Government of the District of Columbia
Office of the Chief Medical Examiner
2003 ANNUAL REPORT

Government of the District of Columbia
Anthony A. Williams, Mayor

Edward D. Reiskin
Deputy Mayor for Public Safety and Justice

Marie-Lydie Y. Pierre-Louis, MD Chief Medical Examiner
Office of the Chief Medical Examiner

DISTRICT OF COLUMBIA
OFFICE OF THE CHIEF MEDICAL EXAMINER

2003 ANNUAL REPORT

MISSION:

The mission of the Office of the Chief Medical Examiner (OCME), 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 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 Anthony A. Williams, Mayor, District of Columbia,
The Council of the District of Columbia

August 2005

ACKNOWLEDGEMENT

We wish to acknowledge the dedication and support of the OCME staff, MPD's Natural Squad and the staff of the Wendt Center, all of whom work together as a team to ensure that the families and visitors of the District of Columbia receive service that affords them dignity and respect during their time of loss and grief, as well as, ensuring that the office attains its core mission.

A special thanks is extended to the Medical and Mortuary Staff who provide the most difficult work of the agency and to those OCME staff members who regularly step outside of their normal day-to-day duties to provide services and perform tasks that enables the agency to accomplish goals, special projects and the sometimes-difficult tasks that we face on a daily basis.

We also would like to thank the Mayor, the City Administrator and the Deputy Mayor of Public Safety and Justice, along with the other agencies that provide support to our office.

Executive Summary

The Government of the District of Columbia Office of the Chief Medical Examiner (OCME) is pleased to present its Twelfth Annual Report. Such a report has not been produced since 1992. This Report covers data that resulted from the investigation of 3,113 fatalities that occurred in the District of Columbia during the Calendar Year (CY) 2003.

The OCME is a cabinet level agency that serves under the administrative authority of the Deputy Mayor for Public Safety and Justice. OCME is primarily responsible for investigating all known or suspected homicides, suicides, accidental, drug-related, and medically unattended deaths as well as those deaths considered a threat to public health and safety.

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 2003.

There was a total of 3,964 cases reported to the OCME, of which 851 were cremations submitted for approval. As a result 3,113 cases were investigated, and of those cases 1,205 were cases where jurisdiction was waived. Finally, 1,908 cases were accepted for further examination, and of those 1,337 were autopsied. The following table illustrates the number of autopsy examinations, external examinations and medical record reviews performed by "Manner of Death".

Medical Examiner Cases by Manner of Death

Manner	Autopsy Examinations	External Examinations	Medical Record Reviews	Total
Homicide	246	2	0	248
Suicide	48	3	0	51
Accident	335	84	1	420
Natural	669	467	4	1140
Undetermined	24	1	0	25
Stillbirth	11	1	0	12
Pending	4	2	0	6
Total	**1337**	**560**	**5**	**1902**

Note: Non-Human Remains (5) and Anatomical Dispositions (1) are not included in this table.

SUMMARY OF FINDINGS FOR MANNER OF DEATH

HOMICIDES: The OCME investigated 248 homicides in the CY 2003. This report reveals that deaths by homicidal acts were more prevalent in black males, age 20-29 than in any other age group. The weapons of choice were firearms. The peak incidents occurred in April and July. Toxicology testing was requested for 246 of the cases investigated.
Toxicology Findings: Overall, drugs were present in 151 of the homicide cases investigated. The most commonly detected drugs in homicide cases were: Ethanol (81), Cocaine (53), PCP (46), and Marijuana (33).

SUICIDES: The OCME investigated 51 suicides in the CY 2003. This report reveals that deaths by suicidal acts were more prevalent in males and in persons between the ages of 30-39. Whites closely followed Blacks in number. Peak incidents occurred in January and April. Toxicology testing was requested for 49 of the cases investigated.
Toxicology Findings: Overall, drugs were present in 26 of the suicide cases investigated. The most commonly detected drugs were: Ethanol (9), Cocaine (5), Morphine (4), Citalopram (4) and Oxycodone (3). More prescription medications were detected in suicide cases than in homicide cases.

ACCIDENTS: The OCME investigated 420 accidents in the CY 2003. Out of the 420 cases investigated, 214 cases were the result of trauma, and of those 102 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 occurred in April, May, July and September. Also, 152 of the accidental deaths investigated occurred as a direct result of illicit drug use. Toxicology testing was requested for 341 of the cases investigated, and Tox was requested for 91 of the 102 cases identified as traffic related accidents.
Toxicology Findings: Overall, drugs were present in 225 Accident cases investigated. The most commonly detected drugs were: Cocaine (106), Morphine (93), Ethanol (73), Methadone (26), Marijuana (12) and PCP (12). **Toxicology Findings for Traffic-related deaths:** Of the 102 Traffic Accidents investigated drugs were present in 35 cases. The most commonly detected drugs were: Ethanol (14), Cocaine (7), Marijuana (6), Morphine (6), and PCP (5). In the 14 traffic deaths positive for ethanol, the average Blood Alcohol Concentration was 0.13%. The legal limit for Blood Alcohol Concentration in the District of Columbia is 0.08% while driving.

NATURAL DEATHS: The OCME investigated 1,140 Natural deaths in CY 2003. This report reveals that the leading cause of death in Natural cases is Cardiovascular Disease with 739 deaths, followed by Complications of Chronic Alcoholism with 80 deaths associated with this cause. Toxicology testing was requested for 679 of the cases investigated.
Toxicology Findings: Overall, drugs were present in 229 Natural cases investigated. The most commonly detected drugs were: Ethanol (56), Morphine (53), Cocaine (37), Codeine (25), Oxycodone (20) and Methadone (15).

UNDETERMINED: The OCME investigated 25 cases that were concluded to be "Undetermined". An "Undetermined" manner of death is a result of inconclusive evidence and/or investigatory efforts as to the manner of death. Toxicology testing was requested for all 25 of the cases investigated.
Toxicology Findings: Overall, drugs were present in 11 of the Undetermined cases investigated. The most commonly detected drugs were: Ethanol (4), Cocaine (3) and Methadone (2).

STILLBIRTHS: The OCME investigated 12 Stillbirth deaths. Toxicology testing was requested for 10 of these cases investigated.
Toxicology Findings: Overall, drugs were present in 2 of the cases investigated; 1 case had cocaine present and 1 case had both PCP and morphine present.

SUMMARY OF CFRC REVIEWS

During the 2003 calendar year, the CFRC identified the deaths of 133 children/youth, from birth through 25 years of age. These children died from a multitude of causes including extreme prematurity, congenital anomalies, diseases, homicide, suicide and unintentional injuries. Out of the 133 fatalities identified from the 2003 calendar year, 67, or 50% were reported to the DC Office of the Chief Medical Examiner and were accepted for autopsy.

SUMMARY OF MRDD REVIEWS

During the calendar year 2003 the MRDD FRC reviewed deaths that occurred during 2001-2003. The Committee identified 88 deceased persons with MRDD. These decedents died from a multitude of causes, which included: Neurologic Diseases, Cardiovascular Diseases, Gastrointestinal Diseases, Chronic Obstruction Pulmonary Disease, AIDS, Sepsis, Hemoglobinopathy Cancer, Diabetes Mellitus along with Fluvoxamine Intoxication and Trauma. Of the 88 fatalities identified from 2001 – 2003 calendar years, all were reported to the DC Office of the Chief Medical Examiner and were autopsied. The leading Causes of Death for this population of decedents were Neurologic Disease (28) and Cardiovascular Disease (24).

OFFICE OF THE CHIEF MEDICAL EXAMINER
Annual Report for Calendar Year 2003

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APPENDICES:

Introduction

By law the Office of the Chief Medical Examiner (OCME) is required to produce an annual report.[1] This annual report provides statistical data summarizing the results of investigations conducted by the OCME during calendar year 2003. This information is a reflection of the status of health of the residents of the District of Columbia; the level and the type of violence to which this population is subjected; 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 the Deputy Mayor for 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 correct policies for research purposes.

The OCME investigates the following types of human death occurring in the District of Columbia: 1) violent death, whether apparently, homicidal, suicidal or accidental, including deaths due to thermal, chemical, electrical or radiation injury and deaths due to criminal abortion; 2) deaths that are sudden, unexpected or unexplained; 3) deaths that occur under suspicious circumstances; 4) deaths of persons whose bodies are to be cremated, dissected or buried at sea: 5) deaths at the workplace or resulting from work activity; 6) deaths that are due to diseases that may constitute a threat to public health; 7) deaths of persons who are wards of the District government; 8) deaths related to medical or surgical intervention; 9) deaths that occur while persons that 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 orders 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 Forensic 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 all cases autopsied to assist in the determination of the cause and manner of death.

[1] The OCME 2003 Annual Report experienced a delay due to agency challenges. As the agency continues to develop and implement policies and procedures to address these challenges, it is expected that the report will be published on an annual basis in the future

Typical examinations performed by the laboratory determine the presence and amount of alcohol, volatiles, illegal drugs, and commonly used prescription and non-prescription medications.

