

2015 ANNUAL REPORT GOVERNMENT OF THE DISTRICT OF COLUMBIA THE OFFICE OF THE CHIEF MEDICAL EXAMINER

ROGER A. MITCHELL, JR., MD CHIEF MEDICAL EXAMINER THE OFFICE OF THE CHIEF MEDICAL EXAMINER



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 (2015)

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

Jan M. Gorniak, DO Deputy Chief Medical Examiner

> Beverly A. Fields, Esq. Chief of Staff

> Mikelle Devillier, Esq. General Counsel

Toxicology

Lucas W. Zarwell, MFS Chief Toxicologist

Samantha Tolliver, Ph.D. Deputy Chief Toxicologist

Data Analysis & Quality Control

Chikarlo R. Leak, DrPH Forensic Epidemiologist

Anna D. Francis, MS-MIS Quality Control Program and Records Manager

PRESENTED TO:

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



A MESSAGE FROM THE CHIEF MEDICAL EXAMINER

Greetings,

The Office of the Chief Medical Examiner (OCME) was established in 1971. The system began as coroner system in the early 1870s and existed as such for 100 years before becoming a medical examiner system. As I complete my second year as the Chief Medical Examiner of the agency, I am proud of the quality death investigation and certification work performed by a professional and dedicated staff that has placed us in the position to be one of the premier Medical Systems in the nation.

The District of Columbia experienced an increase in homicides and overdoses during the year. We investigated nearly 5,828 deaths and performed 1085 post-mortem examinations, including 161 homicides.

In addition to its day to day activities, during 2015, the agency focused on building District-wide infrastructure in fatality management, public health and safety surveillance and establishment of a data fusion center, grants management, and national and international medicolegal death investigation partnerships. Moreover, maintaining the accreditation of the toxicology laboratory as well as the viability of the District's Breath Program was critical to agency operations. We also worked towards obtaining accreditation from the National Association of Medical Examiners (NAME).

Key accomplishments during the year included:

- The agency continued its quest for accreditation by the National Association of Medical Examiners (NAME) by revising Standard Operating Procedures (SOP), as well as ensuring that medicolegal operations and the physical facility were maintained per NAME guidelines. Additionally, the Office of the Inspector General (OIG) performed an external audit to provide the agency with an independent pre-accreditation evaluation of its operations and compliance with NAME requirements. The purpose was to provide the agency with an opportunity to mitigate noted deficiencies prior to inspection by NAME.

- In partnership with the Department of Health (DOH), the agency's Forensic Toxicology Laboratory supported the Mayor Bowser's Synthetic Drug Surveillance Initiative which involved facilitating the testing of specimens from specified individuals at area hospitals to determine incidents of synthetic marijuana overdoses within the District.

- The Toxicology Laboratory was reaccredited by the American Board of Forensic Toxicology (ABFT). Further, the laboratory continued to set forth the policies and guidelines for the District's

Breath Program which underwent a restructuring that included hiring of a new Breath Program Manager; revision of standard operating procedures and its training program; and implementation of a successive staffing plan.

- The agency solidified itself as the fatality management arm of the District to include overall coordination of the District-wide mass fatality plan, as well as the identification, recovery and transport of remains during a mass fatality incident. Further, the agency secured additional grant funding in this arena from Department of Homeland Security and Emergency Management Administration (HSEMA) to support the critical resources such as a mobile command center, mortuary trailers and portable x-rays.

- The agency unveiled a Data Analysis Fusion Center which was established to provide mortality data to stakeholders in order to allow for "prevention," "detection," and/or "law enforcement." As part of this initiative, the agency hired its first Epidemiologist with a primary responsibility of formulating such data for collaborative use.

- Within the agency's Fatality Review Division, a Supervisory Fatality Review Program Manager was hired and a Web Portal developed such that reviews can be held via a "secure" venue and with increased efficiency.

- Nationally, I was appointed by NAME as Chair of its Deaths in Custody Ad-Hoc Committee which was formed to develop a national standard for medical examiner and coroner's offices to report deaths in custody and to coordinate with the U.S. House Oversight Committee on this issue.

- On the international front, the agency established a partnership with the United States Department of Justice, Criminal Division, International Criminal Investigative Training Assistance Program (ICITAP) which serves to improve knowledge and understanding of criminal justice issues through death investigations.

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. Whether a gunshot wound homicide, a hanging suicide, a slip and fall of the elderly, or a sudden unexpected death in infancy, we are here to serve.

We are excited about the future of this organization and look forward to providing medically and scientifically sound investigations, analysis, and expert witness testimony.

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 3,149 deaths that occurred in the District of Columbia during the Calendar Year (CY) 2015. 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 and the Council of the DC and be informative to the public at large.

The OCME serves the citizens of the District of Columbia and the Metropolitan D.C. 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 everyday of the year as well, and on occasion it is necessary for the Medical Examiner to perform them at night.

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 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 was 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 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 and release of loved ones remains to the families; 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. 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.

Accomplishments in 2015

Human Resources

• Recruitment efforts resulted in critical additions to a highly experienced and educated staff, including a Medical Examiner, Forensic Epidemiologist, Program Manager for the Fatality Review Committees, Supervisor of the Medicolegal Death Investigation.

Accreditation Preparation

- The agency continued preparation for inspection and application for accreditation by the National Association of Medical Examiners (NAME). The agency revised existing Standard Operating Protocols and Procedures in preparation for NAME accreditation.
- As part of preparation for accreditation, the agency partnered with the Office of the Inspector General (OIG) to perform an external audit to evaluate compliance with NAME requirements. Based on the findings, the agency worked to mitigate deficiencies noted in the evaluation in preparation for NAME inspection in February/March 2016.

Operational

- The Forensic Toxicology Laboratory was reaccredited by the American Board of Forensic Toxicology. In addition, the laboratory hired a new Breath Program Manager in order to support the restructuring of the program and to improve the training and implementation of the District's Breath Program.
- As part of Mayor Bowser's Synthetic Drug Surveillance Initiative and in collaboration with the Department of Health, the Forensic Toxicology Laboratory facilitated the testing of specimens from area hospitals of individuals suspected to contain synthetic marijuana.
- The agency established itself as a critical stakeholder in Mass Fatality Management and secured grant funding from the Department of Homeland Security and Emergency Management Administration to support the coordination of a District-wide mass fatality plan and other critical resources.
- In an effort to improve public health and safety, the agency established a Data Analysis and Fusion Center to disseminate mortality data to key stakeholders that allow for prevention and intervention efforts to be developed or improved.

OVERVIEW OF CASES REPORTED AND INVESTIGATED

During the Calendar Year (CY) 2015, **3,149** 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

<u>Accepted Cases</u> - The OCME accepted jurisdiction of **1,085** decedent cases, of which 715 cases were autopsied.

<u>Declined Cases</u> - The OCME declined jurisdiction of **1,932** decedent cases, of which 75 became Storage Requests.

<u>Storage Requests</u> - The D.C. OCME provides a unique service to area nursing homes, hospices, and other like facilities by accommodating requests to store deceased bodies. **Fifty-seven** of the reported cases were Storage Requests only, and **seventy-five** of the storage requests were previously "Declined" cases, so as a result; the agency had a total of 132 Storage Requests, of which **127** were approved (See section 4.0 for additional statistics).

<u>Cremation Requests</u>: The D.C. OCME must review all cremations for deaths that occur in the District of Columbia. There were **2,679** Cremation requests made to the DC OCME in 2015; 586 were OCME cases, 2,093 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 5.0 for details).

Scene Visits - OCME investigation staff reported to 674 scenes.

<u>Body Transport</u> - The OCME transported the bodies of **1,197** decedents from scenes of death to the agency.

Organ/Tissue Donations - There were 131 organ donation requests during CY 2015.

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

| 2013 Medical Examiner Cases by Mainter of Death | | | | | | | | |
|-------------------------------------------------|------------------------------|---------------------------------|--------------------------|------------------------------|---------------|---------------------------------|-------|--|
| Manner | Full Autopsy Examinations | Partial Autopsy Examinations | External Examinations | Review of Medical Records | Non- Human | Anatomical Specimen Disposal | Total | |
| Accident | 228 | 0 | 102 | 12 | 0 | 0 | 342 | |
| Homicide | 161 | 0 | 0 | 0 | 0 | 0 | 161 | |
| Natural | 234 | 0 | 241 | 2 | 0 | 0 | 477 | |
| Stillbirth | 2 | 0 | 0 | 0 | 0 | 0 | 2 | |
| Suicide | 51 | 0 | 1 | 0 | 0 | 0 | 52 | |
| Undetermined | 39 | 0 | 0 | 0 | 0 | 0 | 39 | |
| Other | 0 | 0 | 11 | 0 | 11 | 0 | 12 | |
| Total | 715 | 0 | 345 | 14 | 11 | 0 | 1085 | |

2015 Medical Examiner Cases by Manner of Death

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

SUMMARY OF FINDINGS FOR MANNER OF DEATH

HOMICIDES: The OCME investigated 161 Homicides in the CY 2015. 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 **June, July, August and October**.

Toxicology Findings: Toxicology testing was requested on all 161 Homicide cases investigated. Drugs were present in 108 of the homicide cases investigated. The most commonly detected drugs in homicide cases were: Marijuana Metabolites (50); Ethanol (44); PCP (11); Cocaine and metabolites (7); Morphine (8); Oxycodone (3) and Heroin (3).

SUICIDES: The OCME investigated 52 suicides in the CY 2015. This report reveals that suicides were more prevalent in white males and in persons between the ages of 50-59. Overall whites represented 48.08% of the decedents (N=25) this year. Peak incidents occurred in May. *Toxicology Findings:* Toxicology testing was requested for 51 of 52 Suicide cases investigated. Overall, drugs were present in 39 of the suicide cases investigated. The most commonly detected drugs were: Ethanol (16); Morphine (5); Bupropion (5); Cocaine (4); Fluoxetine (4); Oxycodone (3); Phencyclidine (3) and Marijuana Metabolites (3).

ACCIDENTS: The OCME investigated 342 accidents in the CY 2015. Of the 342 cases investigated, 146 were the result of blunt force trauma, of which 45 were traffic-related deaths and 93 were directly related to falls. Also, 151 of the accidental deaths occurred as a direct result of prescription and/or illicit drug use. Peak incidents for accidental deaths overall occurred in December.

Toxicology Findings for Accidents: Toxicology testing was requested for 232 of the 342 Accident cases investigated, and drugs were present in 211 of these cases. The most commonly detected drugs were: Morphine (100)/Heroin (74); Ethanol (75); Cocaine and Metabolites (42); Fentanyl (28); Naloxone (27); Marijuana Metabolites (15); Methadone (13); Oxycodone (13); Acetyl Fentanyl (13) and Phencyclidine (11).

<u>**Traffic-related Accidents**</u>: 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 July.

Toxicology Findings for Traffic-related accidents: Toxicology testing was requested for 29 of the 45 Traffic-related Accidents, and drugs were present in 19 of these cases. The most commonly detected drugs were: Ethanol (8); Marijuana Metabolite (5); Morphine (1); Amphetamine (1) and Phencyclidine (1).

In the 8 traffic deaths positive for ethanol, 5 were greater than the legal limit (0.08 g/100 mL) for driving under the influence in the District of Columbia.

NATURAL DEATHS: The OCME investigated 477 Natural deaths in CY 2015. This report reveals that the leading cause of death in Natural cases is Cardiovascular Disease with 323 deaths, followed by Alcoholism with 27 deaths. The majority of Natural deaths occurred in March for 2015.

Toxicology Findings: No toxicology reporting for natural deaths is being provided for 2015.

UNDETERMINED: The OCME investigated 39 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 all 39 Undetermined deaths investigated. Drugs were present in 24 of the Undetermined cases investigated. The most commonly detected drugs were: Ethanol (9); Morphine (2); Diphenhydramine (2) and Phencyclidine (2).

STILLBIRTHS: The OCME investigated 2 Stillbirth deaths in CY 2015.

Toxicology Findings: No toxicology findings are being reported for stillbirth deaths in this annual report.

