

2007

Annual Report
Office of the
Chief Medical Examiner

**State of Maryland** 

#### STATE OF MARYLAND

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### POST MORTEM EXAMINERS COMMISSION

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July 1, 2008

The Honorable Martin O'Malley Governor State House 1 State Circle Annapolis, Maryland 21401

Dear Governor O'Malley:

On behalf of the Post Mortem Examiners' Commission and the employees of the Office of the Chief Medical Examiner (OCME) of the State of Maryland, I am pleased to present for your information the 69<sup>th</sup> Annual Report analyzing the death investigations carried out by this Office in 2007.

In carrying out its duties under Health-General State Statute 5-309 the OCME investigated 9,894 cases. Six thousand one hundred sixty-three (6,163) of these cases were determined to be within the jurisdiction of the OCME. There were 4,126 autopsies performed to allow an accurate cause of death to be determined.

Homicides in Maryland decreased to 582 in 2007 compared to 584 in 2006. Firearm homicides decreased from 442 deaths in 2006 to 428 in 2007. Suicides increased to 514 in 2007 from 500 in 2006.

In this report we included information regarding the involvement of alcohol and drugs in homicides, suicides, transportation accidents and drownings as well as data regarding illicit drugs used in fatal drug intoxications.

The Honorable Martin O'Malley July 1, 2008 Page 2

The information developed in this report is being shared with various programs at the local, state and federal levels. This office provides assistance not only on a short or occasional basis, but also participates in ongoing projects as well. A few of the many requests for data and statistics were received from: The Maryland State Medical Society Maternal and Child Health Committee, Uniformed Services University of the Health Sciences Environmental and Occupational Health Division, Johns Hopkins University School of Hygiene and Public Health - Department of Epidemiology and School of Nursing, Center for Substance Abuse Research (CESAR), Child Fatality Review Board, Maryland Department of Transportation, Maryland Department of Labor, Licensing and Regulation, Alcohol and Drug Abuse, Capital Gazette, Homeland News, The Baltimore Sun for Anne Arundel County, Office of Public Health Anne Arundel County, Harford County Department of Community Services, Harford County Sheriff's Office, Maryland State Police, Health Quest, Harborview Medical Center, Worcester County Health Department, The Carroll County Public School System, Maryland Department of Health and Mental Hygiene, National Drug Intelligence Center, Washington Post Newspaper, Baltimore Sun Newspaper, Federal Bureau of Investigation (FBI). Baltimore City Health Department. Department of Justice. Consumer Product Safety Commission, and the University of Maryland National Study Center.

Respectfully submitted,

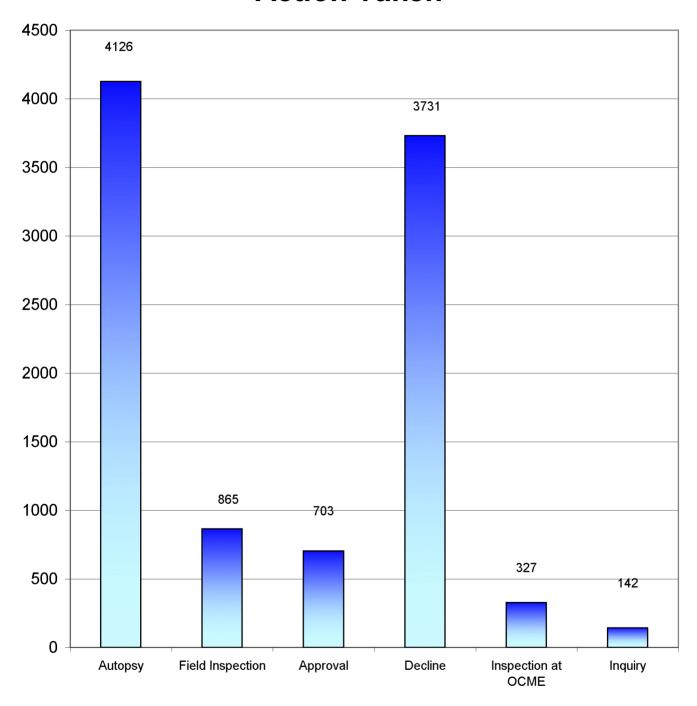
David R. Fowler, M.D. Chief Medical Examiner

DRF/crn

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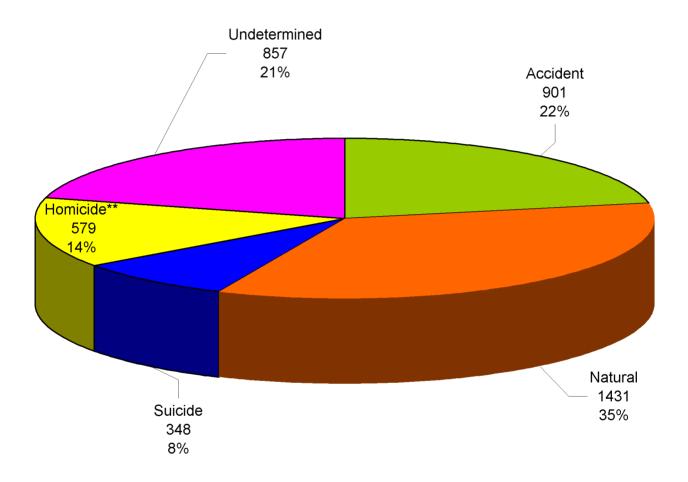
### Cases Reported to OCME - 2007 Action Taken