The OCME actively participated in Fatality Review Committees. Two such Committees have been actively functioning: the Child Fatality Review Committee (CFRC), and the Mentally Retarded and Developmental Disabilities Fatality Review Committee (MRDD FRC). These committees were established to 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 the agencies' responses to the recommendations.

In addition, the office provided temporary storage of bodies for all hospices and local hospitals. The OCME morgue has a capacity of 130 which can be easily exceeded by a mass fatality incident. 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 worked 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 produced post-mortem body and dental X-rays for comparison to ante-mortem films and provided DNA specimens, all of which were used to determine identity.

OCME is one of the few medical examiner offices in the nation that provides grief counseling. This service is provided through a partnership with the Wendt Center for Loss and Healing.

In preparation for possible terrorist attacks and mass disaster, OCME joined the Interstate Compact Group. The goal of the group is to provide mutual assistance in the event of a mass disaster, so that personnel and resources can be shared. Participating members of this group include medical examiner offices of neighboring jurisdictions, such as the City of Philadelphia, the State of Delaware, the State of Maryland, the State of North Carolina, and the State of Virginia and the Armed Forces Institute of Pathology (AFIP).

Finally, the OCME participated in the academic training of medical students and pathology residents of local hospitals, students of physician assistants, forensic science and toxicology programs at 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.

During 2003, the OCME staff was very active in social programs such as Operation Prevent Auto Theft (OPAT), Career Day at District public elementary schools, the Mayoral Toy Drive and the D.C. One Fund.

OCME thanks the staff that carried out the work of the office during calendar year 2003, as well as the staff that assisted in preparing this report. (See Appendix B – 2003 OCME Staff Listing).

2.0 – Medical Examiner Investigations and Medical Legal Autopsies

Overview of Cases Reported to OCME

During the Calendar Year (CY) 2003, 3,964 cases were reported to the Office of the Chief Medical Examiner (OCME). Of the 3,964 cases reported, 851 were cremations submitted for approval. As a result 3,113 cases were investigated by the OCME, and of those cases 1,205 were cases where jurisdiction was waived. As a result, 1,908 cases were accepted for further investigation, and of those 1,337 were autopsied.

Total Number of Cases Reported to the OCME	**3,964**
Total Number of Cremation Approval Requests	**851**
Percent of Cases Reported	*21.44%*
Total Number of Cases Investigated by the OCME	**3,113**
Percent of Cases Reported	*78.56%*
Total Number of Cases where Jurisdiction was Declined	**1,205**
Percent of Cases Investigated	*38.68%*
Total Number of Cases Accepted for Further Investigation	**1,908**
Percent of Cases Investigated	*61.32%*

Breakdown of Cases

Total Number of Cases Investigated (1908)

Number of Autopsies	**1337**
Percent of Cases Accepted	*70.04%*
Number of External Examinations	**560**
Percent of Cases Accepted	*29.39%*
Number of Non-Human Remains *	**5**
Percent of Cases Accepted	*0.26%*
Number of Medical Record Review *	**5**
Percent of Cases Accepted	*0.26%*
Number of Anatomical Dispositions *	**1**
Percent of Cases Accepted	*0.0005%*

*** Definition of Unfamiliar Case Classifications:**

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

- *Medical Record Review*: Cases where the body is not available for examination and the investigation and determination of cause and manner of death are based solely on the review of available medical records.

- *Anatomical Dispositions*: Cases that are identified as those specimens received in formalin.

Breakdown of Case Investigations and Autopsies by Month

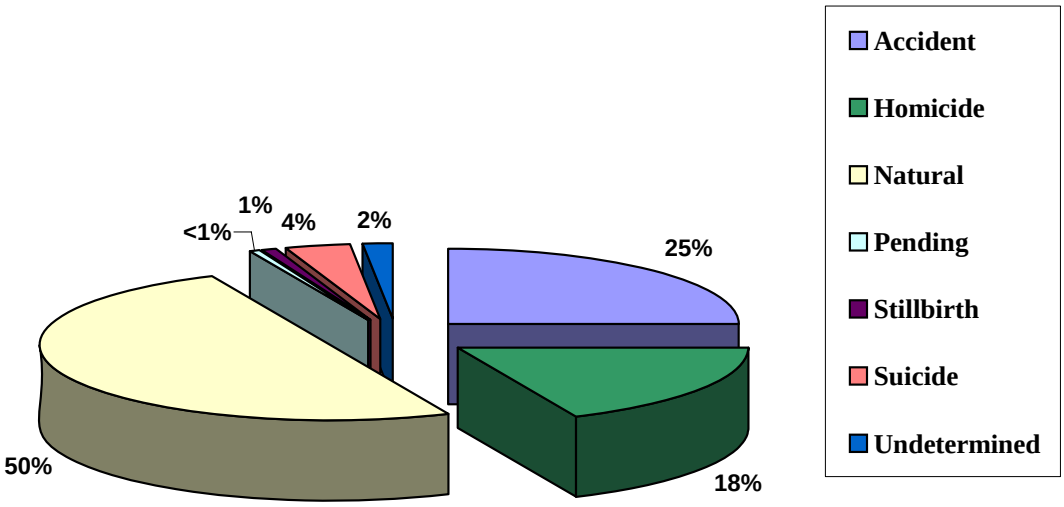
Month	Case Investigations	Autopsies
January	259	118
February	246	109
March	199	99
April	274	130
May	288	130
June	255	99
July	265	113
August	240	99
September	274	108
October	248	104
November	245	100
December	320	128
Total	**3113**	**1337**

Medical Examiner Case Investigations by Manner of Death

Manner	Total	External Examinations	Autopsy Examinations	Medical Record Review
Natural	1140	467	669	4
Accident	420	84	335	1
Homicide	248	2	246	0
Suicide	51	3	48	0
Undetermined	25	1	24	0
Stillbirth	12	1	11	0
Pending	6	2	4	0
Total	**1902**	**560**	**1337**	**5**

Note: The above table does not include “Non-Human Remains” or “Anatomical Dispositions”.

Pie Chart of Medical Examiner Autopsies by Manner of Death



Postmortem Toxicology

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, 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 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. The alcohol and/or drugs detected did not necessarily cause or contribute to the 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=	1354	
Negative	708	52.29%
Positive	646	47.71%

Overall, drugs were absent in 708 postmortem cases; 405 cases had one drug present; 166 cases had 2 drugs present; 59 cases had 3 drugs present; 13 cases had 4 drugs detected; and 3 cases had 5 drugs detected.

The most commonly detected drugs in the postmortem cases were:

Drug Name	Number of Cases	% of Cases
Ethanol	223	16.50%
Cocaine	206	15.20%
Morphine	162	21.00%
PCP	63	4.70%
Marijuana	55	4.10%
Methadone	46	3.40%
Oxycodone	32	2.40%
Codeine	32	2.40%
Hydrocodone	15	1.10%
Midazolam	12	0.90%
Citalopram	11	0.80%
Propoxyphene	10	0.70%

The most commonly detected drug combinations in the postmortem cases were:

Drugs	Number of Cases
Ethanol and Cocaine	62
Ethanol and Morphine	16
Ethanol, Cocaine , and Morphine	14
Ethanol and PCP	14
Morphine and Cocaine	30

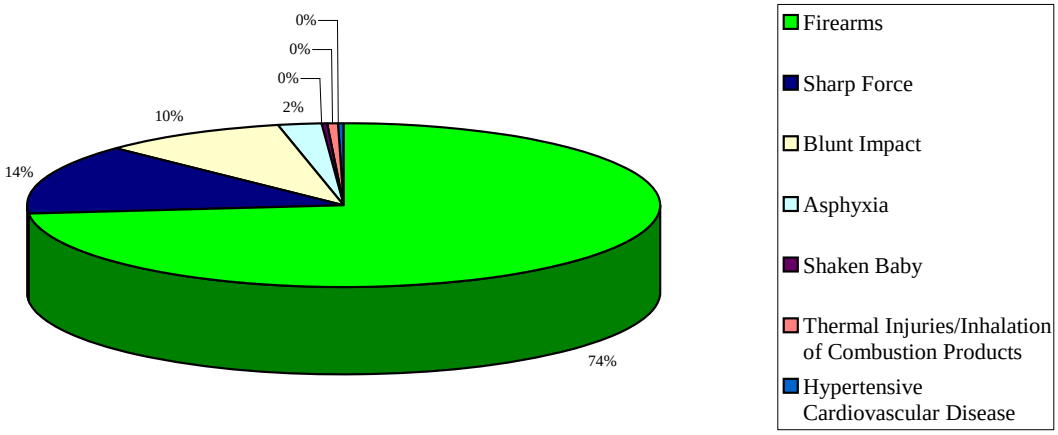
2.1 - Homicides

The OCME investigated 248 homicides in the Calendar Year (CY) 2003. The following tables and graphs provide a distribution by cause, month, race, gender and age group. Death by homicidal acts is more prevalent in black males, age 20-29 than in any other age group. The weapons of choice were firearms. The peak incidents occurred in April and July.