SUMMARY OF APPENDICES

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

- A. 2015 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



Table of Contents

| 1.0 - INTRODUCTION | 1 |
|---------------------------------------------------------|----|
| 2.0 - ME INVESTIGATIONS AND MEDICAL LEGAL AUTOPSIES | 3 |
| Breakdown of Accepted Cases by Exam Type | 4 |
| Breakdown of Accepted Cases and Autopsies by Month | 5 |
| Medical Examiner Case Examinations by Manner of Death | 5 |
| Pie Chart - Medical Examiner Cases by Manner of Death | 5 |
| Breakdown of Accepted Cases by Residence of Decedents | 7 |
| Postmortem Toxicology Summary 2015 | 9 |
| 2.1 - Homicides | 11 |
| Homicides by Jurisdiction of Incident that caused Death | 11 |
| Homicides by Cause of Death | 11 |
| Homicides by Month | 12 |
| Homicides by Race | 13 |
| Homicides by Gender | 14 |
| Homicides by Race/Ethnicity and Gender | 14 |
| Homicides by Age | 16 |
| Toxicology Findings for Homicide Cases | 18 |
| 2.2 - Suicides | 19 |
| Suicides by Jurisdiction of Incident that Caused Death | 19 |
| Suicides by Cause of Death | 19 |
| Suicides by Month | 22 |
| Suicide by Race/Ethnicity | 22 |
| Suicides by Gender | 23 |
| Suicides by Race/Ethnicity and Gender | 23 |
| Suicide by Age | 24 |
| Toxicology Findings for Suicide Cases | 25 |
| 2.3 - Accidents | 26 |
| Accidents by Cause of Death | 26 |
| Accidents by Month | 28 |

| Accidental Deaths by Race | 31 |
|----------------------------------------------------------------------------|----|
| Accidental Deaths by Gender | 31 |
| Accidental Deaths by Age | 31 |
| Toxicology Findings for Accident Cases | 32 |
| 2.3.1 – Traffic Deaths | 33 |
| Role of the Decedent in Traffic Death | 33 |
| Traffic Deaths by Month | 34 |
| Traffic Deaths by Race | 35 |
| Traffic Deaths by Gender | 35 |
| Traffic Deaths by Age | 35 |
| Traffic Deaths by Jurisdiction of Incident that caused Death | 35 |
| Toxicology Findings for Traffic Accident Cases | 36 |
| 2.3.2 – Toxicology Findings for Deaths due to Drug Overdose | 37 |
| 2.4 – Natural Deaths | 45 |
| Natural Deaths by Cause | 45 |
| Natural Deaths by Month | 48 |
| Natural Deaths by Race | 49 |
| Natural Deaths by Gender | 49 |
| Natural Deaths by Age | 49 |
| 2.5 – Undetermined Deaths | 53 |
| Undetermined Deaths by Month | 54 |
| Undetermined Deaths by Race | 55 |
| Undetermined Deaths by Gender | 55 |
| Undetermined Deaths by Age | 55 |
| Toxicology Findings by Undetermined Deaths | 56 |
| 3.0 – ORGAN PROCUREMENT | 60 |
| 4.0 – TOXICOLOGY SERVICES | 61 |
| 4.1 - Toxicology Findings for Driving Under the Influence (DUI) Cases | 61 |
| 4.2 - Toxicology Findings for Drug Facilitated Sexual Assault (DFSA) Cases | 62 |
| 4.3 - Breath Testing Program | 66 |
| 5.0 – OTHER MAJOR ACTIVITIES | 68 |

| 5.1 - Court-related Activities | 68 |
|----------------------------------------------------------|----|
| 5.2 - Identifications | 69 |
| 5.3 - Public Dispositions | 71 |
| 6.0 – BREAKDOWN OF MEDICAL EXAMINER INVESTIGATIONS | 73 |
| 6.1 - Total Population | 74 |
| 6.2 - Total ME Cases by Demographics and Manner of Death | 74 |
| APPENDIXES: | |
| Appendix A OCME Organizational Chart (2014) | |

| Appendix A – OCME Organizational Chart (2014) |
|----------------------------------------------------------------------------|
| Appendix B – Agency Management |
| Appendix C – Program Legislation |
| • 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 (DOH), 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 2015, 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 – (D.C. Law 13-172), DC Official Code $\S5-1401$ 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 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. Injury findings identified at the time of the autopsy may be used to support or refute witness statements and/or uncover completely unsuspected diagnosis of disease or injury. The OCME works in close relationship with neighboring 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 most cases autopsied depending upon the c 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.

The Fatality Review Program includes the Child Fatality Review Committee (CFRC), the Developmental Disabilities Fatality Review Committee (DD FRC) and the Domestic Violence Fatality Review Board (DVFRB). 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 area hospices and local hospitals in the District of Columbia when disposition cannot be obtained by nextof-kin. The OCME has a total body storage capacity of 206. 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 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, Mobile Crime unit of MPD and the Federal Bureau of Investigation (FBI). In addition, OCME uses comparative radiology and/or DNA analysis as necessary to ensure proper and timely identification. The OCME also procures specimens for DNA analysis on each decedent processed.

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 and the D.C. 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) 2015, there were **6,731** deaths that occurred in the District of Columbia as reported by the Center for Policy, Planning and Evaluation for the District of Columbia, of which **3,149 or 47%** 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" or where Storage was requested of the Medical Examiner. The data presented within this report represents deaths occurring exclusively within the District of Columbia for which the Office of the Chief Medical Examiner 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 page 6).

<u>Accepted Cases</u> - The OCME accepted jurisdiction of **1,085** decedent cases, of which 715 cases were autopsied.

<u>Declined Cases</u> - The OCME declined jurisdiction of **1,932** decedent cases, of which 75 became Storage Requests.

<u>Storage Requests</u> - The D.C. OCME provides a unique service to area nursing homes, hospices, and other like facilities by accommodating requests to store deceased bodies. **Fifty-seven** of the reported cases were Storage Requests only, and **seventy-five** of the storage requests were previously "Declined" cases, so as a result; the agency had a total of 132 Storage Requests, of which **127** were approved (See section 5.0 for additional statistics).

<u>Cremation Requests</u>: The D.C. OCME must review all cremations for deaths that occur in the District of Columbia. There were **2,679** Cremation requests made to the DC OCME in 2015; 586 were OCME cases, 2,093 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 5.0 for details).

| Total Number of Cases Reported and Investigated by the OCME | 3149 | | |
|------------------------------------------------------------------------------------|------|--|--|
| | | | |
| Total Number of Declined Cases | 1932 | | |
| Percent of Cases Reported & Investigated | 61% | | |
| Total Number of Cases Accepted for Further Investigation | 1085 | | |
| Percent of Cases Reported & Investigated | 34% | | |
| Total Number of Autopsies | | | |
| Full – 714; Partial –0; Performed in a University Hospital – 1 | 715 | | |
| Percent of Cases Accepted for Further Investigation | | | |
| Number of Scene Visits by a Medical Examiner or Medico Legal/Forensic Investigator | | | |
| Percent of Cases Accepted for Further Investigation | 62% | | |
| Total Number of Bodies/Cases Transported by OCME or by Order of the OCME: | | | |
| Transported by Pick-up Service -1055 | | | |
| Transported by Office Personnel –127 | | | |
| (Investigations: 10; Mortuary: 117; Medical Examiner: 0) | 1197 | | |
| Transported by Others -15 (Funeral Home -12 and Police -3) | | | |
| Total Number of Organ/Tissue Donation Requests: | 131 | | |
| (See Section 3 for breakdown) | | | |

OCME- 2015 Annual Report rev. 2/21/2017

Breakdown of Accepted Cases by Exam Type

| Total Number of Cases Accepted and Investigated Further | 1,085 |
|------------------------------------------------------------|-------|
| | |
| Total Number of Autopsies | |
| Full – 714 | |
| Partial –0 | |
| Performed at a University Hospital – 1 | 715 |
| Percent of Cases Accepted | 66% |
| | |
| Number of External Examinations | |
| On-site -353 | |
| Off-site - 1 | 345 |
| Percent of Cases Accepted | 32% |
| | |
| Number of Medical Record Reviews * | 14 |
| Percent of Cases Accepted | 1% |
| | |
| Number of Non-Human Remains * | 11 |
| 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 2015 there were 2 cases where the autopsy was performed at a University hospital. The DC 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.
- > <u>Non-Human Remains</u>: 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 | 93 | 51 |
| February | 87 | 49 |
| March | 97 | 58 |
| April | 89 | 41 |
| May | 91 | 60 |
| June | 97 | 65 |
| July | 77 | 61 |
| August | 81 | 53 |
| September | 71 | 56 |
| October | 108 | 79 |
| November | 96 | 71 |
| December | 98 | 71 |
| Total | 1085 | 715 |

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 | 228 | 0 | 102 | 12 | 0 | 0 | 342 |
| Homicide | 161 | 0 | 0 | 0 | 0 | 0 | 161 |
| Natural | 234 | 0 | 241 | 2 | 0 | 0 | 477 |
| Stillbirth | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| Suicide | 51 | 0 | 1 | 0 | 0 | 0 | 52 |
| Undetermined | 39 | 0 | 0 | 0 | 0 | 0 | 39 |
| Other | 0 | 0 | 11 | 0 | 11 | 0 | 12 |
| Total | 715 | 0 | 345 | 14 | 11 | 0 | 1085 |

Pie Chart - Medical Examiner Cases by Manner of Death



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

OCME- 2015 Annual Report rev. 2/21/2017

Five-year Overview of Deaths Reported to the Medical Examiner (2011–2015)



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 (2011 – 2015)



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 District of Columbia (DC). As a result, residence of these decedents can be anywhere in the world. Nonetheless, the majority of the cases accepted by the DC Office of the Chief Medical Examiner 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 DC OCME do not represent



all the suspicious or non-natural fatalities of District residents, who may have died in another state or country.

| DC Deaths by Jurisdiction of Residence and Manner of Death | | | | | | | | |
|------------------------------------------------------------|----------------|-----------|-----------|---------|------------|---------|--------------|-------|
| Ward | # of Deaths | Accidents | Homicides | Natural | Stillbirth | Suicide | Undetermined | Other |
| Ward 1 | 67 | 17 | 6 | 39 | 0 | 1 | 4 | 0 |
| Ward 2 | 45 | 12 | 2 | 27 | 0 | 4 | 0 | 0 |
| Ward 3 | 42 | 13 | 3 | 19 | 0 | 5 | 2 | 0 |
| Ward 4 | 102 | 27 | 9 | 56 | 1 | 4 | 5 | 0 |
| Ward 5 | 137 | 31 | 19 | 80 | 0 | 5 | 2 | 0 |
| Ward 6 | 101 | 20 | 19 | 50 | 0 | 10 | 2 | 0 |
| Ward 7 | 130 | 24 | 16 | 78 | 1 | 5 | 5 | 12 |
| Ward 8 | 161 | 57 | 34 | 59 | 0 | 4 | 7 | 0 |
| DC | 785 | 201 | 108 | 408 | 2 | 38 | 27 | 1 |
| MD | 147 | 69 | 43 | 21 | 0 | 7 | 7 | 0 |
| VA | 46 | 28 | 5 | 8 | 0 | 3 | 2 | 0 |
| Other | 40 | 21 | 2 | 13 | 0 | 3 | 1 | 0 |
| Unknown | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Undomiciled | 55 | 23 | 3 | 26 | 0 | 1 | 2 | 0 |
| Total | 1074 | 342 | 161 | 477 | 2 | 52 | 39 | 1 |

Table: Medical Examiner cases by Residence and Manner of Death

Note: The above table does not include Non-Human Remains (11).

² This external exam was a case from a previous year with a Cause and Manner of Death of Natural, Respiratory Disease

Map of OCME Decedents by DC Ward and Manner of Death

Of the 1,085 decedent deaths investigated by the OCME, 785³ (72%) were District of Columbia (DC) residents at the time of their death. The map below illustrates the deaths by DC ward and manner of death.



³ The external exam from a previous year with a Cause and Manner of Death of Natural, Respiratory Disease is included in the "Total Deaths by Manner" for Naturals.

Postmortem Toxicology Summary 2015

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. In 2015, the laboratory received and inventoried 5,617 postmortem specimens (780 cases) yielding 2,126 reported results.

