

# Los Angeles County CORONER



2011



**Annual Report** 







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Supervisor, First District
Mark Ridley-Thomas
Supervisor, Second District
Zev Yaroslavsky
Supervisor, Third District
Don Knabe
Supervisor, Fourth District
Michael D. Antonovich
Supervisor, Fifth District

On December 7, 1990, an ordinance approved by the County of Los Angeles Board of Supervisors created a Department of Coroner administered by a nonphysician director for all nonphysician operations, while retaining the Chief Medical Examiner-Coroner to set standards for the entire Department and carry out statutorily-mandated Coroner functions.

The ordinance placed the responsibility for all physician staff under the control of the Chief Medical Examiner-Coroner, subject to the general direction of the Chief Executive Officer, and the nonphysician director was given authority to manage/direct all nonphysician operations and staff with the Department, subject to the general direction of the Chief Executive Officer.





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#### **DEPARTMENT HEADS' MESSAGE**

This report contains statistical information from the Los Angeles County Department of Coroner for the year 2011, as well as selected statistics from the previous ten years.

#### **Significant Accomplishments**

During the year the Department had the following significant accomplishments:

- Received full accreditation by NAME and the California Medical Association-IMQ
- Completed a Coverdell Grant project to bar code toxicology and histology specimens
- Received a second Coverdell Grant to bar code property
- Created a Pathology Assistant position in the County, as a specialty under the Physician's Assistant position
- Evidence Section received the Top Ten Productivity and Quality Award for the County
  of Los Angeles and the National Association of Counties (NACO) Achievement Award
  for interagency efforts to release cold case evidence

#### Legislation

AB 1016 (Penal Code 4750 (f)): Coroner's costs in connection with a state prisoner are reimbursable by the State

SB1236 (Business and Professions Code 802.5): If a death occurs due to gross medical negligence or incompetence by a physician's assistant, the Coroner is required to report the death to the Medical Board of California.

#### **Presentations**

E. Fu "Coroner: Head to Toe Tag", presented at California State University, Los Angeles, January 2011.

L. Sathyavagiswaran," Evolution of the Psychological Autopsy over 50 Years: Los Angeles County Coroner Medical Examiner's Experience", presented at American Academy of Forensic Sciences, Chicago, February 2011.

S.C. Acree, C. Rogers, D. Anderson, M. Schuchardt, L. Sathyavagiswaran, "Amantadine Overdose: Was it Murder or Suicide? The Effect of Post-mortem Redistribution", presented at American Society for Clinical Pathology, Las Vegas, October 2011.

L. Nguyen, C. Rogers, "Deaths in Unlicensed Alcohol Rehabilitation Facilities", presented at American Academy of Forensic Sciences, Chicago, February 2011.





#### **Presentations**

- O. Chinwah, C. Rogers, L. Sathyavagiswaran, "TASER $^{\circ}$  XREP $^{\text{TM}}$ : A Case Study", presented at American Academy of Forensic Sciences, Chicago, February 2011.
- D. Anderson "Postmortem Toxicology: Interpretative Resources", presented at American Academy of Forensic Sciences, Chicago, February 2011.
- D. Anderson "Postmortem Toxicology: Interpretative Resources", presented at Los Angeles County Department of Coroner, Los Angeles, March 2011.
- M. Kaleuati "Forensic Autopsy", presented at California State University, Los Angeles, April 2011.
- D. Anderson "And Let's Not Forget about MDMA...", presented at California Association of Toxicologists, Napa, California, May 2011.
- M. Kaleuati, E. Miller, "Surprise! Finding More than You Expect", presented at International Association for Identification Conference, Milwaukee, Wisconsin, August 2011.
- D. Anderson "Aspects of Postmortem Testimony, Mistakes Made, and Other Tidbits...", presented at Society of Forensic Toxicologists, San Francisco, September 2011.
- M. Kaleuati "Well, a Knife Is Just a Knife. . . ", presented at Seminar in the Forensic Sciences, San Diego Museum of Man, September 2011.
- D. Anderson "Celebrity Deaths and the Duties of a Criminalist at the Los Angeles County Coroner", presented at Northeastern Association of Forensic Scientists, Newport, Rhode Island, November 2011.
- D. Anderson "Living in a Cloud of Volatiles", presented at Northeastern Association of Forensic Scientists, Newport, Rhode Island, November 2011.
- M. Kaleuati "Forensic Science and the Coroner's Criminalist", presented at East Los Angeles College, Los Angeles, November 2011

#### **Departmental Conferences**

Skeletal Recovery Workshop, Los Angeles, October 2011

West Coast Training Conference, North Hollywood, California, October 2011





#### **Publications**

PG Teixeira, K Inaba, G Barmparas, C Georgiou, C Toms, T Noguchi, C Rogers, L Sathyavagiswaran, D Demetriades, "Blunt Thoracic Aortic Injuries: An Autopsy Study", J Trauma, 2011 Jan;70(1):197-202.

D Anderson, S deQuintana, New Drug: Asenapine (Saphris®). Society of Forensic Toxicologists ToxTalk. 2011 Mar;35(1):23.

S Shackelford, L Nguyen, T Noguchi, L. Sathyavagiswaran, K Inaba, D Demetriades, Fatalities of the 2008 Los Angeles train crash: autopsy findings. Am J Disaster Med 2011 Mar-Apr;6(2):127-31.

L Scheinin, CB Rogers, L Sathyavagiswaran, "Familicide-Suicide: A Cluster of 3 Cases in Los Angeles County", Am J Forensic Med Pathol 2011 Dec;32(4):327-30.

#### **Awards**

Dan Anderson

AAFS Recipient of the Toxicology Section Ray Abernathy Award, February 2011

#### Evidence Section

Top Ten Productivity and Quality Award for the County of Los Angeles – October 2011 "Department of Coroner Collaborates To Release Cold Case Evidence"

#### **Evidence Section**

National Association of Counties (NACO) Achievement Award - 2011 For interagency coordinated efforts to release cold case evidence to the appropriate investigating Agency

# Lakshmanan Sathyavagiswaran, M.D. Anthony T. Hernandez

Chief Medical Examiner-Coroner

Director

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#### **Administrative Services Bureau**

Sarah Ahonima, Administrative Deputy

The Administrative Services Bureau is responsible for all departmental financial operations, departmental budget preparation, fiscal reports, personnel, payroll, litigation, procurement, accounting, revenue collection, marketing, volunteer services, affirmative action, contracts and grants, internal control certification, workfare programs, facilities management, and other related functions.

#### **FISCAL SERVICES**

The Accounting section is responsible for all financial transactions performed by the Department of Coroner. All Auditor-Controller guidelines are followed as well as any departmental guidelines governing monetary issues. The section also monitors all departmental accounts, such as salary and benefits, overtime expenditures, services and supplies, and budget.

#### **PROCUREMENT**

Procurement is responsible for purchasing equipment, maintenance of buildings, contracts, budgetary support, monitoring of fixed assets, and inventory control.