Homicides by Cause of Death

Cause	Number of Deaths	% of Total Homicides
Firearms	182	73.39%
Sharp Force	34	13.71%
Blunt Impact	24	9.68%
Asphyxia	5	2.02%
Shaken Baby	1	0.40%
Thermal Injuries/Inhalation of Combustion Products	1	0.40%
Hypertensive Cardiovascular Disease	1	0.40%
Total	**248**	**100.00%**

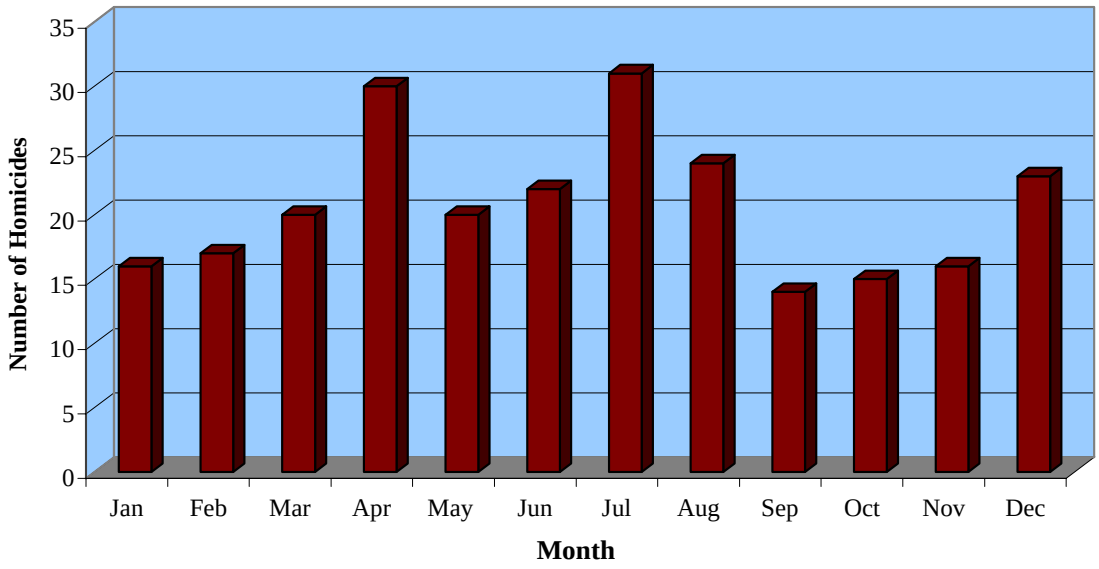
Pie Chart – Homicides by Cause of Death



Homicides by Month

Month	Number of Deaths
January	16
February	17
March	20
April	30
May	20
June	22
July	31
August	24
September	14
October	15
November	16
December	23
Total	**248**

Graph - Homicides by Month



Homicides by Race

Race/Ethnicity	Number of Homicides
Black	222
Hispanic	13
White	9
Unknown	3
Asian	1
Other	0
Total	**248**

Homicides by Gender

Gender	Number of Homicides
Female	30
Male	218
Total	**248**

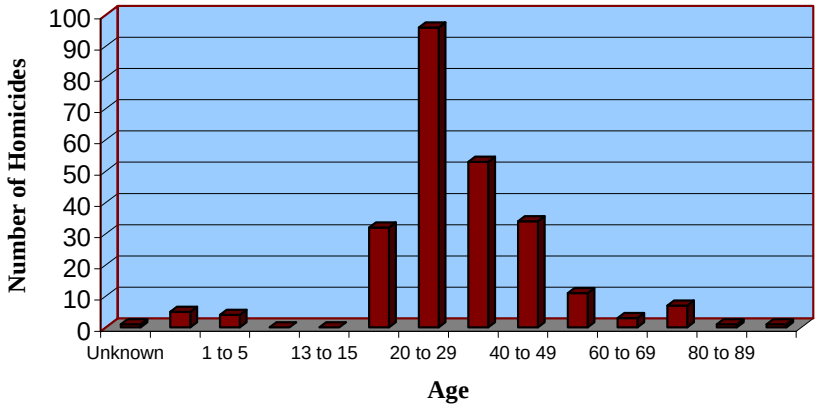
Homicides by Race and Gender

Race/Ethnicity by Gender	Number of Homicides
Asian	
Female	0
Male	1
Black	
Female	27
Male	195
Hispanic	
Female	0
Male	13
Other	
Female	0
Male	0
Unknown	
Female	1
Male	2
White	
Female	1
Male	8
Total	**248**

Homicides by Age

Age	Number of Homicides
Unknown (Date of birth unknown)	1
Under 1	5
1 to 5	4
6 to 12	0
13 to 15	0
16 to 19	32
20 to 29	96
30 to 39	53
40 to 49	34
50 to 59	11
60 to 69	3
70 to 79	7
80 to 89	1
90 +	1
Total	**248**

Chart – Homicides by Age Group



Homicides by Jurisdiction of Incident

Jurisdiction of Incident	Number of Homicides
DC	227
MD	10
VA	3
WV	1
Unknown	7
Total	**248**

Toxicology Findings for Homicide Cases

Description	Number of Cases	% of Cases
N=	246	
Negative	95	38.60%
Positive	151	61.40%

Overall, drugs were absent in 95 homicide cases; 85 cases had one drug present; 45 cases had 2 drugs present; 17 had 3 drugs present; 2 cases had 4 drugs detected; and 2 cases had 5 drugs detected.

The most commonly detected drugs in the homicide cases were:

Name of Drug	Number of Cases	% of Homicide Cases
Ethanol	81	32.90%
Cocaine	53	21.50%
PCP	46	18.70%
Marijuana	33	13.40%
Morphine	11	4.50%
MDMA/MDA[1]	4	1.60%
Methadone	3	1.20%

[1] MDMA/MDA – refers to “Ecstasy” related drugs

The substances ketamine, methamphetamine, oxycodone and carbon monoxide were also detected in 2 cases each.

The four (4) homicide cases where multiple drugs were detected had the following toxicology:

a) ethanol, MDMA, PCP, cocaine, and marijuana
b) ethanol, MDMA, morphine, methadone, and marijuana
c) ethanol, cocaine, ketamine, and marijuana; and
d) PCP, methadone, oxycodone, and marijuana

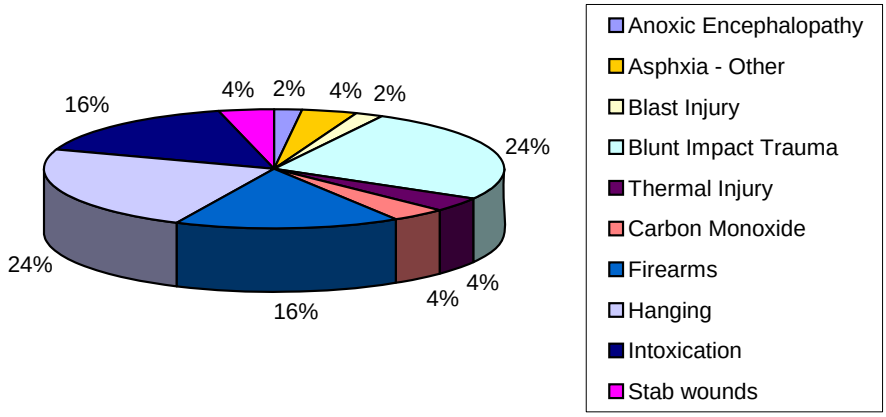
2.2 - Suicides

The OCME investigated 51 suicides in the Calendar Year2003. Deaths by suicidal acts are more prevalent in males and in persons between the ages of 30-39. Whites closely follow Blacks in number. Peaks occurred in January and April.

