Government of the District of Columbia Office of the Chief Medical Examiner



ANNUAL REPORT 2006



Dan Tangherlini, City Administrator Executive Office of the Mayor



A MESSAGE FROM THE CHIEF MEDICAL EXAMINER

Calendar Year 2006 was a year of stabilization for the Office of the Chief Medical Examiner (OCME). Tremendous improvements continued to be made in the areas of staff and management relations, customer service, policies and procedures, and death investigations. Most significantly the historical backlog of autopsy reports (initial backlog 1,997), which extended from 1993 through 2003, was completed in FY 06. This is an important achievement for the public in general since many cases needed the cause and manner of death determined in order to allow for insurance payments to survivors. This accomplishment was made thanks to the efforts of the entire OCME staff and the collaborative efforts of MPD's Natural Squad that is assigned to the agency. Also, we acknowledge the dedication of two forensic pathologists who - though not full-time members of the staff - graciously took to heart the task we faced.

Other achievements should be mentioned. The agency again received the "Gold Award" in 2006 for staff participation in the DC One Fund, which allows District government employees to donate funds to local charities throughout the metropolitan area. We engaged in community outreach activities, including various efforts geared towards impacting at risk youths in the city. We are proud to have partnered and/or participated in programs and events such as: Operation Prevent Auto Theft (OPAT), Call-out with Bill Cosby at UDC, and Career Day at local public schools. We also engaged in outreach efforts to needy families through providing Thanksgiving baskets, collection of clothing for the homeless, and school supplies for children.

This report will continue to report on Weight Distributions in our deceased population, using the Body Mass Index (BMI). The level of BMI is compared to the incidence of Hypertensive and Arteriosclerotic Cardiovascular Disease by age and race. The goal of these special reports is to alert and educate the public and the government about different trends in the District, thereby, aiding in the provision of adequate services and the development of outreach programs. This report will also present a special report on Suicidal Deaths in the DC area during the past 30 years.

We continue to acknowledge the support of the Executive Office of the Mayor, the Council and all the professional entities we collaborate with throughout the year that enable us to accomplish our mission. I also want to extend a special thanks to all the staff for providing superior customer service day in and day out to the residents and visitor's of this great city, as we are called to serve in extraordinary circumstances.

Sincerely,

Marie Lydie J. Gurs. Laus, HD Marie-Lydie Y. Pierre-Louis, MD

Chief Medical Examiner

Government of the District of Columbia

DISTRICT OF COLUMBIA OFFICE OF THE CHIEF MEDICAL EXAMINER

2006 ANNUAL REPORT

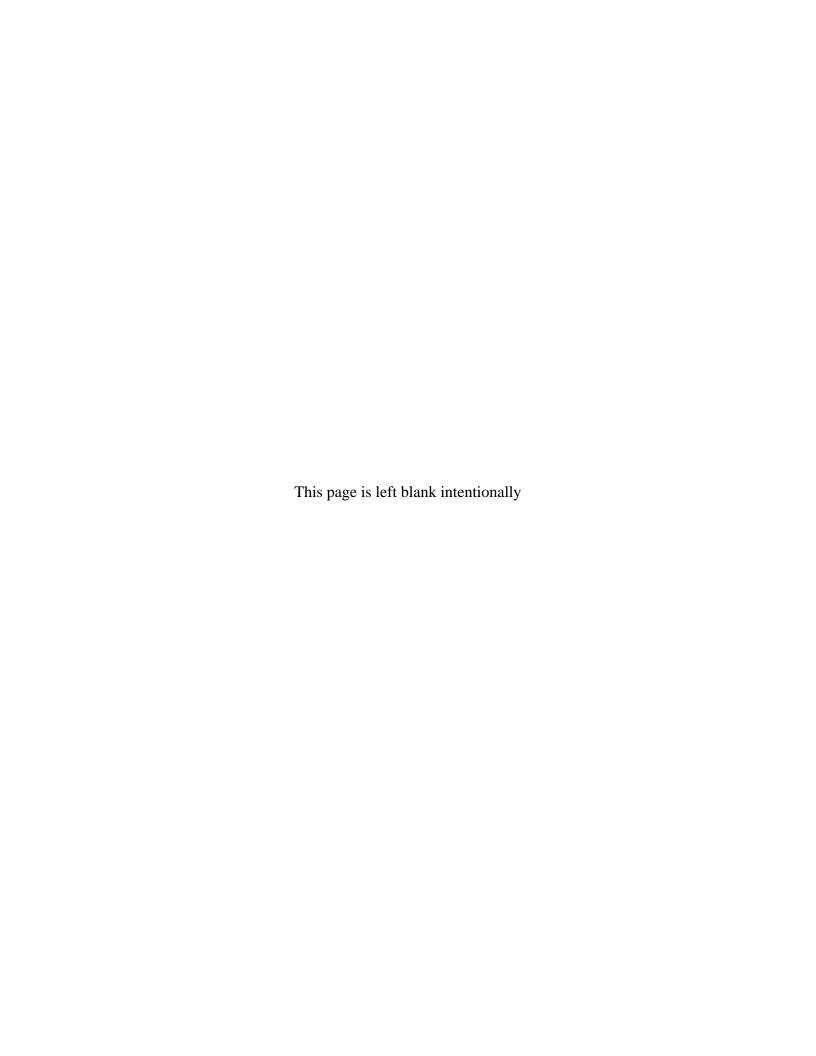
MISSION:

The mission of the Office of the Chief Medical Examiner (OCME), for the District of Columbia, is to investigate and certify 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's 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.

PRESENTED TO:

The Honorable Adrian M. Fenty, Mayor, District of Columbia and
The Council of the District of Columbia

November 2007



Executive Summary

The Government of the District of Columbia, Office of the Chief Medical Examiner (OCME) is pleased to present its Fifteenth Annual Report. This Report covers data that resulted from the investigation of 2,989 deaths that occurred in the District of Columbia during the Calendar Year (CY) 2006. It will also cover an historical overview of statistical data on Suicides for the CYs 1972 through 2002. Report data will be included for: Weight Distributions, Internal Partnerships, Identification Process, and Agency Management. Other Major Activities include - Backlog Reporting, Expert Witness and Court Tracking, Mass Casualties, and Educational Lectures and Presentations.

The OCME was established as a Medical Examiner's system from a Coroner system in 1971. At that time the office had a single program, which was Death Investigation and Certification. The OCME has grown into a cabinet level agency that serves under the administrative authority of the Executive Office of the Mayor. OCME's primary mission is to investigate all known or suspected homicides, suicides, accidents, drug-related, and medically unattended deaths, all deaths in at-risk populations (e.g. children and the intellectually and developmentally challenged individuals), as well as those deaths considered to be a threat to public health and safety. The agency now has three programs: Death Investigation and Certification, Agency Management, and Fatality Review. This report will include data on all existing programs.

OCME is one of the few medical examiner offices in the nation that provides on-site grief counseling. This service continues to be provided through a partnership with the Wendt Center for Loss and Healing (See Appendix C – Internal Partnerships, for more information on the program).

In preparation for possible terrorist attacks and mass disaster, OCME continues its efforts to develop alliances with area hospitals and with agencies in the Public Safety and Justice cluster with a goal to enhance the agency's Mass Fatality Plan in coordination with the National and District Response Plans. To practically accomplish this goal, we participated in local and federal exercises to determine scenarios not considered, additional resources that may be necessary, and processes and authorities that must be established.

During 2006, the OCME staff continued to be very active in social programs such as Operation Prevent Auto Theft (OPAT), Career Day at District of Columbia Public and Public Charter schools, the Mayoral Toy Drive and the D.C. One Fund.

OCME provided academic training to medical students and pathology residents from local hospitals, students from different universities located locally, regionally and abroad, from programs and scientific disciplines such as mortuary science, physician assistant, forensic science, and toxicology. The OCME also provided training for members of the Transit police, the United States Attorney's office and soldiers of the Marine Corps.

OCME continues its effort to provide historical statistics by producing special 30-year review studies for calendar years $1972 - 2002^{1}$. In the 2004 Annual Report, a 30-year review of Homicides in the District of Columbia was published, and for this year's 2006 Annual Report a review of Suicides in the District of Columbia is being published for the same span of time with an emphasis on suicides by firearms and by asphyxiation.

The goal of this report is to provide the public at-large, the Executive Offices of the Mayor, and members of the Council for the District of Columbia with detailed information regarding deaths investigated during CY 2006.

¹ In the most recent decade 1982–2002 only one (1992) annual report was published, whereas from 1972-1981, annual reports were published and available for statistical review and compilations

As stated previously there were a total of 2,989 deaths reported and investigated by the OCME, of which 1,471 cases were declined, but 1,518 were accepted for further investigation. Of the 1,518 cases that were accepted, 1,017 were autopsied (Full and Partials). The OCME also processed 2,189 cremation requests that were submitted for approval. The following table illustrates the number of autopsy examinations (full and partial), external examinations, and medical record reviews that were conducted by "Manner of Death".

	2006 Medical	Examiner	Cases by	v Manner	of Death
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Manner	Full Autopsy Examinations	Partial Autopsy Examination	External Examinations	Medical Record Reviews	Total
Accident	235	9	115	1	360
Homicide	177	0	0	0	177
Natural	452	68	353	6	879
Suicide	34	0	1	0	35
Undetermined	42	0	5	0	47
Total	9402	77	474	7	1498

Note: "Non-Human Remains" (n=20) are not included in this table. The 5 cases above noted under External Examinations with a manner of death of "Undetermined" were all Human bone parts.

SUMMARY OF FINDINGS FOR MANNER OF DEATH

HOMICIDES: The OCME investigated 177 homicides in the CY 2006. This report reveals homicides to be more prevalent in black males and in persons between the ages of 20-29. The weapons of choice are still firearms. The peak incidents occurred in July.

Toxicology Findings: Toxicology testing was requested for all 177 of the Homicide cases investigated. Drugs were present in 107 of the homicide cases investigated. The most commonly detected drugs in homicide cases were: Ethanol (N=61), Cocaine (30), PCP (26), Ecstasy and/or Ecstasy-related drugs (12), and Morphine (6).

SUICIDES: The OCME investigated 35 suicides in the CY 2006. This report reveals that deaths by suicide were more prevalent in white males and in persons between the ages of 40-49. Blacks closely followed Whites in number again this year. Peak incidents occurred in July.

Toxicology Findings: Toxicology testing was requested for all 35 of the Suicide cases investigated. Overall, drugs were present in 18 of the suicide cases investigated. The most commonly detected drugs were: Ethanol (N=7), Cocaine (5), and Methamphetamine (2). More prescription medications were detected in suicide cases than in homicide cases.

ACCIDENTS: The OCME investigated 360 accidents in the CY 2006. Of the 360 cases investigated, 114 of the accidental deaths occurred as a direct result of illicit drug use, and 212 cases were the result of trauma, of which 73 were traffic related deaths. The majority of the traffic accident deaths occurred in the following categories: males, blacks, and drivers between the ages of 20-29. Peak incidents for accidents overall occurred in September, but for traffic accidents the peak month was February.

Overall Toxicology Findings: Toxicology testing was requested for 242 of the 360 Accident cases investigated, and drugs were present in 162 of these cases. The most commonly detected drugs were: Cocaine (N=77), Ethanol (63), Morphine (62), Methadone (14) and Carbon Monoxide (10).

Toxicology Findings for Traffic-related accidents: Toxicology testing was requested for 66 of the 73 Traffic Related Accidents, and drugs were present in 24 of these cases. The most commonly detected drugs were: Ethanol (N=19), Morphine (4), PCP (4), Marijuana (4) and Cocaine (2). In the 19 traffic related deaths positive for ethanol, the average Blood Alcohol Concentration was 0.16 %. The legal limit for Blood Alcohol Concentration in the District of Columbia is 0.08% while driving.

-

² 5 of these autopsies were performed at area hospitals.

Toxicology Findings for Drug Overdose accidents: Toxicology testing was requested for 111 of the 114^3 Drug Overdose deaths investigated. Drugs were present in 110 of these cases. The one case that had a negative post-mortem toxicology result was a delayed death with prolonged hospitalization, which resulted in dissipation of the drugs from the body. The most commonly detected drugs were: Cocaine (N=75), Morphine (50), Ethanol (30), and Methadone (14).

NATURAL DEATHS: The OCME investigated 879 Natural deaths in CY 2006. This report reveals that the leading cause of death in Natural cases is Cardiovascular Disease with 570 deaths, followed by Complications of Alcoholism with 52 deaths.

Toxicology Findings: Toxicology testing was requested for 483 of the 879 Natural cases investigated. Drugs were present in 201 of the Natural cases investigated. The most commonly detected drugs were: Ethanol (N=67), Cocaine (63), Morphine (27), Acetone (21), Methadone (18), Codeine (12), Oxycodone (12), Sertraline (6), Diazepam (4), Hydrocodone (4) and Tramadol (4).

UNDETERMINED: An "Undetermined" manner of death is a result of inconclusive evidence and/or investigative findings as to the circumstances of the death at the time. The OCME investigated 47 cases where the manner of death was concluded to be "Undetermined." Of the 47 Undetermined cases investigated 23 (51%) had a cause of death established, 9 (19%) had a cause of "Sudden and Unexplained", and 14 (30%) had an "Undetermined" cause of death. If additional information is discovered, the manner and/or cause of death will be amended at that time. **Toxicology Findings⁴:** Toxicology testing was requested for 41 of the 47 Undetermined deaths investigated. Drugs were present in 15 of the Undetermined cases investigated. The most commonly detected drugs were: Ethanol (N=7), Oxycodone (2), and Morphine (2).

WEIGHT DISTRIBUTIONS

This year OCME will include report data on Body Mass Index (BMI). BMI is a mathematical formula used to determine one's ratio of body height to body weight, and which correlates strongly (in adults) with body fat content. Adult individuals with a calculated BMI between 25 and 30 are considered overweight, and those with a BMI over 30 are considered to be obese⁵. The BMI data is compared to the incidence of Hypertensive and Arteriosclerotic Cardiovascular Disease by age and race. OCME investigated 757 cases where the decedents were overweight-to-obese. This report also includes the BMI for children between the ages of 2-19 years.

SUMMARY OF SIGNIFICANT APPENDICES

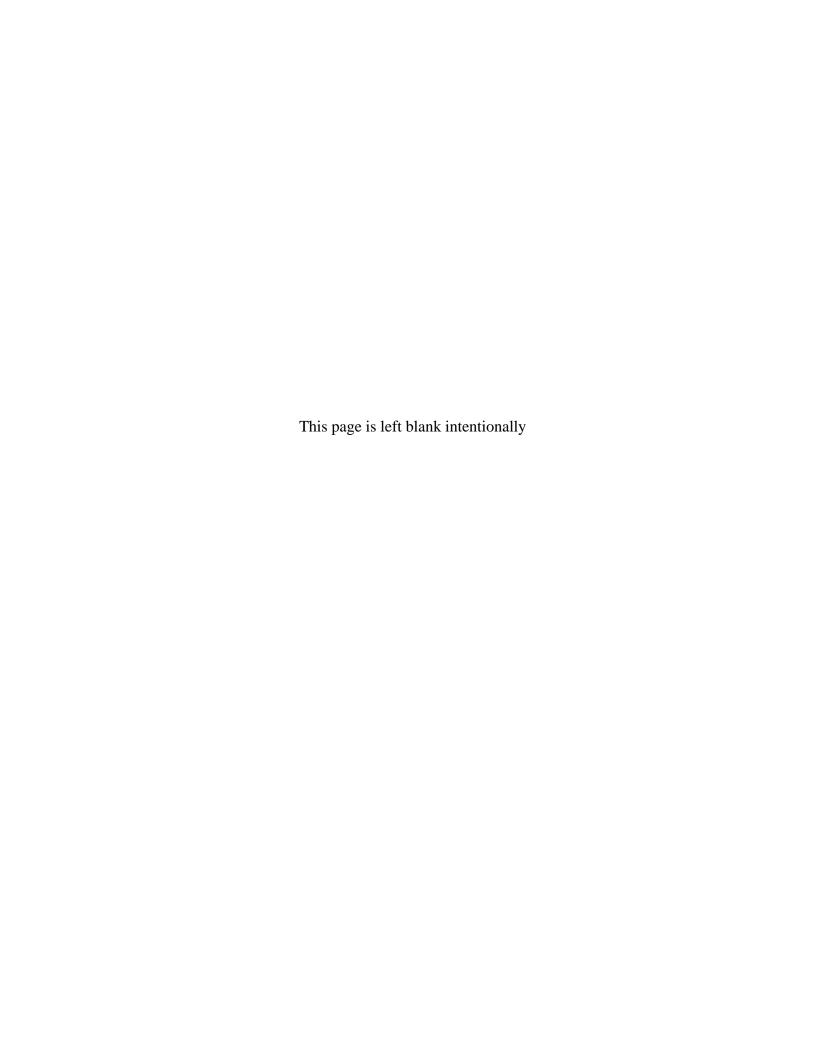
Also included in this year's report are the following reports:

- 1. <u>A 30-year Review of Suicides</u> This segment provides statistical compilations for suicides with an emphasis on firearms and asphyxiation/hangings. Also included is the total number of suicides vs. the total number of autopsies performed for calendar years 1972 through 2006.
- 2. <u>Agency Management</u> This segment outlines major activities such as personnel management, facilities, a budget overview and Mass Fatality Planning.
- 3. <u>Internal Partnerships</u> This segment provides an overview of OCME's partnerships with MPD's Natural Squad and the Wendt Center for Loss and Healing.
- 4. <u>Other Major Activities</u> This segment highlights the following activities: Autopsy Report Backlog, Court Testimony, Education and an Overview of the Identification and Public Disposition Process.

³ <u>Drug Overdose Accidents:</u> There were 3 cases in 2006 where post-mortem toxicology was not requested. In one (1) case the decedent had been embalmed and therefore toxicology samples were not feasible, and in the other two (2) cases the decedents were admitted into the hospital, which resulted in the deaths being delayed, and as a result of the time delay the drugs dissipated from the body by the time death occurred

⁴ <u>Undetermined Toxicology findings</u>: There were 6 cases in which Toxicology testing was not requested. 4 of these cases were External Examinations; 1 was a bone case and 1 was a decomposed body that did not have an adequate specimen for toxicological testing.

⁵ Reference: The Center for Disease Control's (CDC) website at www.cdc.gov





OFFICE OF THE CHIEF MEDICAL EXAMINER 2006 Annual Report

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Appendix A – 2006 OCME Organizational Chart

Appendix B – Agency Management

Appendix C – Internal Partnerships

Appendix D – Other Major Activities:

- Backlog
- Court Testimony
- Education
- Overview of Identifications and Public Disposition Process

Appendix E – Program Legislations

- OCME, DC Law 13-172, codified at DC Official Code §5-1401 et seq. (2001)
- CFRC Legislation and Mayoral Order 98-67
- MRDD FRC Mayoral Order 2005-143
- DVRB, DC Law 14-296, codified at DC Official Code §16-1051 et seq. (2001)

Appendix F – A 30-Year Review of Suicides in the District of Columbia (1972-2002)

INTRODUCTION

By law the Office of the Chief Medical Examiner (OCME) is required to produce an annual report. This annual report provides statistical data summarizing the results of investigations conducted by the OCME during calendar year 2006. This information is a reflection of the status of health of the District of Columbia residents, the level and the type of violence to which this population is subjected to, and the prevalence of drug use and its association with homicides and/or traffic accidents. The Office of the Mayor, Office of the City Administrator, Office of Public Safety and Justice, Department of Health (DOH), the D.C. Office of the Attorney General, United States Attorney's Office, the Public Defender Service and other entities can use these data to develop preventative and corrective policies, and for research purposes.

The OCME investigates the following types of human deaths occurring in the District of Columbia: 1) violent deaths, 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; 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 A – (D.C. Law 13-172), DC Official Code §5-1401 et seq. (2001)).

All deaths under the jurisdiction of the OCME, as outlined above, are investigated irrespective of the location of the primary causative incident. The 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 and the Detectives of MPD's Natural, Homicide, and Traffic Divisions provide information related to the circumstances of the deaths. The autopsy helps answer questions as to time of death, pattern and/or sequence of injuries and the effect of natural diseases versus injuries; and is also used to support or refute witness statements, or uncover completely unsuspected risk factors that may be useful to public health. The OCME works in close relationship with neighboring jurisdictions and is often called upon to provide expert testimony in these areas. Toxicological examinations are performed on most cases autopsied depending upon the conditions of the remains; to assist in the determination of the cause and manner 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 (for example: neuropathology, and cardiac) are requested when appropriate.

The "Fatality Review Program" includes the Child Fatality Review Committee (CFRC), the Mental Retardation and Developmental Disabilities Fatality Review Committee (MRDD FRC) and the newly established Domestic Violence Fatality Review Board (DVFRB). The DVFRB was established by Public Law §14-296 passed on April 11, 2003. These committees examine

causes and circumstances associated with deaths in their respective populations, evaluate issues associated with services provided and make relevant recommendations in order to decrease the number of preventable deaths. 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 provides temporary storage of bodies for all hospices and local hospitals. The OCME morgue has a total capacity of 115, which can be easily exceeded. Continuous and active efforts to locate family members, and bury or cremate unclaimed bodies are necessary to maintain available space. All efforts are made toward identification of the deceased before disposition. To achieve this goal, the OCME works cooperatively with the Mobile Crime unit of MPD and the Federal Bureau of Investigation (FBI) and trained its technical staff to fingerprint the decedents. OCME also uses comparative radiology and/or DNA analysis as necessary to ensure identification.

OCME is one of the few medical examiner offices in the nation that provides on-site grief counseling. This service continues to be provided through a partnership with the Wendt Center for Loss and Healing (See page Appendix C for more information on the program).

In preparation for possible terrorist attacks and mass disaster, OCME is developing alliances with area hospitals and with agencies in the Public Safety and Justice cluster with a goal to integrate our Mass Fatality plan with the Mayor's Disaster Response Plan. To practically accomplish this goal we are also participating in local and federal exercises to determine scenarios not considered, additional resources that may be necessary, and processes and authorities that must be established. OCME is a member of the Interstate Compact Council that seeks to develop interstate mutual aid and unites Maryland, Virginia, Delaware, the District of Columbia, Federal Agencies and other jurisdictions.

During 2006, the OCME staff continued to be very active in social programs such as Operation Prevent Auto Theft (OPAT), Career Day at District of Columbia public and public charter schools, the Mayoral Toy Drive and the D.C. One Fund.

OCME also provides academic training of medical students and pathology residents from local hospitals, students of physician assistance, forensic sciences and toxicology programs from different universities located locally, regionally and abroad. The OCME also provided training for members of MPD, the United States Attorney's office and soldiers of the Marine Corps.

In conclusion, a 30-year review (1972-2002) of Suicides in the District of Columbia is included in this year's report. For calendar years 1972-1981 annual reports were available for data compilations. The statistical data for the years 1982 –2002 was compiled manually because only one (1992) annual report was published during this 20-year span of time. The absence of the annual report during these years was primarily due to chronic understaffing secondary to high turnover. The 2006 OCME Annual Report continues in the effort to close the gap – as the 2004 Annual Report did with the 30-year review of Homicides - by providing statistical compilations for this subset of data with emphasis on suicides by gunfire, associated demographics, and a comparison to the total number of autopsies performed.

2.0 – Medical Examiner Investigations and Medical Legal Autopsies

Overview of Cases Reported and Investigated

During the Calendar Year (CY) 2006, 2,989 cases were reported to and investigated by the Office of the Chief Medical Examiner (OCME). The OCME declined 1,471 of these cases, and 1,518 were accepted for further examination, and of the accepted cases 1,017 were autopsied. Of the 1,017 autopsies, 5 were performed at area hospitals and 1,012 at OCME. The agency also had a total of 2,172 cremation requests submitted for approval. The DC OCME transports 100% of all accepted cases unless there is a special circumstance such as only a "Review of Medical Records" is required.