#### **HUMAN RESOURCES**

Human Resources is responsible for personnel issues that are inherent in County government such as benefits, processing examinations, filling vacant positions, litigation, workers compensation, volunteer services, payroll, community support programs such as job fairs, and budgetary support.

#### MARKETING PROGRAM

"Skeletons in the Closet" has been operating since September 1993. Given the scarcity of resources at that time, revenue generation had to be considered to help offset monetary losses. "Skeletons in the Closet" features a complete line of quality souvenir items, such as beach towels, shirts, toe tags, and much more. The items are available to the public via website at LACORONER.COM or by calling (323) 343-0760.

#### **CONTRACT PROGRAMS**

The Department administers contracts and agreements for various functions, such as tissue harvesting, regional offices, satellite hospitals, histopathology, transcribing and contract physicians. The staff monitors and studies Department operations in the continuing evaluation of the appropriateness of contracting for other functions.





#### **MORTUARY BILLING PROGRAM**

The Department now utilizes the services of the various mortuaries to bill for transportation and storage costs at the time services are billed to the families. This has improved the collection rate, dramatically raising revenues.

#### FORENSIC DATA INFORMATION SYSTEMS

The mission of Forensic Data Information systems is to enhance and support the Department's long-range goals, mission-critical business goals, and objectives through the administration, project management, and expansion of information technology-related applications and services, including, where appropriate, the delivery of services to agencies referred through appropriate 24/7 e-government technologies.

The FDIS is also responsible for network, database and application administration, preparation of statistics and general client support. The FDIS is responsible to ensure that the Department is in alignment with the County-wide strategic planning effort to conduct County business electronically and maintain compliance with the technological directives as stipulated by the County's Chief Information Officer. The FDIS manages the information technology efforts of subcontracts in the implementation and support of new technologies such as e-commerce content management and voice over internet protocol (VoIP).•



Forensic Science Center under Construction, circa 1970.





#### **FORENSIC MEDICINE BUREAU**

Chief, Christopher Rogers, M.D.

The Forensic Medicine Bureau's full-time permanent staff consists of board-certified forensic pathologists who are responsible for the professional medical investigation and determination of the cause and mode of each death handled by the Department. Our physicians are experts in the evaluation of sudden unexpected natural deaths and unnatural deaths such as deaths from firearms, sharp and blunt force trauma, etc. Physicians are frequently called to court to testify on cause of death, and their medical findings and interpretations, particularly in homicide cases. In addition, the division has consultants in forensic neuropathology, odontology, anthropology, anesthesiology, pediatrics, surgery, ophthalmologic pathology, pulmonary pathology, cardiac pathology, emergency medicine, psychiatry, psychology and radiology to assist the deputy medical examiners in evaluating their cases.

#### **MEDICAL EDUCATION**

The Department is approved by the Institute for Medical Quality, a subsidiary of the California Medical Association as a provider of Continuing Medical Education activities.

#### **HEALTH & SAFETY/RISK MANAGEMENT**

The Department has implemented an aggressive health & safety committee and risk management program, which has significantly reduced work-related injuries.

#### **ICAN**

The Department participates in the interagency Council for Child Abuse and Neglect. This Department is the host of the monthly Child Death Review Committee of ICAN.

#### **IDENTIFICATION OF UNIDENTIFIED BODIES (SB 90)**

The Department participates in a State-mandated program to examine dental records and collect appropriate specimens for the identification of John and Jane Does.

#### MEDICAL EXAMINER-CORONER ALERT PROJECT

The Department of Coroner reports to the Consumer Product Safety Commission all deaths directly from unsafe consumer products.





#### RESIDENCY PROGRAM

The Medical Division of the Department of Coroner has an Accreditation Council for Graduate Medical Education —approved forensic pathology residency program designed to train deputy medical examiners and prepare them for board certification while performing medical investigations under appropriate supervision.

#### **SCUBA PROGRAM**

The Department staff participates in the Los Angeles County Interagency Scuba Committee to investigate and develop programs to prevent future scuba diving fatalities.

#### TISSUE HARVESTING/ORGAN TRANSPLANTATION

This program provides corneas and other tissues to all in need in our community through coordinated efforts with various tissue banks and hospitals. After family consent is obtained, our medical staff provides review of organ and tissue Procurement in Coroner's cases. In addition, the program makes tissues available to low-income and indigent patients at County hospitals at no cost to the patients or hospitals.

#### UNIVERSITY HOSPITAL PATHOLOGY RESIDENT TRAINING PROGRAM

We offer the opportunity for pathology residents from local university-affiliated hospital (USC, UCLA and others) to train in our office with costs paid by the hospitals. This program fosters positive relationships with the university hospitals' pathology department and improves the standard of practice of forensic medicine in general, as these pathology residents will be practicing in the community when they finish training.•



Autopsy Room, Hall of Justice





#### FORENSIC LABORATORIES BUREAU

Chief, Joseph J. Muto, D-ABC, FTS-ABFT

The Forensic Science Laboratories Bureau is responsible for the identification, collection, preservation, and analysis of physical and medical evidence associated with Coroner's cases. Our mission is to conduct a comprehensive scientific investigation in to the cause and manner of any death within the Coroner's jurisdiction. This is accomplished through the chemical and instrumental analysis of physical and medical evidence.

Our goal is to provide our medical examiners, families of decedents, outside investigating agencies, and the judicial system with timely, accurate, and state-of-the art forensic analyses, and to provide expert interpretation of these analyses. The Forensic Laboratory is fully accredited by the prestigious American Society of Crime Laboratory Directors-Laboratory Accreditation Board, and our forensic blood alcohol testing program is licensed by the State of California.

#### **CRIMINALISTICS**

Our team of specially-trained forensic scientists is on call twenty-four hours a day to respond to crime scenes for the proper documentation, collection and preservation of physical evidence.

#### **HISTOLOGY**

This laboratory facilitates the preparation of gross tissue specimens for microscopic examination by the medical staff. This includes hematoxylin and eosin stains, special stains, and immunohistochemical stains. Through the microscopic examination of tissue, our forensic pathologists can determine the age and degree of injury, diagnose disease including cancers, evaluate cellular variation in tissue, and identify the presence of bacterial, medical disorders, and toxins such as asbestos.

#### **TOXICOLOGY**

Using state-of-the art equipment and methods, the toxicology laboratory conducts chemical and instrumental analysis on post-mortem specimens to determine the extent to which drugs may have contributed to death. The laboratory's experienced forensic toxicologists offer expert drug interpretation that assists the medical examiners in answering questions like what drug was taken? How much and when was the drug taken? Did the drug contribute to the cause and/or manner of death? Was the drug use consistent with therapeutic administration, or was it abuse? If the death is due to a drug overdose, was it intentional or accidental?





#### SCANNING ELECTRON MICROSCOPY LAB

Our SEM laboratory conducts gunshot residue (GSR) analyses and toll mark evaluations. Using a scanning electron microscope equipped with an energy dispersive x-ray detector, GSR analysis is used to determine whether an individual may have fired a weapon. Our laboratory also performs GSR analyses for many law enforcement agencies throughout California.