9894 Total Cases

## 2007 Medical Examiner Cases Autopsied\*

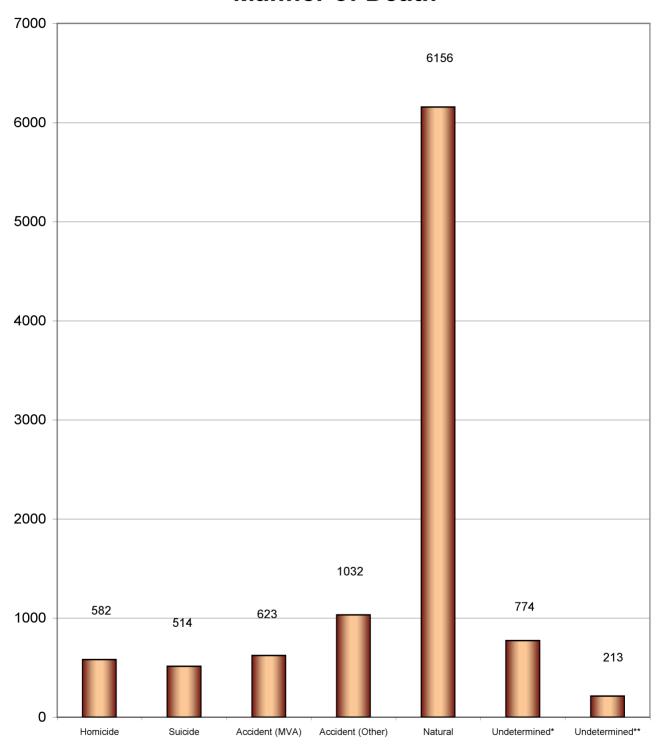
\*Ten cases were classified as "not applicable"



\*\* Three homicides were not autopsied due to final disposition prior to Medical Examiner notification.

**Total Cases Autopsied - 4126** 

### 2007 Cases Reported to OCME Manner of Death

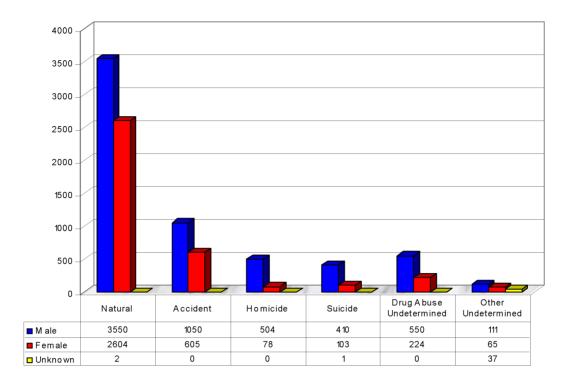


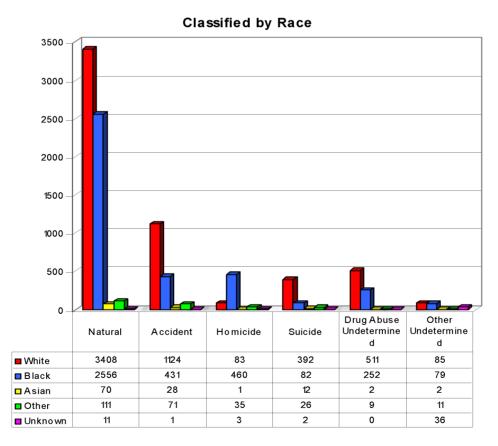
**Total Cases - 9894** 

\*Undetermined Manner: Drugs/Narcotics

\*\*Undetermined Manner: Other

### Classified by Sex





### Medical Examiner Cases – 2007 Cause and Manner of Death

Cause of Death	Manner of Death					Total
	Natural	Homicide	Suicide	Accident	Undeter- mined	
Infectious disease						
AIDS	22	-	-	-	-	22
Other	45	-	-	-	-	45
Malignant neoplasms (Cancer)	431	-	-	_	-	431
Endocrine and metabolic disease						
Diabetes	48	_	-	_	-	48
Other	5	_	-	-	_	5
Mental Disorders						
Alcohol abuse	145	_	_	_	_	145
Other	4	_	_	_	_	4
Nervous system disease		_	_		_	
Meningitis	4					4
Seizure disorder	29	_	-	-	-	29
Other	58	_	-	-	-	58
	38	_	-	-	-	30
Circulatory system disease	1786					1786
Hypertensive cardiovascular disease Arteriosclerotic cardiovascular disease		-	-	-	-	
	2255	-	-	-	-	2255
Cardiac arrhythmia	119	-	-	-	-	119
Cardiomyopathy	57	-	-	-	-	57
Pulmonary embolism	111	-	-	28	-	139
Cerebrovascular disease	49	-	-	-	-	49
Aneurysm	44	-	-	-	-	44
Hemorrhage	101	-	-	-	-	101
Other	106	-				106
Respiratory system diseases	1.0					
Respiratory distress syndrome	18	-	-	-	-	18
Pneumonia	90	-	-	-	-	90
Chronic obstructive pulmonary disease	46	-	-	-	-	46
Asthma	20	-	-	-	-	20
Other	63	-	-	-	-	63
Digestive system disease						
Fatty liver	4	-	-	-	-	4
Cirrhosis	59	-	-	-	-	59
Gastrointestinal hemorrhage	20	-	-	-	-	20
Other	38	-	-	-	-	38
Congenital anomalies	11	-	-	-	-	11
Perinatal conditions	9	-	-	-	_	9
Ill-defined conditions						
Sudden Infant Death Syndrome	14	-	-	-	_	14
Other	7	_	_	_	61	68