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.

| Description | Number of Cases | % of Cases |
|--------------------------------------------|--------------------|------------|
| <i>N</i> = | 780 | |
| Negative | 186 | 23.8 % |
| Positive | 538 | 69.0 % |
| Storage (no testing requested or assigned) | 56 | 7.2% |

Total number of postmortem cases analyzed:

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 were⁴:

| Drug Name | Number of Cases | % of Cases |
|-------------------------|-----------------|-------------|
| Ethanol | 200 | 25.6% |
| Morphine/Heroin | 142/82 | 18.2%/10.5% |
| Marijuana Metabolites | 85 | 10.9% |
| Cocaine and Metabolites | 75 | 9.6% |
| Naloxone | 41 | 5.3% |
| Fentanyl | 39 | 5.0% |
| Phencyclidine | 33 | 4.2% |
| Oxycodone | 31 | 4.0% |
| Diphenhydramine | 21 | 2.7% |
| Hydromorphone | 20 | 2.6% |
| Methadone | 19 | 2.4% |
| Oxymorphone | 17 | 2.2% |
| Alprazolam | 17 | 2.2% |
| Nordiazepam | 15 | 1.9% |
| Lorazepam | 14 | 1.8% |
| Acetyl Fentanyl | 13 | 1.7% |
| Hydrocodone | 13 | 1.7% |

⁴ This data does suggest individual cases and the majority of cases include mixed drug toxicity.

2.1 - Homicides

The OCME investigated **161** homicides in the CY 2015. 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 2015 there were more homicides observed in **August** than any other months.



Homicides by Jurisdiction of Incident that caused Death

| Jurisdiction | Number of Homicides | % of Homicides |
|----------------------|---------------------|----------------|
| District of Columbia | 139 | 86% |
| Maryland | 18 | 11% |
| Virginia | 1 | 1% |
| Unknown | 3 | 2% |
| Total | 161 | 100% |

Homicides by Cause of Death

| Cause | Number of Homicides | % of Total Homicides |
|--------------|---------------------|----------------------|
| Firearms | 111 | 69% |
| Sharp Force | 26 | 16% |
| Blunt Impact | 19 | 12% |
| Other | 3 | 2% |
| Asphyxia | 1 | 1% |
| Undetermined | 1 | 1% |
| Total | 161 | 100% |

<u>Pie Chart – Homicides by Cause of Death</u>



Homicides by Month

| Month | Number of Homicides | % of Homicides |
|-----------|---------------------|----------------|
| January | 9 | 6% |
| February | 3 | 2% |
| March | 12 | 7% |
| April | 7 | 4% |
| May | 16 | 10% |
| June | 17 | 11% |
| Julv | 19 | 12% |
| August | 20 | 12% |
| September | 13 | 8% |
| October | 17 | 11% |
| November | 15 | 9% |
| December | 13 | 8% |
| Total | 161 | 100.00% |





Homicides by Race

| Race/Ethnicity | Number of Homicides | % of Homicides |
|----------------|---------------------|----------------|
| Black | 139 | 86% |
| White | 10 | 6% |
| Hispanic | 9 | 6% |
| Other | 2 | 1% |
| Unknown | 1 | 1% |
| Total | 161 | 100% |

Chart – Percentage of Homicides by Race



OCME- 2015 Annual Report rev. 2/21/2017

Homicides by Gender

| Gender | Number of Homicides | % of Homicides |
|--------|---------------------|----------------|
| Female | 14 | 9% |
| Male | 147 | 91% |
| Total | 161 | 100% |

Homicides by Race/Ethnicity and Gender

| Race/Ethnicity by Gender | Number of Homicides |
|--------------------------|---------------------|
| Black | 139 |
| Female | 8 |
| Male | 131 |
| White | 10 |
| Female | 2 |
| Male | 8 |
| Hispanic | 9 |
| Female | 3 |
| Male | 6 |
| Other | 2 |
| Female | 1 |
| Male | 1 |
| Unknown | 1 |
| Female | 0 |
| Male | 1 |
| Total | 161 |

Map of Homicides by DC Ward

Of the **161** homicides in the District of Columbia, 108 (67%) 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.



Map of Homicides by DC Ward and Cause of Death



Homicides by Age

| Age | Number of Homicides | % of Homicides | |
|----------|------------------------|-------------------|--|
| Under 1 | 5 | 3.11% | |
| 1 to 5 | 3 | 1.86% | |
| 6 to 12 | 2 | 1.24% | |
| 13 to 15 | 2 | 1.24% | |
| 16 to 19 | 12 | 7.45% | |
| 20 to 29 | 65 | 40.37% | |
| 30 to 39 | 37 | 22.98% | |
| 40 to 49 | 13 | 8.07% | |
| 50 to 59 | 13 | 8.07% | |
| 60 to 69 | 8 | 4.97% | |
| 70 to 79 | 1 | 0.62% | |
| 80 to 89 | 0 | 0% | |
| 90 + | 0 | 0% | |
| Total | 161 | 100% | |

| | Adolescent and Young Adults Homicides by Cause of Death | | |
|--------------|------------------------------------------------------------|----------------------------|----|
| | 13 to 15 | 13 to 15 16 to 19 20 to 29 | |
| Blunt Impact | 0 | 0 | 0 |
| Firearms | 1 | 9 | 57 |
| Other | 0 | 0 | 2 |
| Sharp Force | 1 | 3 | 6 |
| Undetermined | 0 | 0 | 0 |
| Total | 2 | 12 | 65 |

Chart - Homicides by Age Group



Toxicology was performed on all 161 of 161 homicide cases investigated by OCME. All cases were screened for alcohol and major drugs of abuse. Drugs were absent in 53 homicide cases.

| Description | Number of Cases | % of Cases |
|-----------------------------------------------|-----------------|------------|
| N= | 161 | |
| Negative | 53 | 32.9% |
| Positive | 107 | 66.4% |
| Storage (No testing requested or assigned) | 1 | <1% |

The most commonly detected drugs in the homicide cases were:

| Name of Drug | Number of Cases | % of Homicide Cases |
|-------------------------|-----------------|---------------------|
| Marijuana Metabolites | 50 | 31.0% |
| Ethanol | 44 | 27.3% |
| Phencyclidine (PCP) | 11 | 6.8% |
| Morphine/Heroin | 8/3 | 4.9% / 1.8% |
| Cocaine and metabolites | 7 | 4.3% |
| Oxycodone | 3 | 1.2% |

2.2 - Suicides

The OCME investigated **52** suicides in CY 2015, which represents a **24.6%** decrease from CY 2014 (69). Deaths by suicidal acts were more prevalent in white males and in persons between the ages of 50 to 59 years. Firearms were the leading cause of suicidal deaths. More incidents occurred in **May** than in any other month.



Suicides by Jurisdiction of Incident that Caused Death

| Jurisdiction of Incident | Number of Suicides | % of Suicides |
|--------------------------|-----------------------|---------------|
| District of Columbia | 44 | 84.62% |
| Maryland | 4 | 7.69% |
| Virginia | 2 | 3.85% |
| Unknown | 2 | 3.85% |
| Total | 52 | 100% |

Suicides by Cause of Death

| Cause | Number of Suicides | % of Total Suicides |
|------------------------------------------------------|--------------------|---------------------|
| Firearms | 15 | 28.85% |
| Hanging | 12 | 23.08% |
| Blunt Impact Trauma • Building - 7 • Metro - 1 | 8 | 15.38% |
| Intoxication | 8 | 15.38% |
| Thermal Injury | 3 | 5.77% |
| Drowning | 2 | 3.85% |
| Sharp Object | 2 | 3.85% |
| Poisoning | 1 | 1.92% |
| Suffocation | 1 | 1.92% |
| Total | 52 | 100.00% |

Pie Chart - 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

Map of Suicides by DC Ward

Of the **52** suicides in the District of Columbia, 38(73%) 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.



Suicides by Month

| Month | Number of Suicides | % of Suicides |
|-----------|--------------------|---------------|
| January | 2 | 4.35% |
| February | 6 | 7.25% |
| March | 2 | 8.70% |
| April | 3 | 14.49% |
| May | 9 | 17.31% |
| June | 5 | 14.49% |
| July | 3 | 8.70% |
| August | 2 | 11.59% |
| September | 5 | 7.25% |
| October | 5 | 4.35% |
| November | 5 | 7.25% |
| December | 5 | 8.70% |
| Total | 52 | 100% |

Chart - Suicides by Month



Suicide by Race/Ethnicity

| Race/Ethnicity | Number of Suicides | % of Suicides |
|----------------|--------------------|---------------|
| White | 25 | 48.08% |
| Black | 22 | 42.31% |
| Asian | 4 | 7.69% |
| Hispanic | 1 | 1.92% |
| | 52 | 100% |

Chart - 5-year Trend of Suicide by Race/Ethnicity



Suicides by

Gender

| Gender | Number of Suicides | % of Suicides |
|--------|--------------------|---------------|
| Female | 7 | 13.46% |
| Male | 45 | 86.54% |
| Total | 52 | 100% |

Suicides by Race/Ethnicity and Gender

| Race/Ethnicity by Gender | Number of Suicides |
|--------------------------|--------------------|
| White | 25 |
| Female | 4 |
| Male | 21 |
| Black | 22 |
| Female | 2 |
| Male | 20 |
| Asian | 4 |
| Female | 1 |
| Male | 3 |
| Hispanic | 1 |
| Female | 0 |
| Male | 1 |
| Total | 52 |
Suicide by Age

| Age | Number of Suicides | % of Suicides | |
|----------|--------------------|---------------|--|
| 13 to 15 | 1 | 1.92% | |
| 16 to 19 | 4 | 7.69% | |
| 20 to 29 | 8 | 15.38% | |
| 30 to 39 | 8 | 15.38% | |
| 40 to 49 | 5 | 9.62% | |
| 50 to 59 | 11 | 21.15% | |
| 60 to 69 | 9 | 17.31% | |
| 70 to 79 | 4 | 7.69% | |
| 80 to 89 | 1 | 1.92% | |
| 90 + | 1 | 1.92% | |
| Total | 52 | 100% | |

| Adolescent and Young Adult Suicides by Cause of Death | | | | | |
|----------------------------------------------------------|---|---|---|--|--|
| 13 to 15 16 to 19 20 to 29 | | | | | |
| Blunt Impact | 0 | 1 | 2 | | |
| Drowning | 0 | 2 | 0 | | |
| Firearms | 0 | 1 | 3 | | |
| Hanging | 0 | 0 | 2 | | |
| Intoxication | 1 | 0 | 2 | | |
| Total | 1 | 4 | 8 | | |

Chart - Suicides by Age



Toxicology Findings for Suicide Cases

Toxicology analysis was performed on 51 of 52 OCME suicide cases investigated by OCME.

Drugs were absent in 12 of these cases.

| Description | Number of Cases | % of Cases |
|----------------------------------------------------|-----------------|------------|
| <i>N</i> = | 52 | |
| Negative | 12 | 23.1 % |
| Positive | 39 | 75.0 % |
| Storage (No test- ing requested or assigned) | 1 | 1.9% |

The most notable detected drugs in suicide cases were:

| Name of Drug | Number of Cases | % of Suicide Cases |
|-----------------------|-----------------|--------------------|
| Ethanol | 16 | 30.8 % |
| Morphine | 5 | 9.6 % |
| Bupropion | 5 | 9.6 % |
| Cocaine | 4 | 7.7 % |
| Fluoxetine | 4 | 7.7% |
| Oxycodone | 3 | 5.8% |
| Phencyclidine | 3 | 5.8% |
| Marijuana Metabolites | 3 | 5.8% |

2.3 - Accidents

OCME investigated **342** accidental deaths in CY 2015. Of the **342** cases investigated, **45** were related to motor vehicle accidents and **151** of the Accidental deaths were the direct result of prescription and/or illicit drug use. The majority of incidents occurred in **December**.

| recidents by Cause of Death | | | |
|-----------------------------------------------------------------------------------|-------------|-------------|--|
| Cause | # of Deaths | % Accidents | |
| Intoxication | 151 | 44.15% | |
| Blunt Injury - Due to Fall (93) - Due to Traffic (45) - Due to Other (8) | 146 | 42.69% | |
| Thermal | 17 | 4.97% | |
| Other | 9 | 2.63% | |
| Asphyxia | 7 | 2.05% | |
| Drowning | 6 | 1.75% | |
| Hypothermia | 5 | 1.46% | |
| Electrocution | 1 | 0.29% | |
| Total | 342 | 100% | |

Accidents by Cause of Death



Pie Chart - Accidents by Cause of Death⁵



Graph - Eleven-year Overview of Accidents



⁵ 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 | 27 | 7.89% |
| February | 24 | 7.02% |
| March | 26 | 7.60% |
| April | 27 | 7.89% |
| May | 23 | 6.72% |
| June | 26 | 7.60% |
| July | 28 | 8.19% |
| August | 27 | 7.89% |
| September | 28 | 8.19% |
| October | 33 | 9.65% |
| November | 34 | 9.94% |
| December | 39 | 11.40% |
| Total | 342 | 100% |

Chart - Accidents by Month of Death



Map of Intoxication Deaths by DC Ward

There was a total of **151** Accidental Intoxication Deaths in the District of Columbia in 2015, of which 111 (74%) 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.

| Accidents by Jurisdiction of Residence | | |
|-------------------------------------------|-------------|--|
| Jurisdiction | # of Deaths | |
| DC | 201 | |
| MD | 69 | |
| VA | 28 | |
| Other | 21 | |
| Undomiciled | 23 | |
| Total | 342 | |



Map of Blunt Injuries due to Falls by DC Ward

There was a total of **93** Accidental Deaths caused by Blunt Injuries due to Falls in the District of Columbia in 2015, of which 49 (53%) 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.