Total Number of Cases Reported and	
Investigated by the OCME	2,989
Total Number of Declined Cases	1,471
Percent of Cases Investigated	49.21%
Total Number of Scene Visits	492
Percent of Cases Investigated	16.46%
Total Number of Cases Accepted for Further Investigation	1,518
Percent of Cases Investigated	50.79%
Total Number of Organ Donor's	28
Percent of Cases Accepted for Further Investigation	1.84%
Total Number of Autopsies	
ullet Full $-$ 940 (5 were performed at area hospitals)	
● Partial – 77	1,017
Percent of Cases Accepted for Further Investigation	67.00%

Total Number of Cremation Requests Submitted for Approval	2,172
Total Number of Approved Cremation Requests	2,132
Percent of Cremations Requested	96.07%
Total Number of Denied Cremation Requests contingent on physician contact that was to be re-submitted for ap-	
proval.	827
Percent of Cremations Requested	39.00%

Breakdown of Cases Accepted and Investigated

Total Number of Cases Accepted and Investigated	1 510
by Exam type	1,518
Total Number of Autopsies	
• Full – 940 (5 were performed at area hospitals)	
• Partial – 77	1,017
Percent of Cases Accepted and Investigated	67.00 %
N	474
Number of External Examinations	474
Percent of Cases Accepted and Investigated	31.16 %
Number of Non-Human Remains *	20
Percent of Cases Accepted and Investigated	1.32 %
Number of Medical Record Reviews *	7
Percent of Cases Accepted and Investigated	0.46%

* Definition of Unfamiliar Case Classifications:

- Non-Human Remains: Cases that are commonly identified as animal remains.
- 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.

Breakdown of Case Investigations and Autopsies by Month

Month	Case Investigations	Full Autopsies
January	142	88
February	128	88
March	136	86
April	124	76
May	133	80
June	111	66
July	134	89
August	122	66
September	129	81
October	134	77
November	106	61
December	119	82
Total	1518	940

Medical Examiner Case Investigations by Manner of Death

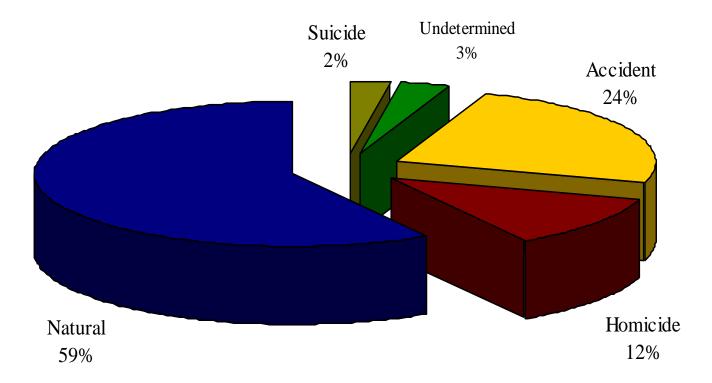
Manner of Death	Full Autopsy Examinations	Partial Autopsy Examinations	External Examinations	Review of Medical Records	Total
Accident	235	9	115	1	360
Homicide	177	0	0	0	177
Natural	452	68	353	6	879
Suicide	34	0	1	0	35
Undetermined	42	0	5	0	47
Total	940	77	474	7	1498

Note: The above table does not include "Non-Human Remains (N=20)", which would bring the total number of cases accepted and investigated to 1,518 as reported on page 2.

3

Medical Examiner Cases by Manner of Death

Of the total 1,498¹ cases accepted and investigated the percentage of cases by manner is shown in the figure below.



¹ This figure does not include the 20 "*Non-Human Remains*," which would bring the total number of cases accepted and investigated to 1,518 as indicated on page 2.

Postmortem Toxicology Summary

Depending on the specimens received and the degree of decomposition, routine toxicological testing includes analysis for alcohols (ethanol and other volatiles), an initial screen for major classes of illicit and prescription medications, and an additional screen for various illicit drugs, and prescription and "over-the-counter" medications. All drugs of significance are then confirmed by further testing. Typical specimens received include blood, urine, bile, vitreous, liver, brain, and gastric contents.

A negative case refers to the <u>absence</u> of any alcohol and commonly detectable drugs. A positive case refers to the <u>presence</u> of alcohol and/or drug(s), noting that a case can be positive for more than one substance. The alcohol and/or drugs detected did not necessarily cause or contribute to death. Drugs that are excluded from this report include many of the "over-the-counter" medications such as: caffeine, nicotine, diphenhydramine, pseudoephedrine, ephedrine, dextromethorphan, salicylate, acetaminophen, and ibuprofen unless they contributed to the death or were detected in a significant concentration. Further, the data does not reflect the true prevalence of marijuana in the postmortem population, as marijuana was only confirmed in certain cases.

Total number of postmortem cases analyzed

Description	Number of Cases	% of Cases
N=	978	
Negative	475	48.6 %
Positive	503	51.4 %

Overall, drugs were absent in 475 postmortem cases; 313 cases had one drug present; 135 cases had 2 drugs present; 39 had 3drugs present; 11 cases had 4 drugs detected; 3 cases had 5 drugs detected; and 2 cases had 6 drugs present.

Postmortem Toxicology - Most Commonly Detected Drugs

The most commonly detected drugs in all of the postmortem cases were:

Drug Name	Number of Cases	% of Cases
Ethanol	205	21.0 %
Cocaine	177	18.1 %
Morphine ²	98	10.0 %
Methadone	34	3.8 %
PCP	33	3.4 %
Oxycodone	23	2.4 %
Codeine	18	1.8 %
Carbon monoxide	12	1.2 %
MDMA or MDA ³	11	1.1 %
Sertraline	11	1.1 %
Methamphetamine	10	1 %
Trazodone	9	< 1 %
Hydrocodone	8	< 1 %
Amitriptyline	7	< 1 %

² Morphine includes both morphine only and heroin/morphine combined

³ MDMA/MDA – Refers to "Ecstasy" related drugs

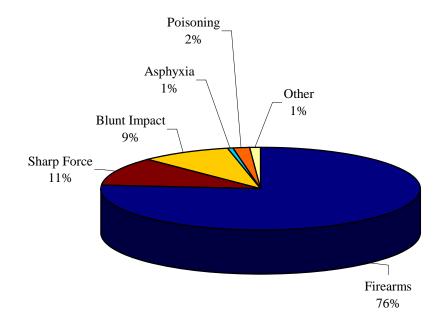
2.1 – HOMICIDE STATISTICS

The OCME investigated 177 homicides in the CY 2006. The following tables and graphs provide a distribution by cause, month, race, gender and age group. Black males and those decedents between the ages of 20-29 paid the highest toll in this manner of death. The weapon of choice continues to be firearms. The peak incidents occurred in July.

Homicides by Cause of Death

Cause of Death	Number of Homicides	% of Total Homicides
Firearms	135	76.27 %
Sharp Force	20	11.30 %
Blunt Impact	16	9.04 %
Asphyxia	1	0.56 %
Poisoning	3	1.69 %
Other	2	1.13 %
Total	177	100 %

Homicides by Cause of Death (Figure 1)

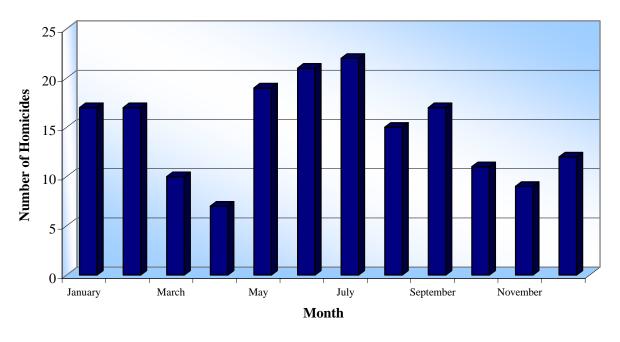


Note: The percentages in the "Figure 1" are rounded up or down to nearest whole number.

Homicides by Month

Month	Number of Homicides	% of Homicides
January	17	9.60 %
February	17	9.60 %
March	10	5.65 %
April	7	3.95 %
May	19	10.73 %
June	21	11.86 %
July	22	12.43 %
August	15	8.47 %
September	17	9.60 %
October	11	6.21 %
November	9	5.08 %
December	12	6.78 %
Total	177	100.00 %

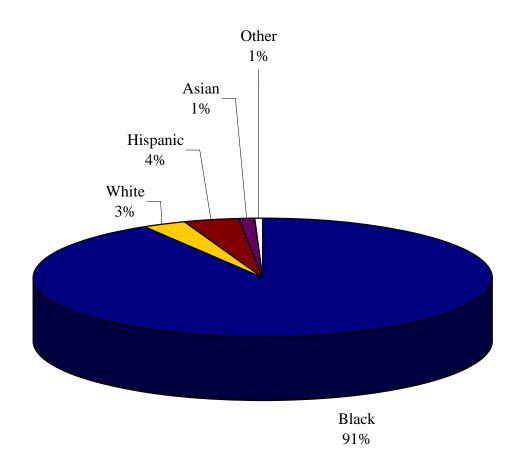
Homicides by Month (Figure 2)



Homicides by Race

Race/Ethnicity	Number of Homicides	% of Homicides
Black	162	91.53 %
White	5	2.82 %
Hispanic	7	3.95 %
Asian	2	1.13 %
Other	1	0.57%
Total	177	100.00 %

Percentage of Homicides by Race (Figure 3)



Homicides by Gender

Gender	Number of Homicides	% of Homicides
Female	16	9.04 %
Male	161	90.96 %
Total	177	100.00 %

Homicides by Race/Ethnicity and Gender

Race/Ethnicity by Gender	Number of Homicides	% of Homicides
Asian	2	1.13 %
Female	0	0.00 %
Male	2	1.13 %
Black	162	91.53 %
Female	16	9.04 %
Male	146	82.49 %
Hispanic	7	3.95 %
Female	0	0.00 %
Male	7	3.95 %
White	5	2.82 %
Female	0	0.00 %
Male	5	2.82 %
Other	1	0.56%
Female	0	0.00 %
Male	1	0.56%
Total	177	

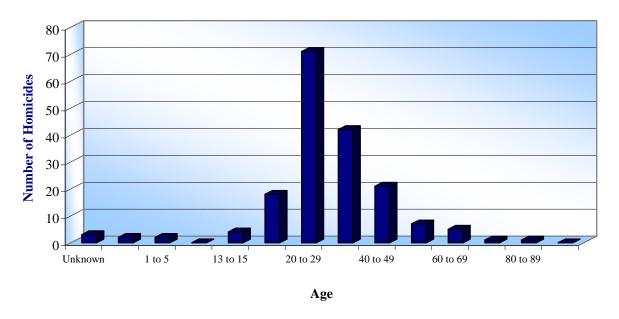
Homicides by Jurisdiction of Incident

Jurisdiction of Incident	Number of Homicides
DC	170
MD	7
Total	177

Homicides by Age

Age	Number of Homicides	% of Homicides
Unknown	1	0.56 %
Under 1	2	1.13 %
1 to 5	2	1.153%
6 to 12	0	0.00 %
13 to 15	4	2.26 %
16 to 19	18	10.17 %
20 to 29	71	40.11%
30 to 39	42	23.73 %
40 to 49	22	12.43 %
50 to 59	7	3.95 %
60 to 69	5	2.82 %
70 to 79	1	0.56 %
80 to 89	1	0.56 %
90 +	1	0.56 %
Total	177	100.00 %

Homicides by Age Group (Figure 4)



Toxicology Findings for Homicide Cases

Of the 177 Homicide deaths investigated by OCME, toxicology analysis was performed on all 177 cases. Overall, drugs were absent in 70 homicide cases; 74 cases had one drug present; 25 cases had 2 drugs present; 6 cases had 3 drugs present; and 2 cases had 4 drugs detected.

Description	Number of Cases	% of Cases
N=	177	
Negative	70	39.5 %
Positive	107	60.5 %

The most commonly detected drugs in the homicide cases were:

Name of Drug	Number of Cases	% of Homicide Cases
Ethanol	61	34.5 %
Cocaine	30	16.9 %
PCP	26	14.6 %
MDMA/MDA	12	6.7 %
Morphine	6	3.0 %
Fentanyl	2	1.1 %

Ethanol was detected in 61 Homicide cases with blood concentrations ranging from 0.02 - 0.27 % (average 0.11 %, median 0.08 %).

The 7 Homicide cases with the most drugs detected had the following toxicology:

- a) Ethanol (0.04 %), PCP, methamphetamine, and MDMA
- b) Ketamine, dextromethorphan, methamphetamine, and MDMA
- c) Ethanol (0.16 %), PCP, and MDMA
- d) Ethanol (0.16 %), PCP, and MDMA
- e) Ethanol (0.03 %), PCP, and cocaine
- f) Ethanol (0.12 %), methamphetamine, MDMA
- g) Ethanol (0.04 %), methamphetamine, MDMAF entanyl, oxycodone, amitriptyline

2.2 – SUICIDE STATISTICS

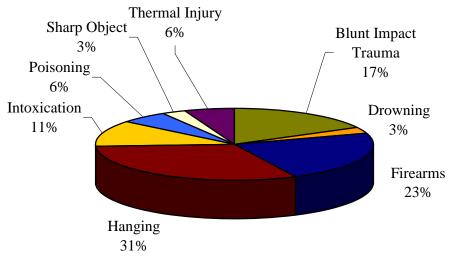
The OCME investigated 35 suicides in CY 2006. Deaths by suicidal acts are more prevalent in Whites males (followed closely by Black males), and in persons between the ages of 40-49. The data also reveals that the most prevalent method used was by hanging and not by firearms as in previous years. Peak incidents occurred in July.

Suicides by Cause of Death

Cause of Death	Number of Suicides	% of Total Suicides
Blunt Impact Trauma	6	17.14%
Drowning	1	2.86%
Firearms	8	22.86%
Hanging	11	31.43%
Intoxication	4	11.43%
Poisoning	2	5.71%
Sharp Object	1	2.86%
Thermal Injury	2	5.71%
Total	35	100%

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

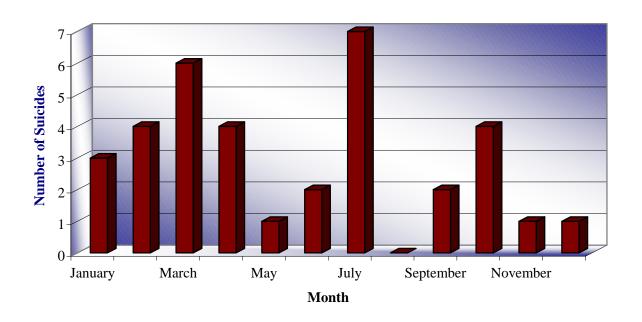
Suicides by Cause of Death (Figure 1)



Suicides by Month

Month	Number of Suicides	% of Suicides
January	3	8.57 %
February	4	11.43 %
March	6	17.14 %
April	4	11.43 %
May	1	2.86 %
June	2	5.71 %
July	7	20.00 %
August	0	0.00 %
September	2	5.71 %
October	4	11.43 %
November	1	2.86 %
December	1	2.86 %
Total	35	100.00 %

Suicides by Month (Figure 2)



Suicide by Race/Ethnicity

Race/Ethnicity	Number of Suicides	% of Suicides
White	17	48.57 %
Black	13	37.14 %
Hispanic	2	5.71 %
Asian	3	8.57 %
Total	35	100.00 %

Suicides by Race/Ethnicity and Gender

Race/Ethnicity by Gender	Number of Suicides	% of Suicides
Asian	3	8.57 %
Female	2	5.71 %
Male	1	2.86 %
Black	13	37.14 %
Female	1	2.86 %
Male	12	34.28 %
Hispanic	2	5.71 %
Female	0	0.00 %
Male	2	5.71 %
White	17	48.57 %
Female	2	5.71 %
Male	15	42.86 %
Total	35	100 %

Suicides by Gender

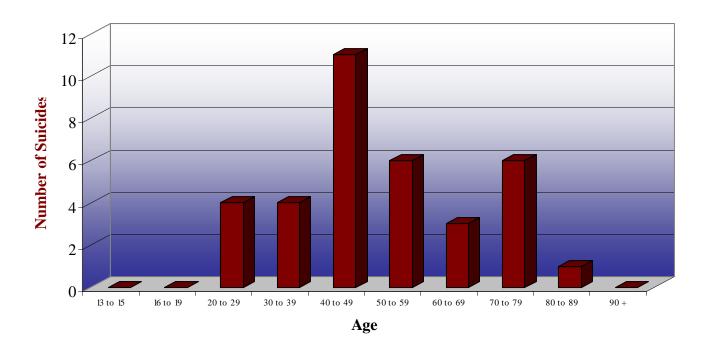
Gender	Number of Suicides	% of Suicides
Female	5	14.29 %
Male	30	85.71 %
Total	35	100%

Suicide by Age

Age	Number of Suicides	% of Suicides
20 to 29	4	11.43 %
30 to 39	4	11.43 %
40 to 49	11	31.43 %
50 to 59	6	17.14 %
60 to 69	3	8.57 %
70 to 79	6	17.14 %
80 to 89	1	2.86 %
Total	35	100.00 %

Note: There were zero (0) suicides for persons under 20 years old and for persons over 89.

Suicides by Age (Figure 3)



Toxicology Findings for Suicide Cases

Of the 35 Suicide deaths investigated by OCME, toxicology analysis was performed on all 35 cases. Overall, drugs were absent in 17 suicide cases; 10 cases had one drug present; 4 cases had 2 drugs present; 3 cases had 3 drugs present; and 1 case had 4 drugs present.

Description	Number of Cases	% of Cases
N=	35	
Negative	17	48.6 %
Positive	18	51.4 %

The most commonly detected drugs in suicide cases were:

Name of Drug	Number of Cases	% of Suicide Cases
Ethanol	7	20.0 %
Cocaine	5	14.3 %
Methamphetamine	2	5.7 %

Overall, more prescription medications were detected in suicide cases than in homicide cases, in particular antidepressant, antipsychotic, benzodiazepine and analgesic medications.

These drugs include amitriptyline, chlordiazepoxide, clonazepam, diazepam, fluoxetine, hydrocodone, hydromorphone, oxycodone, thioridazine, temazepam, and venlafaxin,

Ethanol was detected in 7 Suicide cases with blood concentrations ranging from 0.02 - 0.28 % (average 0.10 %, median 0.05 %).

The 4 Suicide cases with the most drugs detected had the following toxicology:

- a. Ethanol (0.03 %), venlafaxin, hydrocodone, and fluoxetine
- b. Hydromorphone, diazepam, and chlordiazepoxide
- c. Acetone, methamphetamine, and cocaine
- d. Ethanol (0.04 %), diphenhydramine, and oxycodone

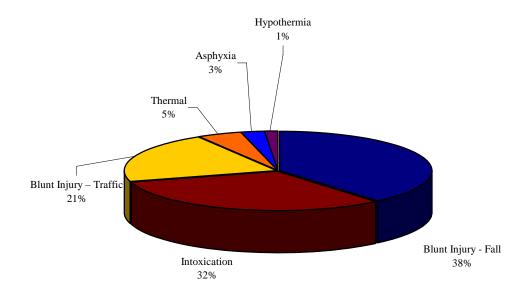
2.3 – ACCIDENTAL DEATH STATISTICS

OCME investigated 360 accident cases in 2006. Out of the 360 cases investigated, 114 were the direct result of illicit drug use, 212 cases were the result of trauma, and of the trauma cases 73 were traffic accidents with one being an air traffic accident. The peak incidents occurred in September.

Accidents by Cause of Death

Cause of Death	Number of Accidental	% of Total Accidents
	Deaths	
Blunt Injuries	212	58.89%
Due to Fall	139	38.33%
Due to Traffic	73	20.56%
Intoxication (Drug Overdose)	114	31.39%
Thermal	16	4.72%
Asphyxia	9	2.50%
Hypothermia	5	1.39%
Drowning	1	0.28%
Hyperthermia	1	0.28%
Therapeutic Complications	1	0.28%
Firearms	1	0.28%
Total	360	100%

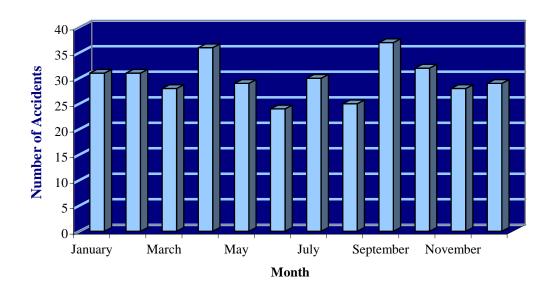
Accidents by Cause of Death (Figure 1)



Accidents by Month

Month	Number of Accidental Deaths	% of Accidental Deaths
January	31	8.61 %
February	31	8.61 %
March	28	7.78 %
April	36	10.00 %
May	29	8.06 %
June	24	6.67 %
July	30	8.33 %
August	25	6.94 %
September	37	10.28 %
October	32	8.89 %
November	28	7.78 %
December	29	8.06 %
Total	360	100.00 %

Accidents by Month of Death (Figure 2)



Accidental Deaths by Race

Race/Ethnicity	Number of Accidental Deaths	% of Accidental Deaths
Black	217	60.28 %
White	116	32.22 %
Hispanic	14	3.89 %
Asian	6	1.67 %
Other	5	1.39 %
Unknown	1	0.28 %
Pacific Islander	1	0.28 %
Total	360	100.00 %

Accidental Deaths by Gender

Gender	Number of Accidental Deaths	% of Accidental Deaths
Female	131	36.39 %
Male	229	63.61 %
Total	360	100.00 %

Accidental Deaths by Age

Age	Number of Accidents	% of Accidents
Unknown	3	1.39 %
1 to 5	10	2.78 %
6 to 12	7	1.94 %
13 to 15	2	0.56 %
16 to 19	7	1.94 %
20 to 29	22	6.11 %
30 to 39	25	6.66 %
40 to 49	69	19.17 %
50 to 59	68	18.61 %
60 to 69	31	8.61 %
70 to 79	35	9.72 %
80 to 89	52	14.44 %
90 +	29	8.06 %
Total	360	100.00 %

Note: There were no accidental deaths for children under age 1

Toxicology Findings for Accident Cases

Of the 360 Accident Deaths investigated by OCME, toxicology analysis was performed in 242 cases. Overall, drugs were absent in 80 accident cases. Of the 162 cases where drugs were present, 81 cases had one drug detected; 55 cases had 2 drugs detected; 17 cases had 3 drugs detected; 6 cases had 4 drugs detected, 2 cases had 5 drugs detected, and 1 case had 6 drugs detected.

Description	Number of Cases	% of Cases
N=	242	
Negative	80	32.9 %
Positive	162	58.8 %

The most commonly detected drugs in the accident cases were:

Name of Drug	Number of	% of Accident Cases
	Cases	
Cocaine	77	32.5 %
Ethanol	63	25.9 %
Morphine	62	25.5 %
Methadone	14	5.7 %
Carbon Monoxide	10	4.1 %
Oxycodone	5	2.0 %
PCP	5	2.0 %
Trazadone	5	2.0 %
Codeine	4	1.6 %
Doxepin	4	1.6 %
Sertraline	4	1.6 %
THC	4	1.6 %
Hydrocodone	3	1.2 %
Zolpidem	3	1.2 %

Ethanol was detected in 63 Accident cases with blood concentrations ranging from 0.02-0.48 % (average 0.14 %, median 0.09 %).

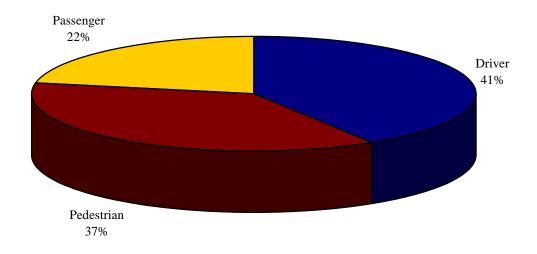
2.3.1 – Traffic Deaths

Of the three categories distinguished in traffic fatalities, Drivers were impacted the most with 41% of the total traffic deaths. The age group impacted the most was 20 to 29. Peak incidents occurred in February.