### Medical Examiner Cases – 2007 Cause and Manner of Death

Cause of Death	Cause of Death Manner of Death				Total	
Cause of Death	Natural Homicide Suicide Accident Undeter-			1 otai		
	Naturai	Homicide	Suicide	Accident	Mined	
Traumatic injury						
Head/Chest injuries	_	16	-	229	15	260
Multiple injuries	_	10	17	585	7	619
Blunt force	_	28	-	-	-	29
Gunshot wound	_	428	236	1	-	665
Sharp force/cutting	_	67	10	1	-	78
Fracture	_	_	-	122	-	122
Other trauma	_	-	-	10	-	10
Poisoning						
Alcohol intoxication	_	-	_	4	40	44
Drug intoxication/abuse	_	-	50	2	92	144
Alcohol and drug intoxication	_	_	1	_	30	31
Carbon monoxide	_	_	13	8	2	23
Cocaine intoxication	3	_	_	_	71	74
Cocaine and alcohol intoxication	_	-	-	_	5	5
Cocaine and narcotic intoxication	_	_	_	_	69	69
Narcotic intoxication	5	-	4	2	438	449
Narcotic and alcohol intoxication	_	_	2	1	75	78
Inhalant intoxication	_	_	2	_	_	2
Asphyxiation						
Airway obstruction/Aspirated stomach						
content	_	_	_	-	_	_
Hanging	_	_	134	-	-	134
Smoke inhalation	_	_	2	60	5	67
Strangulation/Asphyxiation	_	27	33	_	3	63
Suffocation	_	-	_	_	_	_
Drowning	_	_	6	48	14	68
Unspecified type of asphyxia	_	_	-	25	_	25
Hypothermia	_	_	_	34	_	34
<i>Hyperthermia</i>	_	_	_	18	_	18
Thermal Injuries (Burns)	_	_	_	22	_	22
Electrocution	-	_	_	4	_	4
Other non-natural cause	_	5	4	450	6	465
Other natural cause	330	-		.50	_	330
Unknown cause	- 330	1	_		26	27
Non-human remains		-			28	28
Accident during surgery	-	_	-		20	20
	6156	582	514	1655	987	9894
TOTAL	0130	382	) 314	1033	98/	9094

### Manner of Death - 3 Year Comparison

### Medical Examiner Cases: Manner of Death, Maryland 2007

Manner of Death	Number	%
Natural	6156	62.2
Homicide	582	5.9
Suicide	514	5.2
Accident	1655	16.7
Undetermined	987	10.0
Total	9894	100.0*

### Medical Examiner Cases: Manner of Death, Maryland 2006

Manner of Death	Number	%
Natural	6007	62.1
Homicide	584	6.0
Suicide	500	5.2
Accident	1615	16.7
Undetermined	966	10.0
Total	9672	100.0*

### Medical Examiner Cases: Manner of Death, Maryland 2005

Manner of Death	Number	%
Natural	5337	60.8
Homicide	595	6.8
Suicide	487	5.5
Accident	1549	17.6
Undetermined	814	9.3
Total	8782	100.0*

<sup>\*</sup>Because of rounding, percentages do not necessarily total 100.

### **Medical Examiner Case - 2007**

#### Manner and Jurisdiction

County	<u>Natural</u>	<u>Accident</u>	<b>Homicide</b>	<u>Suicide</u>	<u>Undetermined</u>	<b>TOTAL</b>
Allegany	99	39	1	11	16	166
Anne Arundel	439	99	20	50	72	680
<b>Baltimore County</b>	504	196	33	76	125	934
Calvert	87	21	3	10	12	133
Caroline	12	5	0	2	1	20
Carroll	81	27	2	18	17	145
Cecil	57	41	5	13	29	145
Charles	39	26	2	14	14	95
Dorchester	21	7	2	5	4	39
Frederick	89	51	8	15	29	192
Garrett	38	14	1	5	0	58
Harford	194	54	7	21	38	314
Howard	85	30	3	19	20	157
Kent	20	10	0	4	3	37
Montgomery	637	174	20	62	71	964
Prince George's	1046	214	141	63	84	1548
Queen Anne's	8	6	1	3	5	23
St. Mary's	72	11	1	8	9	101
Somerset	10	3	0	2	4	19
Talbot	48	25	0	2	6	81
Washington	130	61	8	20	19	238
Wicomico	165	67	5	10	15	262
Worcester	63	20	1	8	21	113
Baltimore City	2212	454	318	73	373	3430
TOTAL	6156	1655	582	514	987	9894

### Type and Jurisdiction

		OCME	Field				
<u>County</u>	<u>Autopsy</u>	<u>Inspections</u>	<u>Inspections</u>	<u>Inquiry</u>	<u>Approval</u>	<u>Decline</u>	<u>TOTAL</u>
Allegany	66	2	32	1	23	42	166
Anne Arundel	294	21	64	7	30	264	680
<b>Baltimore County</b>	450	31	112	14	92	235	934
Calvert	53	3	19	1	4	53	133
Caroline	10	1	4	0	1	4	20
Carroll	78	3	25	8	10	21	145
Cecil	99	5	11	2	11	17	145
Charles	64	2	10	1	9	9	95
Dorchester	25	3	4	0	1	6	39
Frederick	110	3	23	5	22	29	192
Garrett	27	1	17	1	1	11	58
Harford	137	11	36	5	16	109	314
Howard	95	6	23	3	4	26	157
Kent	24	0	2	1	1	9	37
Montgomery	314	29	62	11	100	448	964
Prince George's	639	29	141	12	49	678	1548
Queen Anne's	18	1	2	1	0	1	23
St. Mary's	46	1	13	3	4	34	101
Somerset	12	1	2	1	0	3	19
Talbot	43	1	10	2	4	21	81
Washington	118	5	37	4	28	46	238
Wicomico	96	11	36	2	26	91	262
Worcester	62	5	27	0	4	15	113
Baltimore City	1246	152	153	57	263	1559	3430
TOTAL	4126	327	866	142	783	3731	9894

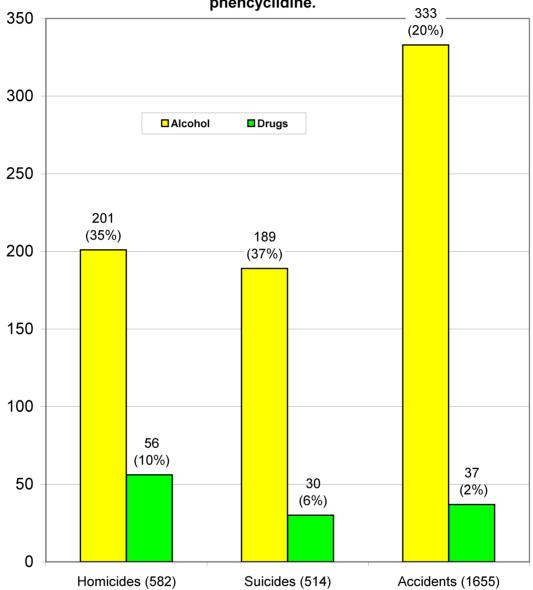
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### **2007 Toxicology Testing**