Tool mark analysis involves the evaluation of trauma to biological material, especially bone and cartilage, as to the type of instrument that might have produced the trauma. This not only helps our pathologists understand the circumstances of a death, but also aids the law enforcement agency in their criminal investigation.

#### **EVIDENCE CONTROL**

Our evidence personnel are responsible for maintaining the integrity and chain of custody for all of the evidence collected from Coroner's cases. All of the physical evidence collected by Department investigators, criminalists, pathologists, forensic technicians, and forensic attendants is documented and maintained by the evidence control unit.•



Mass Spectrometer, circa 1970's





#### **OPERATIONS BUREAU**

Chief, Craig Harvey, F-ABMDI

This Bureau is responsible for the 24-hour-a-day, 7-day-a-week operations of many direct services provided by the Department. The Bureau oversees Investigations and Forensic Services Division. In addition, the Bureau is responsible for disaster planning, homeland security grants, fleet management, public information, and other ancillary programs such as regional offices and the Youthful Drunk Driver Visitation Program (YDDVP).

Coroner's Investigators are also responsible for testimony in court and depositions on Coroner's cases, along with preparation of investigative reports for use in the determination of cause and mode of death. Under State law, all Coroner's Investigators are sworn peace officers. The Coroner's Investigators must meet the same stringent hiring standards as any other California law enforcement agency. The Department of Coroner is a California Peace Officer Standards and Training (POST)-certified agency.

#### **IDENTIFICATION OF UNIDENTIFIED BODIES (SB 90)**

The Department participates in a State-mandated program to examine dental records of know missing persons to aid in the identification of John and Jane Does. In addition, more recent changes in the law have required that DNA specimens be collected from unidentified remains and sent to the State of California DNA lab in Richmond, California.

#### **NURSING HOME DEATHS (SB90)**

The Department participates in a State-mandated program to investigate certain nursing home deaths to determine whether they may be certified as natural deaths by a private physician, or must be handled as Coroner's cases.

#### PEACE OFFICER STANDARS AND TRAINING (POST)

The California State Commission on Peace Officer Standards and Training (POST) establishes minimum standards for training requirements for peace officers. We comply with those standards in hiring and all advanced training that is offered through the Department of Coroner through the annual West Coast Training Conference or other specialized training such as Skeletal and Buried Body Recovery.





#### **REGIONALIZATION-SATELLITE OFFICES**

Investigative capabilities have been extended to offices in the Antelope Valley, Santa Clarita Valley, and South Bay areas of Los Angeles County. Efforts are under way to expand regional services to the eastern portion of Los Angeles County. Regional offices provide a more rapid Coroner's response to the scene of death, which results in rapid mitigation of traffic and other public conveyance obstructions.

#### YOUTHFUL DRUNK DRIVER VISITATION PROGRAM (YDDVP)

The Department of Coroner has presented the YDDVP program since 1989 as an alternative sentencing option that can be considered by a judicial officer. The program is designed to present to the participants the consequences of certain behavior in a manner that has an impact and is also educational. The program is currently offered up to 12 times per month and includes classes presented completely in Spanish.

#### **DISASTER PREPAREDNESS AND RESPONSE**

This program ensures appropriate Departmental response as one of the lead County agencies in major disasters and significant smaller incidents that involve multiple fatalities requiring successful operation of an Emergency Operations Center (EOC) and field command posts airports, planning and exercises and also through up-to-date manuals. A plan has been developed to form public-private emergency response partnerships with local funeral and cemetery directors for a mass fatality management response system. The Department maintains emergency communications equipment, which includes a command post trailer. County Wide Integrated System (CWIRS) radio communications, a mobile command post, and appropriate ancillary communications equipment. The Department also has eleven disaster cache trailers situated through the County. The Department has emergency shortwave radio communication ability as well.

#### **INVESTIGATIONS**

The Investigations Division responds to the scenes of death throughout Los Angeles County twenty-four hours a day, seven days a week. It is the responsibility of the Coroner's Investigator to function as the eyes and ears of the Deputy Medical Examiner, ensure that State law is followed respect to Coroner's cases, and be the advocate for the deceased person. Due to the diverse case load in Los Angeles County, the Coroner's Investigator is in the important position of seeing every death that occurs under other than natural circumstances, and is often the first to identify serial deaths and consumer product safety issues.





#### SPECIAL OPERATIONS AND RESPONSE TEAM (SORT)

The Department of Coroner has fielded a specialized response unit comprised of Coroner's Investigators, Coroner's Criminalists, and Coroner's consultants in anthropology and archaeology, and as needed, Forensic Attendants and Forensic Photographers.

The SORT team has special purpose vehicles fully equipped to handle certain types of cases thoroughly and as rapidly as possible. The SORT team responds to cases requiring specialized recovery and scene processing techniques such as those required in aircraft crashes, buried bodies, scattered human remains and fires, and also assists law enforcement agencies in general searches for scattered human remains or possible burial sites.

#### FORENSIC SERVICES DIVISION

This Division is responsible for providing direct support in the autopsy room to the deputy medical examiners. Staff duties include, but are not limited to, preparation of the bodies for medical examiners and autopsy, assisting the deputy medical examiners in the performance of the autopsy, preparation and gathering of toxicology specimens, x-ray and photography, and preparation of bodies for release to a mortuary.

The Division is also home to the Forensic Fingerprint Identification Unit that is responsible for post-mortem dental x-rays and specialized fingerprint processing to aid in the identification of Jane, John, and Undetermined Does. Personnel who have been specially trained also fulfill specialized audio-visual and graphic production requirements for the entire Department as well as the courts. Personnel assigned to this unit are responsible for the transportation, processing, storage, and release of bodies that are under the jurisdiction of the Coroner. Bodies may be recovered from any death scene, in almost any environment imaginable, including those in public view, private homes, and hospitals. Decedent processing includes obtaining the height and weight of bodies, the collection, documentation, and safekeeping of personal effects, and to the collection of both physical and medical evidence, fingerprinting of decedents using LIVE-SCAN technology and placement of identification tags on the body. Bodies are maintained in refrigerated crypts while awaiting examination and release to mortuaries or for County cremation.

The Decedent Services Unit is responsible for crypt management of human remains prior to release for photography, x-ray and autopsy. Additionally, staff members are accountable for all human remains and specimens stored in the crypt areas.•







#### Box Camera Used at Coroner's Office

C 150 5M 4-47

# NOTICE

THESE PREMISES ARE IN THE CUSTODY OF THE PUBLIC ADMINISTRATOR OF LOS ANGELES COUNTY PENDING COURT ACTION.

ANY PERSON BREAKING OR ENTERING IS GUILTY OF A FELONY AND IS LIABLE TO FINE AND IMPRISONMENT.

SEALED BY: BEN H. BROWN, CORONER.

Ву..