Suicides by Cause of Death

Cause	Number of Deaths	% of Total Suicides
Blunt Impact Trauma	13	25.49%
Hanging	12	23.53%
Firearms	8	15.69%
Intoxication	8	15.69%
Asphxia - Other	2	3.92%
Thermal Injury	2	3.92%
Carbon Monoxide	2	3.92%
Stab wounds	2	3.92%
Anoxic Encephalopathy	1	1.96%
Blast Injury	1	1.96%
Total	**51**	**100.00%**

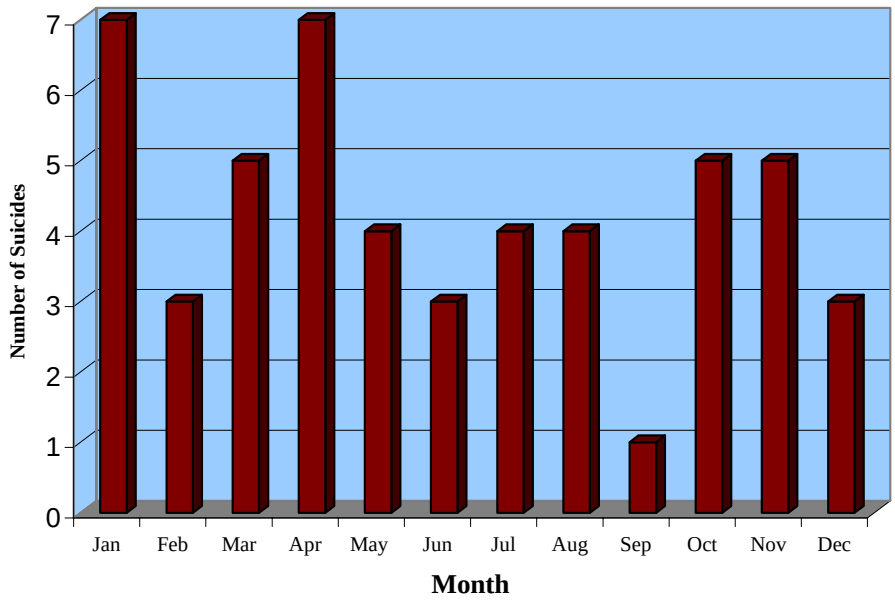
Pie Chart - Suicides by Cause of Death



Suicides by Month

Month	Number of Deaths
January	7
February	3
March	5
April	7
May	4
June	3
July	4
August	4
September	1
October	5
November	5
December	3
Total	**51**

Chart- Suicides by Month



Suicides by Race

Race	Number of Suicides
Black	25
White	22
Hispanic	2
Other	1
Unknown	1
Total	**51**

Suicides by Gender

Gender	Number of Suicides
Female	12
Male	39
Total	**51**

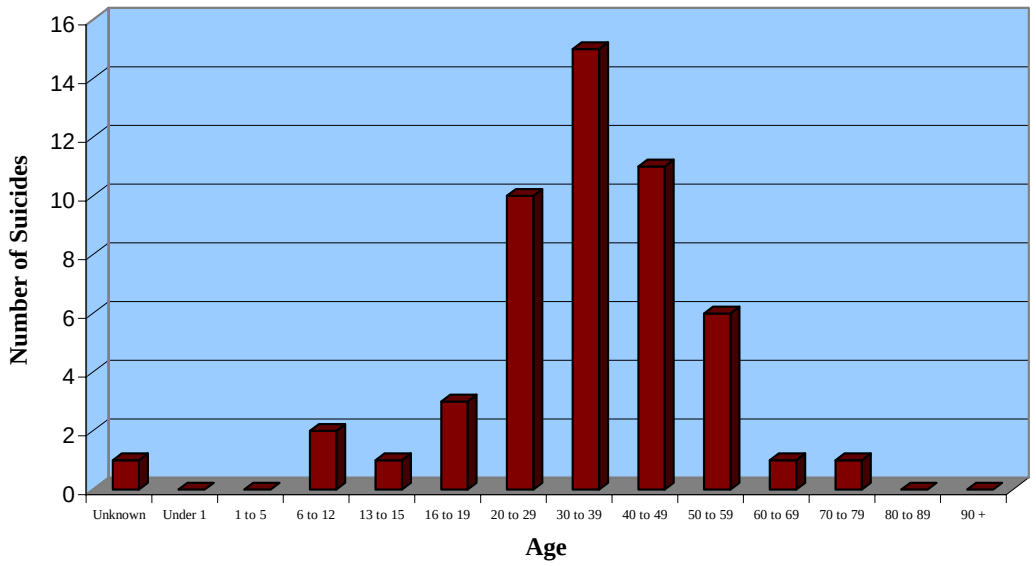
Suicides by Race and Gender

Race/Ethnicity by Gender	Number of Suicides
Asian	
Female	0
Male	0
Black	
Female	4
Male	21
Hispanic	
Female	0
Male	2
Other	
Female	1
Male	0
Unknown	
Female	1
Male	0
White	
Female	7
Male	15
Total	**51**

Suicides by Age

Age	Number of Suicides
Unknown (Date of birth unknown)	1
Under 1	0
1 to 5	0
6 to 12	2
13 to 15	1
16 to 19	3
20 to 29	10
30 to 39	15
40 to 49	11
50 to 59	6
60 to 69	1
70 to 79	1
80 to 89	0
90 +	0
Total	**51**

Chart - Suicides by Age



Toxicology Findings for Suicide Cases

Overall, drugs were absent in 23 suicide cases; 14 cases had one drug present; 6 cases had 2 drugs present; 3 had 3 drugs present; and 3 cases had 4 drugs detected.

Description	Number of Cases	% of Cases
N=	49	
Negative	23	46.9%
Positive	26	53.1%

The most commonly detected drugs in suicide cases were:

Name of Drug	Number of Cases	% of Suicide Cases
Ethanol	9	18.40%
Cocaine	5	10.20%
Morphine	4	8.20%
Citalopram	4	8.20%
Oxycodone	3	6.10%

The substances hydrocodone, nortriptyline and diphenhydramine were detected in 2 cases each. The following substances were detected in one case each: PCP, acetaminophen, amphetamine, carbon monoxide, doxepin, ethylene glycol, fluoxetine, fluvoxamine, midazolam, mirtazepine, olanzapine, sertraline, tramadol and venlafaxine.

The three (3) suicide cases with the most drugs detected had the following toxicology:

a) Morphine, oxycodone, hydrocodone, and acetaminophen
b) Amphetamine, cocaine, oxycodone, and doxepin; and
c) ortriptyline, citalopram, cyclobenzaprine, and marijuana.

Overall, more prescription medications were detected in the suicide cases than in the homicide cases, in particular anti-depressant type medications.

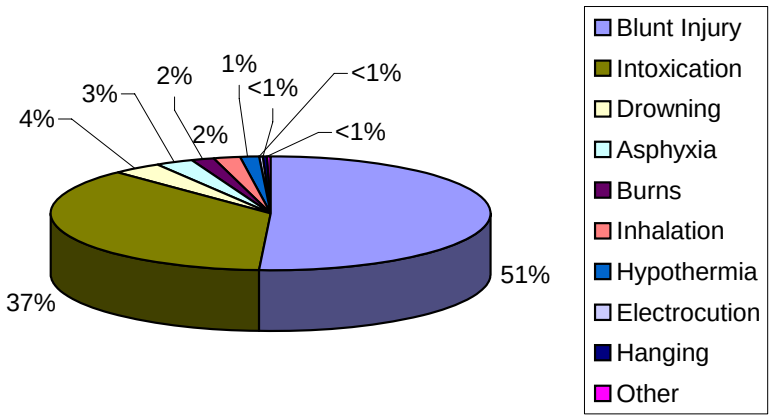
2.3 - Accidents

OCME investigated 420 accident cases in 2003. Out of the 420 cases investigated, 217 cases were the result of trauma, and of those 102 were traffic related. 152 cases were the direct result of illicit drug use.

Accidents by Cause of Death

Cause	Number of Deaths	% of Total Accidents
Blunt Injury	217	50.95%
Intoxication	152	36.90%
Drowning	15	3.57%
Asphyxia	11	2.62%
Burns	8	1.90%
Inhalation	8	1.90%
Hypothermia	6	1.43%
Electrocution	1	0.24%
Hanging	1	0.24%
Other	1	0.24%
Total	**420**	**100.00%**

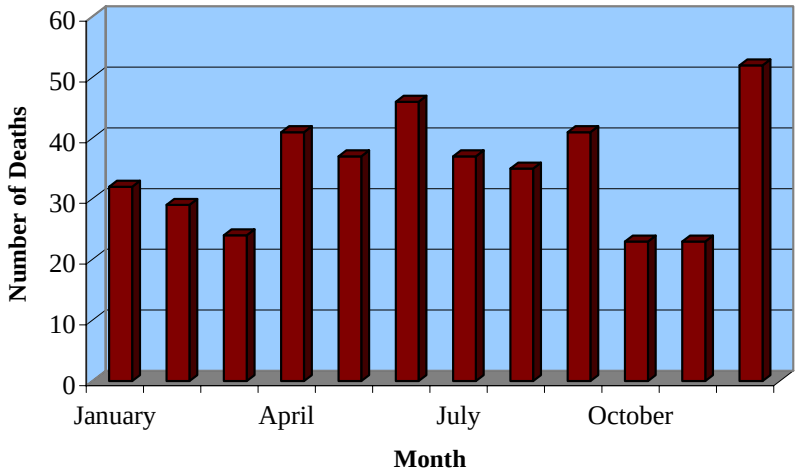
Pie Chart - Accidents by Cause of Death



Accidents by Month

Month	Number of Deaths
January	32
Febuary	29
March	24
April	41
May	37
June	46
July	37
August	35
September	41
October	23
November	23
December	52
Total	**420**

Chart - Accidents by Month of Death



Accidents by Race

Race/Ethnicity	Number of Accidents
Unknown	1
Asian	4
Black	263
Hispanic	21
Other	4
White	127
Total	**420**

Accidents by Gender

Gender	Number of Accidents
Female	144
Male	276
Total	**420**

Accidents by Age

Age	Number of Accidents
Unknown (Date of birth unknown)	2
Under 1	4
1 to 5	7
6 to 12	6
13 to 15	3
16 to 19	9
20 to 29	39
30 to 39	44
40 to 49	100
50 to 59	79
60 to 69	28
70 to 79	33
80 to 89	46
90 +	20
Total	**420**

Toxicology Findings for Accident Cases

Overall, drugs were absent in 116 accident cases; 112 cases had one drug present; 76 cases had 2 drugs present; 30 cases had 3 drugs present; and 7 cases had 4 drugs detected.