# of Cases Positive for Alcohol and/or Drugs\*

(Percentage of the Manner of Death)

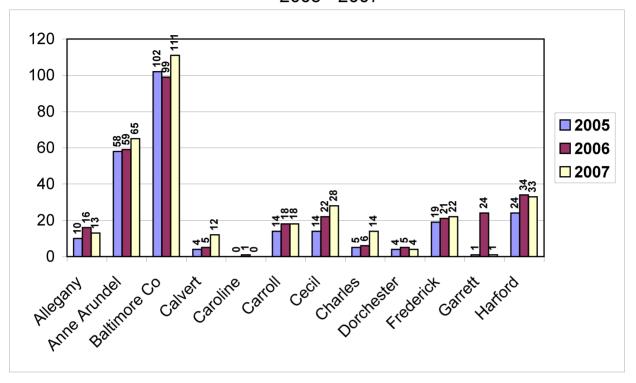
\*Drugs include heroin, morphine, cocaine, methadone and phencyclidine.

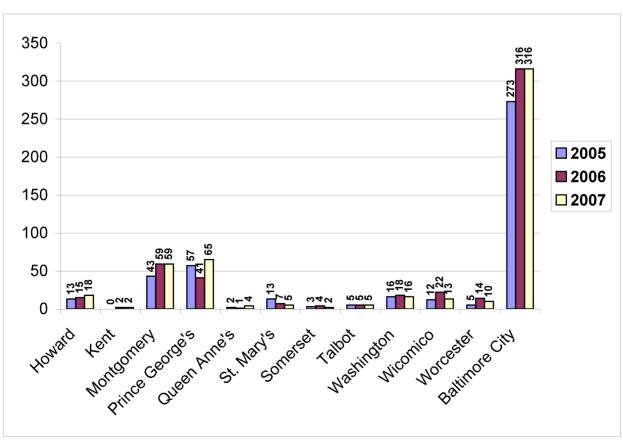


**Manner of Death** 

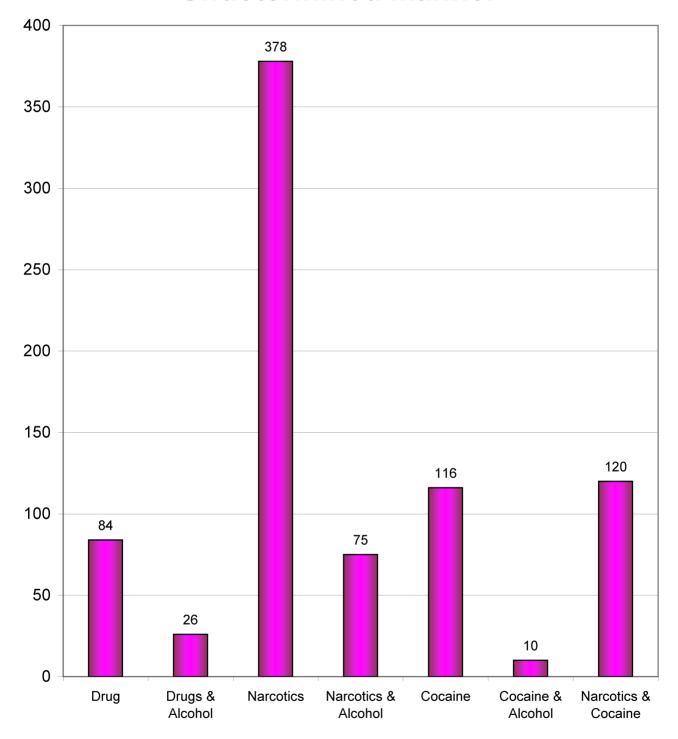
### **Drug Abuse Deaths**

3 Year Comparison by Jurisdiction 2005 - 2007



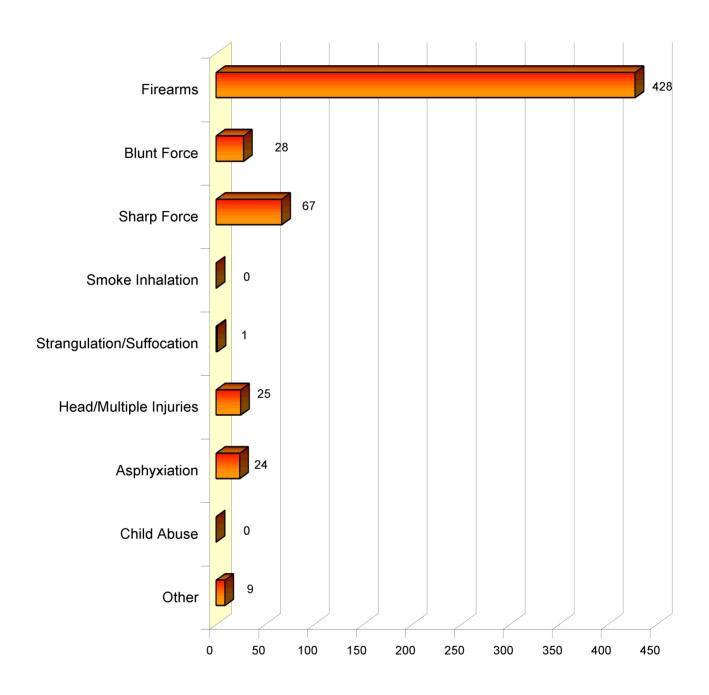


### **2007 Drug Abuse Deaths Undetermined Manner**



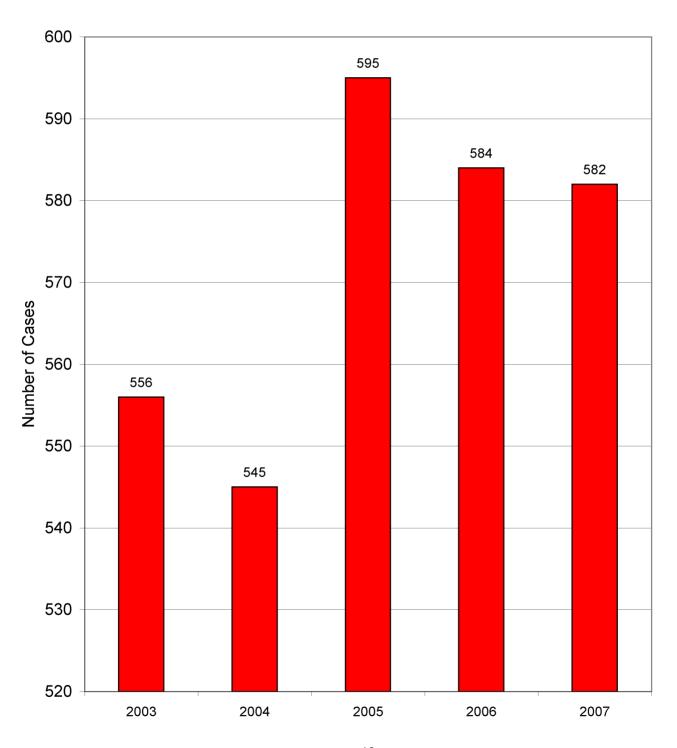
Narcotics include Heroin, Morphine, Methadone, Phencyclidine Drugs include Prescription Medications