Deputy.

Inquire at Office of: BEN H. BROWN, Public Administrator 524 N. Spring St. Los Angeles, Calif.

Seal of Public Administrator-Coroner, 1947





#### **PUBLIC SERVICES DIVISION**

Chief, Silvia Gonzalez

This Division is responsible for Coroner case file management, revenue collection (document sales, decedent billing, etc.), and interaction with the public both telephonically and at the front lobby reception area. In addition to providing information and copies of autopsy reports, Public Services staff offers many services to the public. These services include preparation of "Proof of Death" letters to verify that a death is being investigated by the Coroner, and "Port of Entry" letters to confirm that at decedent had no communicable disease, necessary for the decedent's admission into a foreign country after death.

#### **RECORDS SECTION**

Records Section is responsible for Coroner case file control, file retention, document sales, and transportation billing. The Section handles over 2,500 telephone inquiries per month from the public and other agencies requesting information and Coroner's reports. Revenue generated from documents, microscopic slides, photograph sales and transportation billing for a one year period totals over \$1,200,000.

The Coroner is mandated by the California Government Code to retain all files permanently; consequently the Department maintains 100+ years of records that are accessed on a regular basis at the request of the public. Approximately 16,000 pages are copied from compact disk, optical disk and microfilm to fill requests received from the public each year.

#### **DEATH CERTIFICATION & MEDICAL/CLERICAL SECTION**

The Section is responsible for the completion and daily issuance of the death certificates to mortuaries, and preparation of amendments stating the final cause of death. Medical/Clerical Section is responsible for reporting SIDS (Sudden Infant Death Syndrome) cases to the State and local health agencies for follow-up by those agencies. This section also provides secretarial and clerical support to the Deputy Medical Examiners.

#### **MEDICAL TRANSCRIBING SECTION**

This section is responsible for the transcription of the autopsy report protocols, microscopic slide reports, neuropathology reports, etc. An outside contractor is utilized for routine transcription, and an in-house staff of three full-time employees handles rush, high-priority, and sensitive cases. In a one-year period, over 2,000 cases are transcribed by request of the law enforcement agencies, the families, hospitals, and other outside agencies.



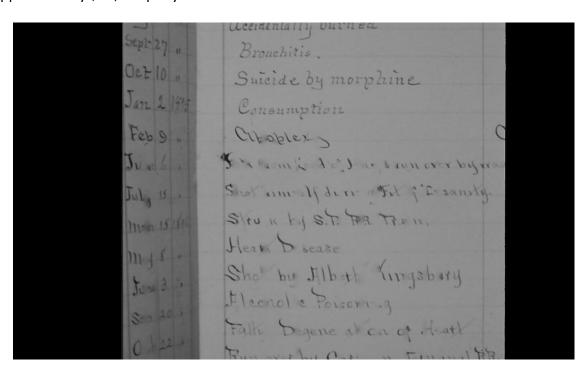


#### PERSONAL PROPERTY SECTION

Personal property of all decedents is brought to the Personal Property Section and safeguarded in a vault until release to the decedent's next of kin. The Department has three Personal Property Custodians who are responsible to receive and inventory the personal effects, contact the next of kin, and arrange for delivery of the personal effects to the decedent's family. The Office of the Public Administrator is consulted when next of kin resides out of State or is unknown. The Custodians are also responsible for disposal of all unclaimed personal effects.

#### SUBPOENA CONTROL

Approximately 4,000 subpoenas are received and processed by the Public Services Division Subpoena Control Section in a one-year period. This unit is responsible for the scheduling of all Deputy medical Examiners for court appearances, depositions and appointments with law enforcement, Deputy District Attorneys, Public Defender staff, and members of the public. The revenue generated by civil witness fees and collected by this section totals approximately \$55,000 per year. •



First Coroner's Register, circa 1850's

# **Los Angeles County**

# **Death Statistics**





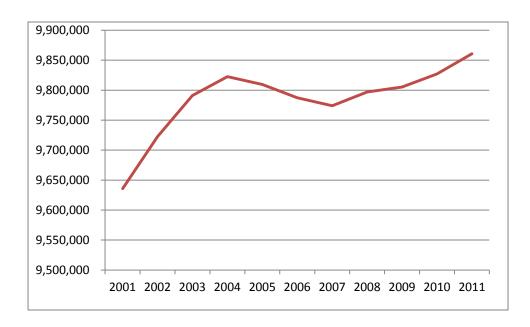
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Infectious Diseases among Natural Deaths	
Neoplasms among Natural Deaths	42





# Population of Los Angeles County, 2001-2011

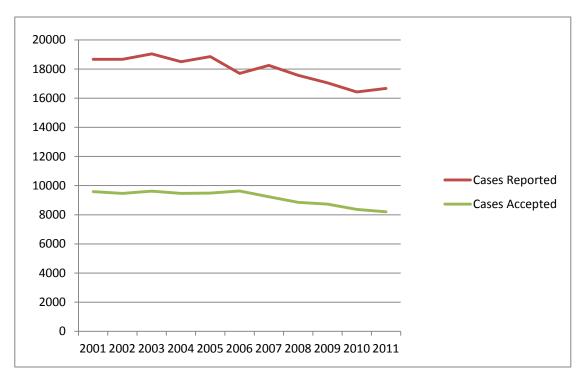


<u>Year</u>	<u>Population</u>
2001	9,635,795
2002	9,722,444
2003	9,791,022
2004	9,822,508
2005	9,809,557
2006	9,787,327
2007	9,773,894
2008	9,796,812
2009	9,805,233
2010	9,827,070
2011	9,860,836





# Number of Reported and Accepted Cases per Year, 2001-2011

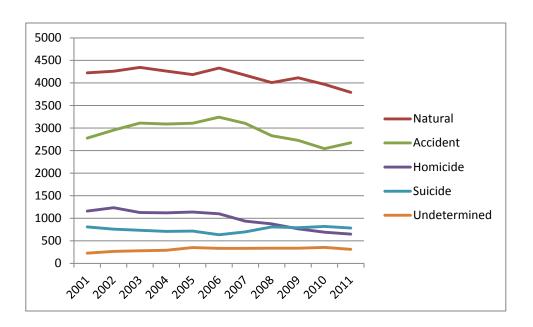


<u>Year</u>	Cases Reported	Cases Accepted
2001	18,665	9,470
2002	18,665	9,591
2003	19,039	9,620
2004	18,509	9,465
2005	18,854	9,494
2006	17,704	9,637
2007	18,254	9,237
2008	17,572	8,854
2009	17,053	8,734
2010	16,434	8,371
2011	16,668	8,207