Accidental Deaths by Race

| Race/Ethnicity | Number of Accidents | % of Accidents |
|----------------|---------------------|----------------|
| Black | 209 | 61.11% |
| White | 112 | 32.75% |
| Hispanic | 10 | 2.92% |
| Asian | 5 | 1.46% |
| Other | 4 | 1.17% |
| Unknown | 2 | 0.58% |
| Total | 342 | 100% |

Accidental Deaths by Gender

| Gender | Number of Accidents | % of Accidents |
|--------|---------------------|----------------|
| Female | 107 | 31.29% |
| Male | 235 | 68.71% |
| Total | 342 | 100% |

Accidental Deaths by Age

| Age | Number of Accidents | % of Accidents |
|----------|---------------------|----------------|
| Under 1 | 5 | 1.46% |
| 1 to 5 | 3 | 0.88% |
| 6 to 12 | 3 | 0.88% |
| 13 to 15 | 0 | 0.00% |
| 16 to 19 | 4 | 1.17% |
| 20 to 29 | 24 | 7.02% |
| 30 to 39 | 29 | 8.48% |
| 40 to 49 | 43 | 12.57% |
| 50 to 59 | 83 | 24.27% |
| 60 to 69 | 63 | 18.42% |
| 70 to 79 | 31 | 9.06% |
| 80 to 89 | 44 | 12.87% |
| 90 + | 10 | 2.92% |
| Total | 342 | 100% |

Of the 342 Accidental Deaths investigated by OCME, toxicology analysis was performed in 232 cases. Drugs were absent in 28 accident cases.

| Description | Number of Cases | % of Cases |
|-------------|-----------------|------------|
| N= | 253 | |
| Negative | 28 | 11.1% |
| Positive | 204 | 80.6% |
| Storage | 21 | 8.3% |

The most commonly detected drugs in the accident cases were:

| Name of Drug | Number of Cases | % of Accident Cases |
|-------------------------|-----------------|---------------------|
| Morphine/Heroin | 100/74 | 39.5%/29.2% |
| Ethanol | 75 | 29.2% |
| Cocaine and Metabolites | 42 | 16.6% |
| Fentanyl | 28 | 11.1% |
| Naloxone | 27 | 10.7% |
| Marijuana Metabolites | 15 | 5.9% |
| Methadone | 13 | 5.1% |
| Oxycodone | 13 | 5.1% |
| Acetyl Fentanyl | 13 | 5.1% |
| Phencyclidine | 11 | 4.3% |

2.3.1 – Traffic Deaths

Of the **45** traffic related deaths certified by the OCME in Calendar Year 2015 the majority involved drivers of motor operated vehicles (all types) and decedents between the ages of 20 to 29. Traffic fatalities were more prevalent in the month of July.

| Role of th | ne Deced | lent in T | raffic I | Death |
|------------|----------|-----------|----------|------------|
| | | | I GIII C | > 0 a ci i |
| | | | | |

| Role | Traffic Deaths | % of Traffic Deaths |
|------------------------------------------------------------------|-----------------------|---------------------|
| Driver - Motor Vehicle(15) - Motorcycle (6) - Moped (1) | 22 | 48.89% |
| Pedestrian | 19 | 42.00% |
| Passenger - Motor Vehicle (3) | 3 | 6.67% |
| Bicyclist | 1 | 2.22% |
| Total | 45 | 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 | 5 | 11.11% |
| February | 3 | 6.67% |
| March | 1 | 2.22% |
| April | 4 | 8.89% |
| May | 4 | 8.89% |
| June | 2 | 4.44% |
| July | 7 | 15.56% |
| August | 3 | 6.67% |
| September | 3 | 6.67% |
| October | 4 | 8.89% |
| November | 4 | 8.89% |
| December | 5 | 11.11% |
| Total | 45 | 100.00 |





Traffic Deaths by Race

| Race | Number of Traffic Deaths | % of Traffic Deaths |
|----------|--------------------------|---------------------|
| Black | 25 | 55.56% |
| White | 17 | 37.78% |
| Hispanic | 2 | 4.44% |
| Other | 1 | 2.22% |
| Total | 45 | 100% |

Traffic Deaths by Gender

| Gender | Number of Traffic Deaths | % of Traffic Deaths |
|--------|-----------------------------|---------------------|
| Female | 15 | 33.33% |
| Male | 30 | 66.67% |
| Total | 45 | 100% |

Traffic Deaths by Age

| Age | Number of Traffic Deaths | % of Traffic Deaths |
|----------|--------------------------|---------------------|
| | | |
| 6 to 12 | 2 | 4.44% |
| 16 to 19 | 1 | 2.22% |
| 20 to 29 | 9 | 20.00% |
| 30 to 39 | 8 | 17.78% |
| 40 to 49 | 6 | 13.33% |
| 50 to 59 | 4 | 8.89% |
| 60 to 69 | 8 | 17.78% |
| 70 to 79 | 6 | 13.33% |
| 80 to 89 | 1 | 2.22% |
| Total | 45 | 100% |

Traffic Deaths by Jurisdiction of Incident that caused Death

| Jurisdiction of Incident | Number of Traffic Deaths | % of Traffic Deaths |
|--------------------------|-----------------------------|---------------------|
| District of Columbia | 20 | 44.44% |
| Maryland | 19 | 42.22% |
| Virginia | 5 | 11.11% |
| Unknown | 1 | 2.22% |
| Total | 45 | 100% |

Of the 45 Traffic-related deaths investigated by OCME, toxicology analysis was performed in 29 cases. Drugs were absent in 10 traffic accident cases. Of the remaining positive cases, 15.5% had more than one drug present.

| Description | Number of Cases | % of Cases |
|-------------|-----------------|------------|
| N= | 33 | |
| Negative | 10 | 30.3% |
| Positive | 19 | 57.6% |
| Storage | 4 | 12.1% |

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

| Name of Drug | Number of Cases | % of Traffic Cases |
|----------------------|--------------------|--------------------|
| Ethanol | 8 | 24.2% |
| Marijuana Metabolite | 5 | 15.2% |
| Morphine | 1 | 3.0% |
| Amphetamine | 1 | 3.0% |
| Phencyclidine | 1 | 3.0% |

In the 8 traffic deaths positive for ethanol, 5 were greater than the legal limit (0.08 g/100 mL) for driving under the influence in the District of Columbia.

2.3.2 – Toxicology Findings for Deaths due to Accidental Drug Overdose

There were 151 OCME cases where death was directly related to drug abuse, and toxicology analysis was performed in 147 of these cases, 1 case was a review of medical records and 3 cases were external and no toxicology was submitted. The most prevalent drug in the population was heroin alone or in combination with other drugs. Drugs were present in all overdose cases. Of the positive cases, 73.4 % had more than one drug present.

| Description | Number of Cases | % of Cases |
|-------------|-----------------|------------|
| N= | 147 | |
| Negative | 0 | 0 % |
| Positive | 147 | 100.0 % |

The most commonly detected drugs in drug overdose cases were:

| Contributing Drugs | Number of Cases | % of Cases |
|-------------------------|-----------------|-------------|
| Morphine/Heroin | 95/74 | 64.6%/50.3% |
| Ethanol | 55 | 37.4% |
| Cocaine and Metabolites | 42 | 28.6% |
| Fentanyl | 27 | 18.4% |
| Naloxone | 26 | 17.7 % |
| Acetyl Fentanyl | 13 | 8.8 % |
| Alprazolam | 12 | 8.2% |
| Oxycodone | 11 | 7.5% |
| Methadone | 11 | 7.5% |
| Phencyclidine | 9 | 6.1% |

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, and fentanyl. The prevalence of phencyclidine (PCP) and oxycodone has been included.



Overdose Deaths by Age and Drugs Calendar Year 2015

Age Range

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), and oxycodone has been included.



Overdose Deaths by Race and Drugs

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

Deaths due to Opioid Drug Use: January 1, 2014 to December 31, 2015⁶

The DC Office of the Chief Medical Examiner (OCME) investigated a total of **197**⁷ deaths due to use of Opioids from January 1, 2014 through December 31, 2015, **83** deaths in CY 2014 and **114** in CY 2015 respectively. This report examines the presence of Opioids (*Heroin, Fentanyl, Acetyl Fentanyl, Morphine, prescription Opioids and the general classification of Opiates*) in the deaths observed at the OCME. The tables and graphs below present the decedent information by trends, demographics, and jurisdiction of residence.

Incidence of Opioids by Year

Each drug is counted independently in fatalities involving more than one of these drugs and ranged from 1 to 5 Opioids identified per death. Therefore, there were a total of **120** Opioids⁸ found in the 83 deaths in 2014 and **160** Opioids found in the 114 deaths in 2015. As depicted in the graph to the right, the total number of Opioids that caused a death increased from 2014 to 2015.

Trends in Deaths due to Opioid Use

When examining the monthly trends in deaths caused by Opioid drug use, more fatalities occurred in the month of July in 2014 and in the month of September in 2015 than any other month in that respective year. Overall there was a 37% increase in fatal overdoses due to Opioid use from 2014 (n=83) to 2015 (n=114).

Breakdown of Increase in Cases since September

Number of Opioid Drugs Contributing to Accidental Intoxication Deaths by Year (All Opioids) 180 160 140 Number of Drugs 120 100 96 80 60 2014 40 20 2015 Opioid Drug



Seventy-five percent of deaths involving Acetyl Fentanyl were found among decedents between September to December. Of the nine cases of Acetyl Fentanyl since September 2015, there were 3 decedents that were residents of Ward 4, 2 decedents that were undomiciled and the remaining four decedents were spread equally in Wards 5, 6, 8, or were jurisdiction of residence was unknown.

⁶ Data for 2015 is inconclusive and subject to change due to cases where cause and manner of death is "Pending Further Investigation"

⁷ The data presented in this report includes 6 cases with a Manner of Death other than Accidental Intoxication- three cases in 2014 and one case in 2015 in which the Manner of Death was Undetermined but the Cause of Death was due to Opioid drug use. Additionally there were 2 causes with Manner of Death of Suicide in 2014.

⁸ Morphine and Fentanyl can both be prescribed. However, for the sake of this report, they are included under the illicit opioids

Demographics⁶

Race/Ethnicity

Overall, **145** or **74%** of all deaths due to Opioid use were among Blacks. Moreover, this trend is remains when examining the data across years.

<u>Gender</u>

Fatal overdoses due to Opioid drug use were most common among males than females.





Number of Deaths due to Opioid Use by Race/Ethnicity and Year

50

Race/Ethnicity

White

0

Hispanic

0

Unknown

2014

2015

Total

145

85

Black

60

160

140

Number of Deaths Number

20

0

<u>Age</u>

Approximately, 76% of all overdoses due to Opioid drug use happen among adults between the ages of 40-69 years old. Overall, deaths due to Opioid use were most prevalent among people ages 50 to 59 (40%), followed by people ages 40 to 49 (20%) and 60 to 69 (16%). This trend is consistent across years, except for people age 30 to 39 were the third most common age category to experience a drug overdose due to use of Opiates in 2014. There were no deaths from the use of Opioids among individuals younger than 16 and older than 89.

| Deaths due to Opioid Drug Use by Age | | | | |
|--------------------------------------|------------|----------|-------|--|
| | Category | and Year | | |
| Age | Year | | | |
| | | | | |
| | 2014 | 2015 | Total | |
| | | | | |
| 16-19 | 0 | 1 | 1 | |
| 20-29 | 7 | 7 | 14 | |
| 30-39 | 15 | 10 | 25 | |
| 40-49 | 16 | 24 | 40 | |
| 50-59 | 31 | 48 | 79 | |
| 60-69 | 10 | 22 | 32 | |
| 70-79 | 4 | 1 | 5 | |
| 80-89 | 0-89 0 1 1 | | | |
| Total 83 114 197 | | | | |

Jurisdiction of Residence6

Deaths from Opioids were most prevalent in Wards 7 and 8 in 2015 compared to Wards 5 and 7 in 2014. The largest increase from 2014 to 2015 was observed in Ward 8, which increased by over 250%.