### **2007 Homicide Deaths Cause of Death**

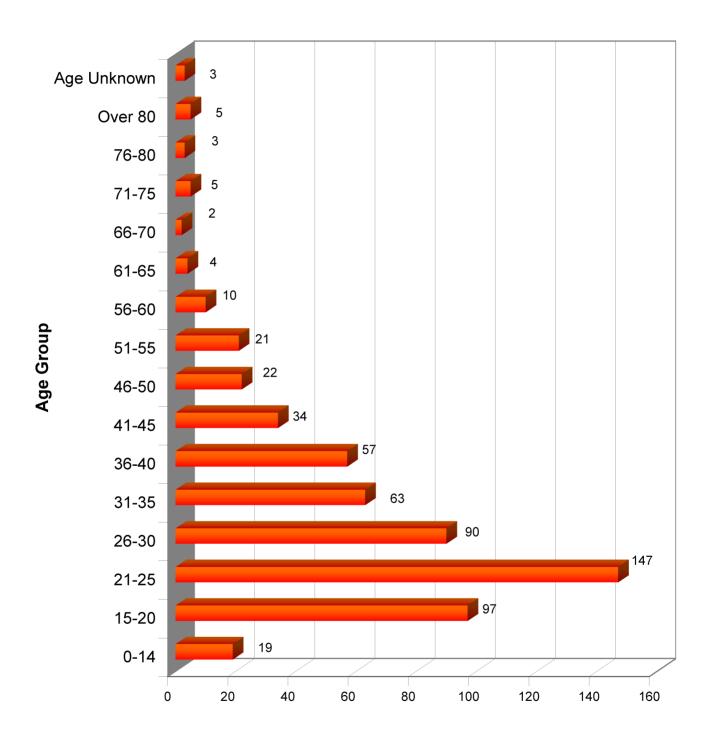


**Total Deaths - 582** 

# Homicides 5 Year Comparison 2003 - 2007

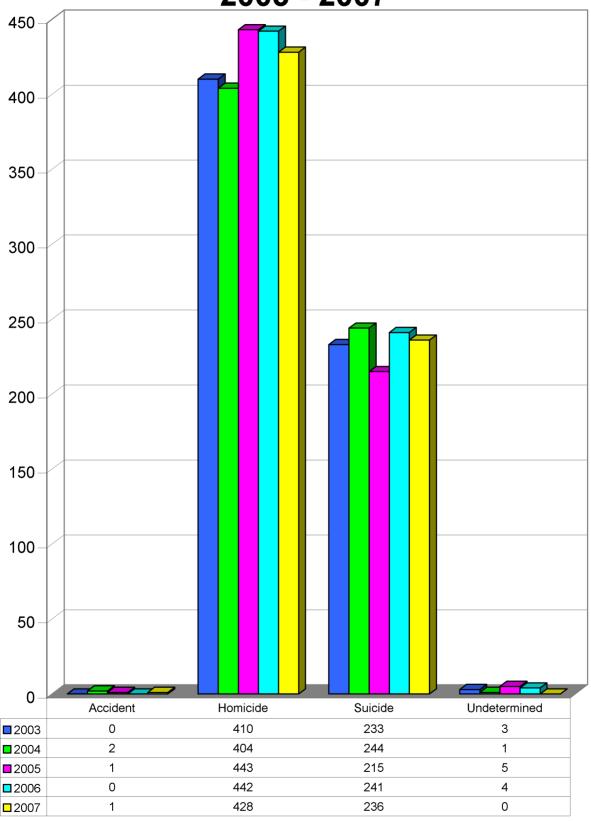


## 2007 Homicides Deaths by Age

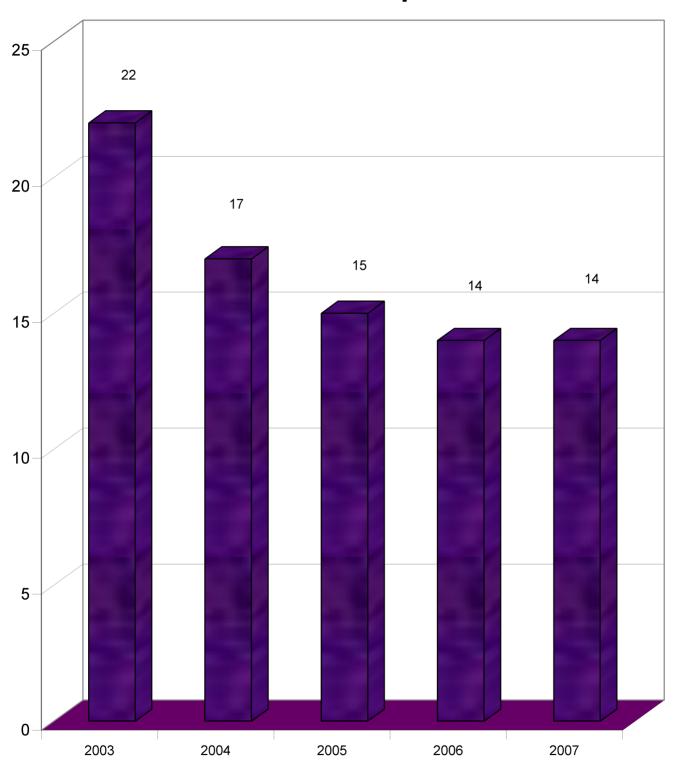


**Total Deaths - 582** 

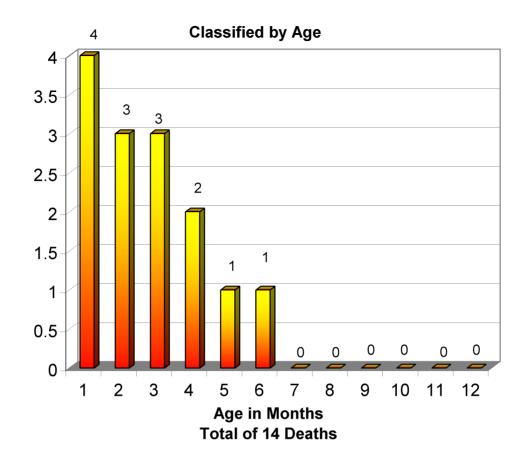