Role of the Decedent in Traffic Death

Role	Traffic Deaths	% of Traffic Deaths
Driver	30	41%
Automobile	27	
Bicyclist	1	
Motorcycle	1	
Moped	1	
Pedestrian	27	37%
Automobile	22	
Bus	3	
Dump Truck	1	
Train	1	
Passenger	16	22%
Automobile	14	
Helicopter	1	
Motorcycle	1	
Total	73	100%

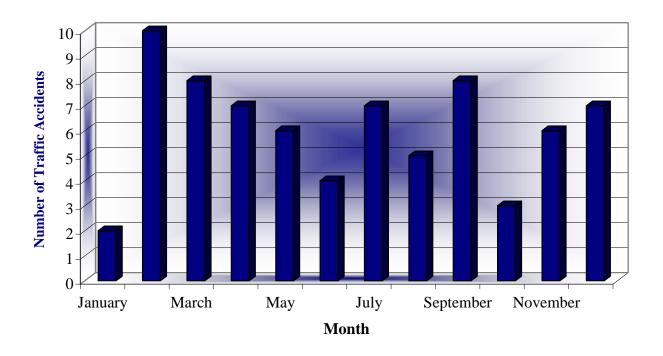
Role of Decedent in Traffic Accident (Figure 1)



Traffic Deaths by Month

Month	Number of Traffic Deaths	% of Traffic Deaths
January	2	2.74 %
February	10	13.70 %
March	8	10.96 %
April	7	9.59 %
May	6	8.22 %
June	4	5.48 %
July	7	9.59 %
August	5	6.85 %
September	8	10.96 %
October	3	4.11 %
November	6	8.22 %
December	7	9.59 %
Total	73	100.00 %

Traffic Deaths by Month (Figure 2)



Traffic Deaths by Race

Race	Number of Traffic Deaths	% of Traffic Deaths
Asian	2	2.74%
Black	43	58.90%
White	20	27.40%
Hispanic	6	8.22%
Pacific Islander	1	1.37%
Other	1	1.37%
Total	73	100.00 %

Traffic Deaths by Gender

Gender	Number of Traffic Deaths	% of Traffic Deaths
Female	21	28.77%
Male	52	71.23%
Total	73	100.00 %

Traffic Deaths by Age

Age	Number of Traffic Deaths	% of Traffic Deaths
Unknown	1	1.37%
1 to 5	8	10.96%
6 to 12	3	4.11%
13 to 15	2	2.74%
16 to 19	5	6.85%
20 to 29	15	20.55%
30 to 39	11	15.07%
40 to 49	10	13.70%
50 to 59	4	5.48%
60 to 69	5	6.85%
70 to 79	3	4.11%
80 to 89	4	5.48%
90 +	2	2.74%
Total	73	100%

Traffic Deaths by Jurisdiction of Incident

Jurisdiction of Incident	Number of Traffic Deaths	% of Traffic Deaths
DC	71	97.26%
MD	2	2.74%
Total	73	100%

Toxicology Findings for Traffic Accident Cases

Of the 73 Traffic-related deaths investigated by OCME, toxicology analysis was performed in 66 cases. Overall, drugs were absent in 42 traffic death cases. Of the 24 cases were drugs were present, 15 cases had one drug detected; 5 cases had 2 drugs detected; 3 cases had 3 drugs detected; and 1 case had 5 drugs detected.

Description	Number of Cases	% of Cases
N=	66	
Negative	42	63.6%
Positive	24	36.4%

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

Name of Drug	Number of Cases	% of Traffic Cases
Ethanol	19	28.8%
Morphine	4	6.1%
PCP	4	6.1%
Marijuana	4	6.1%
Cocaine	2	3.0%

Ethanol was detected in 19 Traffic accident cases with blood concentrations ranging from 0.03 – 0.38 % (average 0.16 %). The legal limit for Blood Alcohol Concentration in the District of Columbia is 0.08% while driving.

The 4 Traffic accident cases with the most drugs detected had the following toxicology:

- a) Ethanol (0.09 %), phencyclidine (PCP), marijuana, MDMA (Ecstasy), and sertraline
- b) Ethanol (0.09 %), phencyclidine (PCP), and marijuana
- c) Cocaine, morphine, and marijuana; and
- d) Trazodone, venlafaxine, and lamotrigine

2.3.2 – Toxicology Findings for Deaths due to Drug Overdose

There were 114⁴ OCME cases where death was directly related to drug use, and toxicology analysis was performed in 111 of these cases. The one case that had a negative post-mortem toxicology result was a delayed death with prolonged hospitalization, which resulted in dissipation of the drugs from the body. The most prevalent drug in the population was cocaine alone or in combination with other drugs (most commonly morphine). Overall, 45 Drug overdose cases had one drug present; 46 cases had 2 drugs present; 12 cases had 3 drugs present; 5 cases had 4 drugs present; 1 case had 5 drugs present, and 1 case had 6 drugs present.

Description	Number of Cases	% of Cases
N=	111	
Negative	1	0.09 %
Positive	110	99.1 %

The most commonly detected drugs in drug overdose cases were:

Contributing Drugs	Number of Cases	% of Overdose Cases
Cocaine	75	67.6 %
Morphine	50	45.0 %
Ethanol	30	27.0 %
Methadone	14	12.6 %
Codeine	3	2.7 %
Oxycodone	5	4.5 %
Doxepin	4	3.6 %
Zolpidem	3	2.7 %
Sertraline	3	2.7 %
Trazadone	3	2.7 %

Ethanol was detected in 30 Drug Overdose cases with blood concentrations ranging from 0.02 - 0.48 % (average 0.11 %, median 0.05 %).

The 2 Drug Overdose cases with the most drugs detected had the following toxicology:

a) Methadone, morphine, benzoylecgonine, doxepin, trazadone, and propoxyphene Oxycodone, olanzapine, doxepin, sertraline, and trazadone.

⁴ There were 3 cases that did not have post-mortem toxicology testing in 2006. In one (1) case the decedent had been embalmed and therefore toxicology samples were not feasible, and in the other two (2) cases the decedents were admitted into the hospital, which resulted in the deaths being delayed, and as a result of the time delay the drugs dissipated from the body by the time death occurred.

Accidental Drug Overdose Fatalities by Age and Drugs Detected

Figure 1 indicates the number of overdose deaths by age and by the number of times a drug was detected within that age category. For example in the age group 21-30 there were 5 overdose deaths, and morphine was detected in all 5 cases; whereas ethanol and cocaine were detected in 2 cases and they were not necessarily the same 2 cases.

Overdose Deaths by Age and Drugs

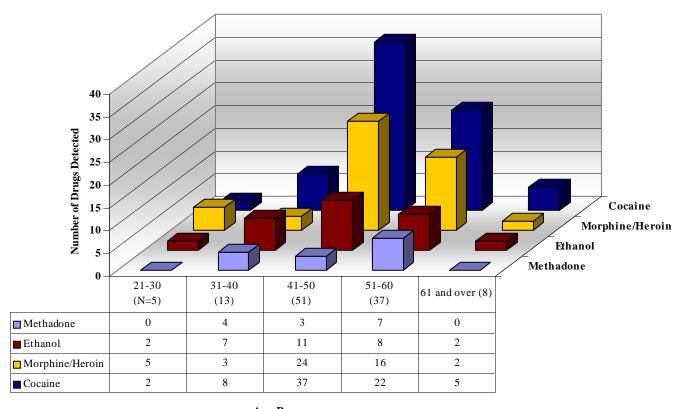


Figure 1

Age Range

Note: "N" indicates the total number of deaths in the age category. Of the total 114 overdose deaths 111 had toxicology testing (see pg. 26 for explanation). So as a result in the age category 41-50, of the 51 total deaths only 1 case did not have Toxicology testing done, and in the age category 61 and over only 2 of the 8 overdose deaths were not tested.

Accidental Drug Overdose Fatalities by Race and Drugs Detected

Figure 2 below indicates the number of overdose deaths by race and by the number of times a drug was detected within that race category. For example, there were 97 overdose deaths within the black race, and cocaine was detected in 67 cases; morphine/heroin in 43 cases, ethanol in 21 cases and methadone was detected in 11 cases.

Overdose Deaths by Race and Drugs

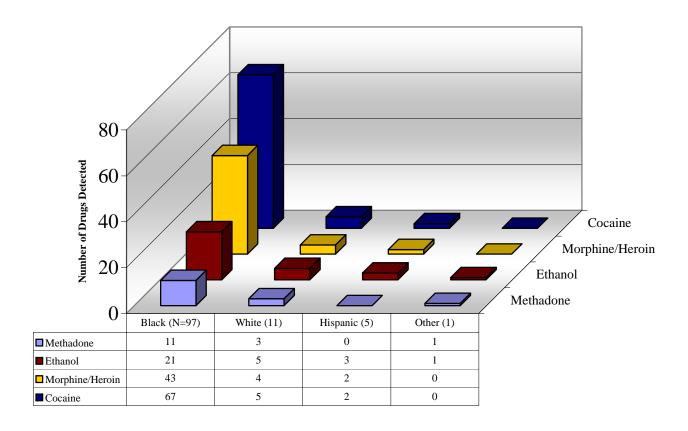


Figure 2

Note: "N" indicates the total number of deaths in the race category. Of the total 114 overdose deaths 111 had toxicology testing (see pg. 26 for explanation). So as a result in the race category "*Black*", of the 97 total deaths only 2 case did not have Toxicology testing done, and in the race category "*White*" only 1 of the 11 overdose deaths were not tested.

2.3.3 - 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. DUI cases were submitted to OCME from the District's Metropolitan Police Department, the U.S. Parks Police, and the U.S. Secret Service.

Routine toxicological examinations for DUI cases include analysis for alcohols (ethanol and other volatiles), an initial screen for major classes of illicit and prescription medications, and an additional screen for various illicit drugs, prescription drugs, and 'over-the-counter' medications. All drugs of significance are then confirmed by further testing. Marijuana and its major metabolites are screened for in all DUI cases.

A negative case refers to the absence of any alcohol and commonly detectable drugs. 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.

Total number of DUI cases analyzed:

Description	Number of Cases	% of Cases
N=	304	
Negative	13	4.3 %
Positive	291	95.7 %

Type of Specimen Submitted:

Description	Number of Cases	% of Cases
Blood	232	76.3 %
Urine	72	23.7 %

Overall, drugs were absent in 13 DUI cases; 183 cases (60.2 %) had one drug present; 83 cases (27.3 %) had 2 drugs present; 21 (6.9 %) cases had 3 drugs present; 3 (1 %) cases had 4 drugs present; and 1 case had 5 drugs detected.

The most commonly detected drugs in the DUI cases were:

Name of Drug	Number of Cases	% of DUI Cases
Ethanol	244	80.3 %
Marijuana	69	22.7 %
Phencyclidine (PCP)	47	15.5 %
Cocaine	33	10.9 %
Heroin/Morphine	8	2.6 %
Methadone	5	1.6 %
MDMA and/or MDA	4	1.3 %
Methamphetamine	2	< 1 %
Oxycodone	2	< 1 %

In the 244 DUI cases positive for alcohol, the average alcohol concentrations were as follows:

Description	N=	Average	Median	Range
Average Blood Alcohol Result	206	0.15 %	0.15 %	0.01-0.30 %
Average Urine Alcohol Result	38	0.09 %	0.07 %	0.01-0.40%

Common drug combinations for DUI cases include:

Name of Drugs	Number of Cases
Ethanol + Marijuana	30
Ethanol + PCP	14
Ethanol + Cocaine	12
PCP + Marijuana	11
Ethanol + PCP + Marijuana	6
Ethanol + Cocaine + Marijuana	5

The 4 DUI cases with the most drugs detected had the following toxicology:

- a. Ethanol (0.08 %), cocaine, morphine, hydromorphone, and methadone
- b. Ethanol (0.04 %), phencyclidine (PCP), methadone, and diazepam
- c. Ethanol (0.12 %), marijuana, clonazepam, and citalopram; and Cocaine, morphine, marijuana, and clonazepam

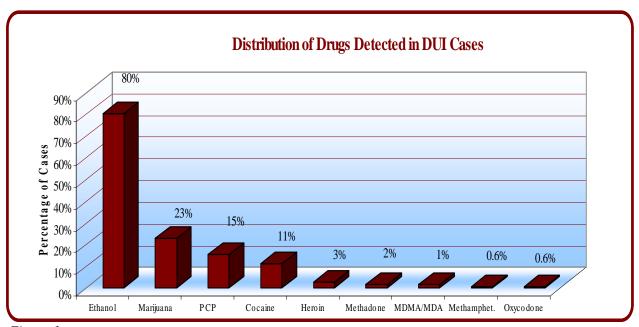


Figure 1.

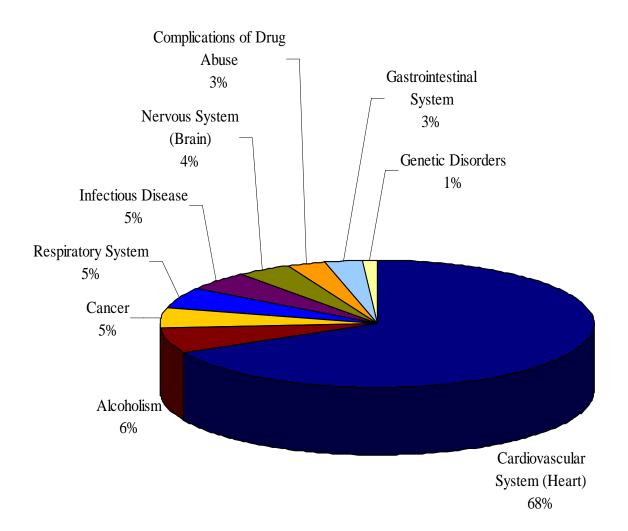
2.4 - NATURAL DEATH STATISTICS

The majority of deaths investigated by OCME fall into the Cardiovascular disease category. In other words the most prevalent cause of death involves diseases of the cardiovascular system. Peak incidents occurred in January. Blacks represented 76% of the affected population, followed by Whites, which represented 19% of the Natural Deaths.

Natural Deaths By Cause

Cause of Death	Number of Deaths	% of Total Natural Deaths
Cardiovascular System (Heart)	570	64.85%
Alcoholism	52	5.92%
Cancer	45	5.12%
Respiratory System	45	5.12%
Infectious Disease	39	4.44%
Nervous System (Brain)	36	4.10%
Complications of Drug Abuse	24	2.73%
Gastrointestinal System	22	2.50%
Genetic Disorders	10	1.14%
Diabetes Mellitus	8	0.91%
Hemopoietic System (Blood)	8	0.91%
Immune System Disease	6	0.68%
Prematurity	4	0.46%
Connective Tissue Disease	3	0.34%
Endocrine System	2	0.23%
Morbidity Obesity	2	0.23%
Complications of Pregnancy	1	0.11%
Genitourinary System	1	0.11%
Musculoskeletal System	1	0.11%
Total	879	100%

Natural Deaths by Cause (Figure 1)

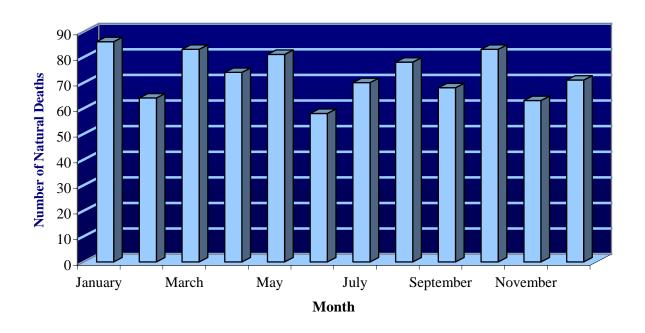


Note: Causes of Death that are less than 1% are not included in this figure.

Natural Deaths by Month

Month	Number of Deaths
January	86
February	64
March	83
April	74
May	81
June	58
July	70
August	78
September	68
October	83
November	63
December	71
Total	879

Natural Deaths by Month (Figure 2)



Natural Deaths by Race

Race	Number of Natural Deaths	% of Natural Deaths
Black	668	76.08 %
White	172	19.48 %
Hispanic	25	2.85 %
Asian	8	0.91 %
Other	3	0.34 %
Unknown	3	0.34 %
Total	879	100.00 %

Natural Deaths by Gender

Gender	Number of Natural Deaths	% of Natural Deaths
Female	367	41.57 %
Male	512	58.43 %
Total	879	100.00 %

Natural Deaths by Age

Age	Number of Natural Deaths	% of Natural Deaths
Unknown	3	0.34 %
Under 1	12	1.03 %
1 to 5	3	0.34 %
6 to 12	1	0.11 %
13 to 15	1	0.11 %
16 to 19	3	0.34 %
20 to 29	20	2.28 %
30 to 39	58	6.61 %
40 to 49	144	16.51 %
50 to 59	218	24.83 %
60 to 69	175	19.82 %
70 to 79	133	15.15 %
80 to 89	94	10.71 %
90 +	14	1.59 %
Total	879	100.00%

Toxicology Findings for Natural Deaths

Of the 879 Natural Deaths investigated by OCME, toxicology analysis was performed in 483 cases. Overall, drugs were absent in 282 natural cases. Of the 201 cases where drugs were present, 141 cases had one drug detected; 47 cases had 2 drugs detected; 10 cases had 3 drugs detected; 2 cases had 4 drugs detected, and 1 case had 5 drugs detected.

Description	Number of Cases	% of Cases
N=	483	
Negative	282	58.4%
Positive	201	41.65

The most commonly detected drugs in the natural cases were:

Name of Drug	Number of Cases	% of Natural Cases
Ethanol	67	23.7 %
Cocaine	63	22.3 %
Morphine	27	9.5 %
Acetone	21	7.4 %
Methadone	18	6.4 %
Codeine	12	4.2 %
Oxycodone	12	4.2 %
Sertraline	6	2.1 %
Diazepam	4	1.4 %
Hydrocodone	4	1.4 %
Tramadol	4	1.4 %

Ethanol was detected in 67 Natural cases with blood concentrations ranging from 0.02-0.60% (average 0.13%, median 0.10%)

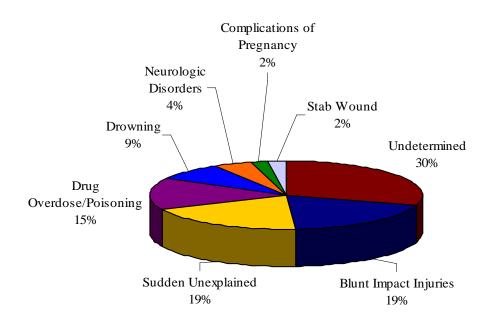
2.5 – UNDETERMINED DEATH STATISTICS

Undetermined by Cause of Death

The OCME investigated 47 cases where the <u>manner of death</u> was concluded to be "Undetermined," and of these 47 cases 14 or 30% also had a <u>cause of death</u> classified as "Undetermined". An "Undetermined" manner of death is a result of inconclusive evidence and/or investigatory efforts as to the circumstances of the death at the time. If additional information is discovered, the manner of death will be amended to indicate those new findings. There were no deaths classified as "Undetermined" in the following age groups: 1–19 years; 70-79 years and 90 years or older.

Cause of Death	Number of Deaths	% of Total Accepted Cases
Undetermined	14	29.79%
Blunt Impact Injuries	9	19.15%
Sudden and Unexplained	9	19.15%
Drug Overdose/Poisoning	7	14.89%
Drowning	4	8.51%
Neurologic Disorders	2	4.26%
Complications of Pregnancy	1	2.13%
Stab Wound	1	2.13%
Total	47	100.00%

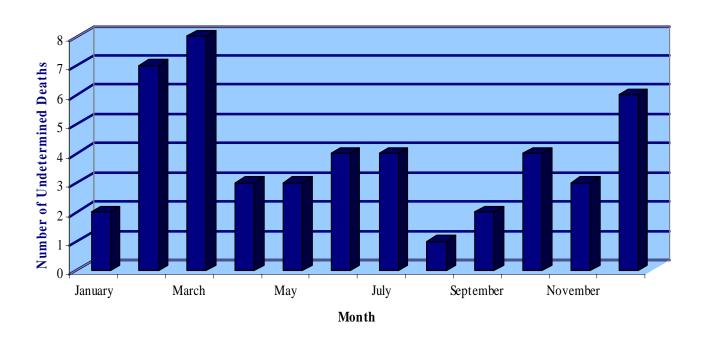
Undetermined by Cause of Death (Figure 1)



<u>Undetermined Deaths by Month</u>

Month	Number of Deaths
January	2
February	7
March	8
April	3
May	3
June	4
July	4
August	1
September	2
October	4
November	3
December	6
Total	47

Undetermined Deaths by Month (Figure 2)



<u>Undetermined Deaths by Race</u>

Race	Number of Undetermined Deaths
Black	33
White	6
Hispanic	2
Other	1
Unknown	5
Total	47

Undetermined Deaths by Gender

Gender	Number of Undetermined Deaths
Female	19
Male	23
Unknown	5
Total	47

Undetermined Deaths by Age

Age	Number of Undetermined Deaths
Unknown	6
Under 1	12
1 to 5	0
6 to 12	0
13 to 15	0
16 to 19	0
20 to 29	2
30 to 39	3
40-to 49	12
50 to 59	9
60 to 69	2
70 to 79	0
80 to 89	1
90 +	0
Total	47

Toxicology Findings for Undetermined Deaths

Of the 47 Undetermined Deaths investigated by OCME, toxicology analysis was performed in 41 cases. Overall, drugs were absent in 26 undetermined cases, and of the 15 cases that were positive for drugs; 7 cases had one drug present; 4 cases had 2 drugs present; 3 cases had 3 drugs present, and 1 case had 6 drugs present.

Description	Number of Cases	% of Cases
N=	41	
Negative	26	60.6 %
Positive	15	39.4 %

The most commonly detected drugs in the undetermined cases were:

Name of Drug	Number of Cases	% of Undetermined Cases
Ethanol	7	17.5%
Morphine	2	5.0%
Oxycodone	2	5.0%

Ethanol was detected in 7 Undetermined cases with blood concentrations ranging from 0.04 – 0.26 % (average 0.09 %, median 0.05 %).

The 3 undetermined cases with the most drugs detected had the following toxicology:

- a) Paroxetine, quetiapine, propoxyphene, trazadone, loxapine, and carbamazepine
- b) Ethanol (0.07 %), sertraline, and olanzapine
- c) Fentanyl, oxycodone, and promethazine

3.0 – FATALITY REVIEW PROGRAMS

The Fatality Review Unit was established under the auspices of OCME in October of 2005 as a means of centralizing all District based fatality review functions. The purpose of the fatality review process is to conduct retrospective reviews of deaths of specific populations as identified by DC Law and/or Mayor's Order to reduce the number of preventable deaths and/or to improve the quality of life for DC residents. Each death review process is intended to assist in identifying systemic and community strengths, as well as improvements needed in service delivery systems in order to better address the needs of the residents of the District. It is an opportunity for self-evaluation through a multi-agency and multi-disciplinary approach. This process provides a wealth of information regarding ways to enhance services and systems.

Considering that each fatality review process is similar in purpose, goals, objectives, and basic operating processes, the centralized fatality review office will create a congruent and collaborative operating structure while maintaining the unique features of the individual components. The objectives of the fatality review processes are as follows:

- ♦ To identify trends and patterns related to the deaths of specific populations through collecting, reviewing and analyzing standardized data, and to use such information to improve understanding of the causes and factors that may contribute to the fatalities.
- ◆ To work to ensure that all systems, both public and private, which are responsible for serving, assisting, and protecting District residents are effective, efficient, and accountable.
- ◆ To improve and optimize systemic responses to violence/abuse/neglect of vulnerable populations by evaluating existing statutes, policies and procedures.
- ♦ To recommend appropriate modifications to existing systems, and develop new mechanisms to reduce the incidence of unexpected and preventable fatalities.
- ◆ To encourage inter and intra-agency and interdisciplinary education, communication, coordination and collaboration in the prevention of fatalities.

Currently there are three fatality review processes that operate within the FRU, the Child Fatality Review Committee (CFRC), Mental Retardation and Developmental Disabilities Fatality Review Committee (MRDD FRC) and the newly established Domestic Violence Fatality Review Board (DVFRB). Following is a brief synopsis of the work achieved during the 2006 calendar year for all three of the operating fatality review processes. The information contained for the CFRC is based on the analysis of data that was available as of June 2007; therefore the data is considered to be provisional until the analysis and Committee/Board review and approval process is complete.