The graphs to the right depict the total number of Heroin, Morphine, Fentanyl, and Acetyl Fentanyl drugs that contributed to death by Ward of Residence. Each drug is counted independently in fatalities involving more than one of these drugs. The total number of Opioids found that caused a fatal overdose increased between years 2014 and 2015. Overall, in the District there were a total of 64 Opioids (Heroin, Morphine, and Fentanyl) that contributed to fatal overdoses in 2014. However, in 2015, the number of Opioids that contributed fatal overdoses in the District increased to a total of 100 Opioids (Heroin, Morphine, Fentanyl, and Acetyl Fentanyl). According to the CDC, Acetyl fentanyl is a synthetic opioid equivalent fentanyl that is up to five times more potent than heroin.9 There were zero cases of Acetyl Fentanyl in 2014. In contrast, nine of the twelve cases of Acetyl Fentanyl found in 2015 were among decedents that were residence of the District.





Prescription Opioids

There were 74 prescription Opioids found in the 197 drug overdoses between 2014 and 2015. Fatal overdoses involving prescription Opioids was more prevalent in 2014 (n=45) than in 2015 (n=29). This represents a 36% decrease in prescription drugs that contributed to drug overdoses. Overall, the most commonly detected prescription Opioid was Methadone. However, there are differences when you examine the data by year. In 2014, Methadone was the most commonly found prescription Opioid in drug overdoses. However, in 2015, Oxyco-



done was the most prevalent prescription Opioid identified.

9 http://www.emergency.cdc.gov/HAN/han00350.asp

<u>Map of Opioid related</u> <u>Deaths by Jurisdiction of</u> <u>Residence</u>

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 77% of all Opioid related drug deaths between 2014 and 2015. The percentage of missing addresses is equal per year, approximately 23% per year.



Map of Opioid related Deaths by Location of Injury

The map below displays the drug overdoses due to Opioid use by location of injury. The location of injury is not known for all decedents reported and investigated by OCME. This map includes all decedents where the location of injury is known, which is approximately 70% all Opioid related deaths (n=138). The percentage of missing addresses is equal per year, approximately 30% per year.



2.4 – Natural Deaths

Natural deaths continue to account for the majority of cases reported to and accepted by the Office of the Chief Medical Examiner. In 2015, **477** deaths were determined to be a result of natural disease. Deaths caused by Cardiovascular Diseases continue to dominate in this category with **323** fatalities. Deaths due to the alcoholism were the second highest cause with **27** deaths. Blacks were more prevalent in this category representing **74.63%** of the population affected. More Natural deaths occurred in **March** than in any other month.

| Cause | Number of Deaths | % Of Total Natural Deaths |
|----------------------------------|---------------------|---------------------------|
| Cardiovascular Disease | 323 | 67.71% |
| Alcoholism | 27 | 5.66% |
| Central Nervous System Diseases | 24 | 5.03% |
| Infection | 21 | 4.40% |
| Respiratory Diseases | 15 | 3.14% |
| Cancer | 14 | 2.94% |
| Diabetes | 14 | 2.94% |
| Gastrointestinal Disease | 14 | 2.94% |
| Other | 7 | 1.47% |
| Infectious Disease | 6 | 1.26% |
| Pulmonary Embolism (PE) | 4 | 0.84% |
| Blood Disease/Hemopoietic System | 2 | 0.42% |
| Genetic Disorder | 2 | 0.42% |
| Therapeutic Complications | 2 | 0.42% |
| Complications of Drug Abuse | 1 | 0.21% |
| Complications of Pregnancy | 1 | 0.21% |
| Total | 477 | 100 |

Natural Deaths by Cause

Pie Chart – Natural Deaths by Cause



Note: Causes of Death that are less than 2% are not included in this chart.



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 **477**¹¹ Natural deaths in the District of Columbia, 408 (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.



¹¹ There was one case of human cremains that received an external exam. The human remains were an OCME case from a previous year with a Cause and Manner of Death of Natural, Respiratory Disease. This case is not included in the map.

Natural Deaths by Month

| Month | Number of Deaths | % of Naturals |
|-----------|------------------|---------------|
| January | 52 | 6.60% |
| February | 52 | 7.45% |
| March | 55 | 10.66% |
| April | 44 | 7.78% |
| May | 39 | 9.14% |
| June | 46 | 8.63% |
| July | 22 | 6.77% |
| August | 29 | 8.80% |
| September | 19 | 8.63% |
| October | 48 | 8.12% |
| November | 36 | 8.63% |
| December | 35 | 8.80% |
| Total | 477 | 100% |

Chart- Natural Deaths by Month



atural Deaths by Exam Type

| Exam Type | Number of Natural Deaths | % of Natural Deaths |
|------------------------|--------------------------|---------------------|
| Autopsy | 234 | 49.06% |
| External Exam | 241 | 50.52% |
| Review Medical Records | 2 | 0.42% |
| Total | 477 | 100% |

Natural Deaths by Race

| Race | Number of | % of Natural Deaths |
|----------|----------------|---------------------|
| | Natural Deaths | |
| Black | 356 | 74.63% |
| White | 109 | 22.85% |
| Hispanic | 7 | 1.47% |
| Asian | 5 | 1.05% |
| Total | 477 | 100% |

Natural Deaths by Gender

| Gender | Number of Natural Deaths | % of Natural Deaths |
|--------|-----------------------------|------------------------|
| Female | 166 | 34.80% |
| Male | 311 | 65.20% |
| Total | 477 | 100% |

Natural Deaths by Age

| Age | # of Natural Deaths | % of Natural Deaths |
|----------|---------------------|---------------------|
| Under 1 | 6 | 1.26% |
| 1 to 5 | 0 | 0.00% |
| 6 to 12 | 0 | 0.00% |
| 13 to 15 | 0 | 0.00% |
| 16 to 19 | 1 | 0.21% |
| 20 to 29 | 11 | 2.31% |
| 30 to 39 | 20 | 4.19% |
| 40 to 49 | 31 | 6.50% |
| 50 to 59 | 135 | 28.30% |
| 60 to 69 | 147 | 30.82% |
| 70 to 79 | 83 | 17.40% |
| 80 to 89 | 32 | 6.71% |
| 90 + | 11 | 2.31% |
| Total | 477 | 100% |

2.4.1 - Body Mass Index (BMI)

The World Health Organization (WHO) defines Body Mass Index (BMI) as a "simple index of weightfor-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 **470** adult decedents that the OCME certified as natural deaths, of which **321** were due to cardiovascular disease. However, the below statistics will represent **320** decedents that died as a result of cardiovascular disease. One case was removed from the total number of adult cardiovascular deaths statistics because it was a review of medical records.

BMI and Deaths Associated with Cardiovascular Disease (CD)¹²

(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 **126** were classified as obese and **68** were classified as over-weight.



¹² 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 BMI

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



BMI for Adult Decedents with Heart Disease by Race and Gender

Of the 194 decedents above the normal weight in 2015, **78%** were Black/African American **19%** was White, **2%** were Hispanic and Asian was **1%**. The majority of the decedents that died due to heart disease and had an above normal BMI were male. The chart below displays the BMI data by race gender.









OCME- 2015 Annual Report rev. 2/21/2017

2.5 – Undetermined Deaths

Undetermined by Cause of Death

The OCME investigated **39** cases (3.59% of total Accepted Cases) in which the <u>manner of death</u> was concluded to be "Undetermined," and of these **21** cases or **53.85%** also had a <u>cause of death</u> classified as "Undetermined".

An "Undetermined" <u>manner of death</u> 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" <u>manner of death</u> 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 | 21 | 53.85% |
| Sudden Unexpected In- | 9 | |
| fant Death (SUID) | | 23.07% |
| Blunt Impact Injuries | 4 | 10.26% |
| Sudden/Unexplained | 3 | 7.69% |
| Drowning | 2 | 5.13% |
| Total | 39 | 100% |

There were no deaths classified as "Undetermined" in the following age groups, **13 to 15 and 90** and above years. Peak incidents occurred in **January**.



Pie Chart - Undetermined by Cause of Death

Undetermined Deaths by Month

| Month | Number of Deaths |
|-----------|------------------|
| January | 1 |
| February | 2 |
| March | 2 |
| April | 5 |
| May | 3 |
| June | 3 |
| July | 3 |
| August | 1 |
| September | 5 |
| October | 5 |
| November | 3 |
| December | 6 |
| Total | 39 |

Chart - Undetermined Deaths by Month



Undetermined Deaths by Race

| Race | Number of Undetermined Deaths | % of Undeter- mined Deaths |
|----------|----------------------------------|-------------------------------|
| Asian | 0 | 0.00% |
| Black | 31 | 79.49% |
| Hispanic | 2 | 5.13% |
| Other | 1 | 2.56% |
| White | 5 | 12.82% |
| Total | 39 | 100% |

Undetermined Deaths by Gender

| Gender | Number of Undetermined Deaths | % of Undetermined Deaths |
|--------|-------------------------------|--------------------------|
| Female | 12 | 30.77% |
| Male | 27 | 69.23% |
| Total | 39 | 100% |

Undetermined Deaths by Age

| Age | Number of Undetermined Deaths | |
|----------|----------------------------------|---|
| Under 1 | 15 | - |
| 1 to 5 | 0 | |
| 6 to 12 | 1 | |
| 16 to 19 | 0 | |
| 20 to 29 | 1 | |
| 30 to 39 | 5 | |
| 40 to 49 | 3 | |
| 50 to 59 | 4 | |
| 60 to 69 | 6 | |
| 70 to 79 | 4 | |
| 80 to 89 | 0 | |
| Total | 39 | |

| Breakdown of Cause of Death | | | | |
|----------------------------------------------------------------------------|------|--------------|-------------|--|
| | SUID | Undetermined | Sudden/ | |
| | | | Unexplained | |
| Under 1 | 9 | 4 | 2 | |
| Note: All of the infant decedents were less than 1 year old (age range be- | | | | |
| tween 4 days and 7 months old). | | | | |

Toxicology Findings by Undetermined Deaths

Of the 39 Undetermined Deaths investigated by OCME, toxicology analysis was performed on all 39 cases. Drugs were absent in 15 undetermined deaths.

| Description | Number of Cases | % of Cases | |
|-------------|-----------------|------------|--|
| N= | 39 | | |
| Negative | 17 | 43.5 % | |
| Positive | 22 | 56.4 % | |

The most commonly detected drugs in the undetermined cases were:

| Name of Drug | Number of | % of Undetermined |
|-----------------|-----------|-------------------|
| | Cases | Cases |
| Ethanol | 9 | 23.0 % |
| Morphine | 2 | 5.1 % |
| Diphenhydramine | 2 | 5.1 % |
| Phencyclidine | 2 | 5.9 % |

2015 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 District of Columbia, 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 **11** co-sleeping/bed-sharing infant fatalities that were certified with a Manner of Death as "*Undetermined*" in calendar year 2015, of which, eight had parents that were residents of the District of Columbia (one in ward 4, one in ward 5, one in ward 7 and five in ward 8), and three had parents that lived outside of the District (two in Maryland and one in Virginia). Ward eight had the highest prevalence of co-sleeping deaths in 2015. Within this review period, there were no co-sleeping/bedsharing fatalities where the parental residence was in the District of Columbia wards 1, 2, 3, or 6. In addition, there were **two** 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 <u>adult bed</u> 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 **five** cases in 2015 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. **Three** of these cases had a Manner of Death of "Undetermined", **one** was "Natural" and **one** was "Accident".

| 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 | 2 | 1 | 3 | | |
| SUID | Undetermined | 8 | 413 | 12 | | |
| Undetermined | Undetermined | 3 | 0 | 3 | | |
| Total | ondetermined | 13 | 5 | 18 | | |

¹³ There was one death which was classified as SUID however, the manner of was Natural (not Undetermined).