# Final Mode of Coroner's Cases, 2001-2011

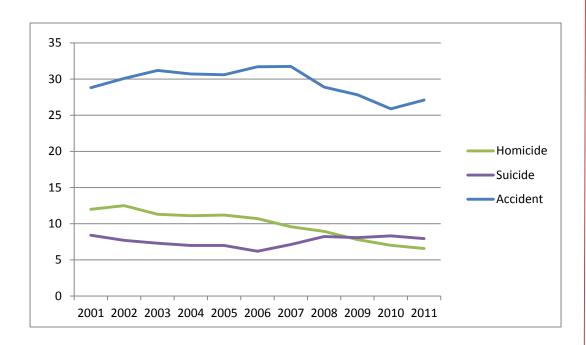


<u>Year</u>	<u>Natural</u>	<u>Accident</u>	<u>Homicide</u>	<u>Suicide</u>	<u>Undetermined</u>
2001	4,224	2,777	1,159	807	226
2002	4,261	2,955	1,232	757	265
2003	4,344	3,110	1,127	732	279
2004	4,265	3,090	1,121	709	289
2005	4,186	3,106	1,137	716	349
2006	4,330	3,243	1,098	635	331
2007	4,170	3,104	936	696	331
2008	4,007	2,830	876	807	334
2009	4,115	2,728	765	791	335
2010	3,968	2,544	689	818	352
2011	3,793	2,673	647	784	310





# Death Rates per 100,000 Population, 2001-2011

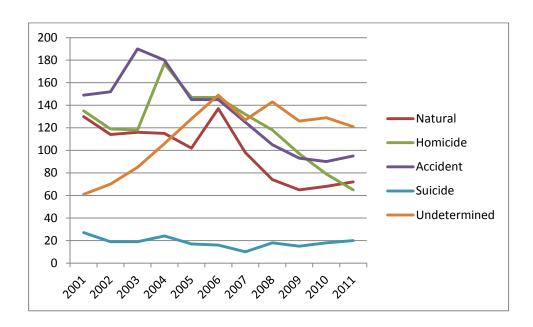


<u>Year</u>	<u>Accident</u>	<u>Homicide</u>	<u>Suicide</u>
2001	28.8	12	8.4
2002	30.1	12.5	7.7
2003	31.2	11.3	7.3
2004	30.7	11.1	7.0
2005	30.6	11.2	7.0
2006	31.7	10.7	6.2
2007	31.8	9.6	7.1
2008	28.9	8.9	8.2
2009	27.8	7.8	8.1
2010	25.9	7.0	8.3
2011	27.1	6.6	8.0





# Modes for Child Death (Ages under 18), 2001-2011



<u>Year</u>	<u>Natural</u>	<u>Homicide</u>	<u>Accident</u>	<u>Suicide</u>	<u>Undetermined</u>
2001	130	135	149	27	61
2002	114	119	152	19	70
2003	116	118	190	19	85
2004	115	177	180	24	106
2005	102	147	145	17	128
2006	137	147	145	16	149
2007	98	132	125	10	127
2008	74	118	105	18	143
2009	65	97	93	15	126
2010	68	79	90	18	129
2011	72	65	95	20	121





## Statistics Required by National Association of Medical Examiners, 2011

Number of deaths reported: 16668

Number of cases accepted: 8207

Number of cases by manner of death:

Accident: 2673

Homicide: 647

Natural: 3793

Suicide: 784

Undetermined: 310

Scene visits: 3433

Number of bodies transported: 6150

External examinations:

By physician: 2041

By investigator: 2125

Partial autopsies: 202

Complete autopsies: 3839

Hospital autopsies under ME jurisdiction: 5

Cases where toxicology was performed: 4574

Bodies unidentified after examination: 12

Organ and tissue donations:

Total organ donors: 138

Total tissue donors: 666

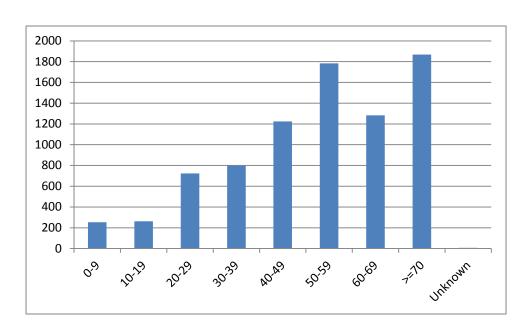
Unclaimed bodies: 670

Exhumations: 1





# Number of Coroner's Cases by Age, 2011

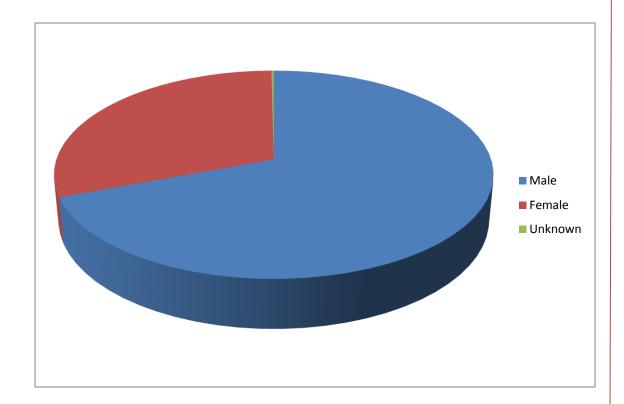


<u>Age</u>	<b>Number of Cases</b>
0-9	254
10-19	263
20-29	724
30-39	799
40-49	1224
50-59	1784
60-69	1283
>=70	1869
Unknown	7





# Coroner's Cases by Gender, 2011

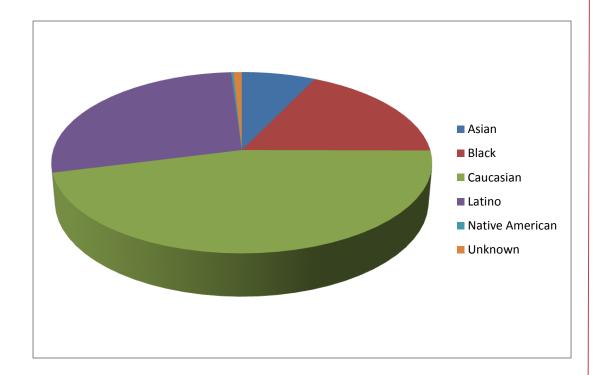


<u>Gender</u>	Number of Cases
Male	5685
Female	2506
Unknown	16





# Coroner's Cases by Race, 2011

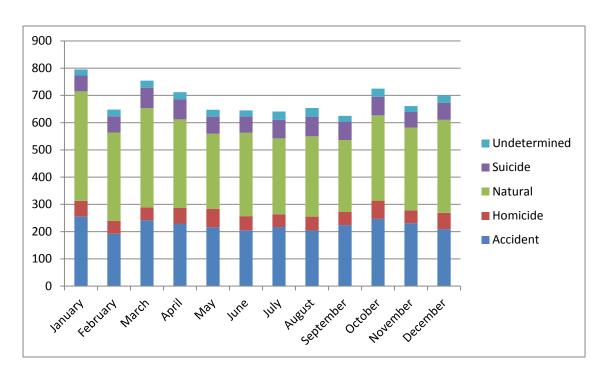


<u>Race</u>	Number of Cases
Asian	591
Black	1466
Caucasian	3774
Latino	2291
Native American	19
Unknown	66