Description	Number of Cases	% of Cases
N=	341	
Negative	116	34.00%
Positive	225	66.00%

The most commonly detected drugs in the accident cases were:

Name of Drug	Number of Cases	% of Accident Cases
Cocaine	106	31.10%
Morphine	93	27.30%
Ethanol	73	21.40%
Methadone	26	7.60%
Marijuana	15	4.40%
PCP	12	3.50%
Oxycodone	7	2.10%
Codeine	6	1.70%
Midazolam	4	1.20%
Citalopram	4	1.20%
Carbon monoxide	4	1.20%

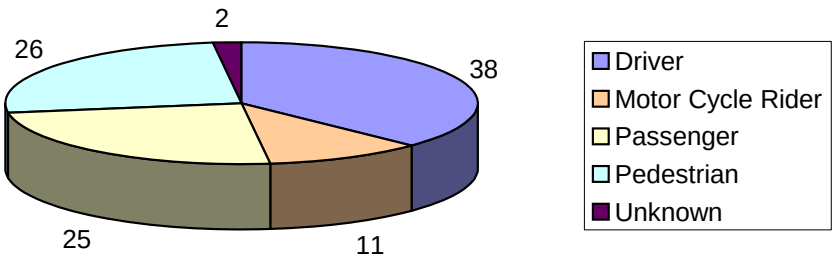
2.3.1 - Traffic Accident Deaths

The majority of traffic deaths occurred in the following categories; males, blacks, and drivers between the ages of 20-29. Peaks occurred in April, May, July and September.

Role of the Decedent in Traffic Accident Deaths

Role	Traffic Deaths
Driver	38
Pedestrian	26
Passenger	25
Motorcycle Rider	11
Unknown	2
Total	**102**

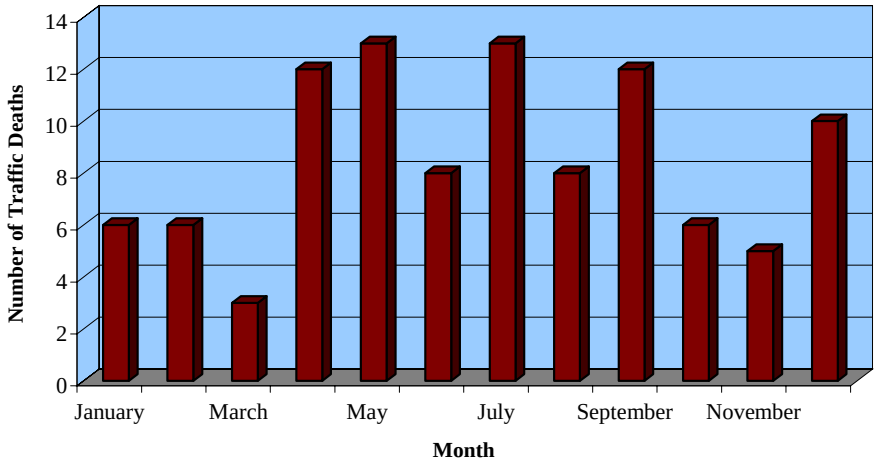
Pie Chart - Role of Decedent in Traffic Accident Deaths



Traffic Accident Deaths by Month

Month	Number of Traffic Accidents
January	6
February	6
March	3
April	12
May	13
June	8
July	13
August	8
September	12
October	6
November	5
December	10
Total	**102**

Chart - Traffic Accident Deaths by Month



Traffic Accident Deaths by Race

Race	Number of Traffic Deaths
White	31
Hispanic	12
Black	54
Asian	5
Total	**102**

Traffic Accident Deaths by Gender

Gender	Number of Traffic Deaths
Female	30
Male	72
Total	**102**

Traffic Accident Deaths by Age

Age	Number of Traffic Deaths
Under 1	3
1 to 5	4
6 to 12	3
13 to 15	4
16 to 19	7
20 to 29	24
30 to 39	12
40 to 49	17
50 to 59	12
60 to 69	4
70 to 79	6
80 to 89	5
90 +	1
Total	**102**

Traffic Accident Deaths by Jurisdiction of Incident

Jurisdiction of Incident	Number of Traffic Deaths
DC	61
MD	24
VA	13
Unknown	2
DE	1
WV	1
Total	**102**

Toxicology Findings for Traffic Accident Deaths

Overall, drugs were absent in 56 traffic death cases; 23 cases had one drug present; 11 cases had 2 drugs present; and 1 case had 3 drugs present.

Description	Number of Cases	% of Cases
N=	91	
Negative	56	61.50%
Positive	35	38.50%

The substances methadone and codeine were present in 2 cases each, while oxycodone, ketamine, carbon monoxide, midazolam, clozapine and citalopram were detected in one case each.

Name of Drug	Number of Cases	% of Suicide Cases
Ethanol	14	15.40%
Cocaine	7	7.70%
Marijuana	6	6.60%
Morphine	6	6.60%
PCP	5	5.50%

In the 14 traffic deaths positive for ethanol, the average Blood Alcohol Concentration was 0.13 % (range 0.02 – 0.25 %). The legal limit for Blood Alcohol Concentration in the District of Columbia is 0.08% while driving.

2.3.2 – Toxicology Findings for Deaths due to Drug Overdose

There were 152 OCME cases where death was directly related to drug use. The most prevalent drug in the population was cocaine alone or in combination with other drugs (most commonly morphine).

Contributing Drug(s)[2]	# of Cases
Cocaine	46
Morphine	28
Cocaine + Morphine	18
Methadone	7
Morphine + Alcohol	6
Cocaine + Alcohol	5
Heroin + Alcohol	4
Cocaine + Methadone	4
Cocaine, Morphine + Alcohol	3
Cocaine + Heroin	3
Alcohol	3
Heroin	2
Cocaine, Methamphetamine + Morphine	1
Cocaine, Morphine + Oxycodone	1
Cocaine, Morphine + PCP	1
Cocaine, Heroin + Alcohol	1
Cocaine + Methamphetamine	1
Cocaine + PCP	1
Heroin + Methadone	1
Morphine, Hydromorphone + Hydrocodone	1
Morphine, Citalopram + Nordiazepam	1
Morphine + Sertraline	1
Oxycodone + Venlafaxine	1
Oxycodone	1
Hydrocodone	1
Methadone, Morphine + Oxycodone	1
Methadone, Oxycodone + Diazepam	1
Methadone + Opiates	1
Methadone + Oxycodone	1
Methadone + Sertraline	1
Methadone + Alcohol	1
PCP + Alcohol	1
Alcohol + Nordiazepam	1
Bupropion, Doxylamine + Zolpidem	1
Salicylate	1

[2] Deaths attributable to morphine can either be heroin-related or morphine-related

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. 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, prescription and other-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=	85	
Negative	5	5.90%
Positive	80	94.10%

Type of Specimen Submitted

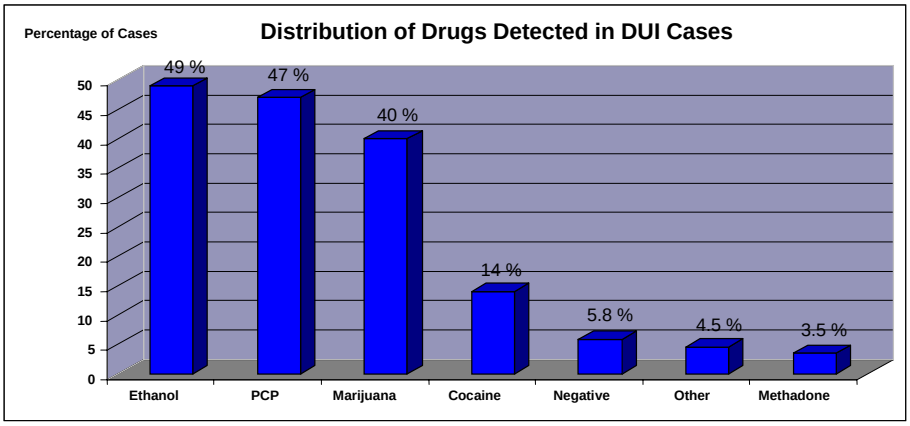
Description	Number of Cases	% of Cases
Blood	25	29.40%
Urine	60	70.60%

Age and gender of DUI cases

Gender	Number of Cases	Age Range	Mean	Median
Male	59	19-54 yr (N-46)	34	30
Female	18	19-54 yr (N-16)	35	34.5
Not Specified	8			

The most commonly detected drugs in the DUI cases were:

Name of Drug	Number of Cases	% of DUI Cases
Ethanol	42	49%
PCP	40	47%
Marijuana	34	40%
Cocaine	12	14%
Methadone	3	3.50%



Overall, drugs were absent in 5 DUI cases; 40 cases had one drug present; 25 cases had 2 drugs present; 13 cases had 3 drugs present; and 2 cases had 4 drugs detected.