Jurisdiction of Parental Residence and Manner of Death

In 2015 there were a total of **29** infant deaths investigated by the DC OCME. The below table provides a breakdown by <u>manner of death</u> 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 | 14 | 2 | 1 | 2 | 9 | | | |
| MD | 14 | 1 | 4 | 4 | 5 | | | |
| VA | 1 | 0 | 0 | 0 | 1 | | | |
| TOTALS | 29 | 3 | 5 | 6 | 15 | | | |



Map of Infant Deaths by Ward and Manner of Death

The CDC defines infants as those children 1 year old or less; whereas the DC 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. See note below for details regarding decedents that were 1 year old at the time of death.


3.0 – ORGAN PROCUREMENT

The Uniform Anatomical Gift Revision Act of 2008 mandates in Sec. 22 [The] cooperation between the Chief Medical Examiner and procurement organization (a) The Chief Medical Examiner and the Office of 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 | 85 | 27 |
| Request Abandoned | 41 | 0 |
| Not Required | 3 | 0 |
| Approached w/o | | |
| Permission | 2 | 1 |
| Total Requests | 131 | 28 |

4.0 – TOXICOLOGY SERVICES

4.1 - 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 2015, the laboratory received 262 cases from the Metropolitan Po lice Department (MPD), 89 cases from the United States Parks Police (USPP), 10 specimens from the United States Capitol Police (USCP), and 6 specimens from the United States Secret Service (USSS) and 1 specimen from the Central Intelligence Agency (CIA). Specimens received were either blood or urine, and multiple specimens could be received with each of the 368 cases.

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

| Description | Number of Cases | % of Cases |
|-------------|-----------------|------------|
| N= | 368 | |
| Negative | 20 | 5.4 % |
| Positive | 348 | 94.5 % |

Total number of DUI cases analyzed:

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 | 276 | 75.09% |
| Marijuana Metabolite | 78 | 21.2% |
| Phencyclidine (PCP) | 61 | 16.6% |
| Cocaine | 18 | 4.9% |
| Synthetic Cannabinoids | 11 | 3.0% |
| Alprazolam/Nordiazepam | 11 | 3.0% |

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

4.2 - 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. Additional screens were assigned depending on requests made by law enforcement. In 2015, the laboratory received 144 cases from District government agencies. Specimens received were either blood or urine, and multiple specimens could be received with each of the 144 cases.

A negative case refers to the <u>absence</u> of any alcohol or detectable drug. A positive case refers to the <u>presence</u> of alcohol and/or drug(s), noting that a case can be positive for more than one substance. 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= | 144 | |
| Negative | 6 | 4.2 % |
| Positive | 138 | 95.8 % |

The most commonly types of detected drugs in DFSA cases were

| Drug Class | % Preva- lence |
|----------------------------------|-------------------|
| Ethanol | 35.4% |
| Marijuana | 25.0% |
| Antidepressants/Antipsychotics | 15.3% |
| Phencyclidine (PCP) | 12.5% |
| Benzodiazepines and metabolites | 12.5% |
| Cocaine and metabolites | 11.8% |
| Over the Counter CNS Depressants | 10.4% |
| Morphine/Heroin (3) | 4.2% |
| Sleep Aids | 2.1% |
| None were detected | 4.2% |

Subject demographics for DFSA cases were:

| Average Age | |
|-------------|------|
| (years) | 28.8 |

| Gender | % of Total |
|--------|------------|
| Male | 6.2% |
| Female | 91.6% |
| Total | 100% |

| Age Range | # of Cases |
|------------------------------|------------|
| Ages ≥ 10 and < 15 | 1 |
| Ages ≥ 15 and ≤ 20 | 19 |
| Ages ≥ 20 and ≤ 25 | 49 |
| Ages \geq 25 and $<$ 30 | 40 |
| Ages \geq 30 and $<$ 35 | 9 |
| Ages \geq 35 and $<$ 40 | 8 |
| Ages \geq 40 and $<$ 50 | 10 |
| Ages \geq 50 and <70 | 8 |
| Total | 144 |

Cases submitted by Agency and cases processed:

| Agency | Cases Received | % Processed |
|----------------|-----------------------|-------------|
| MPD | 71 | 100% |
| OVSJG (DC SANE | 73 | 100% |

Average Monthly Turnaround Time for DFSA Cases Submitted to OCME



OCME- 2015 Annual Report rev. 2/21/2017

Turnaround Time 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) |
| OVS | 1/5/2015 | 11/16/2015 | 315 | MPD | 7/13/2015 | 11/6/2015 | 116 |
| MPD | 1/5/2015 | 4/17/2015 | 102 | OVS | 7/16/2015 | 2/9/2016 | 208 |
| OVS | 1/8/2015 | 8/4/2015 | 208 | OVS | 7/16/2015 | 11/16/2015 | 123 |
| OVS | 1/8/2015 | 8/4/2015 | 208 | MPD | 8/3/2015 | 11/16/2015 | 105 |
| OVS | 1/8/2015 | 8/4/2015 | 208 | MPD | 8/3/2015 | 11/16/2015 | 105 |
| OVS | 1/8/2015 | 4/2/2015 | 84 | OVS | 8/3/2015 | 11/6/2015 | 95 |
| OVS | 1/8/2015 | 3/10/2015 | 61 | OVS | 8/5/2015 | 12/10/2015 | 127 |
| OVS | 1/8/2015 | 3/10/2015 | 61 | OVS | 8/5/2015 | 12/10/2015 | 127 |
| OVS | 1/8/2015 | 3/10/2015 | 61 | OVS | 8/5/2015 | 11/16/2015 | 103 |
| OVS | 1/8/2015 | 3/10/2015 | 61 | OVS | 8/5/2015 | 11/16/2015 | 103 |
| OVS | 1/8/2015 | 3/10/2015 | 61 | OVS | 8/5/2015 | 11/6/2015 | 93 |
| MPD | 1/12/2015 | 4/30/2015 | 108 | OVS | 8/6/2015 | 3/1/2016 | 208 |
| MPD | 1/12/2015 | 3/10/2015 | 57 | MPD | 8/6/2015 | 12/10/2015 | 126 |
| OVS | 2/11/2015 | 9/17/2015 | 218 | MPD | 8/6/2015 | 11/16/2015 | 102 |
| OVS | 2/11/2015 | 6/26/2015 | 135 | MPD | 8/6/2015 | 11/16/2015 | 102 |
| OVS | 2/11/2015 | 4/20/2015 | 68 | MPD | 8/6/2015 | 11/13/2015 | 99 |
| OVS | 2/11/2015 | 4/17/2015 | 65 | MPD | 8/6/2015 | 11/13/2015 | 99 |
| OVS | 2/11/2015 | 4/17/2015 | 65 | MPD | 8/10/2015 | 2/23/2016 | 197 |
| MPD | 2/19/2015 | 11/17/2015 | 271 | MPD | 8/10/2015 | 11/16/2015 | 98 |
| MPD | 2/19/2015 | 6/26/2015 | 127 | MPD | 8/13/2015 | 3/1/2016 | 201 |
| MPD | 2/27/2015 | 4/17/2015 | 49 | OVS | 8/17/2015 | 3/1/2016 | 197 |
| MPD | 3/3/2015 | 9/17/2015 | 198 | MPD | 8/17/2015 | 11/16/2015 | 91 |
| MPD | 3/3/2015 | 4/17/2015 | 45 | MPD | 8/20/2015 | 11/16/2015 | 88 |
| MPD | 3/9/2015 | 4/17/2015 | 39 | MPD | 8/27/2015 | 2/23/2016 | 180 |
| MPD | 3/12/2015 | 8/4/2015 | 145 | MPD | 8/27/2015 | 12/15/2015 | 110 |
| MPD | 3/12/2015 | 4/30/2015 | 49 | MPD | 8/27/2015 | 12/7/2015 | 102 |
| OVS | 3/16/2015 | 11/17/2015 | 246 | MPD | 8/27/2015 | 11/16/2015 | 81 |
| OVS | 3/16/2015 | 9/17/2015 | 185 | MPD | 8/31/2015 | 11/16/2015 | 77 |
| OVS | 3/16/2015 | 9/14/2015 | 182 | OVS | 9/4/2015 | 1/12/2016 | 130 |
| OVS | 3/16/2015 | 7/2/2015 | 108 | OVS | 9/4/2015 | 12/29/2015 | 116 |
| OVS | 3/16/2015 | 5/8/2015 | 53 | OVS | 9/4/2015 | 12/10/2015 | 97 |
| OVS | 3/16/2015 | 4/29/2015 | 44 | MPD | 9/8/2015 | 1/12/2016 | 126 |
| OVS | 3/16/2015 | 4/23/2015 | 38 | MPD | 9/8/2015 | 12/10/2015 | 93 |
| MPD | 3/30/2015 | 11/17/2015 | 232 | MPD | 9/8/2015 | 12/10/2015 | 93 |
| OVS | 3/31/2015 | 11/19/2015 | 233 | MPD | 9/8/2015 | 11/23/2015 | 76 |
| OVS | 3/31/2015 | 11/16/2015 | 230 | MPD | 9/17/2015 | 1/11/2016 | 116 |
| OVS | 3/31/2015 | 8/4/2015 | 126 | OVS | 9/21/2015 | 12/10/2015 | 80 |
| OVS | 3/31/2015 | 8/4/2015 | 126 | OVS | 9/21/2015 | 12/10/2015 | 80 |
| MPD | 4/2/2015 | 8/1/2015 | 121 | OVS | 9/21/2015 | 11/23/2015 | 63 |
| MPD | 4/7/2015 | 11/19/2015 | 226 | OVS | 9/21/2015 | 11/23/2015 | 63 |
| MPD | 4/20/2015 | 11/23/2015 | 217 | OVS | 9/21/2015 | 11/23/2015 | 63 |
| OVS | 4/20/2015 | 11/23/2015 | 217 | MPD | 9/22/2015 | 2/5/2016 | 136 |

| OVS | 4/20/2015 | 11/23/2015 | 217 | OVS | 10/7/2015 | 1/12/2016 | 97 |
|-----|-----------|------------|-----|-----|------------|------------|-----|
| OVS | 4/20/2015 | 8/18/2015 | 120 | OVS | 10/7/2015 | 12/15/2015 | 69 |
| OVS | 4/20/2015 | 8/18/2015 | 120 | OVS | 10/7/2015 | 12/15/2015 | 69 |
| OVS | 4/20/2015 | 8/18/2015 | 120 | OVS | 10/8/2015 | 12/15/2015 | 68 |
| OVS | 4/20/2015 | 8/18/2015 | 120 | MPD | 10/13/2015 | 12/15/2015 | 63 |
| MPD | 4/28/2015 | 11/16/2015 | 202 | MPD | 10/27/2015 | 1/12/2016 | 77 |
| MPD | 4/28/2015 | 11/16/2015 | 202 | MPD | 10/27/2015 | 12/15/2015 | 49 |
| MPD | 4/28/2015 | 11/16/2015 | 202 | OVS | 10/29/2015 | 2/12/2016 | 106 |
| MPD | 4/30/2015 | 11/23/2015 | 207 | MPD | 11/4/2015 | 1/28/2016 | 85 |
| MPD | 5/11/2015 | 11/23/2015 | 196 | OVS | 11/5/2015 | 1/12/2016 | 68 |
| MPD | 5/11/2015 | 11/23/2015 | 196 | OVS | 11/5/2015 | 1/12/2016 | 68 |
| OVS | 5/13/2015 | 11/23/2015 | 194 | MPD | 11/16/2015 | 1/12/2016 | 57 |
| OVS | 5/13/2015 | 11/23/2015 | 194 | MPD | 11/16/2015 | 1/12/2016 | 57 |
| OVS | 5/13/2015 | 11/23/2015 | 194 | MPD | 11/23/2015 | 3/11/2016 | 109 |
| OVS | 5/13/2015 | 11/23/2015 | 194 | OVS | 11/24/2015 | 1/12/2016 | 49 |
| MPD | 5/18/2015 | 12/10/2015 | 206 | OVS | 11/24/2015 | 1/12/2016 | 49 |
| MPD | 5/26/2015 | 11/17/2015 | 175 | OVS | 11/24/2015 | 1/12/2016 | 49 |
| OVS | 6/1/2015 | 12/10/2015 | 192 | MPD | 12/3/2015 | 1/28/2016 | 56 |
| OVS | 6/1/2015 | 12/10/2015 | 192 | MPD | 12/3/2015 | 1/20/2016 | 48 |
| OVS | 6/1/2015 | 11/6/2015 | 158 | OVS | 12/7/2015 | 2/12/2016 | 67 |
| OVS | 6/1/2015 | 11/6/2015 | 158 | MPD | 12/8/2015 | 3/21/2016 | 104 |
| MPD | 6/11/2015 | 12/10/2015 | 182 | MPD | 12/14/2015 | 5/11/2016 | 149 |
| MPD | 6/15/2015 | 11/16/2015 | 154 | MPD | 12/14/2015 | 3/1/2016 | 78 |
| MPD | 6/25/2015 | 3/24/2016 | 273 | OVS | 12/17/2015 | 3/1/2016 | 75 |
| MPD | 6/25/2015 | 2/23/2016 | 243 | OVS | 12/17/2015 | 2/26/2016 | 71 |
| MPD | 6/25/2015 | 12/31/2015 | 189 | OVS | 12/17/2015 | 2/26/2016 | 71 |
| MPD | 6/25/2015 | 12/10/2015 | 168 | MPD | 12/18/2015 | 3/11/2016 | 84 |
| MPD | 7/2/2015 | 11/16/2015 | 137 | MPD | 12/22/2015 | 3/1/2016 | 70 |
| MPD | 7/9/2015 | 11/16/2015 | 130 | MPD | 12/22/2015 | 3/1/2016 | 70 |
| OVS | 7/13/2015 | 11/16/2015 | 126 | MPD | 12/22/2015 | 3/1/2016 | 70 |

4.3 - Breath Testing Program

In 2015, three 40-hour Operator Training Courses were offered, licensing a total of 33 operators. Thirty-five Operators were recertified; therefore there was a total of 126 Licensed Operators. This resulted in 2,904 evidential breath tests being administered through the deployment of 8 instruments into the field.

