



Los Angeles County  
CORONER



2009



Annual Report



## Los Angeles County Department of Coroner Annual Report



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**Gloria Molina**  
*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.

Board of Supervisors



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### DEPARTMENT HEADS' MESSAGE

*This report contains statistical information from the Los Angeles County Department of Coroner for the year 2009, as well as selected statistics from the previous ten years.*

#### **Significant Accomplishments**

*During this period, the Department had the following accomplishments:*

- *Continued planning for a major renovation of the Forensic Science Center, including a new crypt and improved ventilation on the autopsy floor.*
- *Undertook projects to improve the cost-effectiveness of Coroner's services, including establishment of an Efficiencies Committee, cellular telephone cost reduction, and paper reduction.*
- *Continued planning for an on-site DNA laboratory. Among other things, this laboratory will be important for decedent identification and molecular diagnosis.*
- *Explored the availability of Federal grant funding for improvements in computerization.*

#### **Legislation**

*AB 275 – Requires California Coroners to collect DNA samples from unidentified decedents and submit them to the California Department of Justice for possible identification (Penal Code Sections 14250 and 14251).*

*Melendez-Diaz v. Massachusetts, U.S. Supreme Court 07-591. Restricts admissibility of expert witness testimony in criminal cases under some circumstances*

#### **Publications**

*P. Saint-Martin, C. Rogers, E. Carpenter, M.C. Fishbein, S. Lau, L. Sathyavagiswaran, "Subaortic Pseudoaneurysm of the Left Ventricle Complicating Staphylococcal Endocarditis", J. Forensic Sci July 2009 54(4):930-932.*

*L. Scheinin, C. V. Wetli, "Sudden Death and Sickle Cell Trait: Medicolegal Considerations and Implications", Am J. Forensic Med. Pathol. 2009 30(2):204-208.*

*PG Teixeira, C Georgiou, K Inaba, J DuBose, D Plurad, LS Chan, C Toms, TT Noguchi, D Demetriades, "Blunt Cardiac Trauma: Lessons Learned from the Medical Examiner", The Journal of Trauma: Injury, Infection and Critical Care. 2009 67(6):1259-1264.*

Department Heads' Message



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### **Presentation**

*C. Rogers, "Body Storage: The Good and the Bad Ideas", Lecture presented at the 2009 Medicolegal Death Investigation and Mass Fatality Preparedness Conference, Houston TX, August 2009.*

*C. Rogers, J. Kades, L. Sathyavagiswaran, "Death in a Tanker Truck", Presented at American Academy of Forensic Sciences, Denver CO, February 2009.*

*E. Winter, "Coroner's Response to Major Transportation Incidents", Presented at National Association of Medical Examiners, San Francisco CA, September 2009.*

*L. Sathyavagiswaran, T.T. Noguchi, C. Rogers, "Evaluation of Deaths of US Citizens Occurring Abroad/Consular Relations", Presented at National Association of Medical Examiners, San Francisco CA, September 2009.*

*V. Willoughby, G.C. Kanel, J.K. Ribe, "HELLP Syndrome Presenting with Fatal Spontaneous Hemoperitoneum", Presented at National Association of Medical Examiners, San Francisco CA, September 2009.*

*C. Rogers, L. Scheinin, L. Sathyavagiswaran, "Family Annihilation Cases in Los Angeles County", Presented at National Association of Medical Examiners, San Francisco CA, September 2009.*

*Y. Wang, D. Bertone, M. Sandberg, L. Sathyavagiswaran, "Sleeping Pill in a Sudden Infant Death at a Day Care Center", Presented at National Association of Medical Examiners, San Francisco CA, September 2009.*

*J.K. Ribe, "The Child Abuse Autopsy 101", Lecture presented at International Conference on Child Maltreatment, San Diego CA January 2009.*