# Mode of Death by Month, 2011

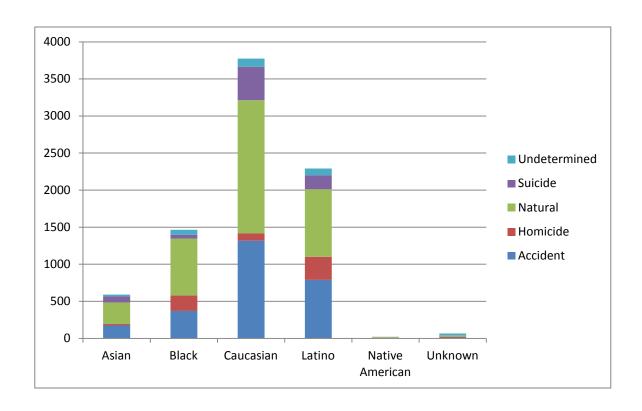


<u>Month</u>	<u>Accident</u>	<u>Homicide</u>	<u>Natural</u>	<u>Suicide</u>	<b>Undetermined</b>
January	256	57	402	58	22
February	192	47	325	59	25
March	242	47	364	75	26
April	230	57	325	73	27
May	216	67	276	63	25
June	205	52	306	60	22
July	217	47	278	69	30
August	204	51	295	71	33
September	224	48	264	68	21
October	247	67	313	68	30
November	231	47	304	57	22
December	209	60	341	63	27





# Racial Distribution for Each Mode, 2011

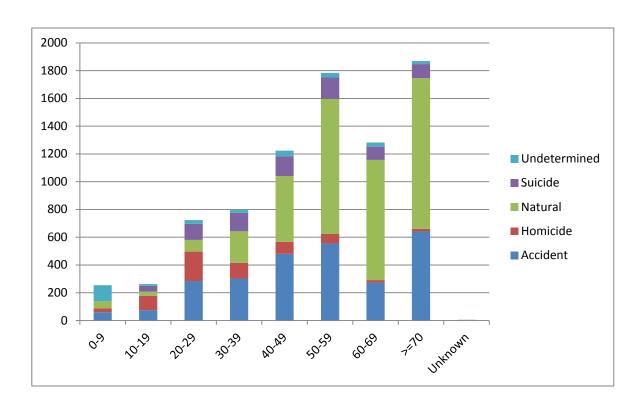


	<u>Accident</u>	<u>Homicide</u>	<u>Natural</u>	<u>Suicide</u>	<u>Undetermined</u>
Asian	174	19	292	85	21
Black	370	209	768	52	67
Caucasian	1318	98	1797	451	110
Latino	790	310	911	191	89
Native American	9	0	9	1	0
Unknown	12	11	16	4	23





# Mode Distribution for Each Age Group, 2011

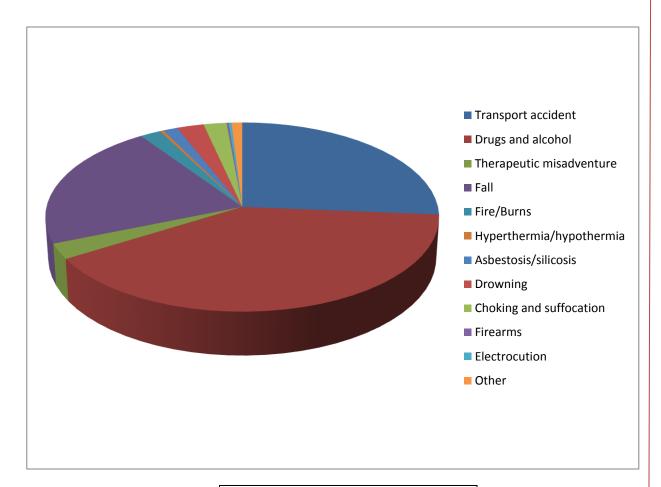


	<u>0-9</u>	<u> 10-19</u>	<u>20-29</u>	<u>30-39</u>	<u>40-49</u>	<u>50-59</u>	<u>60-69</u>	>=70	<u>Unknown</u>
Accident	60	75	285	303	480	555	273	642	0
Homicide	28	103	212	113	87	68	18	18	0
Natural	51	30	84	227	474	973	866	1086	2
Suicide	1	42	116	132	142	154	96	101	0
Undetermined	115	13	27	24	41	34	30	22	4





# **Accidental Deaths, 2011**



Transport accident	703
Drugs and alcohol	1066
Therapeutic misadventure	71
Fall	578
Fire/Burns	51
Hyperthermia/hypothermia	9
Asbestosis/silicosis	35
Drowning	66
Choking and suffocation	56
Firearms	5
Electrocution	7
Other	26
Total	2673





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Cauronal	Annual Report			1
	Transportation Accidents, 2011			
Pedestrians	Collision with car, pick-up truck or van	213		
	Collision with pedal cycle or motorcycle	3		
	Collision with heavy transport vehicle or bus	11		
	Collision with railway train or railway vehicle	11		
	Other and unspecified transport accidents	5		
	Total pedestrians		243	
Pedal Cyclists	Collision with car, pick-up truck or van	27		
	Collision with heavy transport vehicle or bus	3		
	Fall from pedal cycle	4		
	Collision with train	2		
	Collision with fixed object	1		
	Total pedal cyclists		37	
Motorcycle Riders	Collision with motorcycle	2		
	Collision with car, pick-up truck or van	61		
	Collision with heavy transport vehicle or bus	8		
	Collision with fixed or stationary objects	19		<u>a</u>
	Non-collision accident (fell or thrown)	6		<u>s</u> n
	Total motorcycle riders		96	00
Car Occupants	Collision with motorcycle	1		T a
	Collision with car, pick-up truck or van	115		Transportation Accidents
	Collision with heavy transport vehicle or bus	10		n (
	Collision with fixed or stationary objects	132		cc
	Non-collision accident (fell or thrown)	29		d
	Other and unspecified transport accidents	1		en
	Total car occupants		288	ß
Other Transport Accidents	Occupant of pick-up truck or van	5		
	Occupant of heavy transport vehicle	4		
	Occupant of bus	1		
	Equestrian	2		
	Occupant of industrial vehicle	2		
	Occupant of agricultural vehicle	1		
	Occupant of off-road vehicle	1		
	Occupant of watercraft	5		
	Occupant of aircraft	6		
	Other and unspecified transport accidents	12		
	Total other transport accidents		39	
	Total transport accidents		703	