Program Facts

- Total 40-hour Operator Trainings Provided in 2015: 3
- Total New Breath Test Operators Trained in 2015: 33
- Total Recertification Trainings in 2015: 8
- Total Operators Recertified in 2015: 35
- Recertification Rate: 67%
- Total Licensed Operators since September 2012: 154
- Total Licensed Operators in 2015: 126
- Breath Alcohol Technicians Trained: 2
- Total Certified Technicians: 3
- Number of evidential instruments in the field (cumulative): 8
- Total Evidential Tests Taken from 2012-2015: 2904

Tests Taken in 2015 by District:



Final Results from all Districts from 2012 – 2015:

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 - 0.16 g/210L.

Total Number of Breath Alcohol Tests by District and Year



Additional Facts:

Overall, the program maintains an average of 21% refusals (a refusal is when someone elects to not take an evidential breath test) 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 2015

OCME-2015 Annual Report rev. 2/21/2017

5.0 – OTHER MAJOR ACTIVITIES

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

5.1 - 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 2015.

| Type of Judicial Service | Number of Court related Activities |
|--------------------------|---------------------------------------|
| Court Testimony | 5 |
| Depositions | 0 |
| Grand Jury | 0 |
| Pre-trial Conference | 15 |
| Other | 0 |
| Total | 20 |

| Court Services by Type | Number of Court related Activities |
|---------------------------|---------------------------------------|
| Civil | 2 |
| Criminal | 18 |
| Other | 0 |
| Total | 20 |

| Court Services by Jurisdiction | Number of Court related Activities |
|-----------------------------------|---------------------------------------|
| DC | 17 |
| Maryland | 2 |
| Virginia | 1 |
| Total | 20 |

For calendar year 2015 the above data represents approximately **75** hours of Medical Examiner time. In general the least amount of time spent on this activity was 30 minutes, and the maximum recorded time spent on a court-related activity was 2 hours.

5.2 - 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 indi-

vidual. 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 - 641 • at Scene - 167 808 **ID By Fingerprints** 141 ID By X-ray 51 ID Waived 39 ID By Dental X-ray 8 ID By Circumstantial Evidence 8 ID by DNA 3 ID Other 2 Unidentified 0 ID Not Required¹⁴ 25 Total 1085

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.**

<u>Radiograph (X-ray) Comparison</u>: 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 1 to 3 weeks.**

<u>**Circumstantial Identification**</u>: 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).

¹⁴ 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.

<u>Unidentified:</u> 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.

5.3 - Public Dispositions

All bodies examined at the OCME are stored by the agency until family members make 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. 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 30day 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. All unclaimed decedents (whether identified or unidentified) are cremated and the cremains are buried.

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 **115** Public Disposition cases, of which **62** were Medical Examiner cases and 53 were Storage cases. There were no unidentified decedents that were released for Public Disposition in 2014. The breakdown by Adult, Children and Fetuses:

| Description | # of Public Disposition |
|-------------|-------------------------|
| Adults | 112 |
| Children | 1 |
| Fetus | 2 |
| Total | 115 |

Breakdown of Public Dispositions and the Associated Costs

| Public Disposition by type | Number of Unclaimed Remains |
|----------------------------------------------------------------------------------|--------------------------------|
| Cremations – identified adults | 112 |
| Cremations – infants | 1 |
| Cremations – fetal remains | 2 |
| Transport to Quantico Na- tional Cemetery – identified US Military Veteran | 0 |
| TOTAL | 115 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 2015 there were 132 Storage Requests made to the DC OCME

6.0 – BREAKDOWN OF MEDICAL EXAMINER INVESTIGATIONS

The US Census estimates that during 2015, the total population within the District of Columbia was 672,228¹⁵ inhabitants, which comprised primarily of the following ethnic groups: White, Black, Hispanic, Asian and Other. In 2015, the OCME investigated 3,149 deaths that occurred in the District of Columbia or were wards of the District and died in another jurisdiction. 1,085 of these cases were accepted under the jurisdiction of the Medical Examiner for further investigation; of which 788 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.*

| | | | | BYN | VIANN | NEK OF | DEAI | JŢ | |
|--------------------------------------------------------------------------------------------|----------------|-------------------------------|-------------------|-------|-------|--------|------|------|-------------|
| Race | 2010 Census | ME Cases DC Residents Only | Total ME Cases | Nat. | Sui. | Hom. | Acc. | Und. | Stillbirths |
| Black (non-Hispanic) ¹⁶ | 301,053 | 606 | 759 | 357 | 22 | 139 | 209 | 31 | 1 |
| White (non-Hispanic) | 209,464 | 154 | 261 | 109 | 25 | 10 | 112 | 5 | 0 |
| Hispanic (any single race) | 54,749 | 19 | 30 | 7 | 1 | 9 | 10 | 2 | 1 |
| Asian (non-Hispanic) | 20,818 | 6 | 14 | 5 | 4 | 0 | 5 | 0 | 0 |
| Two or more races | 12,650 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other (non-Hispanic) | 1,451 | 0 | 7 | 0 | 0 | 2 | 4 | 1 | 0 |
| American Indian and Alaska Native (non-Hispanic) | 1,322 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pacific Islander (non-Hispanic) | 216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unknown | n/a | 3 | 3 | 0 | 0 | 1 | 2 | 0 | 0 |
| Total Population | 601,723 | | | | | | | | |
| Total # of ME Cases | | 788 | 1,074 | 478 | 52 | 161 | 342 | 39 | 2 |
| 2014 Data – Cen- ter for Policy, Planning and Evaluation, DC DOH ¹⁷ | 6,731 | 4,871 | 1,085 | 5,814 | 55 | 198 | 391 | 48 | 0 |

2015 Manner of Death* by Race with 2010 Census Data

*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

¹⁵ Source: US Census Bureau at http://quickfacts.census.gov/qfd/states/11000.html.

¹⁶ 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" ¹⁷ 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.

6.1 - 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 <u>NOT</u> a race.

6.2 - 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 <u>not</u> included in the OCME Total Population chart.



By Race and Manner of Death¹⁸

¹⁸ The graphs above represent all accepted Medical Examiner cases, but these decedents do <u>NOT</u> represent District residents only.

2015 Totals by Age

| Age Group | Total Deaths | Percent |
|-------------|--------------|---------|
| Fetus | 2 | 0% |
| Under 1 | 29 | 3% |
| 1 to 5 | 8 | 1% |
| 6 to 12 | 6 | 1% |
| 13 to 15 | 3 | 0% |
| 16 to 19 | 21 | 2% |
| 20 to 29 | 109 | 10% |
| 30 to 39 | 99 | 9% |
| 40 to 49 | 95 | 9% |
| 50 to 59 | 246 | 23% |
| 60 to 69 | 233 | 22% |
| 70 to 79 | 124 | 12% |
| 80 to 89 | 77 | 7% |
| 90 and Over | 22 | 2% |
| Unknown | 1 | 0% |
| TOTAL | 1074 | 100% |

2014 Gender by Race

| Race | Males | Females | Total |
|------------------|-------|---------|-------|
| American Indian | 0 | 0 | 0 |
| Asian | 9 | 5 | 14 |
| Black | 555 | 204 | 759 |
| Hispanic | 23 | 7 | 30 |
| Other | 4 | 3 | 7 |
| Pacific Islander | 0 | 0 | 0 |
| Unknown | 3 | 0 | 3 |
| White | 174 | 87 | 261 |
| TOTAL | 768 | 306 | 1074 |

2014 Manner of Death by Gender

| Gender | Naturals | Suicide | Homicides | Accident | Undetermined | Stillbirth | Totals | Percent |
|--------|----------|---------|-----------|----------|--------------|------------|--------|---------|
| Female | 166 | 7 | 14 | 107 | 12 | 0 | 306 | 28% |
| Male | 31219 | 45 | 147 | 234 | 28 | 2 | 768 | 72% |
| Totals | 478 | 52 | 161 | 341 | 40 | 2 | 1074 | 100% |

Note: The above table does not include – Non-Human Remains (11)

The tables above represent all accepted Medical Examiner cases, but these decedents do NOT represent District residents only.

¹⁹ This total includes remains that were found in 2015. The original cause of death was Natural, Respiratory Disease

APPENDIX A

OCME Organizational Chart

This page is left blank intentionally

OFFICE OF THE CHIEF MEDICAL EXAMINER ORGANIZATIONAL CHART FY 2015

OCME Organizational Chart



THIS PAGE IS LEFT BLANK INTENTIONALLY

APPENDIX B

AGENCY MANAGEMENT

AGENCY MANAGEMENT

Agency-wide and Mayoral Initiatives

<u>Synthetic Drugs</u>: 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.

<u>Deaths In Custody</u>: The OCME's Chief Medical Examiner was asked by National Association of Medical Examiners (NAME) to coordinate with the U.S. House Oversight Committee on the Death In Custody Issue. Dr. Mitchell will coordinate with OFRA and OPLA on this issue. The Chief Medical Examiner, was named as the Chair of the newly created Deaths in Custody AD-Hoc Committee of the NAME. This Committee is charged with developing a national standard for medical examiner and coroner's offices to report deaths in custody. Capturing In-Custody Deaths on the Death Certificate will afford the public health sector visibility on incidence and prevalence of deaths while in-custody.

<u>ICITAP</u>: The agency has established a partnership with the United States Department of Justice, Criminal Division, 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.

<u>Duchess of Cornwell</u>: The agency was honored to participate in greeting Camilla Rosemary, Duchess of Cornwall at the Consolidated Forensic Laboratory as she attended the DC Sexual Assault Response Team Meeting held at the Consolidated Forensic Laboratory (CFL) on Thursday, March 19, 2015.

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 facilitated 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

During 2015, the agency enhanced its mission statement to include various aspects of its services and goals. The mission now provides more specificity for staff and external entities on the agency short and long term objectives as follows:

"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

In 2015, the agency continued preparation for inspection and application for accreditation by the National Association of Medical Examiners (NAME). An inspection finding of no more than fifteen (15) Phase I deficiencies and no ()) phase II deficiencies is required for full accreditation.

The agency partnered with the Office of the Inspector General (OIG) to perform an external audit in advance of an inspection by NAME. The OIG's review was conducted from June through August 2015 and included an evaluation of the office utilizing the NAME Inspection and Accreditation Checklist. The purpose was to determine whether the agency would qualify for either full or provisional accreditation. The OIG's August 2015 Evaluation provided the agency with an overall synopsis of the number of Phase I and II deficiencies noted throughout its evaluation. Throughout the rest of 2015, the agency worked to mitigate deficiencies noted in the OIG August 2016 Evaluation.