3.1 - Child Fatality Review Committee

The mandated case review criteria include the following:

- All children/youth between the ages of birth through 18 years of age;
- ◆ Youth over the age of 18 who were known to the child welfare system within four years prior to the death; and
- ♦ Youth over the age of 18 who were known to the juvenile justice system and/or the mental retardation and developmental disabilities system within two years of the death.

The above includes children whose ages ranged from birth through 23 years and who died from a multitude of causes in all manners of death categories. Of the 140 child deaths investigated by OCME, 62 or 44% were reported and accepted by the DC OCME for autopsy. The following charts and graphs represent a summary of the data that resulted from the 2006 deaths reviewed:

DC OCME CHILD DEATHS ACCEPTED FOR AUTOPSY

DESCRIPTION OF DC-OCME DECEDENT POPULATION Age and Gender of Decedents:

Age/Gender	Subtotal	Total Deaths
Under 1		21
Female	9	
Male	12	
1 thru 4		4
Female	0	
Male	4	
5 thru 10		3
Female	0	
Male	3	
11 thru 14		6
Female	0	
Male	6	
15 thru 20		23
Female	0	
Male	23	
Over 20		_ 5
Female	0	
Male	5	

Race of Decedents – DC OCME Population:

Race	Number	% of Total
Black	60	97%
White	1	1.6%
Hispanic	1	1.6%
Asian	0	0%
Other	0	0%

Decedents' Ward of Residence – DC OCME Population:

Ward of Residence	Number
Ward One	4
Ward Two	5
Ward Three	0
Ward Four	7
Ward Five	6
Ward Six	7
Ward Seven	8
Ward Eight	24
Maryland	1

MANNER OF DEATH - DC OCME Population

Manner	Number	% of Total
Homicide	30	48%
Natural	14	23%
Accident	9	14.5%
Undetermined	9	14.5%
Suicide	0	0%

CAUSES OF DEATH CATEGORIZED BY MANNER OF DEATH

Homicides:

Cause	Number
Firearms	26
Stab wound	1
Bunt Impact (1 yr)	1
Poisoning (under 1 year)	1
Asphyxia	1

Natural Deaths:

Cause	Number
Prematurity (under 38 wks)	3
Infectious Disease	3
Respiratory	1
Cardiovascular	2
Central Nervous System	4
Gastrointestinal	1

Accidents:

Cause	Subtotal	Total
Motor Vehicle/Subway		4
Pedestrian	4	
Passenger	0	
Driver (1 motorbike)	0	
Smoke Inhalation/Asphyxia		2
Drowning		0
Fall (Maternal-Prematurity; 19 yr old)		2
Asphyxia (Choking)		1

Undetermined Deaths

Cause	Number
Sudden Unexplained Death in	7
Infancy	
Undetermined	2

"Undetermined" as a final manner of death is declared when a reasonable classification of manner cannot be established after a full and comprehensive analysis of the post-mortem examination, police and forensic investigations, toxicology screens and any other social, familial, medical and other specific events leading to or surrounding the fatal incident. Based on a review of the 2006 "Undetermined" OCME deaths, the following findings were identified:

- o 100% of the decedents were Black/African American infants (n=9) and the majority were females (n=5, or 56%).
- o Five of the infants were born full term and four were preterm. All of the infants who died from Undetermined causes had birth weights that ranged between 1,871 (4.12 lbs) and 4,318 grams (9.5 lbs).
- The majority of the causes of death (n = 7, or 78%) were "Sudden Unexplained Death in Infancy".
- Based on a review of the death certificates or investigations, co-sleeping, inappropriate sleeping environments, or infants position were key risk factors in all nine of the Undetermined deaths.

3.2 - Mental Retardation and Developmental Disabilities Fatality Review Committee

The Mental Retardation and Developmental Disability Fatality Review Committee (MRDD FRC), re-established by Mayor's Order 2005-143, is required to examine events that surround the deaths of individuals diagnosed with mental retardation and other developmental disabilities that were wards of the District and/or receiving care from the Mental Retardation and Developmental Disabilities Administration.

During calendar year 2006, 29 persons died who were diagnosed with mental retardation and other disabilities and were served by the Mental Retardation and Developmental Disabilities Administration. The Fatality Review Committee reviewed 21 cases during the same calendar year. These reviews represented deaths that occurred during calendar years 2003 through 2006.

Table 1 illustrates the total number of persons served by MRDDA and the actual number of deaths per year of MRDD decedents for calendar years 2001 through 2006.

Table 1: Total DC MRDDA Population and Deaths 2001 to 2006.

Year	Population	Number of Deaths	Percentage
2006	1974*	29	1.5%
2005	1993	34	1.7%
2004	1915	36	1.9%
2003	1790	31	1.7%
2002	1703	26	1.5%
2001	1547	32	2%

^{*} Pending information from DDS

Table 2 summarizes the number of cases by calendar year reviewed by the FRC since its inception. The total number of cases reviewed (N=117) spans years 2001-2006. Table 2 also illustrates cases pending review by calendar year.

Table 2: FRC Cases Pending Review

Year	Number of Deaths By Year	Number of Cases Reviewed by Year	Number of Cases Pending Review
2006	30	6	24
2005	34	24	10
2004	36	26	10
2003	31	23	8
2002	26	21	5
2001	32	32	0
Total	189	132	57

DESCRIPTION OF TOTAL MRDD DEATHS REVIEWED DURING 2006

Decedents by Age Range and Gender of Cases Reviewed (N=21)

Age Range	2002	2003	2004	2005	2006
18-20	0	1	0	0	0
21-30	0	0	0	0	0
31-40	1	0	0	0	0
41-50	1	1	0	3	1
51-60	0	0	0	4	3
61-over	0	0	1	3	2

Decedents by Gender of Cases Reviewed (N=21)

Gender	2002	2003	2004	2005	2006
Male	1	1	0	7	3
Female	1	1	1	3	3

Decedents by Race for Cases Reviewed

Race	2002	2003	2004	2005	2006
Black	2	2	1	6	3
White	0	0	0	4	3

Ward/Jurisdiction of Residence at Time of Death (N=21)

District Ward/ Jurisdiction		Deaths b	Deaths by Calendar Year				
	2002 N=2	2003 N=2	2004 N=1	2005 N=10	2006 N=6		
One	0	1	0	1	0		
Two	0	0	0	0	0		
Three	0	0	0	0	0		
Four	0	0	0	1	1		
Five	0	0	0	0	1		
Six	1	0	0	4	1		
Seven	0	0	1	2	1		
Eight	0	0	0	0	0		
Maryland	1	1	0	2	1		
Virginia	0	0	0	0	1		

Location of Decedents At Time of Death (N=21)

Place of Death	2002	2003	2004	2005	2006
	N=2	N=2	N=1	N=10	N=6
Hospital	1	2	1	8	2
Nursing Home	1	0	0	1	2
Hospice	0	0	0	0	1
Residential	0	0	0	1	1
Other, e.g., specialized home	0	0	0	0	0
care (foster homes)					

Manners of Death (N=21)

Manner of Death	2002	2003	2004	2005	2006
Natural	2	2	1	9	6
Accident	0	0	0	1	0
Suicide	0	0	0	0	0
Homicide	0	0	0	0	0
Undetermined	0	0	0	0	0

Causes of Death

Pursuant to Mayor's Order 2006-123, "Autopsies of Deceased Clients of the Mental Retardation and Developmental Disability Administration", autopsies on all persons with MRDD who received services and support from MRDDA were no longer mandated. Of the 21 cases reviewed in 2006, twenty decedents (95%) had autopsies, and one decedent (5%) received an external examination.

- Of the 2002 decedents (N=2), the District's OCME accepted jurisdiction and performed an autopsy on both decedents (100%).
- Of the 2003 decedents (N=2), OCME accepted jurisdiction and performed an autopsy on both decedents (100%).
- Of the 2004 decedents (N=1), OCME accepted jurisdiction and performed the autopsy.
- Of the 2005 decedents (N=10), OCME accepted jurisdiction on 9 cases and performed autopsies on 8 or, 80%. An external examination was performed on 1 case (10%) and, autopsy (10%) was performed in an out-of-state facility.
- Of the 2006 decedents (N=6), OCME accepted jurisdiction and performed autopsies on all 6 decedents (100%).

⁵ Mayor's Order 2006-123, Autopsies of Deceased Clients of the Mental Retardation and Developmental Disabilities Administration, September 28, 2006.

The table below lists the proximate causes of death, or the underlying pathological condition responsible for the demise in the 21 cases reviewed

Cause of Death	Deaths (N=31)
Cardiovascular Diseases (Hypertension, Atherosclerosis,	7
and Mitral Valve Insufficiency)	
Infectious Diseases	2
Cancer (breast, ovary, and esophagus)	2
Primary Neurologic Disease	5
Gastrointestinal tract	2
Primary Pulmonary Conditions	2
Choking (due to aspiration of a bolus of food)	1

3.3 - Domestic Violence Fatality Review Board

The Domestic Violence Fatality Review Board, established by DC Law 14-296, is responsible for reviewing homicides and suicides that are determined to be related to domestic violence. The Board began operation in October 2005. During the first six months of operation, the Board concentrated on establishing the protocols and procedures that are critical to ensuring a consistent and comprehensive case review practice and process. OCME succeeded in identifying grant funds and as a result was able to hire a consultant to assist Board members through the planning phase. During the initial six-month period of Board operation, the Board accomplished the following tasks:

- Conducted research of national state-of-the-art fatality review programs/practices;
- Developed policies and procedures to cover the full case identification/notification and case review process;
- Developed forms to facilitate consistency in practice throughout the review process;
- Developed a database to ensure consistency in data gathering to document victim/perpetrator demographics, services provided and trends; and
- Identified and established working relationships with stakeholders.

Based on the decision of the Board, during the first two years of operation, cases would be identified through the Metropolitan Police Department and the United States Attorneys Office. It was also decided that the review process would begin after the conclusion of the prosecution process for each case and the Board would begin with deaths that occurred during the 2004 calendar year. The case review process began in April 2006 with three test cases from the 2003 calendar year. The purpose of the test process was to test policies, forms and other operational modules developed and to identify problems, gaps and inconsistencies in order for correction prior to formally initiating the review process. During 2006, a total of 39 cases were identified as meeting the review criteria from calendar years 2004 through 2006. In May 2006, the Board began the official case review process and by December 31, 2006 had fully reviewed 12 cases (including the 3 test cases from 2003. The breakdown of the cases identified and reviewed by year is as follows:

Total Cases Identified and Reviewed During 2006								
Case Status 2003 2004 2005 2006								
Identified for Review	3	15	15	9				
Reviewed	3	7	1	0				
Pending Review	0	8	14	9				

The following outlines the status of the 12 cases reviewed by the DVFRB:

- 3 were test cases from calendar year 2003.
- 1 was determined to not meet the criteria and therefore not accepted as a DVFRB fatality
- 8 were accepted and counted as DVFRB fatalities

The following information provides demographic data on the victims and perpetrators for the 8 cases reviewed and accepted as DVFRB fatalities:

Gender of Victim/Perpetrator

- **Perpetrator -** 5, or 63% of the 8 accepted cases involved women as perpetrators and 3 involved male perpetrators
- **Victims** 6, or 75% of the 8 victims were males and 2 were females

Race of Victim/Perpetrators

- **Perpetrators** 7, or 88% of the perpetrators are Black/African American and one was an African immigrant
- **Victims** 7 of the decedents were Black/African American and 1 was a White Romanian immigrant

Age of Victim/Perpetrator

Perpetrators

- ❖ Ages ranged from 19 through 42
- ❖ Average age was 32.4
- ❖ In 3 cases there was a significant age difference between the decedent and the perpetrator that ranged from a low 13 years to a high 37 year difference

• Victims

- ❖ Ages ranged from 19 through 74 years
- ❖ Average age was 36.4

Ward of Residence for Victim/Perpetrator and of Fatal Incident

	Re	sidence	
Ward	Victims	Perpetrator	Fatal Incident
Ward One	1	1	1
Ward Two	0	0	0
Ward Three	0	0	0
Ward Four	0	0	0
Ward Five	2	1	2
Ward Six	0	1	1
Ward Seven	0	2	1
Ward Eight	3	2	3
MD/VA	2	1	0

Manner and Causes of Death:

- 100% of the 8 cases reviewed involved Homicides. The causes of these deaths were as follows:
 - ❖ 3 or 37.5% of the 8 deaths were caused by Stab Wounds;
 - ❖ 3 or 37.5% of the 8 deaths were caused by Blunt Impact Injuries; and
 - ❖ 2 or 25% of the 8 deaths were Gunshot Wounds

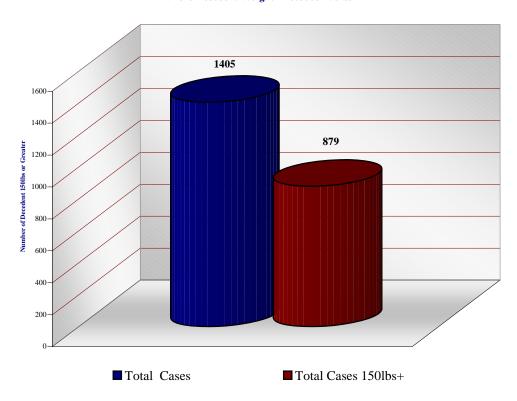
4.0 – Data on Weight Distribution of Accepted OCME Cases for 2006

The obesity rate is rising in all age groups throughout the nation. According to a recent publication, Washington DC ranks 35th highest in a ranking that calculates and rates the obesity of adults and 49th highest amongst those adults calculated as obese and overweight combined. Obesity increases the risks of cardiovascular diseases and diabetes mellitus. The following report provides data on Weight Distribution and the Body Mass Index of adult decedents (age 20 and older) and children (2-19 years) that were brought to the D.C. Office of the Chief Medical Examiner (OCME) either for examination or storage. This report outlines the necessity for the agency to always have 2 staff members available for body retrieval and to procure larger body carts and autopsy tables that can accommodate the increased body mass. The agency foresees an increased request for temporary storage from area hospitals directly related to their inability to adequately store markedly obese decedents while families are making funeral arrangements.

With obesity becoming a major health concern for the nation, this data was compiled using the FACTS Case Management System and cross-referenced with the OCME Mortuary Case Log Book for accuracy. The data presented was gathered on decedents who were processed by the OCME between January 1, 2006 and December 31, 2006.

This year's data reports on the distribution of weights with emphasis on the Body Mass Index (BMI). BMI is a mathematical formula used to determine the ratio of body weight to body height, which correlates strongly (in adults) with body fat content. Individual adults with a BMI between 25 and 30 are considered overweight, and those with a BMI over 30 are considered obese⁶. This report includes a correlation of BMI with deaths due to Arteriosclerotic and Hypertensive Cardiovascular Diseases.

Comparison of 2006 Total Cases to Total Number of Cases Where Decedent Weight Exceeded 150lbs



⁶ **Reference**: The Center for Disease Control's (CDC) website at <u>www.cdc.gov</u>

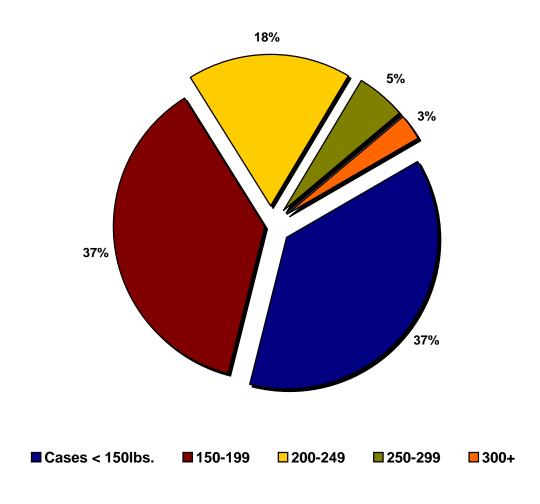
2006 - WEIGHT DISTRIBUTIONS

Weight	< 150lbs	150-199	200-249	250-299	300+	Total Cases 150lbs or more	Total Cases
Number of Decedents	519	520	245	72	42	879	1405

Note: There are 7 OCME cases in 2006 where weight information is not available.

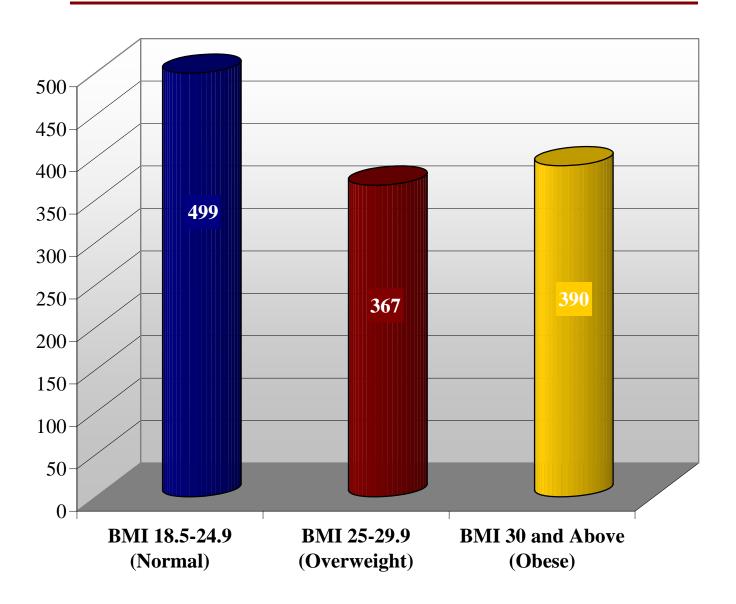
Although <u>all</u> adult persons over the weight of 150 pounds are not necessarily considered overweight, there is a direct correlation with the weight of a decedent and work related injuries for OCME personnel. As a result, adequate staffing, training, and equipment are necessary to prevent injuries related to the lifting of bodies as required at the time of pick-up and during the autopsy procedure.

Distribution of Accepted OCME Cases by Weight 2006



Body Mass Index (BMI)

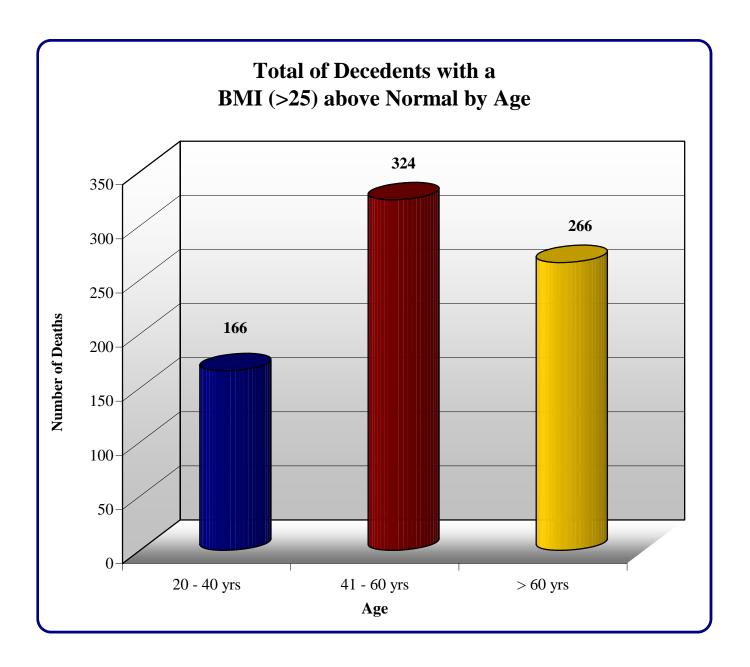
The BMI - figure below illustrates that of the $1,405^7$ adult cases OCME accepted for further investigation, 757 cases or 54% had a Body Mass Index above normal. 367 were overweight (BMI 25 - 29.9), and 390 were obese (BMI 30 and above).



⁷ There are a total of seven (7) cases where BMI could not be determined. Six of these cases were "Review of Medical Records only" in which the body did not come into the facility, and the information was not available for the remaining case.

BMI by Age

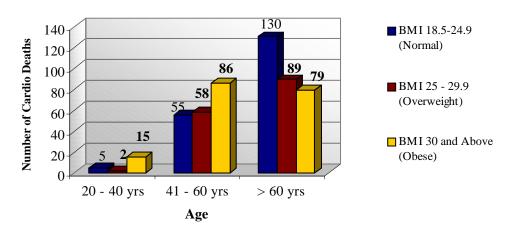
Of the 757 decedents with a BMI above normal (25 or more), the age group with the highest number of deaths was 41 - 60 years old with 324 deaths.



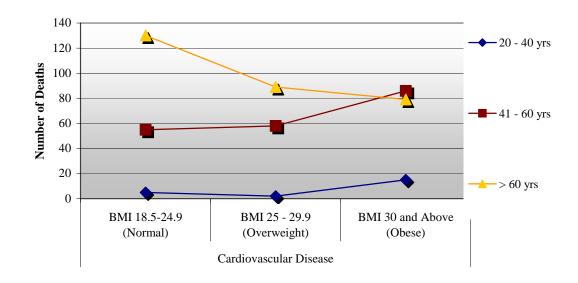
BMI by Age and Cardiovascular Disease

Of the 519 decedents identified by OCME with a cause of death directly associated with Arteriosclerotic and Hypertensive Cardiovascular Disease, 329 cases or 63% had a Body Mass Index above normal. 149 were overweight and 180 were obese. The figures below outline the prevalence of cardiovascular disease by age and BMI.

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

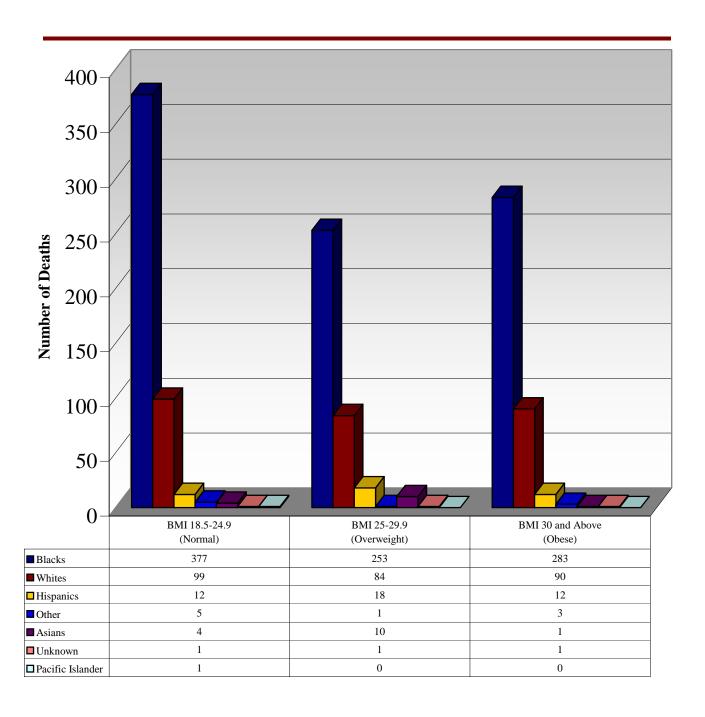


Body Mass Index (BMI) and Deaths Associated with Cardiovascular Disease by Age



BMI by Race

The demographics for this population decreased slightly between 2005 and 2006. Of the 757 decedents above the normal BMI, 71% were Black/African American, 23% were White, 4% were Hispanic and less than 3% were Asian, Other or Unknown.



How is BMI Determined for Children?

The BMI calculation for children between the ages of 2 and 19 years is calculated for each child separately using the following information.

- 1) Date of Birth
- 2) Date of Measurement
- 3) Gender
- 4) Height
- 5) Weight

Once the above information is entered for each child, it is used to calculate where the child falls in an established percentile as compared to other children in their age and gender group. More information on how BMI is determined for boys and girls between the ages 2-19 years can be found at the CDC website:

http://www.cdc.gov/nccdphp/dnpa/bmi/childrens_BMI/about_childrens_BMI.html

BMI Statistical Data

OCME had a total of 82 child decedent cases in 2006 that were accepted for further investigation. Of the 82 cases 29 were under the age of two, and currently there is not a BMI calculation available for this subset of children. There were a total of 53-child decedents age 2 years old and above where BMI calculations could be determined (with 3 exceptions) and they are displayed below by gender and age.

