time of death.

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.

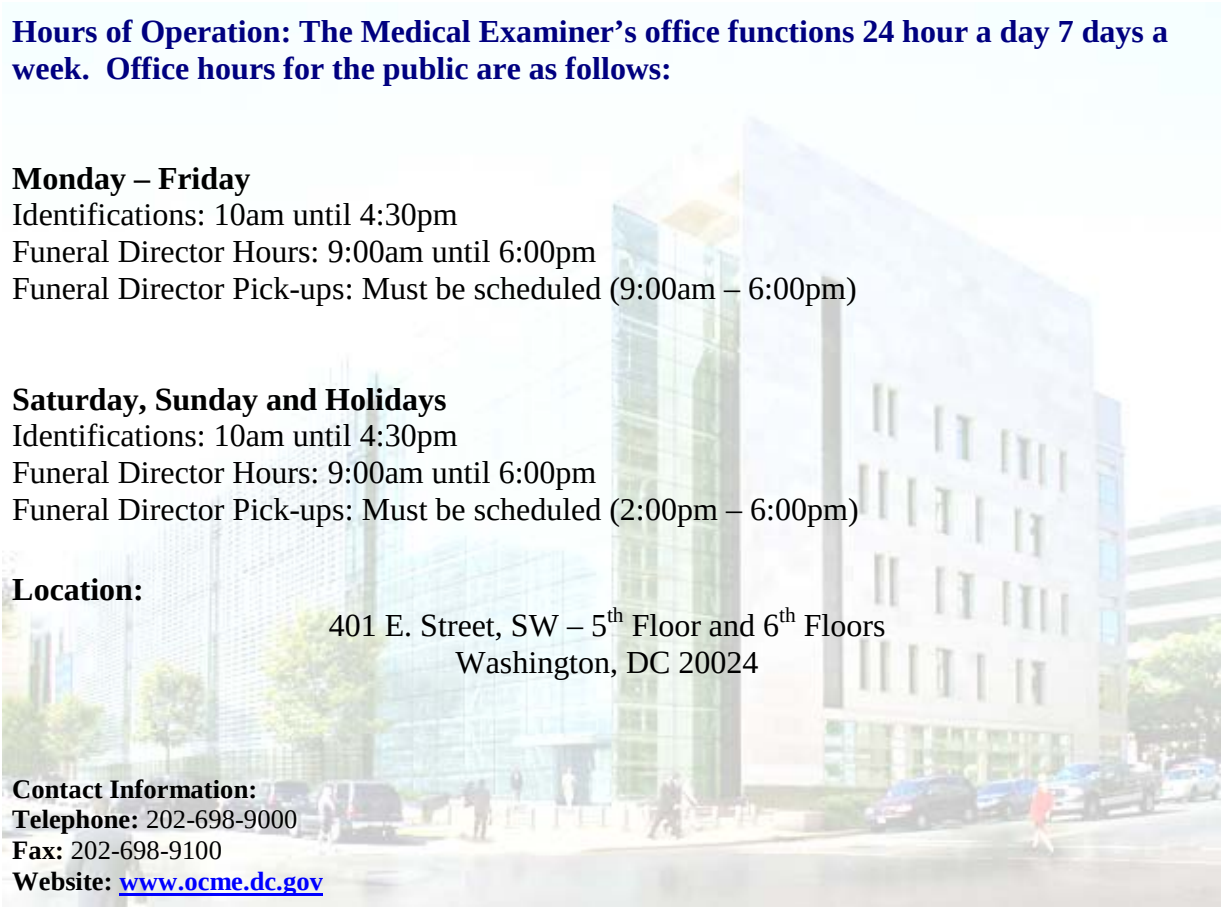
Medical Examiner Wards (MAP)

The DC Office of the Chief Medical Examiner can accept jurisdiction of any death within the eight (8) wards in Washington DC and/or neighboring states or communities. The ward boundaries are defined every 10 years on the 2nd year of the decade.



GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF THE CHIEF MEDICAL EXAMINER

HOURS AND LOCATION



Hours of Operation: The Medical Examiner's office functions 24 hour a day 7 days a week. Office hours for the public are as follows:

Monday – Friday
Identifications: 10am until 4:30pm
Funeral Director Hours: 9:00am until 6:00pm
Funeral Director Pick-ups: Must be scheduled (9:00am – 6:00pm)

Saturday, Sunday and Holidays
Identifications: 10am until 4:30pm
Funeral Director Hours: 9:00am until 6:00pm
Funeral Director Pick-ups: Must be scheduled (2:00pm – 6:00pm)

Location:

401 E. Street, SW – 5th Floor and 6th Floors
Washington, DC 20024

Contact Information:
Telephone: 202-698-9000
Fax: 202-698-9100
Website: www.ocme.dc.gov

"Every man's life ends the same way. It is only the details of how he lived and how he died that distinguish one man from another."

- Ernest Hemingway

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