In preparation for the inspection and accreditation, the agency began organizing revised Standard Operating Procedures (SOP) in order to upload them into the NAME system per the guidelines for accreditation. This will allow the NAME inspector to review the SOPs for compliance per the checklist.

The agency target date for inspection is February/March 2016.

III. 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.

To this end, during 2015, the agency worked with OCP, HSEMA and DPW on over \$700,000 in grants targeted toward the procurement of mass fatality equipment (portable x-rays; mobile command center; mortuary trailers, and supplies etc.). Further, the agency's Mass Fatality and Continuity of Operations Plans were continuously reviewed for modification and the agency has focused on building stakeholder partnerships on a local, regional and federal level with key entities responsible for incident planning within the region.

OCME staff members, including the Chief Medical Examiner, participated in the National Capital Region's Mass Fatality Working Group meeting, facilitated by DC OCME, regarding development of an Interstate Compact of regional stakeholders. Such a compact would define roles and responsibilities, and sharing of resources during a mass fatality incident. Led by the OCME's Emergency Preparedness Administrator, the stakeholders discussed the mission/goals, the concepts to be included in a possible agreement, timelines, funding, training and exercises, legal/liabilities, and next steps.

The agency also continued on its quest to construct an OCME Fatality Management Operations Center (FMOC) which would provide a centralized location for mass disaster operations and coordination. The FMOC would provide ongoing situational awareness for pre-planned or emergency incidents; the ability to centralize operations, assess the situation and provide rapid response; provide appropriate staff preparedness on an ongoing basis; allow communication with other stakeholders (i.e., jurisdictional law enforcement, fire and rescue, emergency agencies and hospitals, as required by

the accreditation standards); and provide a training center for staff for emergency preparedness. As a precursor to the full FMOC build-out, the agency started a build-out of an Executive Situational Room which will function as the command center of the FMOC

IV. 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 2015, 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.

V. 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.

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 Key Performance Indicators.

Of note, recruitment efforts have resulted in a forensic medical examiner staff that is fully boardcertified; a highly experienced and educated managerial staff; and only one vacancy at the end of the fiscal year.

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. Standard Operating Procedures for the laboratory are being completed and are to be reviewed for finalization.

The agency has also developed a Data Analysis Fusion Center which is a concept is to provide and/or share data with the goal of "prevention," "detection," 'law enforcement" or other types of evaluation or analysis, particularly in the areas of public safety or health. The agency's mortality data is critical data that can be formatted in a manner that can provide key information to the Department of Health on various issues that can be formulated for various "prevention" messages. The agency hired an Epidemiologist in September 2015 to manage the DAFC in conducting routine epidemiologic investigations comprised of data surveillance, collection and analysis and statistical reporting. Further, the agency IT staff has been trained in GIS mapping wherein mortality data can be utilized by public safety cluster partners. Specific reports published during 2015 include: Heroin Deaths (Opiates): Public Dispositions; Hypo and Hyperthermia; Synthetic Drugs; Undetermined Deaths; and Homeless Deaths. Such data analysis used in a collaborative effort within a fusion center can play a vital role within the District in providing enhanced support services to District residents and visitors.

Key Performance Indicators¹

Measure One:

This measure requires that the agency complete 50% of reports of all postmortem examinations within 90 calendar days from the time of autopsy in homicide cases, based on National Association of Medical Examiner (NAME) standards. For FY2015, the agency completed 66% of these reports within 90 calendar days. Note that during the fiscal year, the agency did achieve 90% of all postmortem examinations completed within 90 days, which is the current National Association of Medical Examiner's (NAME) standard.

Measure Two:

This measure requires that the agency complete 50% of reports of all postmortem examinations within 60 calendar days from the time of autopsy in all cases (excluding homicides), based on NAME standards. For FY2015, the agency completed 42% of these reports within 60 calendar days.

Note on Measures One and Two:

The agency continues to work to improve in this area with the implementation of technology; establishment of timelines; and weekly reporting to medical examiners regarding their caseload; status of pending cases. Of importance is the fact that some cases do not meet the timeline due to one or all of the following factors: the need for outside consultation; challenges in obtaining histology services; need to review toxicological findings; requests for Metropolitan Police Department (MPD), Fire and Emergency Medical Services (FEMS) or other investigatory reports; or due to the fact that the case is complex. Further, the agency experienced vacancies in medical examiner staffing.

Measure Three:

The third measure focuses on the percent of positively identified bodies ready for release within 48 hours. The percentage identified for this measure during the year was 80% with a target of 95%.

Measure Four:

The fourth measure assesses the percent of preliminary investigative reports complete for utilization in the daily case review morning meetings. The goal (95%) is to ensure that the reports are available and complete for review and discussion the next morning prior to the postmortem examination. Ninety percent or 90% of the investigative reports were complete for use in the morning meetings in FY2015.

Measure Five:

In FY2014, OCME's body transport vendor or mortuary staff arrived on scene within one hour of notification of case acceptance 86% of the time meeting the 95% target.

¹ The District's Agency Key Performance Indicators (KPIs) are compiled on a fiscal year basis. Thus, <u>all</u> KPI data included in this report reflects FY2015 -- the time period between October 1, 2014 through September 30, 2015.

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. Reaccredited by the American Board of Forensic Toxicology (ABFT) for the period November 1, 2015 to October 31, 2017, the forensic toxicology laboratory 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 FY2015², the laboratory processed 244 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).

The laboratory, utilized new technologies and created a new analytical method during 2015 which confirmed over fifteen (15) compounds in less than fifteen minutes. Going forward this should substantially reduce the turnaround time in urine DUI casework. This work was completed utilizing a grant funding in the amount of approximately \$100,000 from the District Department of Transportation and was fully performed by the fourth quarter of the fiscal year.

The laboratory maintained administration of the District's Breath Alcohol Testing Program according to industry standards, including training MPD officers. The Program transitioned to new protocols to ensure the integrity and continuity of the program. All forensic toxicology staff were been trained on such protocols and procedures. A new Breath Program Manager was hired and MPD's Breathalyzers (in all Districts), as well as the Mobile Unit, were certified or recertified. Law enforcement operator certification classes were also conducted. Toxicologists underwent Maintenance Technician and Breath Alcohol Technician training.

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.

² The workload measures included herein, including the number of DUI cases processed by the toxicology laboratory, are based on FY2015 -- the time period between October 1, 2014 through September 30, 2015.

Key Performance Indicators

Measure Six:

Measure six provides results of toxicology laboratory performance requiring for FY2015 that 75% toxicology examinations be completed within 30 calendar days of case submission. The actual percentage was 52%.

Measure Seven:

Measure seven required 50% of toxicology examinations be completed within 45 calendar days of case submission. The actual percentage was 59%.

Fatality Review Management

The Fatality Review Division (FRD) is tasked with fulfilling the agency mission of facilitating the operation of two committees and one board: Child Fatality Review Committee (CFRC); 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 syste4mic problems, provide better services and be held accountable. In 2015, these reviews were held and recommendations to prevent deaths were developed for other agencies and entities with respect to policies and procedures and operations.

The Fatality Review Committee staffing model underwent a needs assessment. Plans were implemented to realign staff resources and work assignments amongst three staff that performed the work associated with the three committees/boards. While previously all three staff persons' work assignments were divided amongst the three entities, more structure was placed to the assignments such that overall productivity has increased. For example, the Supervisor worked with the agency's IT Lead to develop a Web Portal which enables committee members access to "secure" advanced case review materials prior to the meeting. This allows for a more productive and informed case review process. This reduces the amount of resources expended on printing and reproduction of case materials for the meeting and committee members are better prepared. This has improved organizational structure and improved confidentiality which is required for the committees. The Division also increased staffing during the fiscal year by securing additional assistance through the Office of Risk Management's (ORM) Return to Work Program which has allowed the Division to continue the work of the Infant Mortality Team in producing case review reports.

During the year, the 2013 and 2014 CFRC Annual Reports and a consolidated Developmentally Disabilities Fatality Review Coommittee Annual Report for 2012, 2013 and 2014 were published. Further, the FRD revised existing Standard Operating Protocols and Procedures.

Of note, 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 Board – 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.

The FRD also established strategic partnerships with several District agencies as follows. With the Child and Family Services Agency (CFSA), the FRD established a Memorandum of Understanding to share information and ensure timely receipt of autopsy reports such that CFSA can meet mandated requirements for Child Protective Services investigations. The FRD also partnered with the Department of Health (DOH) as part of the Healthy People 2020 Initiative to inform on the

District's surveillance efforts to further minimize violence prevalence in the community and contributed to establishing criteria for how the District will implement violence prevention in relation to national statistics.

Lastly, legislation was enacted concerning the CFRC as follows:

a) the Budget Support Act (BSA) included an amendment regarding CRFC membership to add 5 government agency seats to the CFRC to provide critical services to the populations reviewed, including: housing, mental health, and education.

b) Amendment also contained a technical adjustment to reflect the proper title of what is now the "Office of the Attorney General" and removed a non-stakeholder representative from the Committee in efforts to ensure that the relevant service provider District agencies were properly represented for more informed case review process.

Key Performance Indicators

Measure Eight:

This measure required the CFRC to hold 70% of child fatality reviews within six months of notification of the death. In FY2015, the CFRC completed 88% of multi-agency and statistical reviews of child fatalities within six months of notification of death, exceeding the target.

Measure Nine:

This measure required the DDFRC to review 80% of fatalities within three months of receipt of the investigative report from DDS (formerly MRDDA). One hundred percent (100%) of the cases were reviewed in this timeframe.

APPENDIX C

PROGRAM LEGISLATION

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

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

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, AND CHIEF MEDICAL EXAMINER

| exisNexis® Custom. Solution | www.lexis.com Home FAQ Purchase Code of District of Colu | umbia in Print |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| View TOC - Copyright © 2013 by the | ↓ 1 - 52 of 52 → District of Columbia | Ē |
| DC - D.C. Official Cod | e online View Tuto | orial Help |
| Terms and Connect | ors C Natural Language | |
| Search: O Full-text of Table of Co Search Selected Of Clear All Selections | source documents Search Advanced ontents (TOC) only nly tide Book Headers | |
| ITTLE 1. GO ITTLE 2. GO ITTLE 3. DI ITTLE 3. DI ITTLE 4. PU ITTLE 5. PO ITTLE 10. P ITTLE 12. R ITTLE 12. R ITTLE 12. R | VERNMENT ORGANIZATION VERNMENT ADMINISTRATION STRICT OF COLUMBIA BOARDS AND COMMISSIONS BLIC CARE SYSTEMS LICE, FIREFIGHTERS, AND CHIEF MEDICAL EXAMINER USING AND BUILDING RESTRICTIONS AND REGULATIONS MAN HEALTH CARE AND SAFETY VIRONMENTAL AND ANIMAL CONTROL AND PROTECTION ANSPORTATION SYSTEMS ARKS, PUBLIC BUILDINGS, GROUNDS, AND SPACE RGANIZATION AND JURISDICTION OF THE COURTS IGHT TO REMEDY ROCEDURE GENERALLY | |
| 🛨 🔲 TITLE 14. P | ROOF | 🖲 100% 🔻 |

- 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

THIS PAGE IS LEFT BLANK INTENTIONALLY

Wendt Center for Loss and Healing RECOVER Program January 2015- December 2015

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.

RECOVER Staff provided informational packets and support to nearly sixteen hundred people (1600) who presented to complete nearly 630 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 letters and 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.

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. 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. Outside of the group support, staff has requested 1:1 sessions to debrief about difficult situations and emotional experiences.

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 up letter and 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 care of surviving family members.

Together with the chief medical examiner, updated educational resources (in Spanish and English) were purchased focusing on grief, trauma, violence, supporting children and self -care to provide to families that come to the OCME to complete decedent identification. Resources are displayed on tables in the ID rooms with full permission to families to take what they need or want.

APPENDIX E

GLOSSARY
Glossary

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

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

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

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

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

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 <u>et seq</u>. (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.

APPENDIX E

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.



Source: http://www.washingtonpost.com/wp-srv/metro/specials/theguide/maps05/dc_anc.html

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 "Show me the manner in which a nation or a community cares for it's dead, and I will measure with mathematical exactness the tender sympathies of it's people, their respect for the laws of the land and their loyalty to high ideals."

> William Gladstone, Prime Minister of England



Office of the Chief Medical Examiner 401 E. Street, SW

Washington, DC 20024 (202) 698-9000 Main (202) 698-9100 Fax