FEMALES

Age	Underweight		Healthy		*At Risk		Overweight		Total
	BMI Range	No.	BMI Range	No.	BMI Range	No.	BMI Range	No.	Total
2-5 yrs	**n/a	0	15.1-16.6	2	17.6	1	21.4-26.4	3	6
6-11 yrs	**n/a	0	**n/a	0	**n/a	0	**n/a	0	0
12-16yrs	**n/a	0	**n/a	0	**n/a	0	**n/a	0	0
17-19yrs	**n/a	0	22.9	1	30.0	1	32.2	1	3
Total		0		3		2		4	9

MALES

Age	Underweight		Healthy		*At Risk		Overweight		Total
	BMI Range	No.	BMI Range	No.	BMI Range	No.	BMI Range	No.	Total
2-5 yrs	13.9	1	**n/a	0	**n/a	0	20.6-22.5	3	4
6-11 yrs	DNA ⁸	2	16.9-22.5	5	**n/a	0	**n/a	0	7
12-16 yrs	DNA ⁹	1	17.9-20.8	8	24.0-26.5	3	29.2-31.3	2	14
17-19 yrs	18.7	1	18.2-25.5	16	*n/a	0	25.7-28.6	2	19
Total		5		29		3		7	44

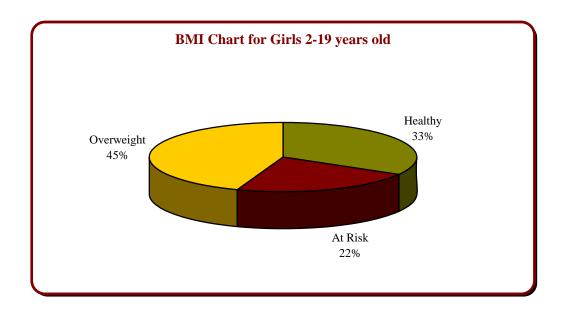
^{*}Note: At Risk indicates that the child is at risk of becoming overweight.

^{**}n/a= not applicable

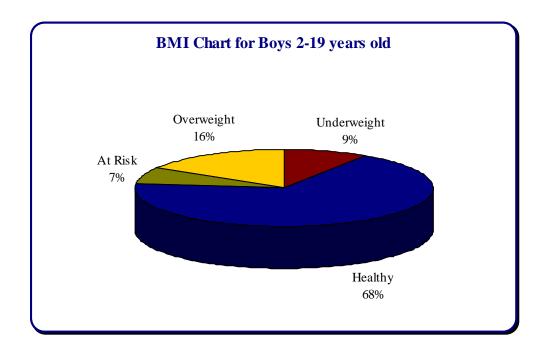
⁸ DNA=Data Not Available. The CDC BMI calculator returns the following statement "the calculated BMI is outside the ranges expected values and cannot be displayed... If the entries are accurate, this child may be underweight..."

⁹ DNA = Data Not Available. The recorded weight is 38 pounds. No height is recorded due to a birth malformation, which causes a constriction of the limbs, so an accurate BMI could not be determined.

There was a total of 9 female youths from 2-19 years, and 67% were found to be outside the healthy range. However, it should be noted that there were <u>no</u> female decedents between the ages 6-16 years.



There were a total of 44 male youths from 2-19 years, and 68% were found to be within the healthy range. There were male decedents in all age categories.



5.0 – Breakdown of Medical Examiner (ME) Investigations compared to Census Population Data

According to the US Census Bureau the estimated population for calendar year 2006¹⁰, in the District of Columbia is 581,530 inhabitants, however no estimated breakdowns by race are available, so for the purpose of this report the 2005 estimated census data will be used. The DC population is comprised primarily of the following ethnic groups: White, Black, American Indian/Asian and Hispanic. In 2006 the OCME investigated 2,989 deaths that occurred in these populations and 1,518 were accepted under the jurisdiction of the Medical Examiner for further investigation. The following table and figures summarize the manner of death by racial composition.

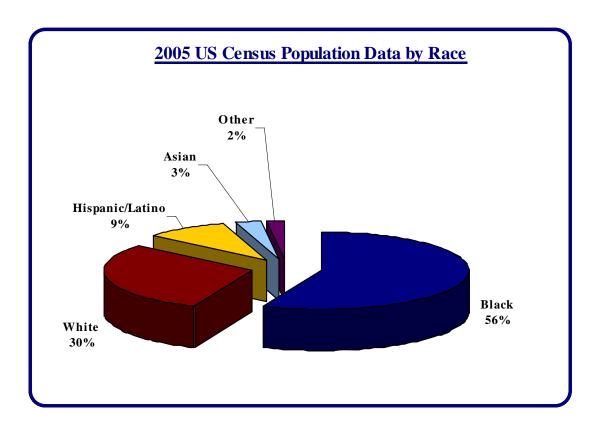
Manner of Death by Race with 2006 Population

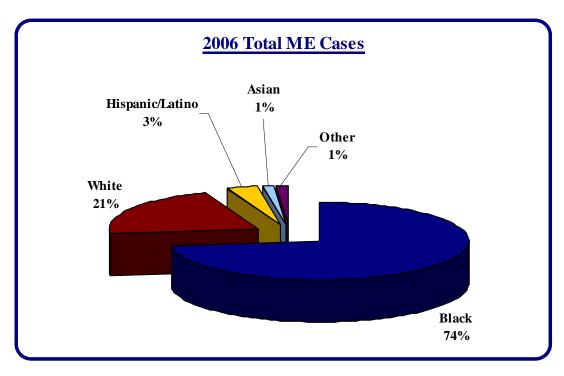
Race	2005 Census	ME Cases	Natural	Suicide	Homicide	Accidents (Traffic)	Accidents (All)	Undetermined
White	152,879	316	172	17	5	20	116	6
Black/African American	290,128	1,093	668	13	162	43	217	33
Hispanic/Latino (of any race)	45,901	50	25	2	7	6	14	2
Asian	14,997	19	8	3	2	2	6	0
Pacific Islander	189	1	0	0	0	1	1	0
Alaskan Native	1,132	0	0	0	0	0	0	0
Other ¹¹	9,892	19	6	0	1	1	6	6
Total Population	515,118	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total # of ME Cases	N/A	1,498	879	35	177	73	360	47

¹⁰ http://quickfacts.census.gov/qfd/states/11000.html

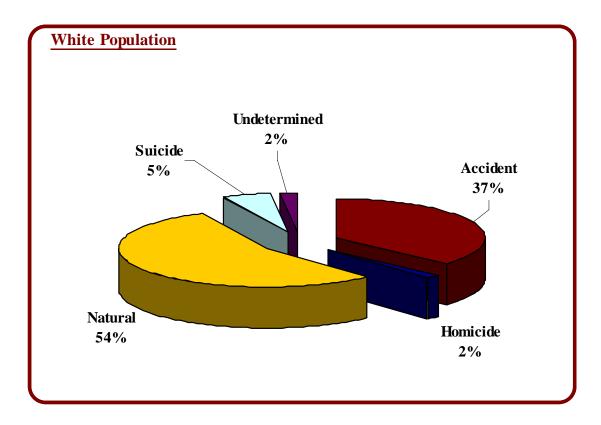
¹¹ Where **Race** is categorized as "Other" the data represents the following: Unknown and two or more races

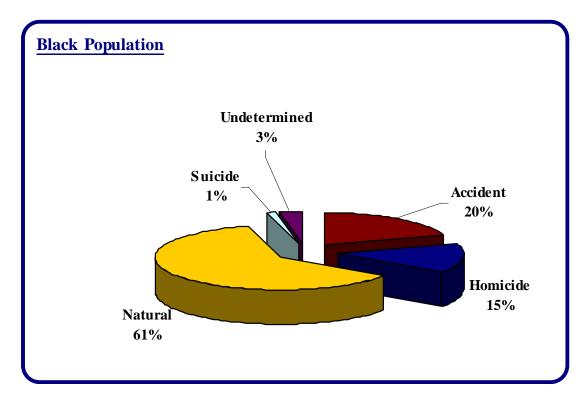
Total Population & Total ME Cases by Race

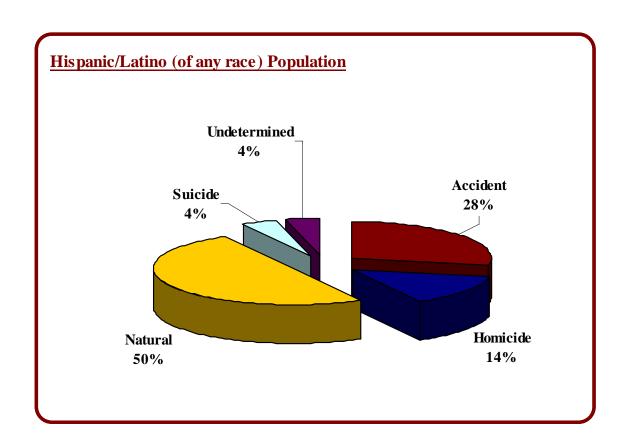




ME Cases by Race and Manner of Death

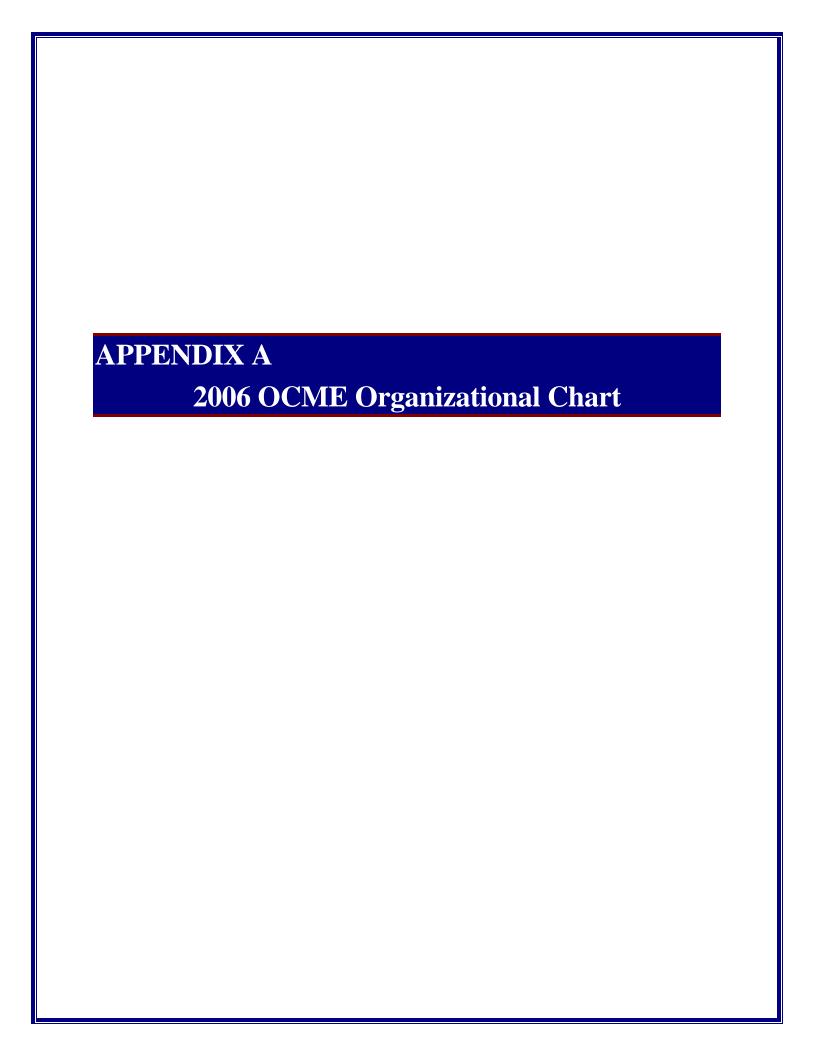


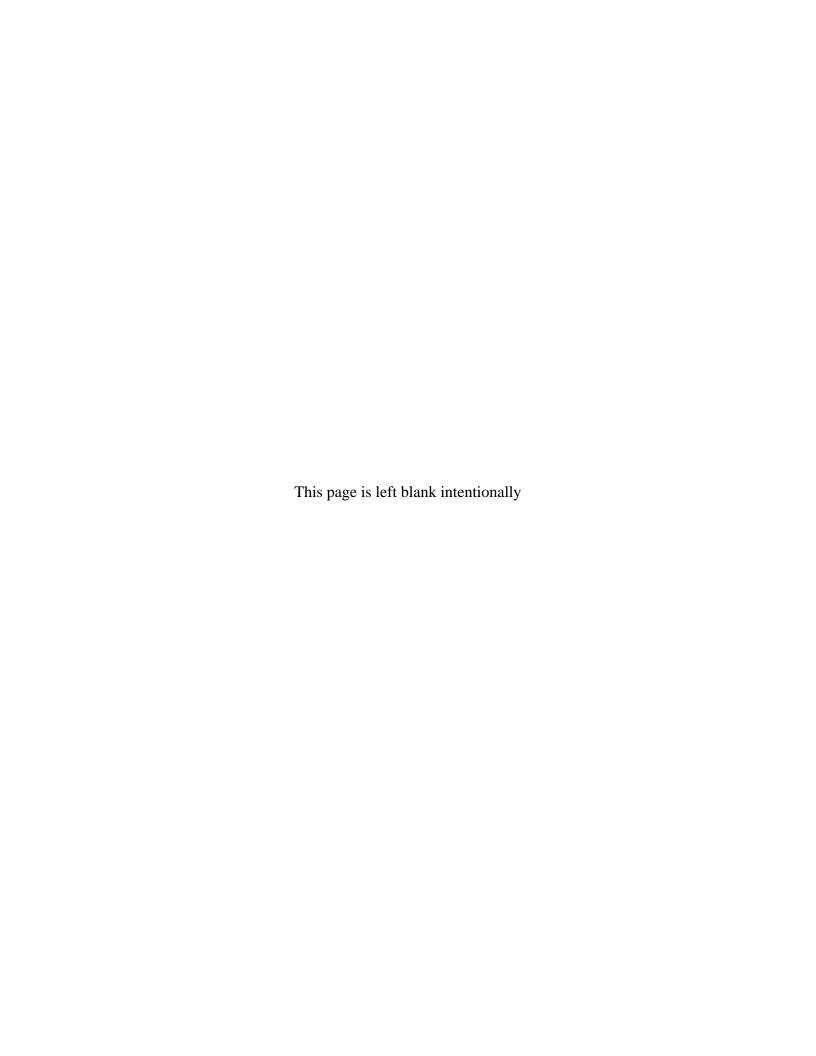




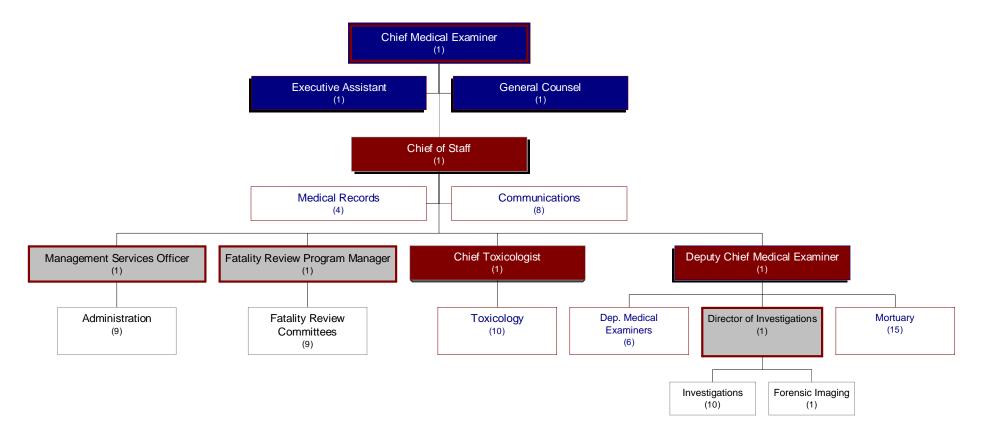
APPENDIXES

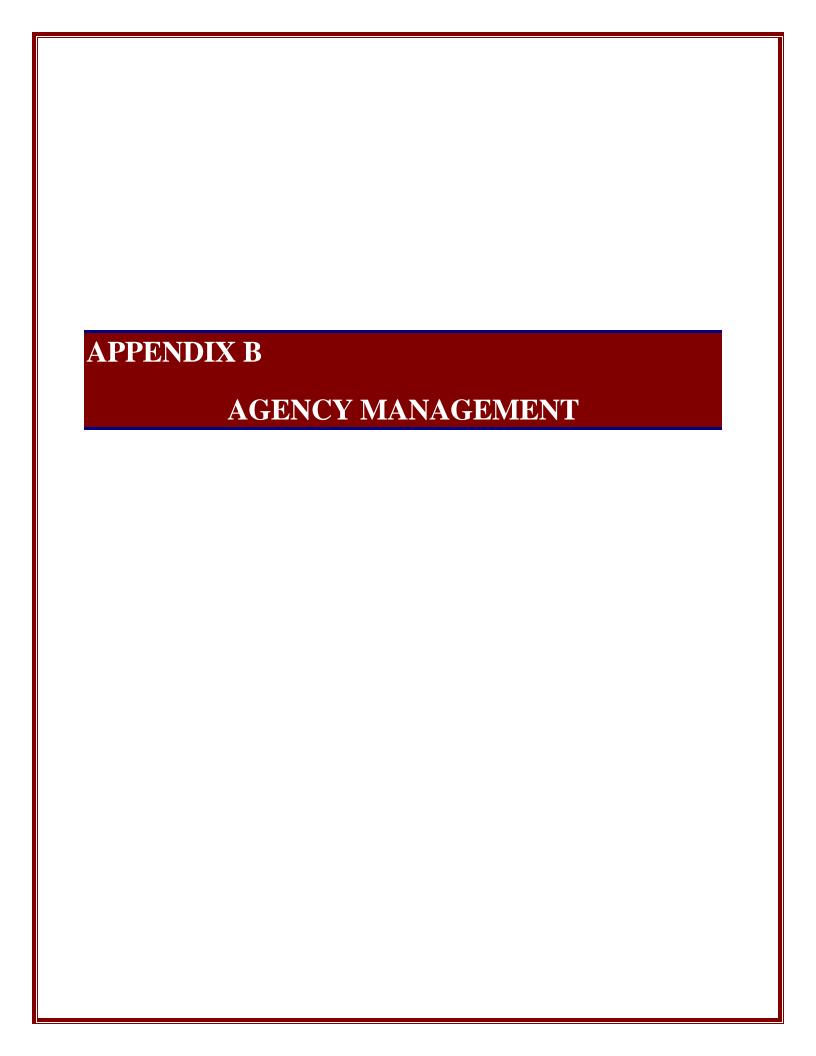
2006 OCME Organizational Chart	A
Agency Management	В
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Other Major Activities	D
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A 30-Year Review Of Suicides	F





OFFICE OF THE CHIEF MEDICAL EXAMINER ORGANIZATION CHART - 2006







AGENCY MANAGEMENT

Personnel Management:

During 2006, OCME focused on maintaining a qualified and diverse workforce through the implementation of employee retention and recruitment efforts. Employee retention efforts include workshops and training sessions during monthly staff meetings, continuous improvement and clarification of agency policies and procedures, Employee Incentive Awards (monetary and non-monetary) for performance, and a focus on labor relations. Of 88 authorized positions, 73 were filled; 12 were in the recruitment or classification process; and 3 were vacant. Management began to establish several new positions that were authorized through the budget process. This entailed evaluation of existing position descriptions and workflow gaps to reclassify current positions and develop new positions to accomplish the agency's mission.

Contracting & Procurement:

OCME's contracting and procurement or purchasing unit provided contracts management, purchasing and technical assistance to department management and staff so that services and commodities were obtained within budget and in a timely manner according to customer specifications during the calendar year.

Pursuant to Title 27, DCMR Chapter 8, Local, Small and Disadvantaged Business Enterprises (LSDBE) Contracting regulations, each agency of the District of Columbia must allocate fifty (50%) of its expendable budget for use with Local Business Opportunity Commission certified Small Business Enterprises (SBE). For 2006, the agency met these LSDBE requirements in providing services to decedents' families, law enforcement, the health community, officials, and the community at large. As in past years, this accomplishment is significant because the agency's contracting needs are often highly specialized and result in limited options for securing services. The agency will continue to encourage non-LSDBE vendors (that appear to be eligible) to apply for certification which may allow us to achieve higher annual set-aside goals.

Property Management:

Throughout 2006, OCME worked with the Office of Property Management (OPM) on several capital projects, including: a) repair of the HVAC system; b) various in-house renovations; and c) a move to external facility for additional staff spacing. While the HVAC system repair was completed in 2005, problems with temperature variances and water leakage continued. An additional assessment of the exhaust system by OPM revealed that more work was required to address the air quality problems and a new design for the exhaust system was developed. After the new design and scope of work were developed, OPM worked with the Office of Contract and Procurement to solicit bidders for the contract. While obtaining bidders proved challenging, OPM continued to work throughout the rest of the year on the solicitation process.

OCME also worked with OPM on Phase I of in-house renovations to accommodate OCME spacing challenges for current staff and new hires. The renovations began in the fall of 2005 and included expanding the reception area and renovation of office spaces to increase the number of offices and spacing for employees. This renovation was completed in 2006. Phase II of the in-house renovation project was initiated to include additional security measures; safety measures for the toxicology laboratory and autopsy suite; and renovation of the mortuary unit office space such that the Forensic Imaging Unit would have secure space for photographs, slides and x-rays. A separate office for the Mortuary Supervisor (Supervisory Pathologist Assistant) and larger office space for Autopsy Assistants was also planned. The actual work would begin in 2007. During 2006, a building design was developed for a move to an external space to provide adequate workspace for the Fatality Review Committee staff. This would in turn provide additional spacing within OCME's core facility.

Information Technology:

During FY 2006, the OCME developed the official agency Information Technology (IT) Unit. Contracted staff and one agency employee previously did the IT work. The contracted staff worked under a capital project to develop a Forensic Automated and Case Tracking System (FACTS) through FY2006 – September 30, 2006. As such, the agency developed two new positions during 2006 -- an IT Network Operator and IT Systems Analyst. These positions, along with an already existing Computer Specialist position, make up the IT Unit.

The FACTS system is used to log all information associated with a case from the time of the initial intake call through the release of remains to the final completion of the autopsy report. With an automated search, OCME can provide information on various aspects of a case, such as: a) whether it is pending jurisdiction or has been accepted; b) status of the autopsy or examination; c) the cause and manner of death; and d) other key case notes about the deceased or investigation. OCME also uses FACTS to compile statistics for the agency's Monthly Performance Scorecard reports and its annual reports. OCME's FACTS is recognized as a national model. During 2006, the IT team developed and implemented several new modules for FACTS, including a module allowing the Child Fatality Review Committee staff to integrate with and input data into FACTS. The agency also worked to deploy a system from Smart Board Technology, Inc., which consists of equipment and software that would allow a physician to input and compile data or autopsy findings at the time of autopsy because of its interactive capabilities. This technology continues to be explored. Additionally, implementation of a new bar coding module has been implemented for use by the mortuary staff for property intake, release, and storage. The development of this project will continue in 2007.

Risk Management:

The agency's Risk Assessment Control Committee ("RACC") met all D.C. Office of Risk Management (ORM) requirements in 2006, which included: holding monthly meetings and providing monthly meeting minutes and cost of risk reports; implementing an Agency Risk Management Plan; continued development of a Continuation of Operations Plan (COOP); updating its Emergency Response Plan (ERP); and providing quarterly updates and a year-end report to the Office of Risk Management. As part of Risk Management, health and safety issues continue to be addressed. The agency continues to provide radiation monitoring and annual tuberculosis testing. The agency has trained staff on the procedures to be followed in the event of an injury, including immediate emergency health care and completion of an accident report.