Ethanol results:

Description	N=	Average	Range
Average blood alcohol result	15	0.14%	0.06-0.27%
Average urine alcohol result	27	0.10%	0.01-0.29%

Common drug combinations for DUI cases include:

Name of Drugs	Number of Cases
PCP + Ethanol	10
PCP + Marijuana	7
PCP + Ethanol + Marijuana	6

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

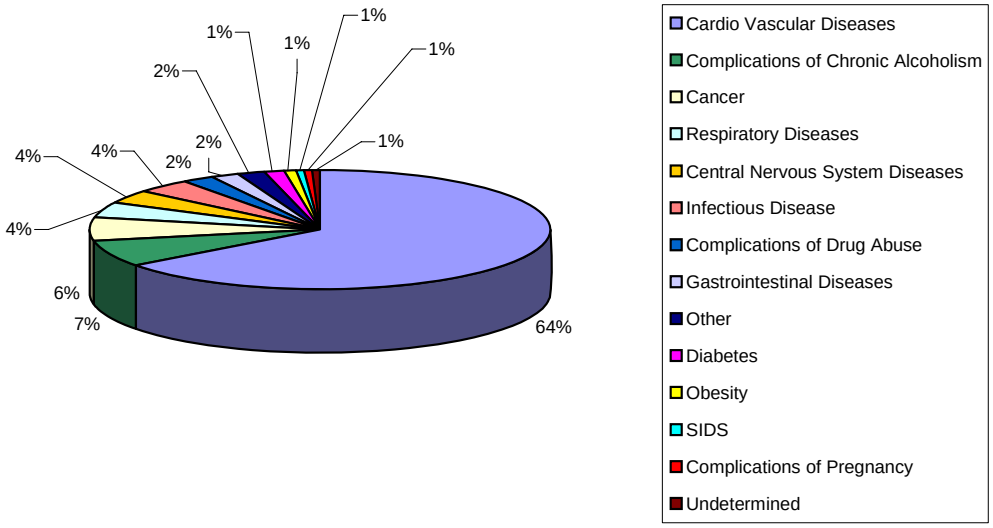
a) ethanol (**.04 %**), PCP, cocaine, and marijuana; and
b) ethanol (**.04%**), PCP, methamphetamine, and marijuana.

2.4 - Natural Deaths

Natural Deaths by Cause

Cause	Number of Deaths	% of Total Natural Deaths
Cardio Vascular Diseases	739	**64.82%**
Complications of Chronic Alcoholism	80	**7.02%**
Cancer	73	**6.40%**
Respiratory Diseases	49	**4.30%**
Central Nervous System Diseases	42	**3.68%**
Infectious Disease	42	**3.68%**
Complications of Drug Abuse	25	**2.19%**
Gastrointestinal Diseases	23	**2.02%**
Other	22	**1.93%**
Diabetes	16	**1.40%**
Obesity	9	**0.79%**
SIDS	8	**0.70%**
Complications of Pregnancy	6	**0.53%**
Undetermined	6	**0.53%**
Total	**1140**	**100.00%**

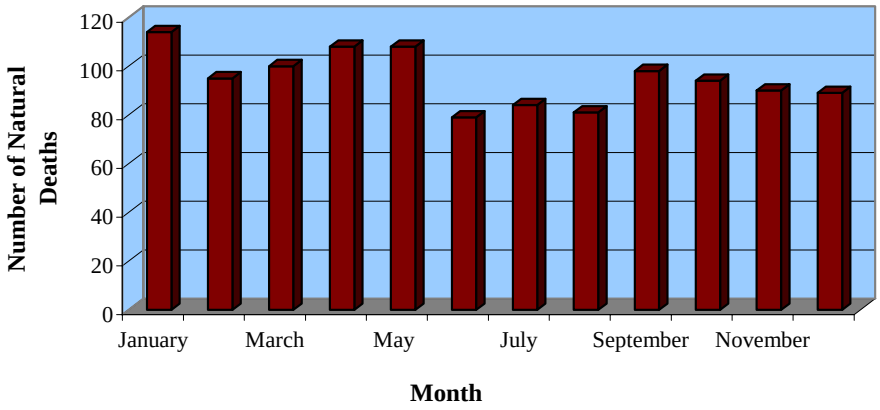
Pie Chart - Natural Deaths by Cause



Natural Deaths by Month

Month	Number of Deaths
January	114
February	95
March	100
April	108
May	108
June	79
July	84
August	81
September	98
October	94
November	90
December	89
Total	**1140**

Chart- Natural Deaths by Month



Natural Deaths by Race

Race	Number of Natural Deaths
Asian	13
Black	885
Hispanic	23
Other	3
Unknown	4
White	212
Total	**1140**

Natural Deaths by Gender

Gender	Number of Natural Deaths
Female	465
Male	675
Total	**1140**

Natural Deaths by Age

Age	Number of Natural Deaths
Unknown (Date of birth unknown)	3
Under 1	22
1 to 5	5
6 to 12	3
13 to 15	0
16 to 19	6
20 to 29	28
30 to 39	68
40 to 49	176
50 to 59	247
60 to 69	191
70 to 79	218
80 to 89	136
90 +	37
Total	**1140**

Toxicology Findings for Natural Deaths

Overall, drugs were absent in 450 natural cases; 186 cases had one drug present; 35 cases had 2 drugs present; 6 had 3 drugs present; 1 case had 4 drugs detected; and 1 case had 5 drugs detected.

Description	Number of Cases	% of Cases
N=	679	
Negative	450	66.30%
Positive	229	33.70%

The most commonly detected drugs in the natural cases were:

Name of Drug	Number of Cases	% of Natural Cases
Ethanol	56	8.20%
Morphine	53	7.80%
Cocaine	37	5.40%
Codeine	25	3.70%
Oxycodone	20	2.90%
Methadone	15	2.20%
Hydrocodone	9	1.30%
Propoxyphene	7	1.00%
Meperidine	6	0.90%
Midazolam	6	0.90%
Fluoxetine	5	0.70%
Hydromorphone	5	0.70%
Marijuana	5	0.70%
Tramadol	5	0.70%

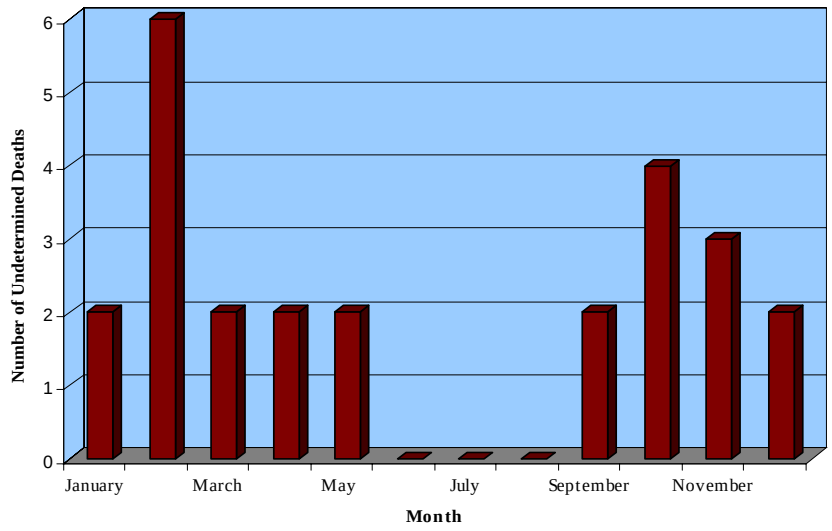
2.5 - Undetermined Deaths

Cause	Number of Deaths	% of Total Accepted Cases
Undetermined	25	1.31%

Undetermined Deaths by Month

Month	Number of Deaths
January	2
February	6
March	2
April	2
May	2
June	0
July	0
August	0
September	2
October	4
November	3
December	2
Total	**25**

Chart - Undetermined Deaths by Month



Undetermined Deaths by Race

Race	Number of Undetermined Deaths
Black	13
White	7
Hispanic	4
Asian	1
Total	**25**

Deleted:

Undetermined Deaths by Gender

Gender	Number of Undetermined Deaths
Female	6
Male	19
Total	**25**

Undetermined Deaths by Age

Age	Number of Undetermined Deaths
Under 1	1
1 to 5	5
6 to 12	2
13 to 15	2
16 to 19	0
20 to 29	4
30 to 39	7
40 to 49	3
90 +	1
Total	**25**

Toxicology Findings for Undetermined Deaths

Overall, drugs were absent in 14 undetermined cases; 6 cases had one drug present; 2 cases had 2 drugs present; and 3 cases had 3 drugs present.