## Firearm Deaths 2003 - 2007

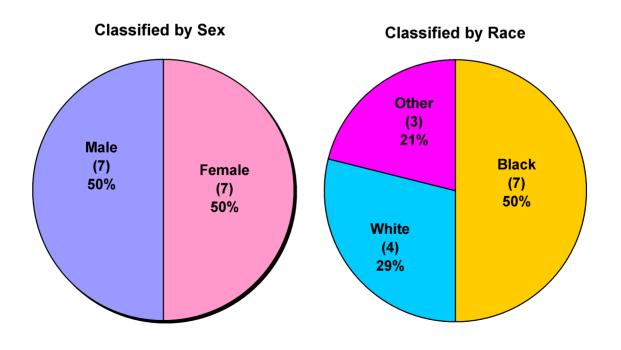


### SIDS Deaths 2003 - 2007 Comparison

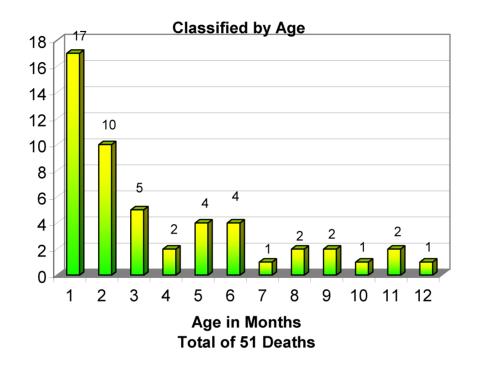


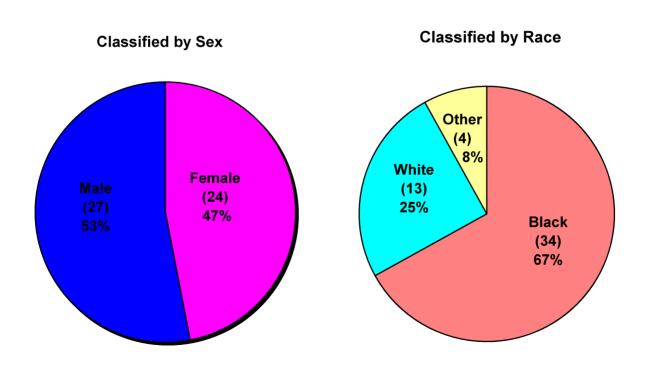
### Sudden Infant Death Syndrome 2007



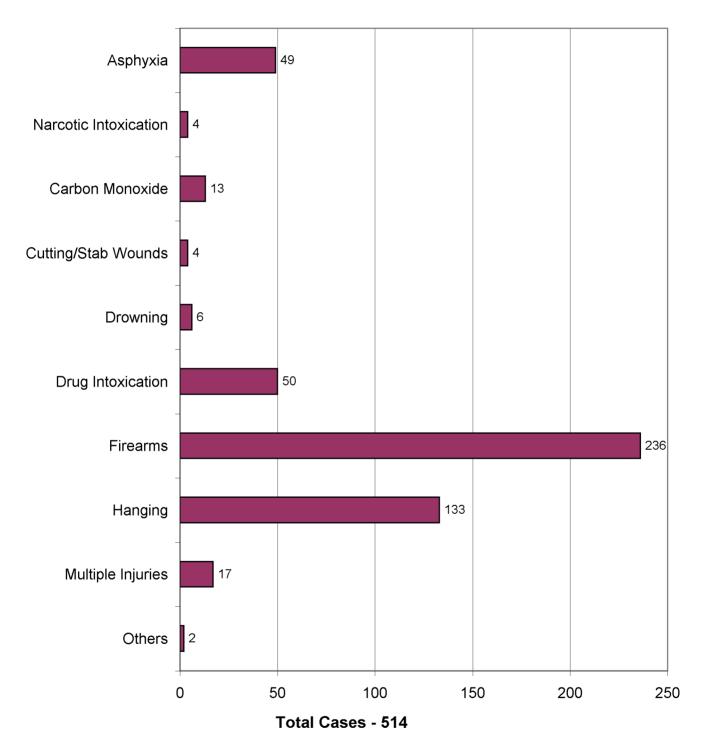


### Sudden Unexplained Death In Infancy 2007

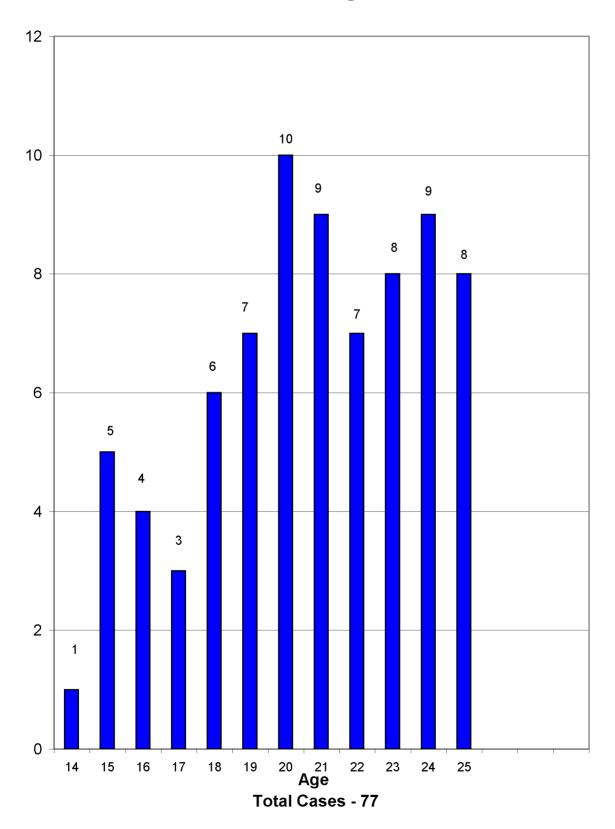