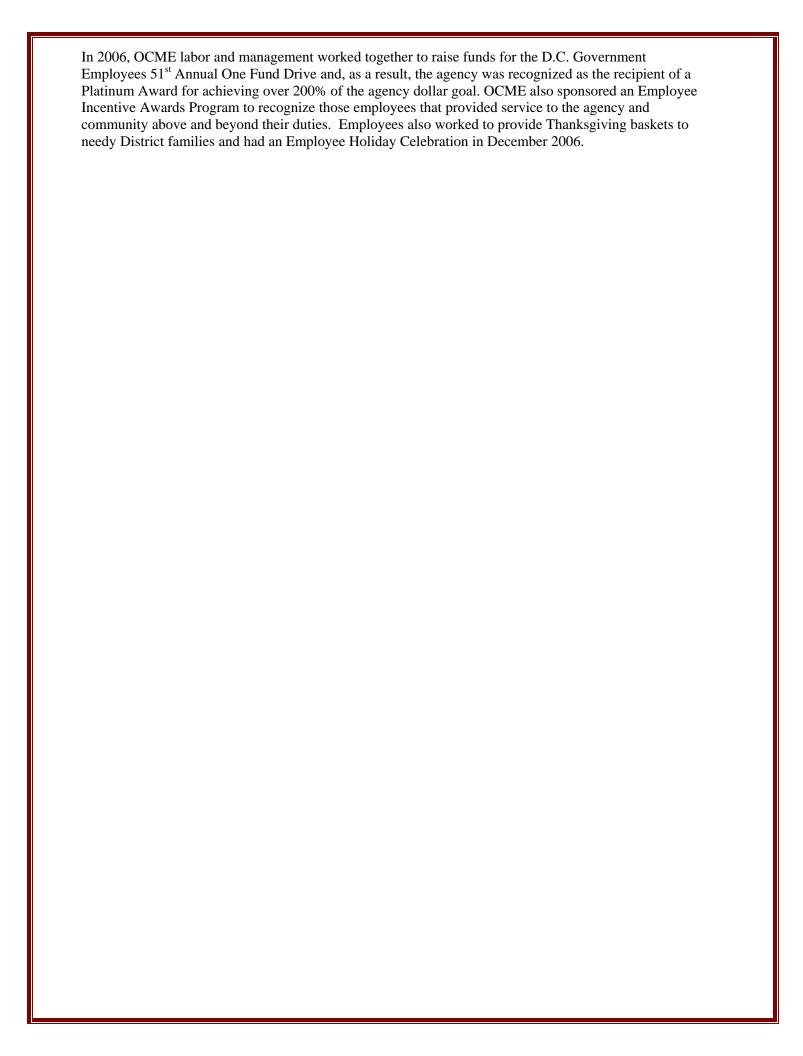
Over the course of 2006, OCME actively pursued activities to support its mass fatality and emergency response planning. The agency's Mass Fatality Plan establishes the framework for response to mass disasters; describes OCME's roles and responsibilities; and outlines OCME's relationships with local, federal and volunteer agencies that may support OCME in its functions. For a second year, the agency attempted to hire a consultant through grant funding to assist in review and implementation of its mass fatality plan. The agency found it challenging to find the requisite experience and qualifications through the solicitation process and is working on other means for continued development of its plan.

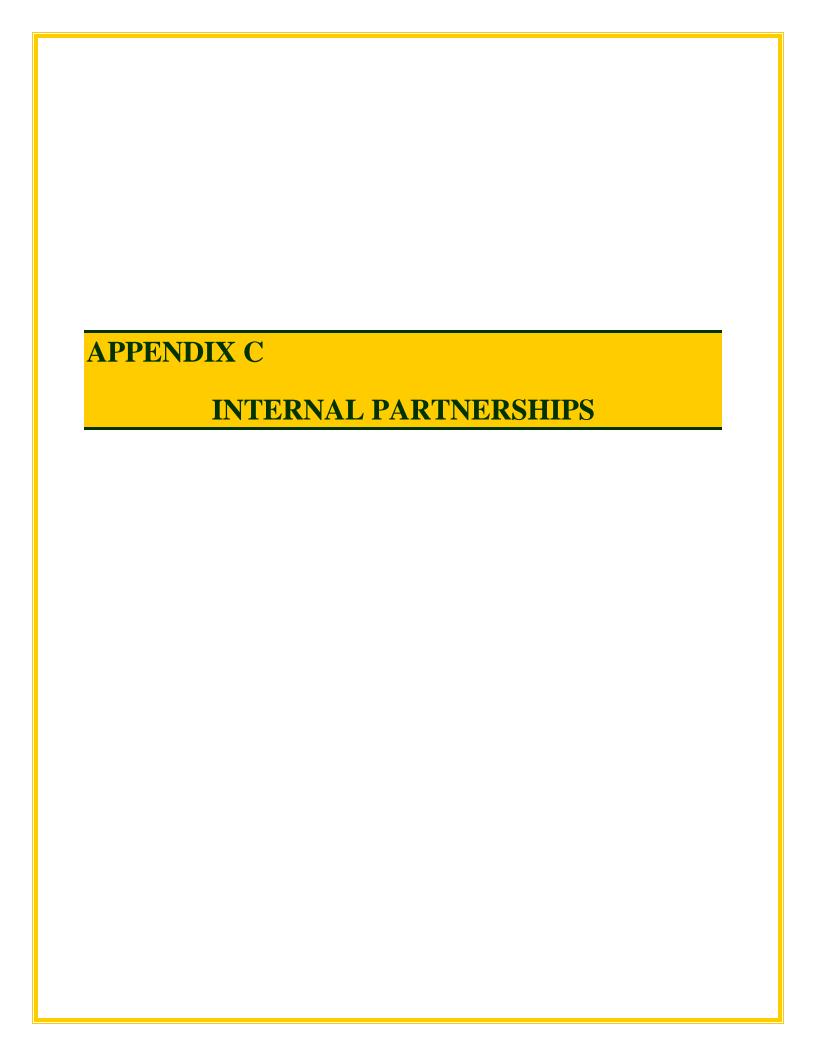
OCME's emergency response planning also included:

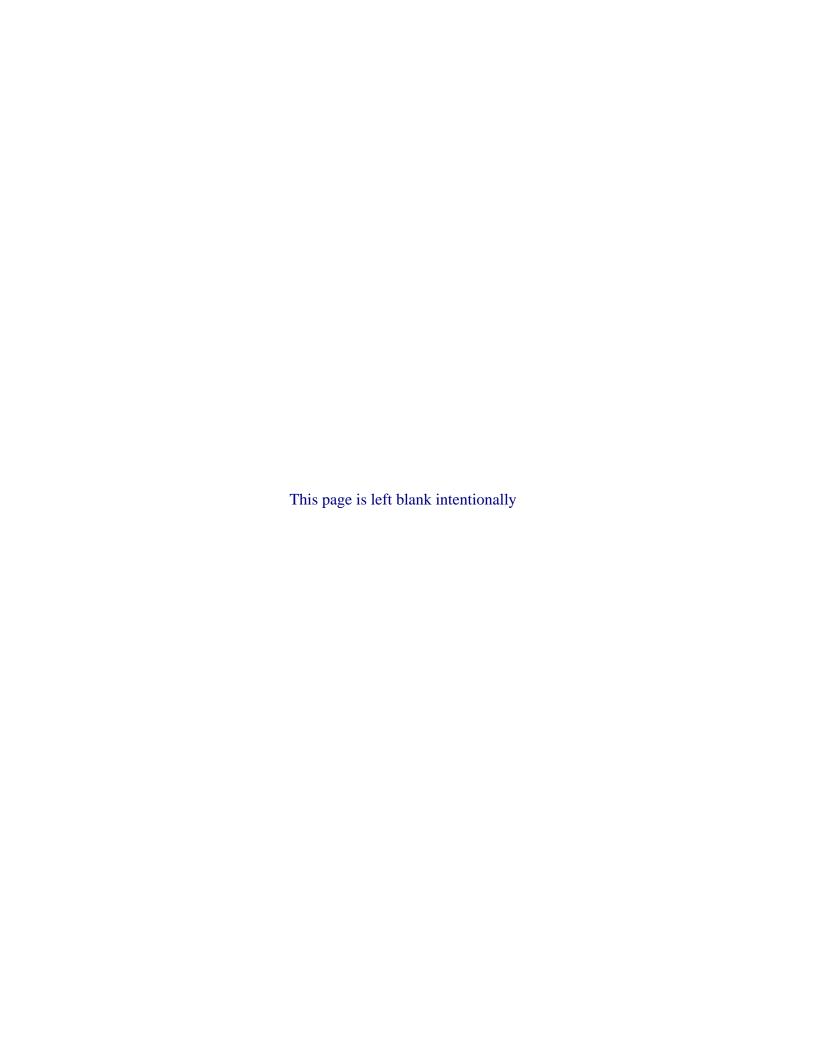
- staff training and participation in various emergency preparedness conferences;
- agency quarterly emergency response drills;
- participation in District National Response Drills; and
- participation in Forensic Lab planning.

Labor Relations:

OCME's Labor Management Partnership Council (comprised of labor and management employees) was active in 2006 and worked on several projects, including unit presentations on their functions and the completion of unit projects geared toward community service or employee health and well-being. The agency also published its first Employee Orientation Guide, which includes an Employee Handbook. The purpose of the handbook is to ensure that employees understand District and agency policies and procedures, which provides a foundation for better labor relations.







INTERNAL PARTNERSHIPS

OCME/MPD Natural Squad Collaborative

During 2006 the MPD Natural Squad continued to work collaboratively with the Investigative Unit of OCME. This collaboration decreases the amount of time a uniformed officer must remain at the death scene waiting for funeral home personnel or OCME mortuary technicians to arrive to transport the deceased. This partnership continues to augment the investigative skills of both the MLI's and the Detectives as they share ideas and discuss investigative techniques and approaches.

MPD officers are invaluable in expediting the identification process through access to FBI files. They also facilitate contact with their counterparts for neighboring jurisdictions thereby gathering necessary investigative information for case evaluation. This ability has proven extremely useful in the completion of some backlog cases.



OCME/Wendt Center for Loss and Healing Collaborative

The RECOVER program is a collaboration of the District of Columbia Office of the Chief Medical Examiner (OCME) and the Wendt Center for Loss and Healing, Washington DC's

premier agency in addressing grief, loss and trauma in adults and children. In November 1999 the Wendt Center's RECOVER program began providing services at the DC OCME. Three hundred and sixty five

days a year, RECOVER staff is positioned at the OCME to support individuals and families, and help guide them through the process of decedent identification. All RECOVER staff is licensed mental health professionals

who have a specialty in trauma, bereavement, crisis and loss. Goals of the RECOVER program for individuals



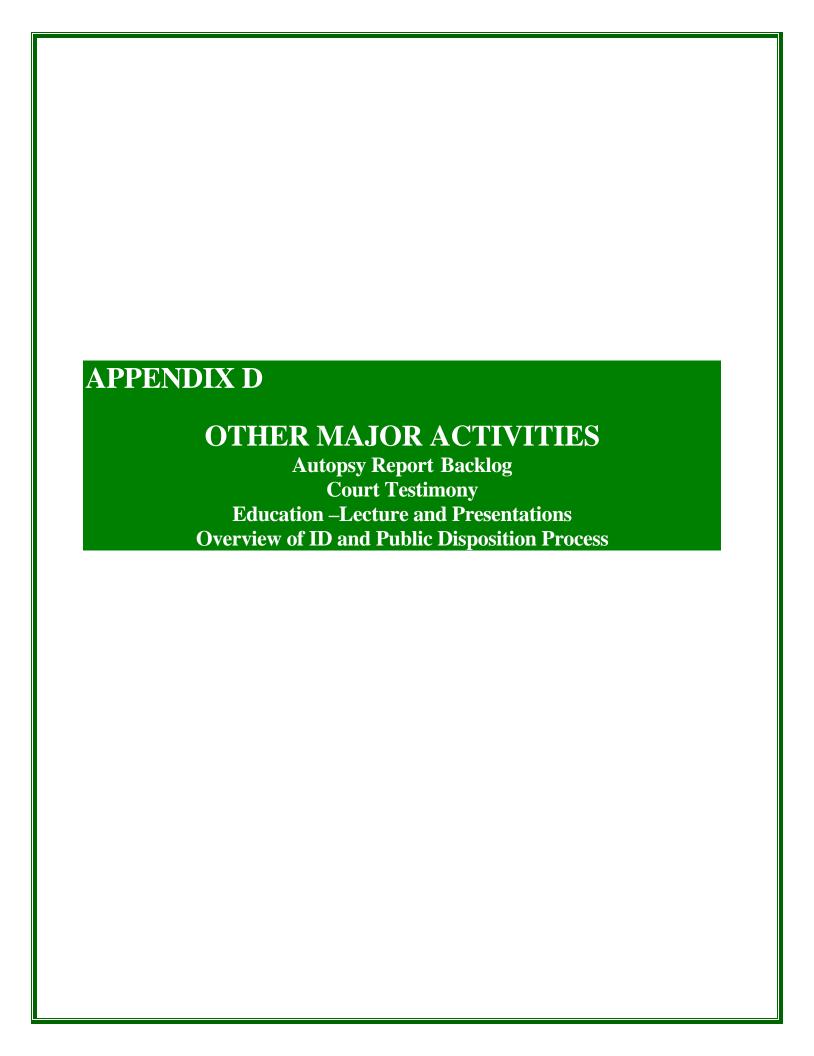
Recover staff member speaking with an OCME Communications member prior to Identification

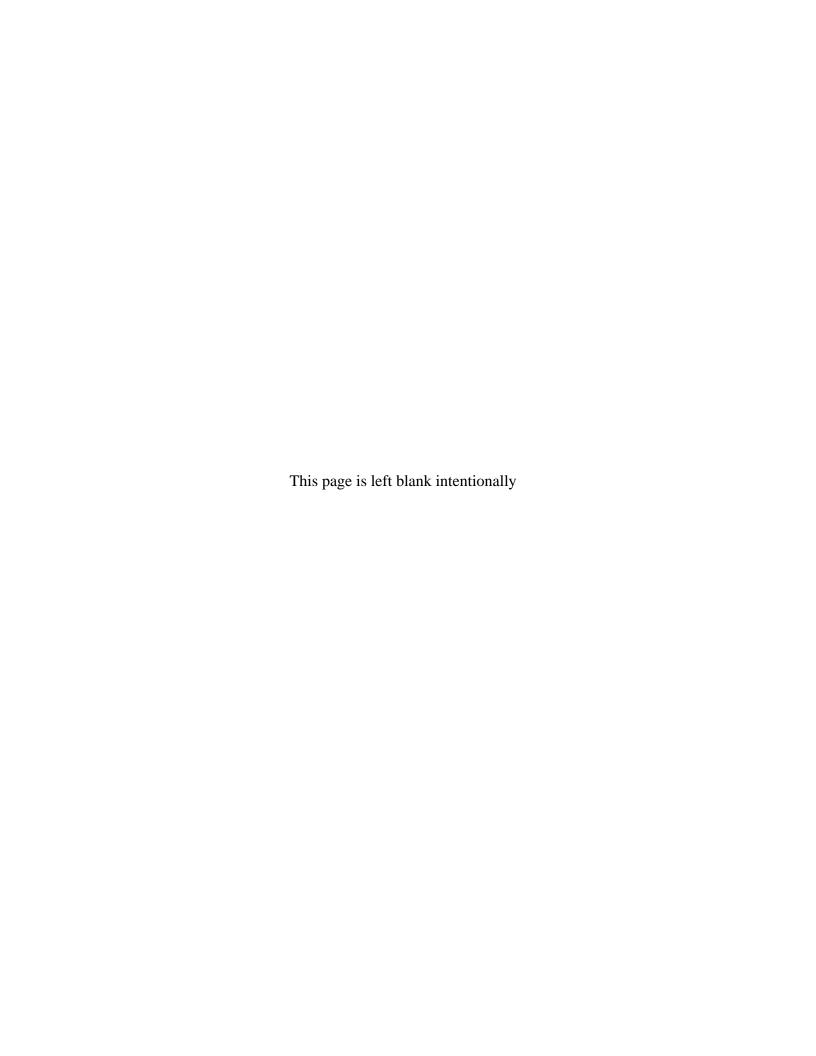
and families who must complete the process of decedent identification at the OCME include 1) providing immediate crisis support; 2) education about trauma, death, grief as well death's impact on children; and 3) providing community based resources. An additional goal is to provide support to OCME staff that experience work related stress and compassion fatigue.

RECOVER counselors help decrease anxiety, stress, anger and preconceived misunderstandings about the OCME by explaining the ID process, guiding families through the necessary paperwork, preparing them for the identification photograph, connecting them with the appropriate OCME staff, which helps families get answers to questions. Depending on the needs of the individual or family, RECOVER staff may discuss talking to children about death, preparing for a funeral, making burial decisions, providing information about common reactions to death, as well as accessing community resources. RECOVER staff works closely with OCME staff to make the identification process for families as easy, informative and compassionate as possible.



Since the inception of the program in November 1999, RECOVER staff has supported families through 6, 948 decedent identifications. During fiscal year 2006 (October 2005-September 30, 2006) RECOVER staff helped families through 1,183 identifications. During that year, a total of 3, 090 people received therapeutic support, trauma/crisis/grief education and community based resources.





Completion of the Historical Backlog

The Office of the Chief Medical Examiner (OCME) is pleased to report that the "Historical backlog" (1996-2003) of autopsy reports was completed on June 30, 2006, and the "Current backlog" (2004 and 2005) of autopsy reports was completed in September 2006. It is important to mention the efforts and the struggle of the entire (OCME) staff in accomplishing such a monumental task. This Autopsy Report Backlog was generated over the span of a decade. There were many phases to this project, which took two years to complete. For example some of the smaller projects that were necessary were: 1) OCME had to get case data and materials from out of state in order to complete several hundred of these cases. Special recognition is given to the agency's General Counsel for taking the necessary measures to retrieve these materials expeditiously. 2) OCME staff conducted hand counts of the backlog cases in calendar years 2005 and 2006. This effort required the retrieval of 344 boxes from archives, and the review of approximately 25,000 case files, but resulted in a more adequate count of cases from calendar years 1996-2002. OCME's Forensic Automated Case Tracking System was not fully implemented until 2003. The hand count revealed that there were a total of One Thousand Nine Hundred and Ninety Seven (1,997) autopsy reports. This was an extraordinary effort of the Medical Records Department that has not gone unnoticed. This portion alone took hundreds of man hours to complete. One example of the 2006 compilations that were generated for the Council is found below.

Case Year	Total Number of Autopsies	Total Number of External Exams	of	Total Number Outstanding Cases
1995	1140	340	1480	0
1996	1129	328	1457	0
1997	1118	256	1374	4
1998	1129	410	1539	0
1999	1297	489	1786	61
2000	1367	501	1868	132
2001	1303	601	1904	32
2002	1328	559	1887	39
2003	1337	560	1897	20
2004	1163	448	1611	103
2005	1143	445	1588	151
2006	281	116	397	n/a

Note: For 2005 cases there are 4 additional cases that were also incomplete at the time of this report; however they were NOT considered outstanding because their due dates for completion were 3/26, 3/28 and 2 on 3/30.

During calendar years 2004, 2005 and a portion of 2006 the OCME was noticeably understaffed with only three medical examiners, which included the Chief Medical Examiner, all of whom continued to handle a normal daily caseload. Simultaneously, OCME produced the "AUTOPSY BACKLOG REPORT," which was submitted to the Mayor's office on a monthly basis; this took the collaboration of several units who kept manual accounts of the progress being made daily. Special notice must also be given to the Medical Examiners in-house and those that assisted the office on a part-time basis. It is not an overstatement to again compliment the enormous amount of manpower and resources that went into this project. The OCME management staff wants to restate how grateful they are to all who went above and beyond the call of duty to fulfill this monumental task.

	HISTORICAL BACKLOG COMPILATIONS (1996 – 2003)					
Year	Initial Backlog as of 2/20/04	% of Cases Completed as of 12/31/06				
1996	2	Completed	0	100%		
1997	85	19	0	100%		
1998	19	Completed	0	100%		
1999	201	69	0	100%		
2000	300	151	0	100%		
2001	295	98	0	100%		
2002	348	175	0	100%		
2003	747	21	0	100%		
Total Historical	1,997	533	0	100%		

	CURRENT BACKLOG COMPILATIONS (2004-2005)				
Year	Initial Backlog	Backlog Cases Completed During CY06	Remaining Backlog As of 12/31/06	% of Cases Completed as of 12/31/06	
2004	190¹	131	0	100%	
2005	114 ²	114	0	100%	
Total Current	304	245	0	100%	

 $^{^1}$ For calendar year $\underline{2004}$ the backlog of autopsy reports was realized and reported July 31, 2005 and there were 190 autopsy reports outstanding. 2 For calendar year $\underline{2005}$ the backlog of autopsy reports was realized and reported April 1, 2006 and there were 114 autopsy reports outstanding.

Court Testimony

A parameter to be considered when evaluating the Medical Examiners workload is time spent in pre-trial conferences, depositions, and providing expert testimony. These services are provided in hearings, or in family, civil and criminal litigations. OCME includes tabulated data for expert services provided in calendar year 2006.

Type of Judicial Service	Number of Cases
Court Testimony	54
Depositions	5
Pre-trial Conference	80
Total	139

Court Services by Jurisdiction	Number of Cases
DC	125
Maryland	9
Virginia	5
Total	139

Court Services by Type	Number of Cases
Civil	16
Criminal	122
Hearing	1
Total	139

Note: The Chief Medical Examiner provides expert court services for most of the cases where a Medical Examiner is no longer with the District Government. For 2006 these additional services represented 39% of the CME's total court caseload.

Education

OCME continues to welcome students and residents from area universities and hospitals for their teaching requirements. We also participated in the 2006 Career Day Activities hosted by the local public schools here in the District of Columbia. In addition, the agency either hosted or was invited to lecture and/or provide presentation at the following medical institutions and/or major conference:

- DC Veteran's Administration Medical Center Death Certificate Presentation for the Geriatrics Medicine Fellows and Medical students, Washington, DC, June 2006
- 2) Operation Prevent Auto Theft Monthly lecture and tour (seasonal)
- 3) DC Medical Examiner's Office Familiarization Training for Metro Transit Police Officers Annual presentation
- 4) Partners in Education with Arlington Public Schools Annual Presentation
- 5) Public Defender Service for the District of Columbia Internship program- presentation about the history of Forensic Medicine and an introduction to DC OCME. June and September 2006.
- 6) Murder at the Museum Marion Koshland Science Museum, Washington, DC September 2006
- 7) Mayor's Summer Youth Program OCME staff provided a presentation to the Passport to Work Students in the Mayor's Youth Summer Program. The participants were ages 15-17yrs old and were employed in the Executive Office of the Mayor August 3, 2006.

Educational Services provided by the Toxicology Unit

<u>Lectures / Presentations:</u>

- Integrating a New DUI Toxicology Program Trials and Tribulations presented at the American Academy of Forensic Science, Seattle, WA, February 2006
- 2) Scientific Chair, Dr. Fiona J. Couper, Society of Forensic Toxicology Annual Meeting, Austin, TX, October 2-7, 2006
- 3) Co-moderator: Dr. Fiona J. Couper, American Academy of Forensic Science, in Seattle, WA, 2006 <u>Peer-reviewed publications:</u>
 - 1) Sklerov JH, Levine B, Ingwersen KM, Aronica-Pollack PA, Fowler D. Two cases of fatal amlodipine overdose. J Anal Toxicol. 2006 Jun;30(5):345-51
 - 2) Sklerov JH, Cox DE, Moore KA, Levine B, Fowler D. Tizanidine distribution in a postmortem case. J Anal Toxicol. 2006 June; 30(5):331-4.

Overview of the Identification and Public Disposition Processes for 2006

The process of identification can be a complex and lengthy procedure. The preferred method of identification, whenever circumstances of death and discovery allow, is by visualization of a Polaroid photograph. Immediate family, close friends, neighbors or colleagues provide verification for visual identifications. In all other cases, the identification process may involve fingerprinting, DNA Analysis, dental charting, or comparative studies of ante-mortem and post-mortem body and/or dental x-rays. There are staff members of different divisions within the agency and outside consultants, including but not limited to Anthropologists of the Smithsonian Institute, Forensic Odontologists, and MPD's Natural Squad who participate collectively in this process.

The Washington, DC area enjoys a large number of national and international visitors. The city has many international institutions and a diverse population of immigrants. Often the next of kin is not available for identification purposes; hence another set of procedures must be followed by the agency through the embassies of different countries to ensure proper identification and release of remains to appropriate family members.