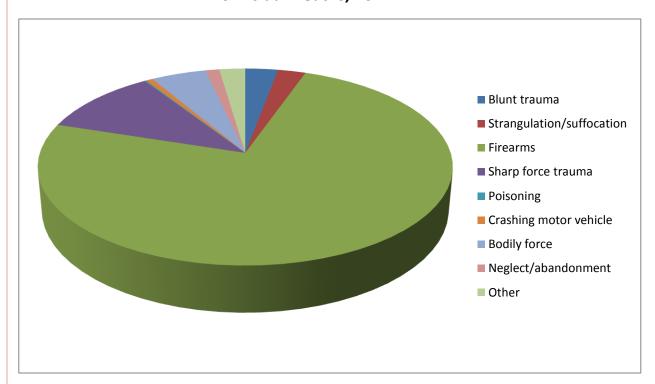
# Accidental Falls, 2011

Fail on same level from slipping, tripping and stumbling	442
Fall involving wheelchair	19
Fall involving bed	29
Fall involving chair	4
Fall involving other furniture	2
Fall on or from stairs and steps	38
Fall on or from ladder	11
Fall on and from scaffolding	4
Fall from, out of or through building or structure	16
Fall from tree	1
Fall from cliff	2
Diving into water causing injury other than drowning	3
Other fall from one level to another	7
Total accidental falls	578





# Homicidal Deaths, 2011

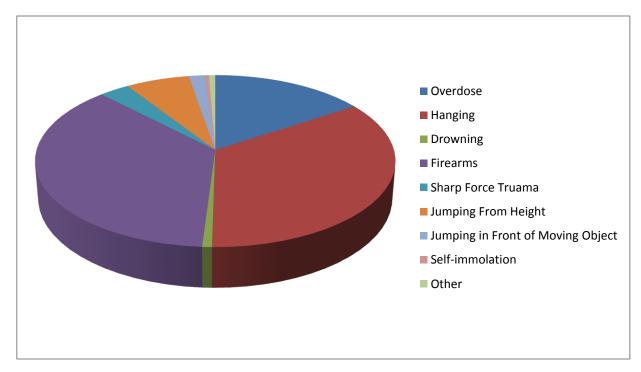


Homicidal Deaths, 2011				
Blunt trauma	19			
Strangulation/suffocation	16			
Firearms	482			
Sharp force trauma	70			
Poisoning	1			
Crashing motor vehicle	4			
Bodily force	32			
Neglect/abandonment	8			
Other	15			
Total homicides	647			





# Suicidal Deaths, 2011

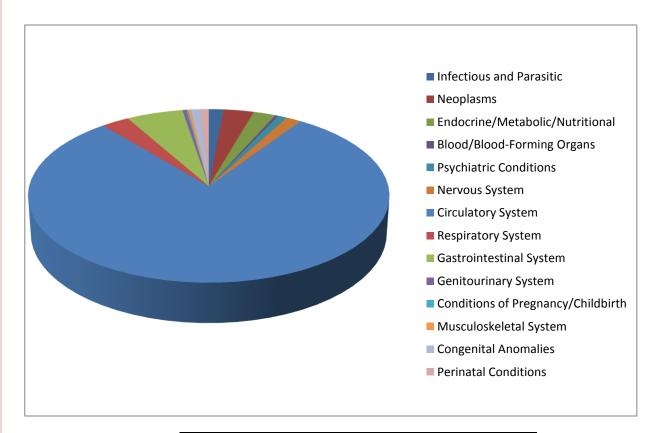


Suicidal Deaths, 2011	
Overdose	123
Hanging	271
Drowning	6
Firearms	288
Sharp Force Trauma	24
Jumping From Height	51
Jumping in Front of Moving Object	13
Self-immolation	3
Other	5
Total suicides	784





### Natural Deaths, 2011



Natural Deaths, 2011	
Infectious and Parasitic	56
Neoplasms	114
Endocrine/Metabolic/Nutritional	84
Blood/Blood-Forming Organs	12
Psychiatric Conditions	35
Nervous System	57
Circulatory System	3016
Respiratory System	106
Gastrointestinal System	214
Genitourinary System	15
Conditions of Pregnancy/Childbirth	6
Musculoskeletal System	11
Congenital Anomalies	35
Perinatal Conditions	32
Total	3793





#### Circulatory System Disease among Natural Deaths, 2011

Aneurysms	Cerebral	22
	Aortic	37
	Other	3
Arteriosclerotic disea	ase	2368
Cardiomyopathy	Alcoholic	9
	Dilated	33
	Hypertrophic	130
	Idiopathic	53
	Right ventricular dysplasia	1
Cerebral hemorrhage/infarction		81
Endocarditis		9
Hypertensive disease		212
Myocarditis		12
Pericarditis		1
Pulmonary hyperten	sion	3
Thrombosis/embolis	m	30
Valvular disease	Aortic valve disease	4
	Mitral valve disease	5
Other		3
Total		3016





### Nervous System Disease among Natural Deaths, 2011

Total	57
Spinal muscular atrophy	1
Sagittal sinus thrombosis	1
Parkinson Disease	3
Muscular dystrophy	2
Meningitis/encephalitis	5
Huntington Disease	1
Epilepsy	36
Cerebral palsy	2
Cerebral/epidural abscess	2
Alzheimer Disease	4

#### Infectious Diseases among Natural Deaths, 2011

Bacterial infections	Clostridium difficile	1
	Mycobacterium tuberculosis	2
	Neisseria meningitidis	1
	Salmonella	1
	Streptococcus	1
	Staphylococcus	1
	Escherichia coli	1
	Clostridium septicum	1
Viral infections	Hepatitis B	2
	Hepatitis C	17
	Human immunodeficiency virus	15
	Viral gastroenteritis	4
Fungal infections	Coccidioides	4
	Histoplasma	1
	Aspergillus	1
	Mucor	1
Parasitic infections	Cysticercosis	2
Total		56





### Neoplasms among Natural Deaths, 2011

Adrenal	1
Brain	7
Breast	14
Cervix	1
Colon	11
Esophagus	2
Gallbladder	1
Heart	1
Kidney	1
Leukemia	7
Liver	3
Lung	23
Lymphoma	11
Mesothelioma	6
Myelodysplastic syndrome	1
Myeloma	1
Ovary	2
Pancreas	8
Prostate	1
Skin	2
Stomach	3
Throat	2
Uterus	2
Metastatic/unknown primary site	3
Total	114

# **Los Angeles County**

# **Toxicology Statistics**

**Toxicology Statistics** 





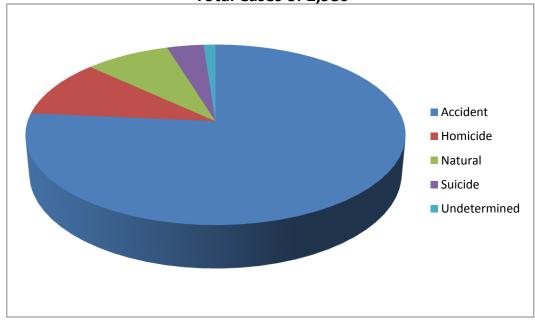
# **Table of Contents for Toxicology Statistics**

Drugs Detected by Mode	45
Marijuana Detected by Mode	45
Cocaine (Benzoylecgonine) Detected by Mode	46
Methamphetamine Detected by Mode	46
Heroin (6-monoacetylmorphine) Detected by Mode	47
Phencyclidine Detected by Mode	47
Drugs by Classification	48
Alcohol Detected by Mode	48
Alcohol Detected by Year	49