Description	Number of Cases	% of Cases
N=	25	
Negative	14	56.00%
Positive	11	44.00%

The most commonly detected drugs in the undetermined cases were:

Name of Drug	Number of Cases	% of Undetermined Cases
Ethanol	4	16%
Cocaine	3	12%
Methadone	2	8%

Toxicology for Stillbirths

Overall, drugs were absent in 8 stillbirths; 1 case had one drug present (cocaine); and 1 case had 2 drugs present (PCP and morphine).

Description	Number of Cases	% of Cases
N=	10	
Negative	8	80.00%
Positive	2	20.00%

3.0 – Child Fatality Review Committee (CFRC)

The District of Columbia Child Fatality Review Committee, which operates under the auspices of the Office of the Chief Medical Examiner, is a citywide effort that is authorized by Law (See Appendix C) and Mayor's Order 98-67, effective April 29, 1998 (See Appendix D), for the purpose of conducting retrospective examinations of the circumstances that contributed to the deaths of infants, children and youth who were residents or wards of the city. Identifying risk reduction, prevention and system improvements factors; recommending strategies to reduce the number of preventable child deaths; and improving the quality of residents' lives are the primary goals of the District's child death review process. The Committee focuses on using information gained from fatality reviews as a means of understanding the following:

- The manner in which District children are dying and patterns/trends associated with preventable child deaths;
- The type of services/interventions and resources needed by families.
- The appropriateness of current child/family-focused policies, legislation and practices; and
- The changes required for ensuring a city-wide continuum of care for children and families and for the protection of our children.

The mandated case review criteria includes 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 the mental retardation and developmental disabilities system within two years of the death.

The child death review process is intended to assist in identifying family and community strengths, as well as deficiencies and improvements needed in service delivery systems, to better address the needs of children and families served. It is an opportunity for self-evaluation, through a multi-agency, multi-disciplinary approach. This process can provide a wealth of information regarding ways to enhance services and systems in an effort to reduce the number of preventable deaths and improve the quality of children's lives.

During the 2003 calendar year, the Committee identified the deaths of 133 children/youth, from birth through 25 years of age. These children died from a multitude of causes including extreme prematurity, congenital anomalies, diseases, homicide, suicide and unintentional injuries. Out of the 133 fatalities identified from the 2003 calendar year, 67, or 50% were reported to the DC Office of the Chief Medical Examiner and were accepted for autopsy. The following charts and graphs represent a summary of the data that resulted from the 2003 deaths reviewed:

3.1 – CFRC Decedent Population Breakdown

CFRC Decedent Population by Age

Age	Number	% of Total
Under 1 Year	68	51%
1 thru 4 Years	7	5%
5 thru 10 Years	5	4%
11 thru 14 Years	8	6%
15 thru 20 Years	36	27%
Over 20 Years	9	7%

CFRC Decedent Population by Race

Race	Number	% of Total
Black	116	87%
White	6	5%
Hispanic	8	6%
Asian	0	0%
Other	1	1%
Unknown	2	1.50%

CFRC Decedent Population by Gender

Gender	Number	% of Total
Female	48	36%
Male	85	64%

CFRC Decedent Population by Ward

Ward of Residence	Number
Ward One	9
Ward Two	8
Ward Three	2
Ward Four	16
Ward Five	16
Ward Six	9
Ward Seven	32
Ward Eight	31
Other State	9

CFRC Decedent Population by Manner of Death

Manner	Number	% of Total
Natural	79	59%
Homicide	38	29%
Accident	8	6%
Suicide	3	2%
Undetermined	4	3%
Unknown	1	1%
Pending	0	0%

3.2 – CFRC Cases Autopsied at OCME

DC OCME Decedent Population by Age and Gender

Age/Gender	Subtotal	Total
Under 1		
Female	7	**21**
Male	14	
1 thru 4		
Female	3	**4**
Male	1	
5 thru 10		
Female	1	**1**
Male	0	
11 thru 14		
Female	1	**3**
Male	2	
15 thru 20		
Female	3	**33**
Male	30	
Over 20		
Female	1	**5**
Male	4	

DC OCME Population by Race

Decedents' Race	Number	% of Total
Black	61	91%
White	3	4%
Hispanic	2	3%
Asian	0	0%
Other	1	1%

DC OCME Population by Ward

Ward of Residence	Number
Ward One	5
Ward Two	2
Ward Three	2
Ward Four	7
Ward Five	8
Ward Six	5
Ward Seven	13
Ward Eight	21
Other State	4

DC OCME Population by Manner of Death

Manner	Number	% of Total
Natural	19	59%
Homicide	34	29%
Accident	7	6%
Suicide	3	2%
Undetermined	4	3%

DC OCME Population - Homicides by Cause of Death

Cause	Number
Bunt Impact	2
(1 Shaken Baby)	
Fire Arms	29
(15 years of age or older)	
Sharp Force	3
(1 under 3 years of age)	

DC OCME Population - Accidents by Cause of Death

Cause	Subtotal	Total
Motor Vehicle		**6**
Pedestrian	3	
Passenger	2	
Driver	1	
Asphyxia		**1**

DC OCME Population - Natural Deaths by Cause

Cause	Number
Prematurity	3
Infection	2
Respiratory	5
Central Nervous System	2
SIDS	7

DC OCME Population – Manner of Death by Month

Manner	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Natural	3		2	2	2	1	2	1	1	2	3	
Homicide	2	1	1	4	2	5	4	2	3	2	4	4
Accident				1		2	1		2		1	
Suicide					1			1	1			
Undetermined	2										1	1

4.0 – Mental Retardation and Developmental Disabilities Fatality Review Committee (MRDD FRC)

This report is a composite summary of work of the District of Columbia Mental Retardation and Developmental Disabilities Fatality Review Committee (MRDD FRC) for the calendar years 2001, 2002 and 2003. The MRDD FRC was established by Mayor's Order 2001-27, effective February 14, 2001 (See Appendix E) (herein referred to as the Order). The Order mandates that the MRDD FRC examine events that surround the deaths of District wards or residents 18 years of age and older with mental retardation and/or developmental disabilities.

The MRDD FRC is comprised of members who represent public and private community organizations from a broad range of disciplines to include health, mental retardation and mental health, social services, public safety, judicial and law enforcement. These individuals come together as a collective body for the purpose of examining and evaluating relevant facts associated with services and interventions that were provided to deceased persons with mental retardation and developmental disabilities (MRDD).

During the fatality case reviews, the MRDD FRC examines an independent investigative report a forensic autopsy report prepared by the Office of the Chief Medical Examiner. The reports highlight each deceased individual's social history including family and care giver's relationships with the deceased, living conditions prior to death; medical diagnosis; medical history; services provided; and cause and manner of death. These fatality reviews examine compliance with regulations and recommendations by service providers, and may lead to identification of systemic health care and service concerns. The MRDD FRC recommends strategies to promote comprehensive health care and improve the quality of life for persons with MRDD.

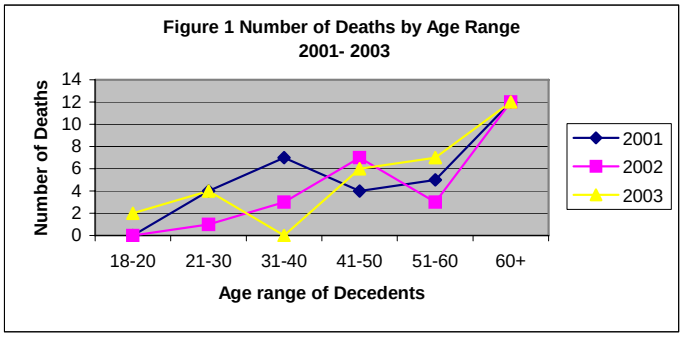
During the calendar year 2003 the MRDD FRC reviewed deaths that occurred during 2001-2003. The Committee identified 88 deceased persons with MRDD. These decedents died from a multitude of causes, which included: Neurologic Disease, Cardiovascular Diseases, Gastrointestinal Diseases, Chronic Obstruction Pulmonary Disease, AIDS, Sepsis, Hemoglobinopathy Cancer, Diabetes Mellitus along with Fluvoxamine Intoxication and Trauma. Of the 88 fatalities identified from 2001 – 2003 calendar years, all were reported to the DC Office of the Chief Medical Examiner and were autopsied. The following charts and graphs represent a summary of the data that resulted from the MRDD FRC review of the deaths.