The District of Columbia, Office of the Chief Medical Examiner (OCME) is tasked by statute (§ 5-1411) to arrange for the final disposition of all unclaimed human remains. This includes remains not claimed from OCME and those that go unclaimed from medical facilities, i.e. hospitals, skilled nursing facilities, etc, within the District. These types of cases are identified as storage cases, which represent 61 (36%) of the 164 unclaimed decedents released as public dispositions in calendar year 2006. The medical facilities that request storage of unclaimed remains are charged a one-time fee of \$150.00 for this service. The medical facility is required to provide an appropriately written and signed certificate of death as well as a letter requesting storage and proof that due diligence has been made in attempting to contact next of kin to claim the remains. There were 8 fetuses released as public dispositions, of which 3 (38%) were originally death certificates reviewed for cremation as hospital dispositions where the circumstances of the premature delivery of the stillborn were such that OCME had to take jurisdiction of the death.

It is important to note that Medical Examiner offices in neighboring jurisdictions do not perform Public Dispositions. For instance in Maryland, bodies are released to the Anatomical Board after 3 days if they are not claimed by their Next of Kin.

During the calendar year 2006, OCME spent \$98,448.00 on the final disposition of unclaimed human remains.

Public Dispositions by Type	Number of Cases	Cost Per Disposition	Total Dollar Amount Per Type
Burials – unidentified adults	15	\$1,988.00	\$29,820.00
Cremations – identified adults	129	\$490.00	\$63,210.00
Cremations - infants	6	\$234.00	\$1,404.00
Cremations – fetal remains	8	\$105.00	\$840.00
Transport to Quantico			
National Cemetery –	6	\$529.00	\$3,174.00
identified US Military			
Veterans			
TOTALS	164	N/A	\$98,448.00

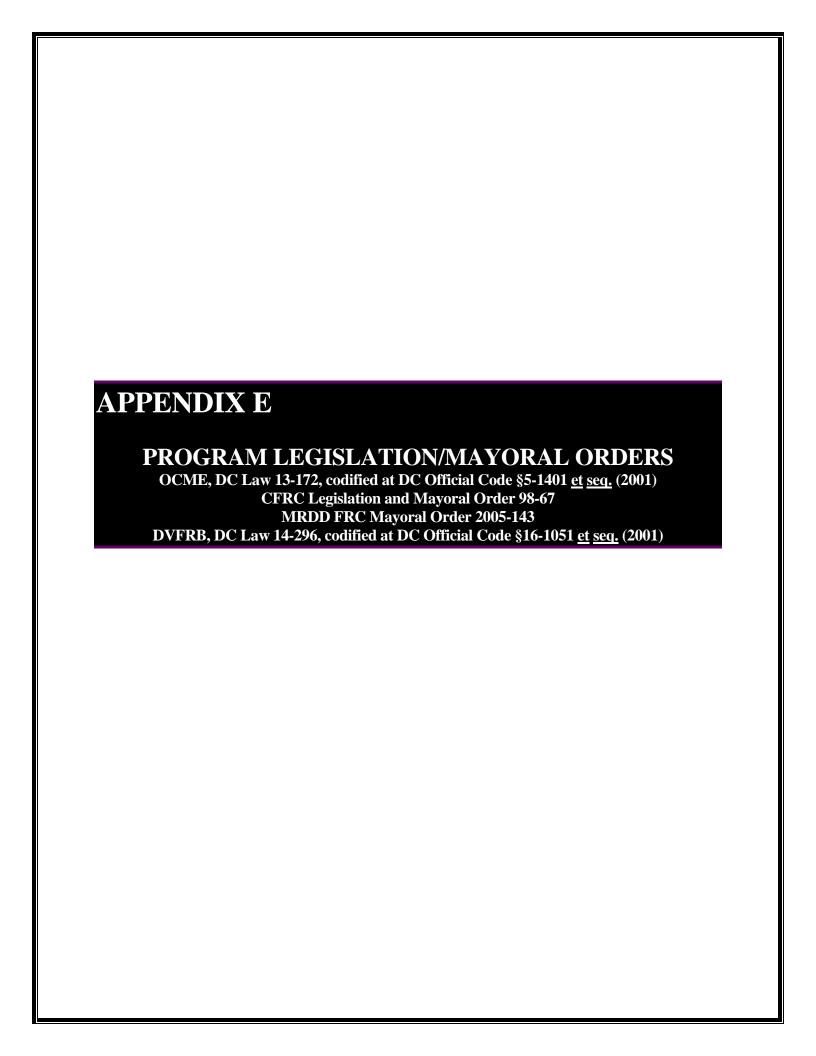
Overview of Cremation Approvals for 2006

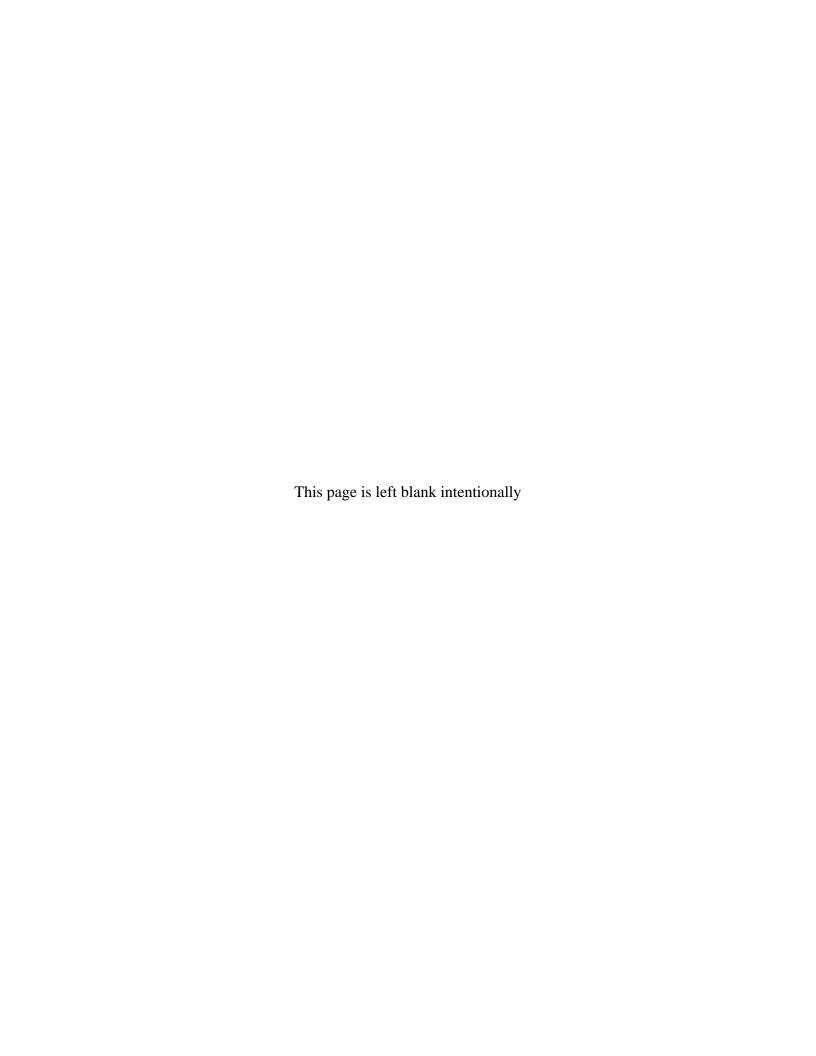
Pursuant to DC ST §5-1405(c), all death certificates for individuals whose deaths occur in the District and who are to be cremated, regardless of the jurisdiction where the cremation will occur, are to be reviewed by OCME. This is to assure there is no further public interest in the death and that the cause of death depicts a clear, etiologically specific disease process. This, at times, can be a long and drawn out process requiring the Medicolegal Investigators (MLI's), who are Physician Assistants and/or Advanced Practiced Nurses, to contact the certifying physicians in cases where the cause of death cannot be approved for the cremation request. The medical history as well as the circumstances of death of the individual is discussed and the certifying physician will then word the cause of death statement so that it is stated in a format consistent with that used on the U.S. Standard Certification of Death.

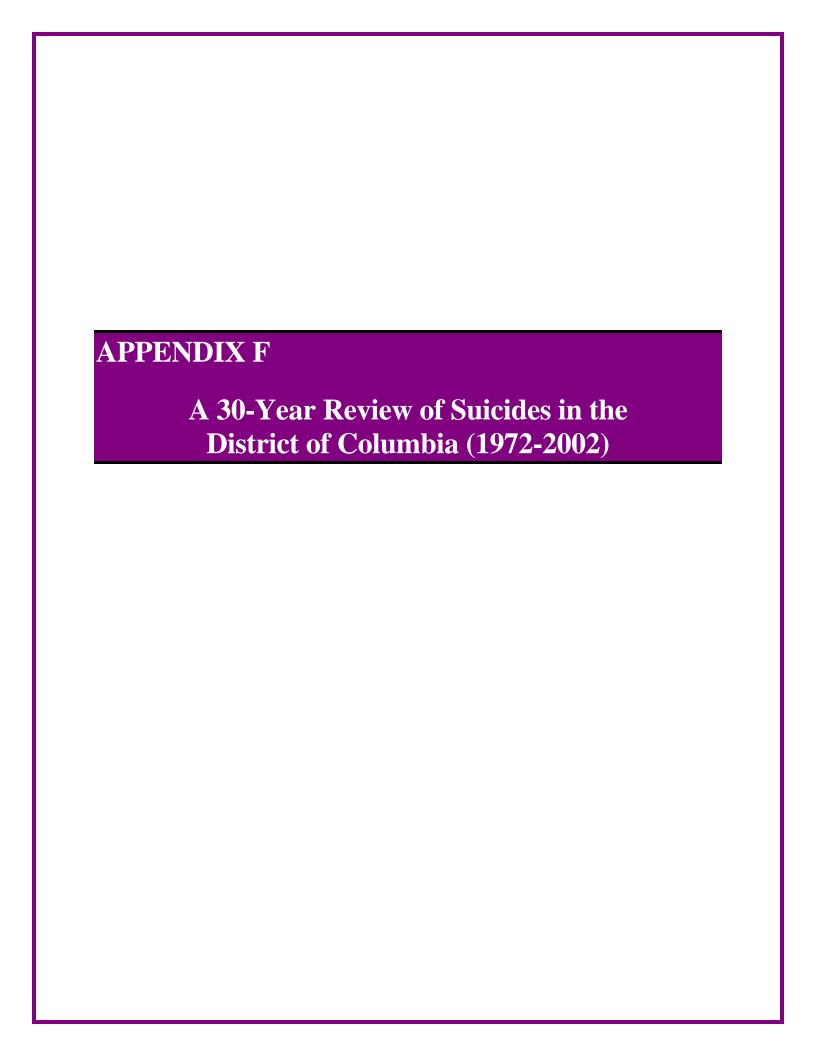
2,172 death certificates were submitted to the Office of the Chief Medical Examiner (OCME) for review of the cause and manner of death for the purpose of cremation approval in 2006. 827 (38%) of the death certificates were declined because they required contact and discussion with the certifying physician in order to have an etiologically specific disease process noted as the proximal cause of death before approval for cremation could be granted. 40 (4.8%) of the declined death certificates were not resubmitted for final approval for cremation. Review of 27 of the cremation requests indicated that they fell under the jurisdiction of OCME. In the end there were 2,132 cases that were approved for cremation in calendar year 2006.

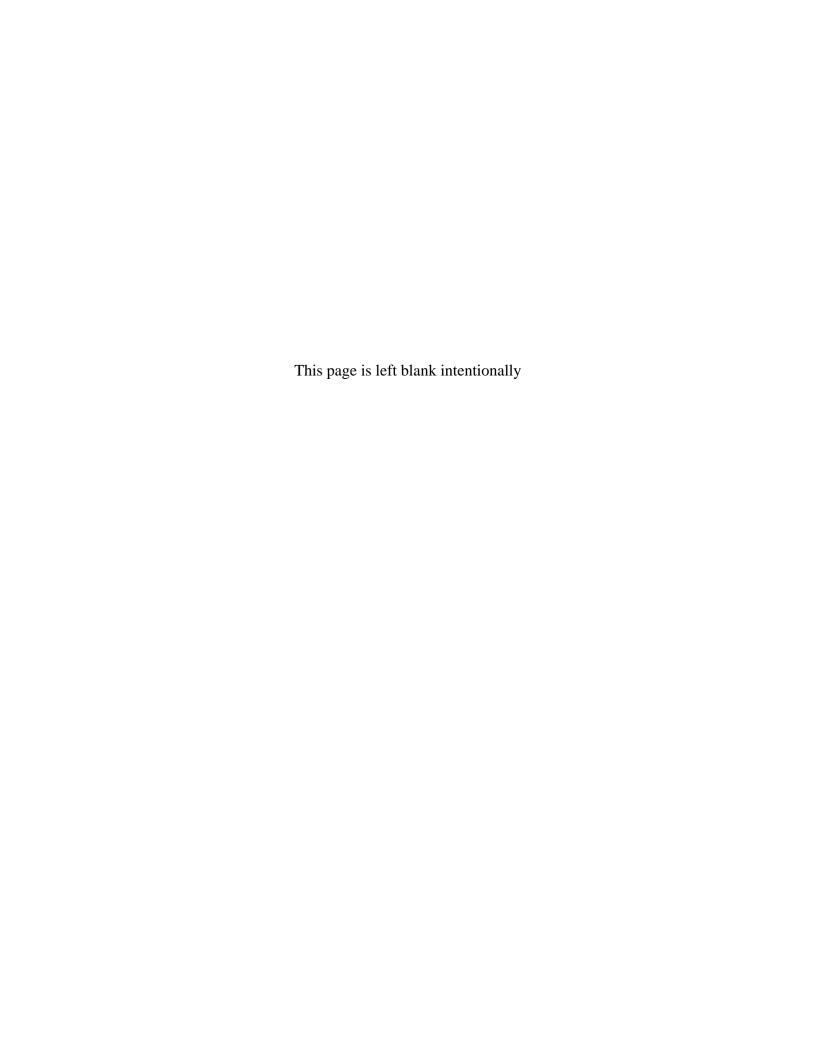
Cremation Requests	Total
Total number of death certificates reviewed for cremation approval	2,172
Cremation requests declined upon initial receipt - Required contact of certifying physician and re-submission for approval.	827
Cremation requests not re-submitted after contact made with certifying physician	40
Cremation requests where death certificates cause and/or manner indicated death fell under jurisdiction of OCME	27
Total number of Cremations Requests approved in 2006	2132

Note: This chart is for visual/display purposes only and is not intended to tally a total.









A 30-YEAR REVIEW OF SUICIDES IN THE DISTRICT OF COLUMBIA (1972-2002)

INTRODUCTION

During the years 1972 – 1981 Annual Reports for the Office of the Chief Medical Examiner (OCME) were available for statistical compilations needed to produce this suicide review. However, for calendar years 1982 – 2002, only one (1992) OCME annual report was published, so as a result a manual count was performed to provide the statistical information for these years. Like the special report "*Review of Homicides*" produced in the 2004 OCME Annual Report, the 2006 OCME Annual Report continues the effort of closing this gap by providing statistical compilations on total suicides with emphasis of those by gunfire, and demographics, along with a comparison of total suicides with the total number of autopsies performed by year. Peak incidents occurred in 1973, 1976, and again in 1986. The data will be presented primarily in segments of 10 years, but 20 and 30-year comparisons are presented as well.

CALENDAR YEARS 1972 THROUGH 1981

From 1972 to 1981, 887 suicides occurred in the District of Columbia, 520 of these decedents were White and 366 were Black/African American with no other race represented during these years. The incidents peaked in the age groups 20-29 with 261 cases. Over half of the total decedents were male (543 men¹).

Number of Suicides Year

Total Suicides (1972-1981)

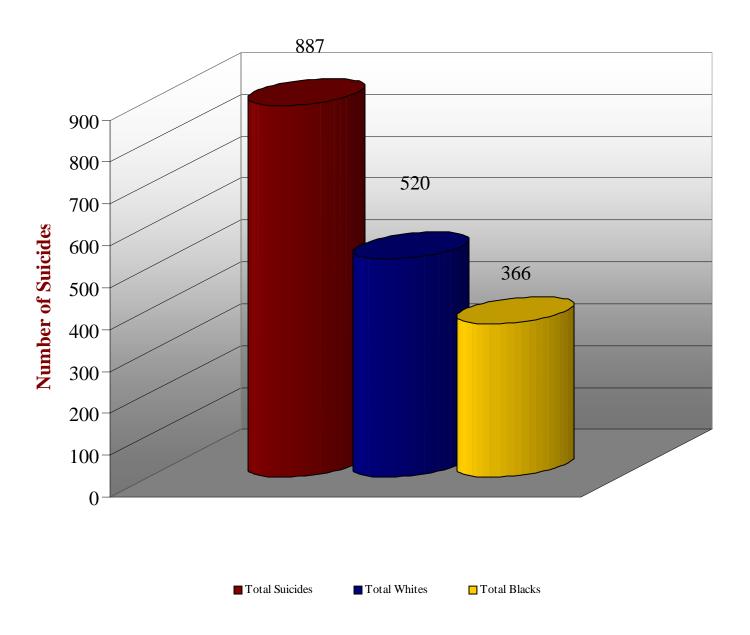
Although the suicide statistics for most years reported are less than half of what was reported in the "30-Year Review of Homicides" in 2004, death by gunfire is the most common cause of death in suicides and homicides alike in the District of Columbia.

¹ This number does not include data by gender from 1972 because gender was not computed in the annual report for calendar year 1972.

SUICIDE BY RACE AND GENDER (1972-1981)

The demographics of the affected population remained constant throughout this study period. The White population consistently represented 50% or more of the victims, and White males paid the highest toll over these 10 years, making up 36% of the total. Suicides in the White population peaked at 71 in 1973 (42 males and 29 females).

Suicides Compared by Race (1972-1981)

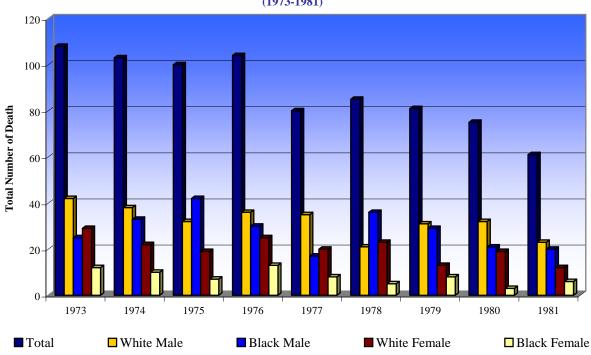


SUICIDE BY RACE AND GENDER (1972-1981)

	SUICIDE BY RACE, AND GENDER OF VICTIM						
Year	Black Males	Black Females	Total Blacks	White Males	White Females	Total Whites	Total Suicides
1972 ²	*N/A	*N/A	41	*N/A	*N/A	48	90 ³
1973	25	12	37	42	29	71	108
1974	33	10	43	38	22	60	103
1975	42	7	49	32	19	51	100
1976	30	13	43	36	25	61	104
1977	17	8	25	35	20	55	80
1978	36	5	41	21	23	44	85
1979	29	8	37	31	13	44	81
1980	21	3	24	32	19	51	75
1981	20	6	26	23	12	35	61
Total	252	72	366	290	182	520	887

^{*}N/A denotes data Not Available

Suicides by Race and Gender (1973-1981)



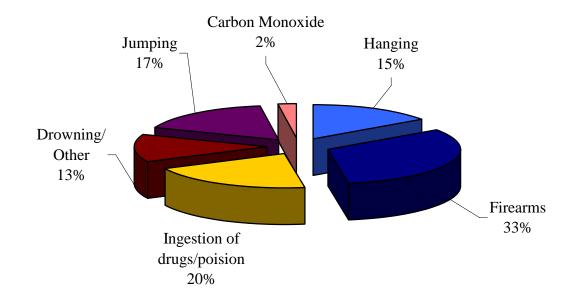
 $^{^2}$ The Annual Report for 1972 does not provide a breakdown of the data for "*Race*" and "*Gender*". 3 1972 had 1 suicide with a race classification as "*Other*." For the purposes of this illustration it was not included in the table.

SUICIDE BY METHOD (1972-1981)

Our records indicate that of the 887 suicides in the District of Columbia, the most prevalent method of suicide during these years was by gunfire (285 or 33%) followed by ingestion of drugs/poison (181 or 20%).

Year	Firearms	Ingestion of Drugs/Poison	Jumping	Hanging	Drowning/ Other	Carbon Monoxide	Total Suicides
1972	38	20	8	12	9	3	90
1973	26	27	25	11	16	3	108
1974	42	22	17	11	10	1	103
1975	32	23	13	21	11	0	100
1976	36	23	14	12	14	5	104
1977	22	16	15	16	8	3	80
1978	29	13	14	10	17	2	85
1979	20	13	21	18	7	2	81
1980	23	15	15	13	9	0	75
1981	17	9	8	12	15	0	61
Total	285	181	150	136	116	19	887

Suicides by Cause 1972-1981

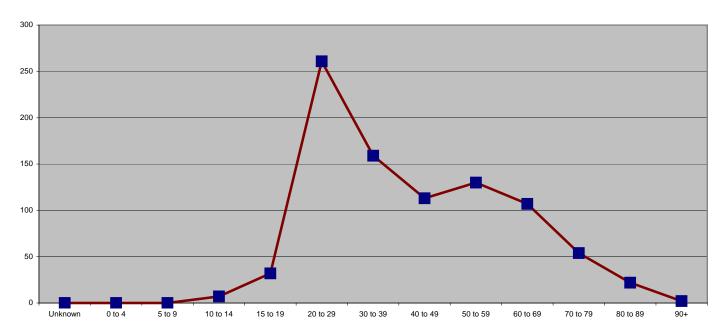


SUICIDE BY AGE (1972-1981)

A study of the data by age reveals that of the 887 suicides that occurred during this period, the age group most impacted was between 20 and 29 years old, with 261 deaths.

Year	10 to 14	15 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90+
1972	0	4	22	17	20	13	9	3	2	0
1973	2	0	31	17	19	21	9	6	3	0
1974	0	6	31	17	11	12	14	9	3	0
1975	1	6	31	18	8	12	13	7	4	0
1976	0	1	35	17	11	13	15	8	3	1
1977	1	6	23	14	11	10	12	3	0	0
1978	1	0	20	21	7	12	14	8	1	1
1979	1	1	31	13	6	15	10	3	1	0
1980	0	6	19	15	10	12	6	4	3	0
1981	1	2	18	10	10	10	5	3	2	0
TOTAL	7	32	261	159	113	130	107	54	22	2

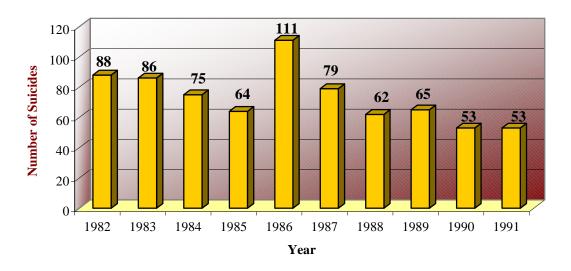
Total Suicides By Age (1972-1981)



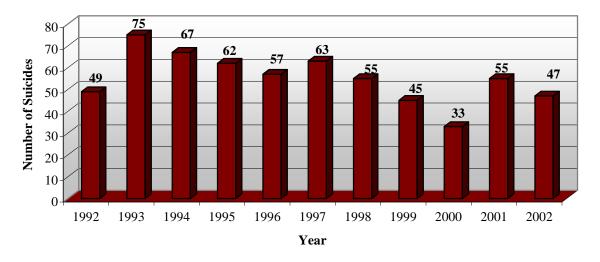
CALENDAR YEARS 1982 THROUGH 2002

From 1982 through 1991 there were 736 suicides; and from 1992 through 2002 there were 608 suicides in the District of Columbia for a total of 1,344 suicides over the course of these twenty-one years. Firearms continued to be the most common method of suicides in all categories. The charts below reveal that, on a whole, a significant overall decline (except 1986) occurred in suicides over the two most current decades particularly when compared to the previous decade (1972-1981), which will be discussed at the end of the report.