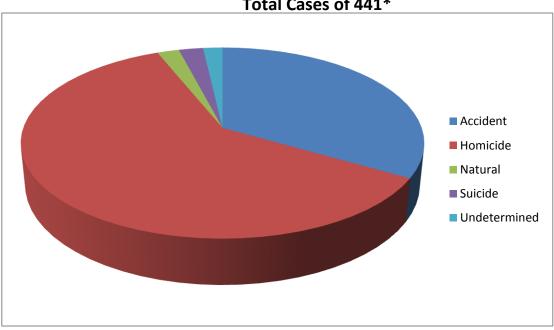


# 2011 Number of Cases with Drugs Detected by Mode Total Cases of 2,980



Accident - 2278 Homicide - 310 Natural -250 Suicide - 107 Undetermined - 35

# 2011 Marijuana Detected by Mode Total Cases of 441\*

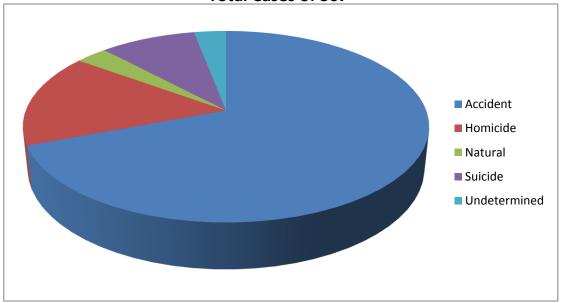


Accident - 147 Homicide -267 Natural - 9 Suicide - 10 Undetermined - 8 \*Generally only tested in Homicides and Traffic Fatalities (Accidents)



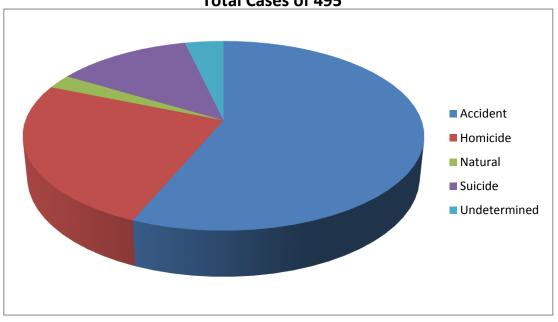


#### 2011 Cocaine (Benzoylecgonine) Detected by Mode Total Cases of 367



Accident - 254 Homicide - 58 Natural -11 Suicide - 33 Undetermined - 11

#### 2011 Methamphetamine Detected by Mode Total Cases of 495

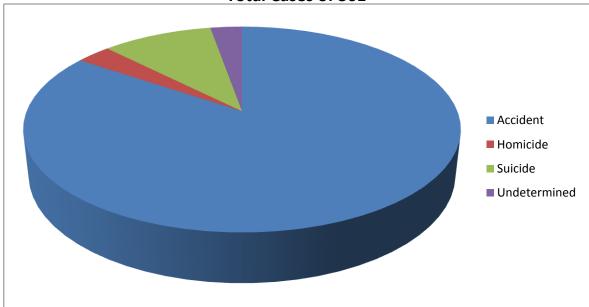


Accident - 279 Homicide - 123 Natural - 12 Suicide - 63 Undetermined - 18



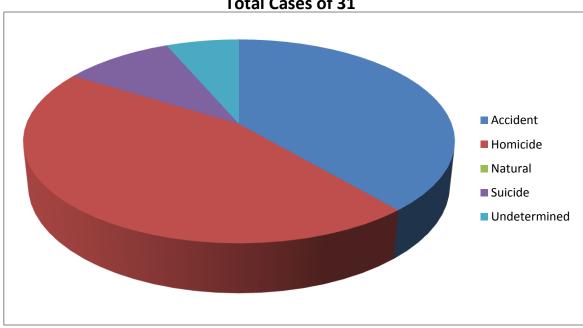


#### 2011 Heroin (6-monoacetyl morphine) Detected by Mode Total Cases of 361



Accident - 305 Homicide -11 Suicide - 35 Undetermined - 10

# 2011 Phencyclidine Detected by Mode Total Cases of 31

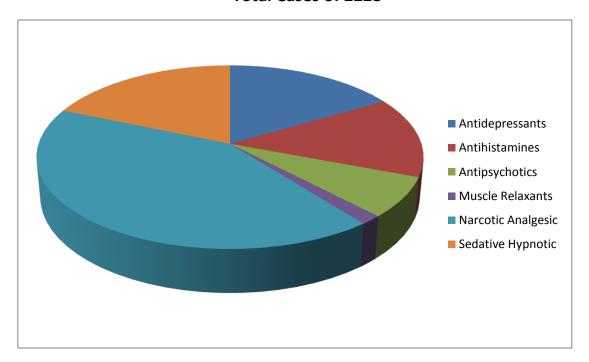


Accident – 12 Homicide – 14 Natural –0 Suicide – 3 Undetermined - 2





#### 2011 Drugs by Classification Total Cases of 2228

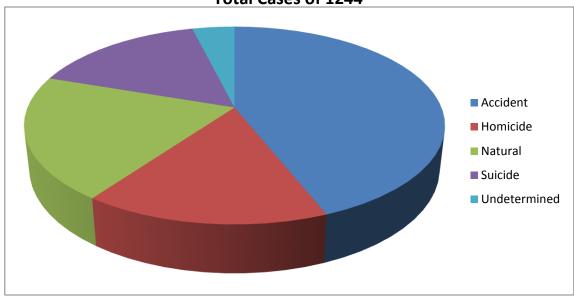


Antidepressants – 369 Antihistamines – 316 Antipsychotics – 158 Muscle Relaxants – 35 Narcotic Analgesic – 935 Sedative Hypnotic - 415

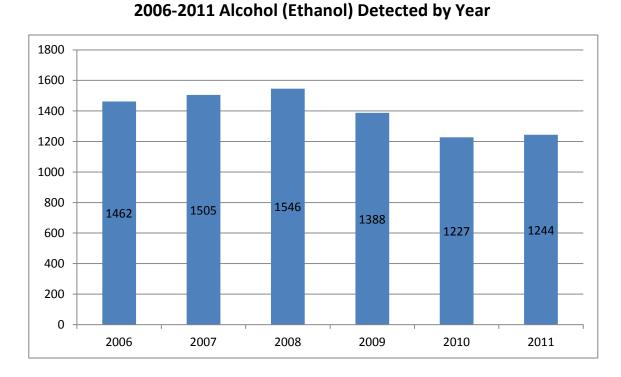




#### 2011 Alcohol (Ethanol) Detected by Mode Total Cases of 1244



Accident – 547 Homicide – 119 Natural – 252 Suicide – 198 Undetermined – 48







Cover Photo: United States Marines participate in the Coroner's Veteran burial program.

Cover Photo