4.1 – MRDD FRC Decedent Population Breakdown

MRDD Population

Year	Population	Deaths	Percentage
2001	1547	32	2.00%
2002	1703	26	1.50%
2003	1790	31	1.70%

MRDD Deaths by Age



MRDD Deaths by Cause

Cause of Death	Deaths
Neurologic Diseases	28
Cardiovascular Diseases (Hypertension, Atherosclerosis)	24
Cancer	9
Gastrointestinal Diseases	9
AIDS	2
Sepsis	2
Hemoglobinopathy	2
Chronic Obstruction Pulmonary Disease	2
Trauma	2
Diabetes Mellitus	1
Fluvoxamine Intoxication	1

5.0 – Breakdown of Medical Examiner (ME) Investigations by Race and Manner of Death

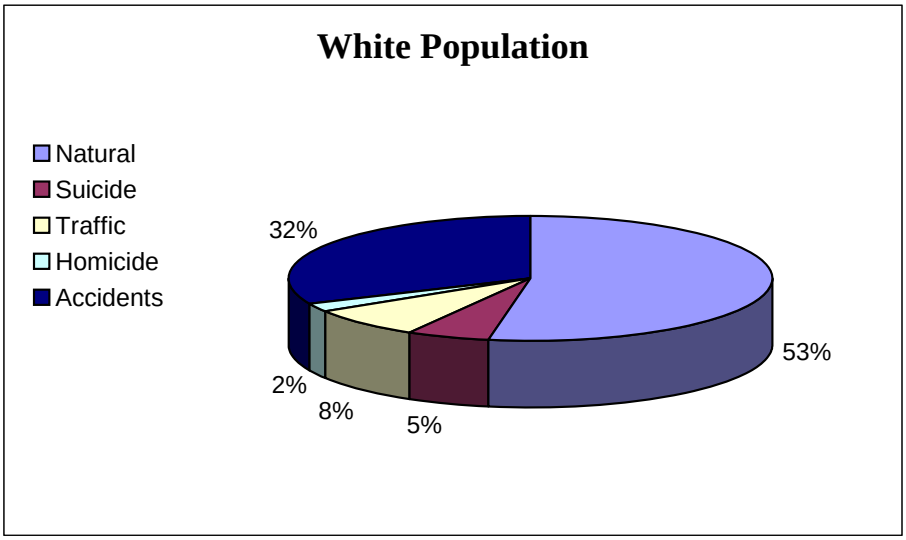
During 2003, the total population of the District was 528,759 inhabitants comprised mainly of the following groups: White, Black, American Indian/Asian and Hispanic. In 2003, the OCME investigated 3,113 of the deaths that occurred in these populations and 1,908 were accepted under the jurisdiction of the Medical Examiner for further investigation. The following table and charts summarize the manner of death by racial composition.

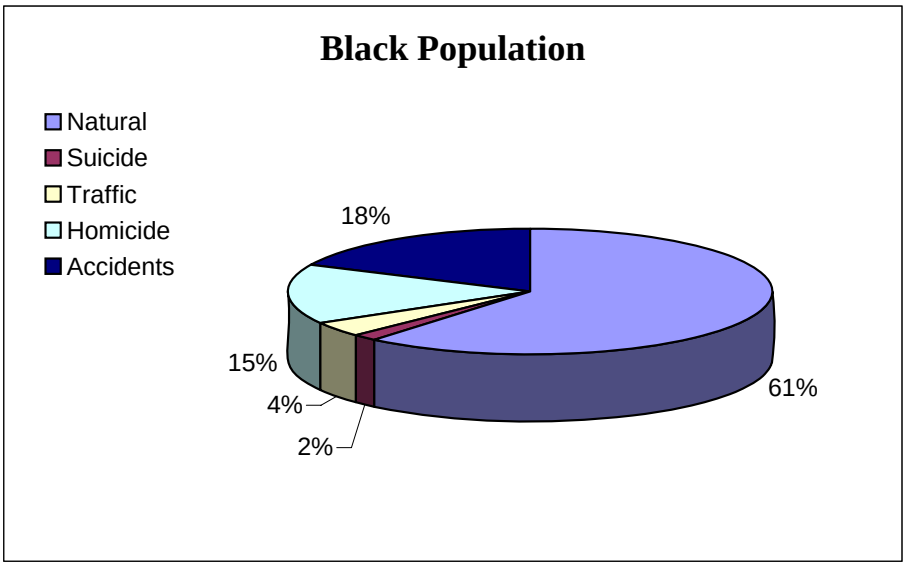
Manner of Death by Race including 2003 Population Data

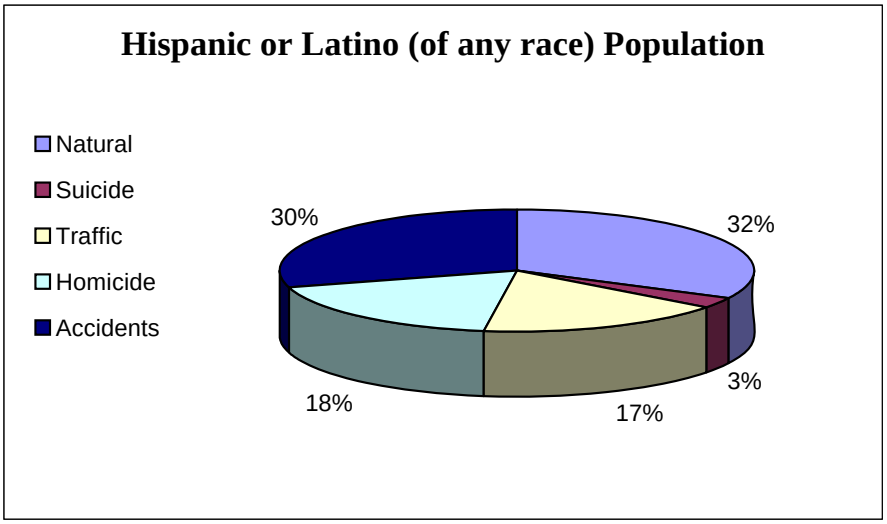
Race	Population (2003)	Total Number of ME Cases	Natural	Suicide	Homicide	Accidents (Traffic-Related)	Accidents (All)
White	166,223	370	212	22	9	31	127
Black or African American	316,481	1,395	885	25	222	54	263
Hispanic or Latino (of any race)	51,900	59	23	2	13	12	21
American Indian/Asian	22,858	18	13	0	1	5	4
Other	31,619	38	7	23	3	0	5
Total Population	**528,759**						
Total # of ME Cases		**1,880**	**1140**	**51**	**248**	**102**	**420**

Note: Undetermined deaths are not included in this table.

Pie Chart - ME Cases by Race and Manner of Death






Hispanic or Latino (of any race) Population
Natural
Suicide
Traffic
Homicide
Accidents
30%
32%
3%
17%
18%

APPENDICES

The Appendices A, C, D and E can be provided upon request at:

Office of the Chief Medical Examiner
1910 Massachusetts Ave., SE – Bldg 27
Washington, DC 20003

APPENDIX B

2003 Office of the Chief Medical Examiner Staffing List

Position Title	FY 2003 FTEs	2003 Filled Positions
Autopsy Assistant	11.0	8.0
Chief Medical Examiner	1.0	1.0
Chief Toxicologist	1.0	1.0
Executive Assistant	1.0	1.0
Computer Operator	1.0	1.0
Custodial Worker	2.0	1.0
Deputy Chief Medical Examiner	1.0	0.0
Deputy Of Administration (Chief of Staff)	1.0	1.0
Forsenic Photographer	2.0	1.0
Intake Assistant (typing)	6.0	5.0
Management Services Officer	1.0	1.0
Medical Officer (Medical Examiner)	5.0	5.0
Medical Records Technician	2.0	2.0
Medical Technologist	1.0	1.0
Medical Transcriptionist	2.0	1.0
Vehicle Operator	1.0	1.0
Administrative Support Specialist	1.0	1.0
Paralegal	1.0	0.0
Physician Assistant (Medicolegal Investigator)	5.0	3.0
Secretary (typing)	1.0	1.0
Staff Assistant	3.0	2.0
Supervisory Attorney Advisor	1.0	1.0
Supervisory Autopsy Assistant	1.0	1.0
Supervisory Medcial Records Technician	1.0	1.0
Supervisory Physician Asst. (Director of Investigation)	1.0	1.0
Deputy Chief Toxicologist	1.0	1.0
Toxicologist	4.0	3.0
Supervisory Program Coordinator	2.0	1.0
Social Worker Program Speicalist	1.0	0.0
Statistic Assistant	1.0	0.0
Community Health Nurse	1.0	0.0
Clerical Assistant	2.0	0.0
Program Assistant	2.0	0.0
Supervisory Program Assistant	1.0	0.0
Physician Assistant (Medicolegal Investigator)	2.0	0.0
Medical Technologist	1.0	0.0
Intake Speicalist	3.0	0.0
Maintenance Foreman	1.0	0.0
Agency Totals	**76.0**	**47.0**

Office of the Chief Medical Examiner
1910 Massachusetts Avenue, SE – Bldg 27
Washington, DC 20003
(202) 698-9000 Main
(202) 698-9100 Fax