Total Suicides (1982-1991)



Total Suicides (1992-2002)



SUICIDE BY RACE AND GENDER

Throughout the entire period (1982-2002) reviewed, male suicides outnumbered female suicides in both races. During these two decades there were more suicide deaths amongst Black males than any other category for each year studied, except for 1985 and 2001, and the ethnicity and race of the decedents identified started to diversify

(1982-1991)

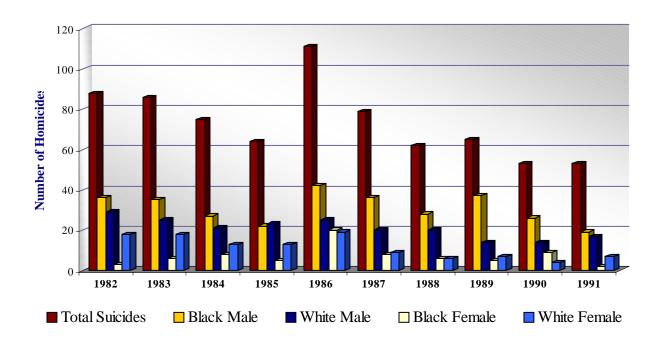
SUICIDES BY RACE, AND GENDER OF VICTIM								
Year		Black	White	Hispanic	Asian	Other/ Unknown	Total Suicides	
1982	Male	36	29	1	0	0	66	
1702	Female	3	18	1	0	0	22	
Total by Race		39	47	2	0	0	88	
1983	Male	35	25	0	0	2	62	
1703	Female	6	18	0	0	0	24	
Total by Race		41	43	0	0	2	86	
1984	Male	27	21	3	0	1	52	
1704	Female	8	13	0	1	1	23	
Total by Race		35	34	3	1	2	75	
1985	Male	22	23	1	0	0	46	
1703	Female	5	13	0	0	0	18	
Total by Race		27	36	1	0	0	64	
1986	Male	42	25	1	2	2	72	
1500	Female	20	19	0	0	0	39	
Total by Race		62	44	1	2	2	111	
1987	Male	36	20	0	4	1	61	
1507	Female	8	9	0	0	1	18	
Total by Race		44	29	0	4	2	79	
1988	Male	28	20	1	0	1	50	
	Female	6	6	0	0	0	12	
Total by Race		34	26	1	0	1	62	
1989	Male	37	14	0	0	1	52	
1707	Female	5	7	0	1	0	13	
Total by Race		42	21	0	1	1	65	
1990	Male	26	14	0	0	0	40	
	Female	9	4	0	0	0	13	
Total by Race		35	18	0	0	0	53	
1991	Male	19	17	5	0	0	41	
	Female	2	7	1	1	1	12	
Total by Race		21	24	6	1	1	53	
Total 1982 – 1991		380	322	14	9	11	736	

(1992-2002)

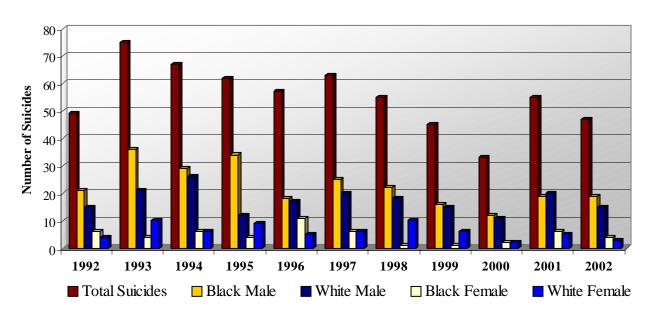
	SUICIDI	ES BY RACE,	AND GEND	ER OF VICTI	M		
Year		Black	White	Hispanic	Asian	Other/ Unknown	Total Suicides
1992	Male	21	15	1	1	0	38
1992	Female	6	4	0	1	0	11
Total by Race		27	19	1	2	0	49
1993	Male	36	21	2	0	0	59
1993	Female	4	10	0	2	0	16
Total by Race		40	31	2	2	0	75
1994	Male	29	26	0	0	0	55
1994	Female	6	6	0	0	0	12
Total by Race		35	32	0	0	0	67
1995	Male	34	12	3	0	0	49
1995	Female	4	9	0	0	0	13
Total by Race		38	21	3	0	0	62
1996	Male	18	17	1	4	0	40
1770	Female	11	5	0	1	0	17
Total by Race		29	22	1	5	0	57
1997	Male	25	20	2	2	2	51
1,,,,	Female	6	6	0	0	0	12
Total by Race		31	26	2	2	2	63
1998	Male	22	18	3	0	1	44
	Female	1	10	0	0	0	11
Total by Race		23	28	3	0	1	55
1999	Male	16	15	5	1	0	37
	Female	1	6	0	1	0	8
Total by Race		17	21	5	2	0	45
2000	Male	12	11	2	0	2	27
T / 11 P	Female	2	2	2	0	0	6
Total by Race	3.6	14	13	4	0	2	33
2001	Male	19	20	0	3	0	42
T-4-11 D	Female	6	5	2	0	0	13
Total by Race	M-1-	25	25	2	3	0	55
2002	Male	19 4	15 3	0	2 2	0	38
Total by Race	Female	23	18	2	4	0 0	47
Total 1992 - 2002		302	256	25	20	5	608
GRAND TOTAL		682	578	39	29	16	1344

CHARTS - TOTAL SUICIDES COMPARED BY RACE AND GENDER

(1982-1991)

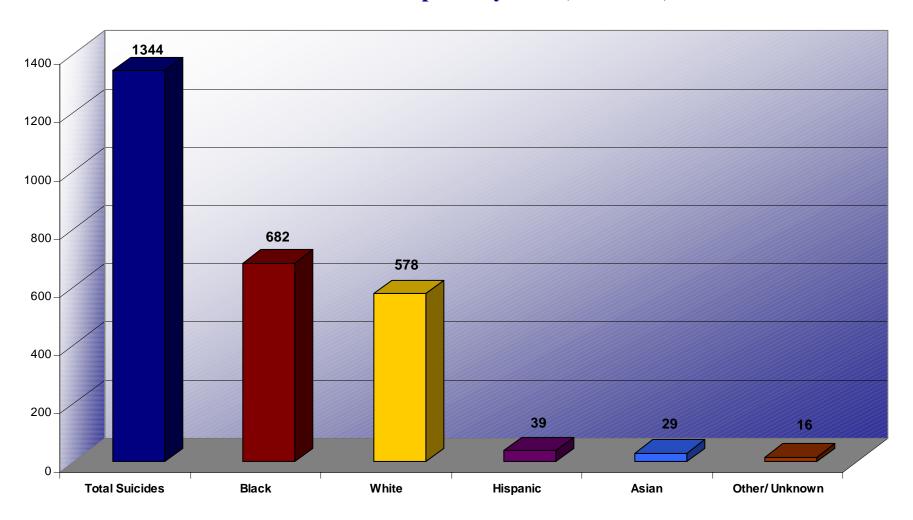


(1992-2002)



Note: For visual purposes, only the statistically higher races are compared in this chart

Total Suicides Compared by Race (1982-2002)



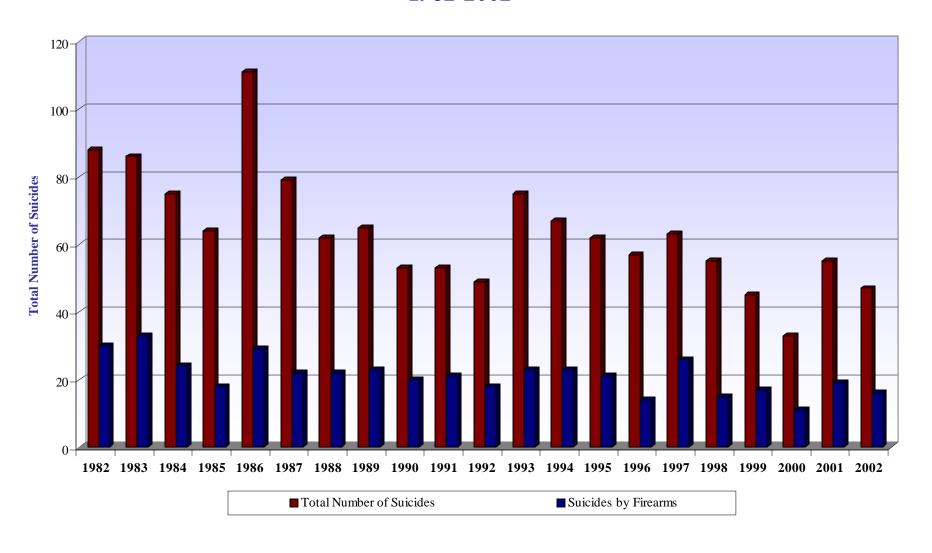
SUICIDES BY FIREARMS (1982-2002)

Out of the 1,344 suicides that occurred the most prevalent method of death is a direct result of Gunfire (445or 33%), followed by Asphyxia (276 or 21%).

					Blunt Impact			Carbon	Total
Year	Firearms	Intoxication	Asphyxia	Hanging	Trauma	Injury	Injuries	Monoxide	Suicides
1982	30	7	15	12	16	3	2	0	88
1983	33	12	12	15	10	2	2	0	86
1984	24	4	20	19	5	0	0	3	75
1985	18	4	17	11	11	1	0	2	64
1986	29	7	24	22	21	2	2	4	111
1987	22	9	21	12	12	2	1	0	79
1988	22	7	14	12	7	0	0	0	62
1989	23	5	6	18	9	1	1	2	65
1990	20	5	9	13	5	1	0	0	53
1991	21	3	3	14	7	4	1	0	53
1992	18	1	11	13	5	0	0	1	49
1993	23	3	35	4	9	1	0	0	75
1994	23	0	16	17	9	1	0	1	67
1995	21	1	15	14	5	2	3	1	62
1996	14	6	14	12	8	0	1	2	57
1997	26	9	8	14	5	0	0	1	63
1998	15	1	12	14	11	0	1	1	55
1999	17	5	5	5	6	3	4	0	45
2000	11	1	4	10	4	0	2	1	33
2001	19	9	7	8	10	2	0	0	55
2002	16	5	8	8	7	3	0	0	47
Total	445	104	276	267	182	28	20	19	1,344

Note: There were 3 suicides in 1982 due to "Blast Injury" that have not been included as part of this chart because this cause of death is exclusive to 1982.

Total Suicides vs. Suicides by Firearms 1982-2002



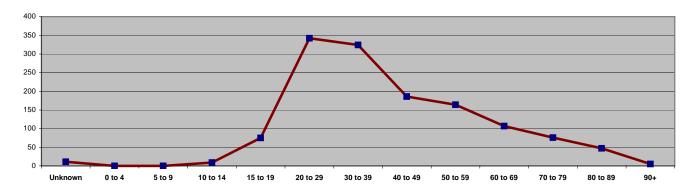
SUICIDES BY AGE (1982-2002)

The number of Suicides from 1982-1991 primarily affected the age groups 20 to 29, 30 to 39 and $\underline{50 \text{ to } 59}$, but from 1992-2002 a slight shift occurred and the age groups most affected were 20 to 29, 30 to 39 and $\underline{40 \text{ to } 49}$. The number of cases for this manner of death peaked in 1986 at 111, but has been below 100 for each year that followed through 2002.

SUICIDES BY AGE

					SUIC.	IDES D	Y AGE	4				
Year	Unknown	10 to 14	15 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90+	Total
1982	0	2	5	22	20	11	13	5	6	6	0	88
1983	0	0	2	24	23	4	13	10	7	3	0	86
1984	3	0	1	18	22	9	9	8	2	3	0	75
1985	1	1	2	24	12	5	13	3	3	0	0	64
1986	0	0	7	35	20	17	13	11	5	3	0	111
1987	1	0	5	25	24	7	4	4	5	3	1	79
1988	0	0	2	16	14	6	8	8	2	6	0	62
1989	1	0	3	22	18	8	6	2	4	1	0	65
1990	0	0	4	10	15	8	5	3	4	4	0	53
1991	1	0	4	12	11	8	6	9	0	1	1	53
Total	7	3	35	208	179	83	90	63	38	30	2	736
1992	0	0	5	15	10	9	0	4	5	1	0	49
1993	2	1	2	15	20	13	12	3	4	3	0	75
1994	0	1	4	19	23	6	4	3	2	4	1	67
1995	0	0	5	15	16	9	7	2	6	1	1	62
1996	1	0	2	9	14	10	11	4	3	3	0	57
1997	0	0	6	10	12	12	11	7	4	1	0	63
1998	1	0	4	12	14	7	7	7	1	2	0	55
1999	0	2	3	5	14	8	4	6	3	0	0	45
2000	0	2	2	10	4	7	3	2	3	0	0	33
2001	0	0	5	13	8	14	7	3	5	0	0	55
2002	0	0	2	11	10	8	8	3	2	2	1	47
Total	4	6	40	134	145	103	74	44	38	17	3	608
Grand Total	11	9	75	342	324	186	164	107	76	47	5	1344

Total Suicides by Age (1982-2002)

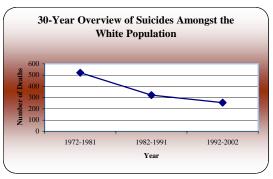


30-Year Overview

Summary of Overall findings for 1972-2002

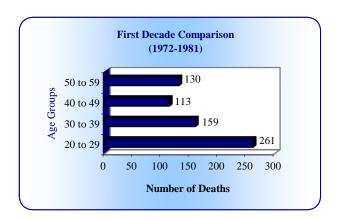
From 1982-2002 there was a sharp decrease of suicide deaths amongst Whites. The sharpest decline in suicides for Whites occurred during 1992-2002 with the total number of suicides being

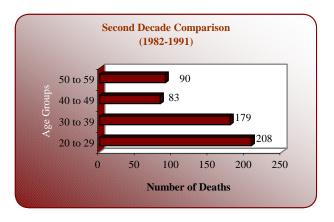
285 compared to 520 during 1972-1981. However, the statistics for Blacks remained somewhat static 324 (72-81), 380 (82-91), and 302 (92-02). On page 15 you will find a chart that provides an overlay comparison of the total number of suicides over the 30-year period broken down into increments of 10-years.



<u>Summary of findings by the Ages primarily</u> affected by Suicide

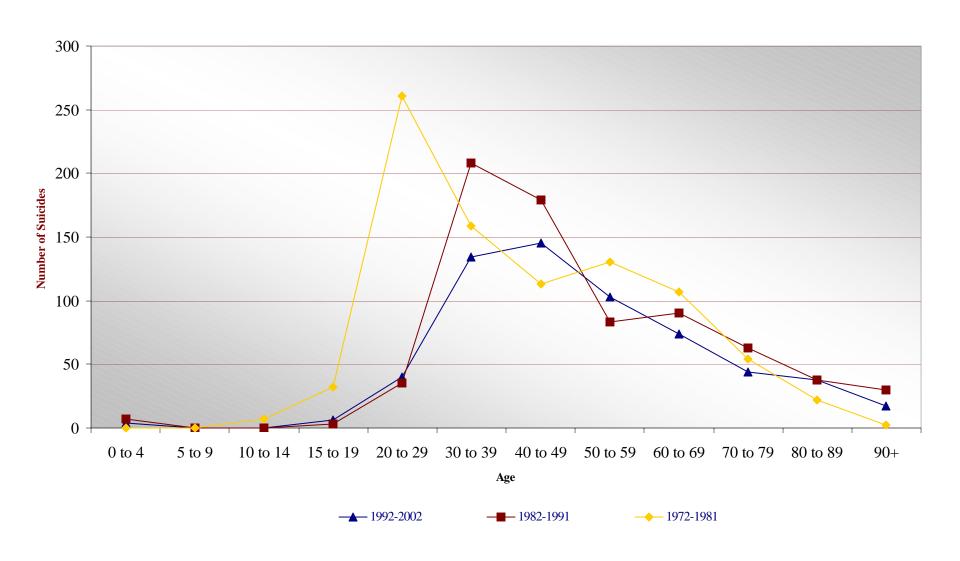
The number of Suicides during the first decade (1972-1981) primarily affected the age groups that were between 20-59. From 1982-1991 the age groups most affected were 20-29, 30-39 and 50-59, as in the previous decade, however during 1992 –2002 a slight variation occurred and the age groups most affected were 20 to 29, 30 to 39 and 40 to 49. As demonstrated in a special study included at the end of this report, the most notable change that was seen during 1982-2002 was in the age group 10-19 years old where overall Black suicide deaths outnumbered Whites by 47% (Blacks, 57 and Whites, 27), and suicides amongst Black males and White females in this age category more than doubled in some cases.







SUICIDES BY AGE A 30-YEAR COMPARISON

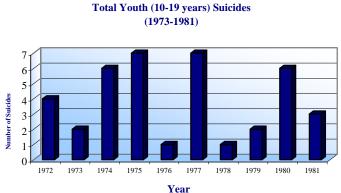


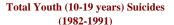
A SPECIAL LOOK AT SUICIDES AMONGST YOUTH (10-19 years)

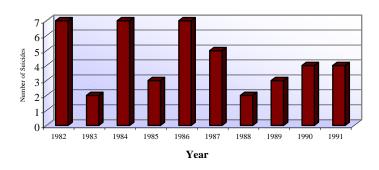
A CDC Report (2004) titled "Methods of Suicide Among Persons Aged 10-19 Years – United States, 1992-2001" reported the following:

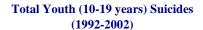
IN 2001, SUICIDE WAS THE THIRD LEADING cause of death among persons aged 10-19 years⁴. The most common method of suicide in this age group was by firearm (49%), followed by suffocation (mostly hanging) (38%) and poisoning (7%). During 1992-2001, although the overall suicide rate among persons aged 10-19 years declined from 6.2 to 4.6 per 100,000 population, methods of suicide changed. A substantial decline in suicides by firearm and an increase in suicides by suffocation in persons aged 10-14 and 15-19 years. Beginning in 1997, among persons aged 10-14 years, suffocation surpassed firearms as the most common suicide method. (JAMA, 2004, vol. 292, 4, p.427)

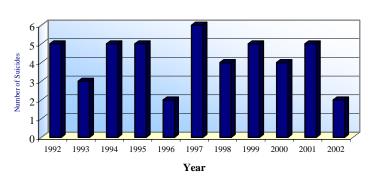
In light of the above CDC report the Office of the Chief Medical Examiner decided to review this age group specifically over the course of our 30-year period of study. The total number of decedents for this age group in the DC population is very small, but our findings do not indicate a decline of suicides. However, overall an increase is realized in this segment of suicides that occurred, in the District of Columbia, when the data is analyzed by decade. From 1972-1981 there were 39 youth suicides; from 1982-1991 there were 44; and from 1992-2002 there were 46.











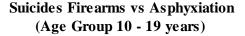
⁴ CDC. Web-based Injury Statistics Query and Reporting System (WISQARS™). Atlanta, Georgia:U.S.

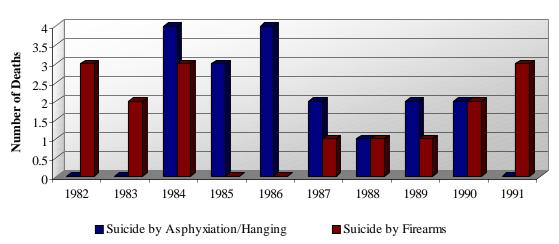
16

Age 10-19 years - A Look at the Most Common Method of Suicide

The data for method by age is not available for years 1972 through 1981. Our data shows asphyxiation was the most prevalent method of suicide from 1984 through 1990, while 1988 and 1990 both show equal numbers for deaths by asphyxiation and firearms. However, unlike the CDC report our data concludes that from 1992 through 2002 firearms remained the dominant method of suicide, and not asphyxiation, with the exception of 1993.

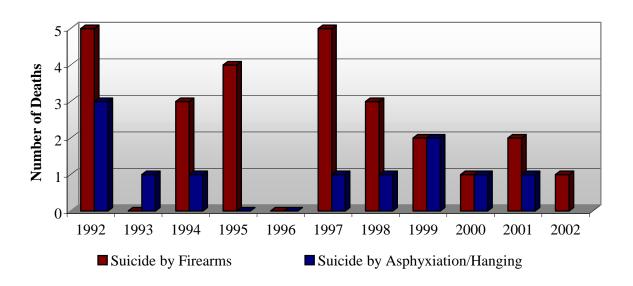
1982 – 1991





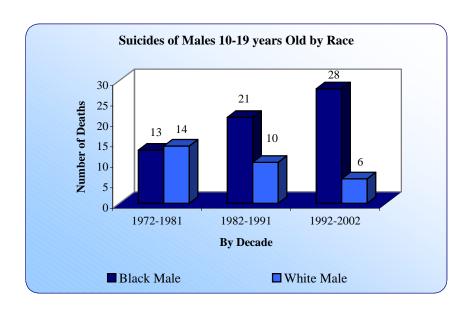
1992 - 2002

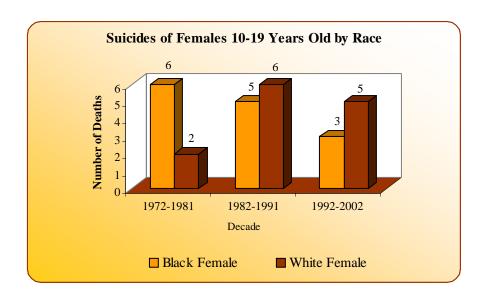
Suicide - Firearms vs Asphyxiation (Ages 10 to 19 years old)



Suicides of Persons Age 10-19 Years Old by Race and Gender

The below illustrations indicate – when reviewed by decade – that deaths amongst both Black male and White female youths more than doubled in some instances over the course of this 30-year study. In fact, although the numbers are low, in the second decade the number of suicides tripled for White females; whereas with White males and Black females a decline in suicides occurred. It is important to note that there was only one other race category for this segment of data and it was "Other"; however, because the statistics are low (n = 4) for the entire 30-year period they are not measured for the purpose of this review.





The following statistics are compelling when Black males and White females are compared directly with the total number of suicides and each other:

<u>1972-1981</u>

Black males were 33% of the total number of suicides, and White females were 5%.

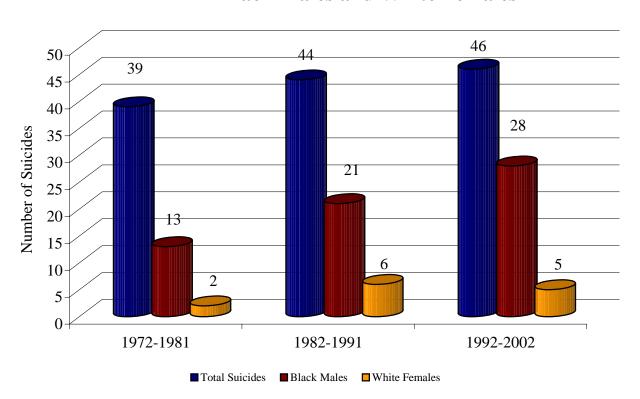
1982-1991

Black males were 48% of the total number of suicides, and White females were 14%.

1992-2002

Black males were 61% of the total number of suicides, and White females were 11%.

Total Suicides Compared to Black Males and White Females



TOTAL SUICIDES AND AUTOPSIES PERFORMED (1972-2006)

Presented below are the total number of suicides and the number of autopsy examinations performed between 1972 and 2006.

Year	Total Number of Suicides	Total Number of Autopsies				
1972	90	1,142				
1973	108	1,147				
1974	103	1,112				
1975	100	1,105				
1976	104	1,040				
1977	80	1,066				
1978	85	978				
1979	81	1,005				
1980	75	1,041				
1981	61	1,040				
1982	88	1,092				
1983	86	940				
1984	75	1,010				
1985	64	1,126				
1986	111	1,147				
1987	79	1,283				
1988	62	1,383				
1989	65	1,380				
1990	53	1,385				
1991	53	1,333				
1992	49	1,234				
1993	75	1,088				
1994	67	1,339				
1995	62	1,140				
1996	57	1,129				
1997	63	1,118				
1998	55	1,129				
1999	45	1,297				
2000	33	1,367				
2001	55	1,303				
2002	47	1,328				
2003	51	1,337				
2004	35	1,137				
2005	44	1,142				
2006	35	1,017				





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