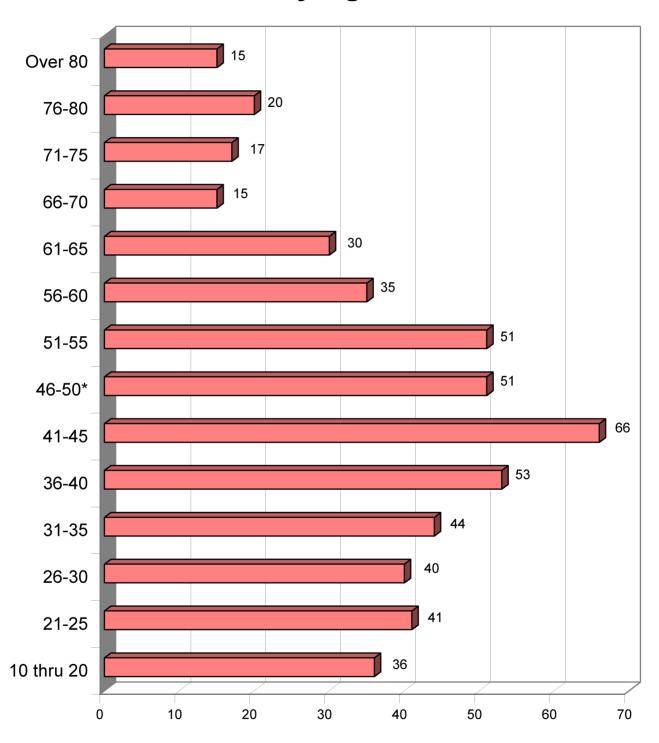
### 2007 Suicide Deaths Classified by Cause of Death



### 2007 Youth Suicides 25 Years of Age and Under

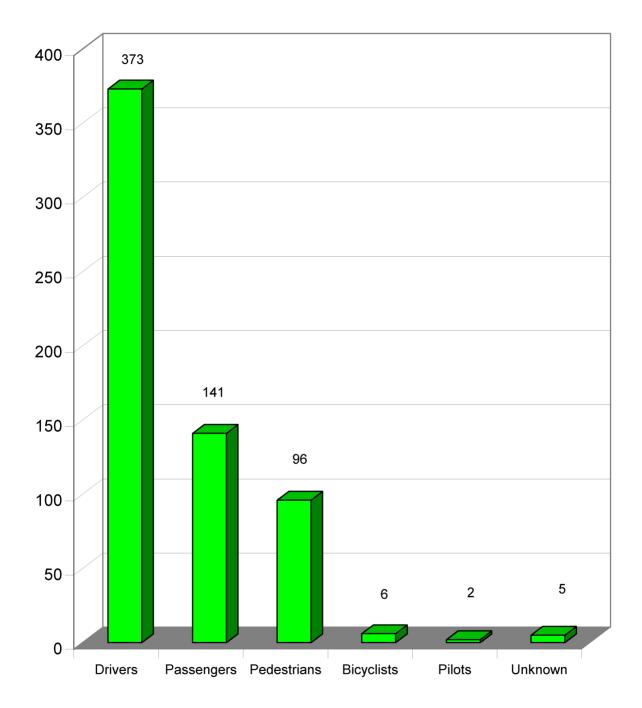


## 2007 Suicide Deaths by Age



Total Deaths - 514
\*One Case with Tentative ID/Age
-20-

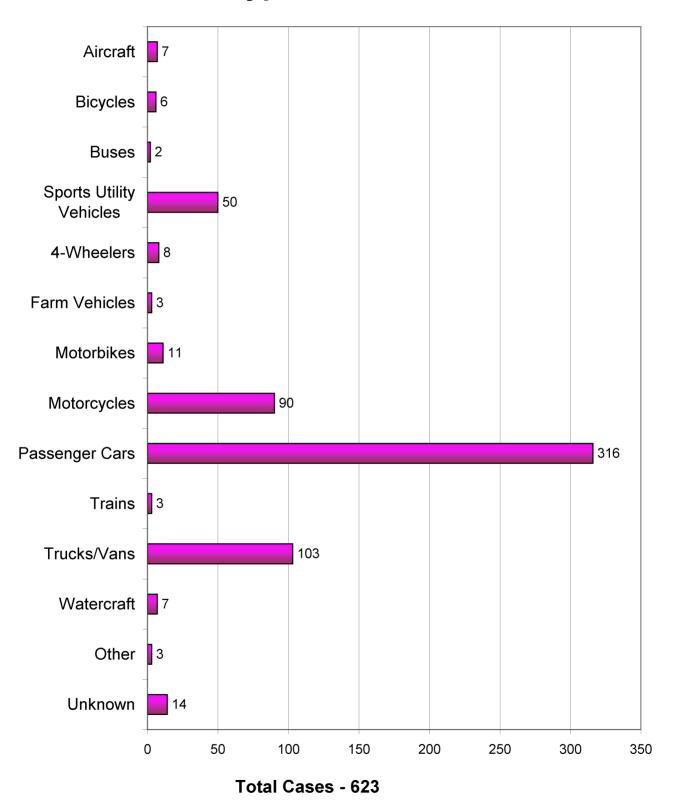
## 2007 Transportation Accidents\* Classified by Activity



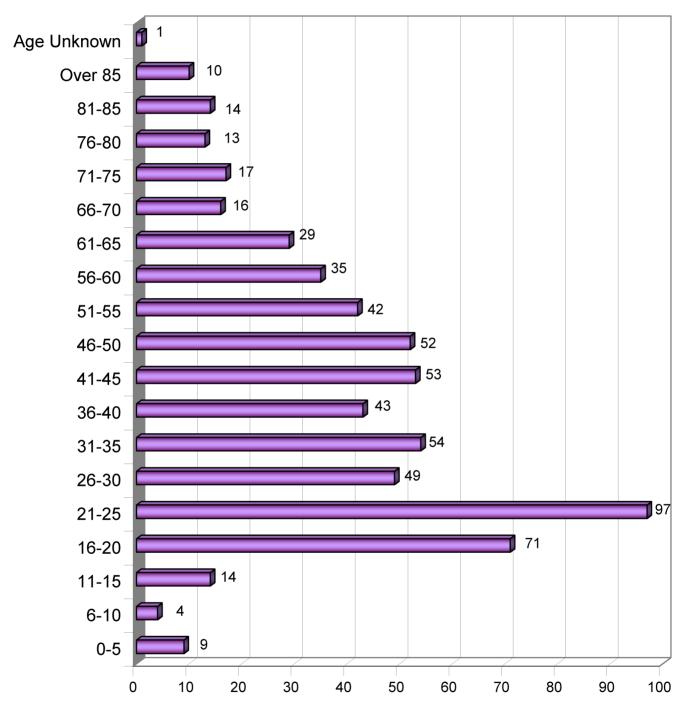
\*Includes motor vehicles, boats, planes, bicycles and trains

**Total Cases - 623** 

## 2007 Transportation Deaths Type of Vehicle

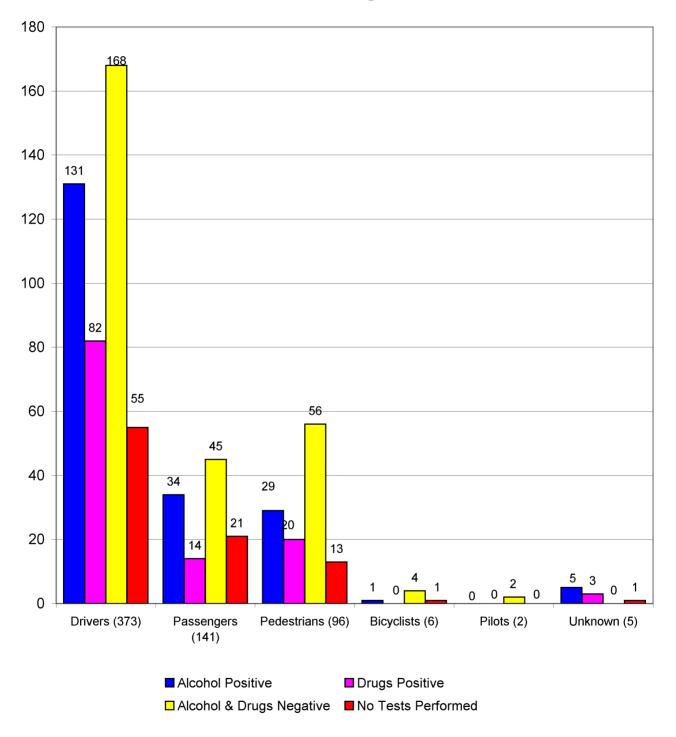


## 2007 Transportation Deaths By Age



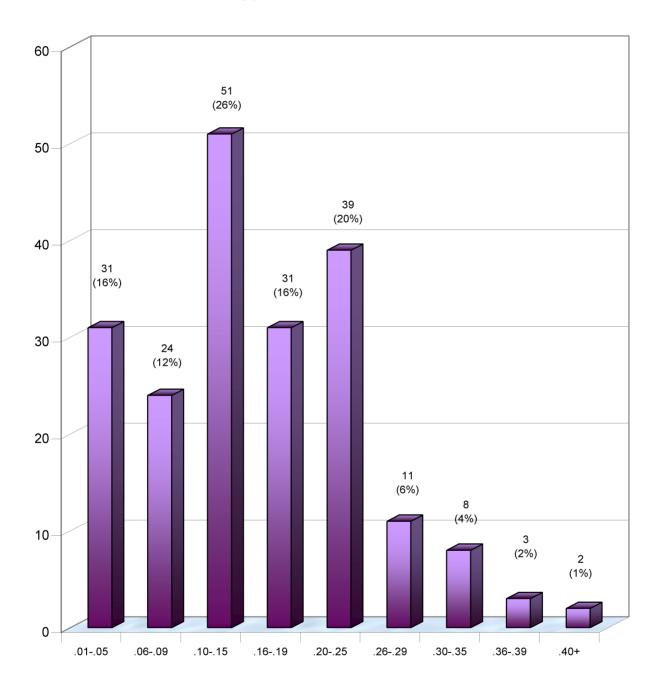
**Total Cases - 623** 

### 2007 Transportation Accidents Alcohol/Drug Results



**623 Transportation Deaths** 

## 2007 Transportation Deaths Blood Alcohol Concentration in 200 Cases 37%\* Tested Positive



623 Transportation Deaths 346 Negative for Alcohol 91 No Testing Performed

<sup>\*</sup>Percent based on total cases tested for alcohol

#### **ADDENDUM**

#### Miscellaneous Data

- 1. Number of autopsies 3391 Number of partial autopsies 734
- 2. Organ donations 62
- 3. Unclaimed bodies released to State Anatomy Board 180
- 4. Exhumations None
- 5. Bodies transported to the OCME 4428
- $6.\ Hospital$  autopsies retained under ME jurisdiction 0