**Anthony Hernandez**  
Director

**Lakshmanan Sathyavagiswaran, M.D.**  
Chief Medical Examiner-Coroner

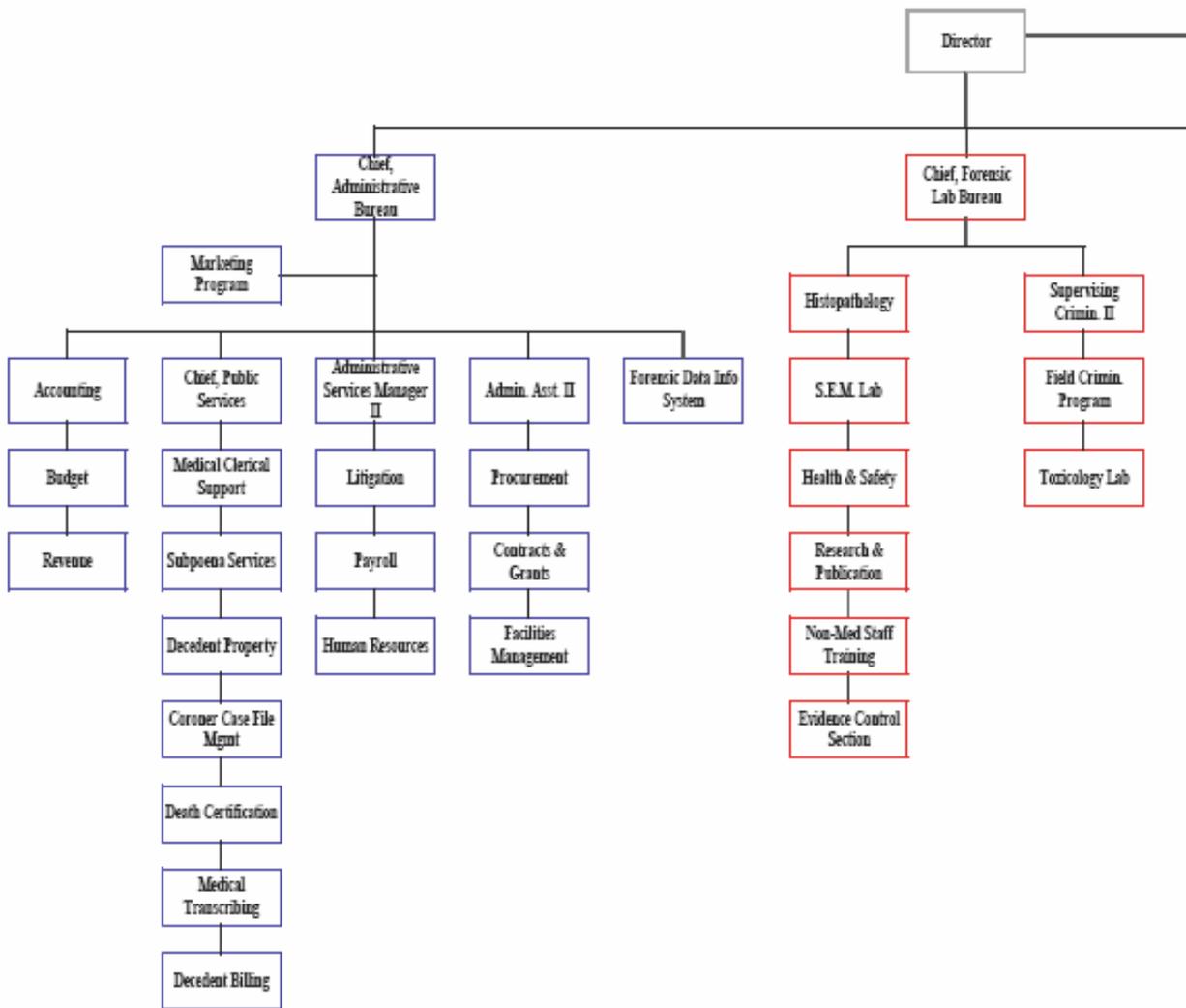
Department Heads' Message



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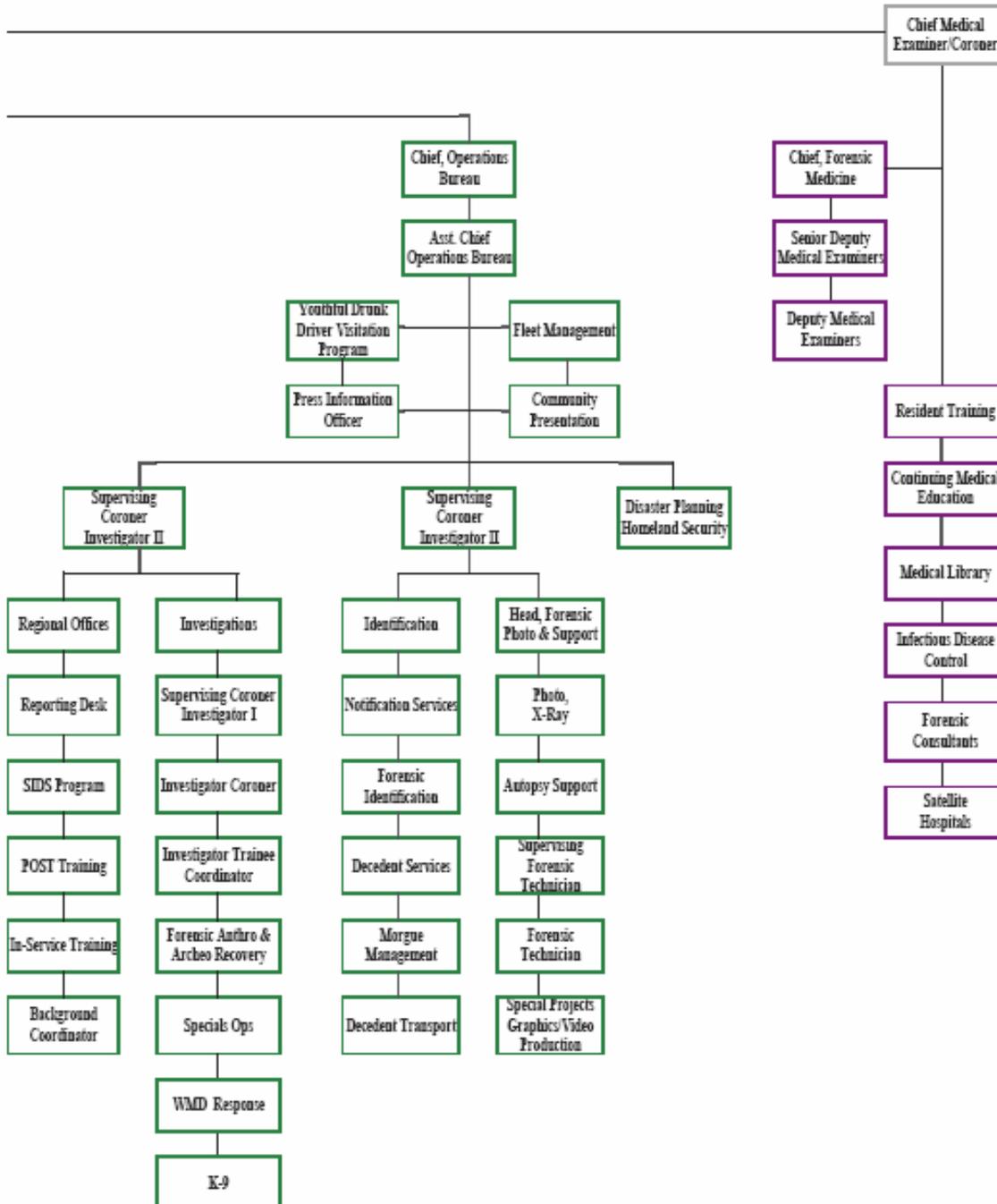
Organizational Chart



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Organizational Chart



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## Administrative Services Bureau

Chief, Sarah Ahonima

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. The intent was to use monies raised to offset some of the costs associated with the youthful Drunk Driver Visitation Program (YDDVP), as well as other Coroner needs. “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).

Administrative Services Bureau



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### 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). •



*Coroner Ben Brown (1945-1953, left) addresses a Coroner's jury in 1947*

Administrative Services Bureau



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## 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.

Forensic Medicine Bureau



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### 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. •



*Coroner's pathological laboratory, 1932*

Forensic Medicine Bureau



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## FORENSIC LABORATORIES BUREAU

Chief, Joseph J. Muto

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, 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?

Forensic Laboratories Bureau



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### 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.

Toll 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. •



*Coroner's chemical laboratory, probably 1932*

Forensic Laboratories Bureau



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## **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 known 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 STANDARDS 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 Seminar or other specialized training such as Skeletal and Buried Body Recovery.

Operations Bureau



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Operations Bureau

### 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 short-wave 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.



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## **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. •

Operations Bureau



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*Detective testifies in 1932 before Coroner Frank Nance (1921-1945)*



*Coroner's transportation vehicle, 1949*

Operations Bureau



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## 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 a 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.

Public Services Division



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### 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 I 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. •



*Coroner's viewing room, 1932*

Public Services Division



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# Death Statistics

Death Statistics



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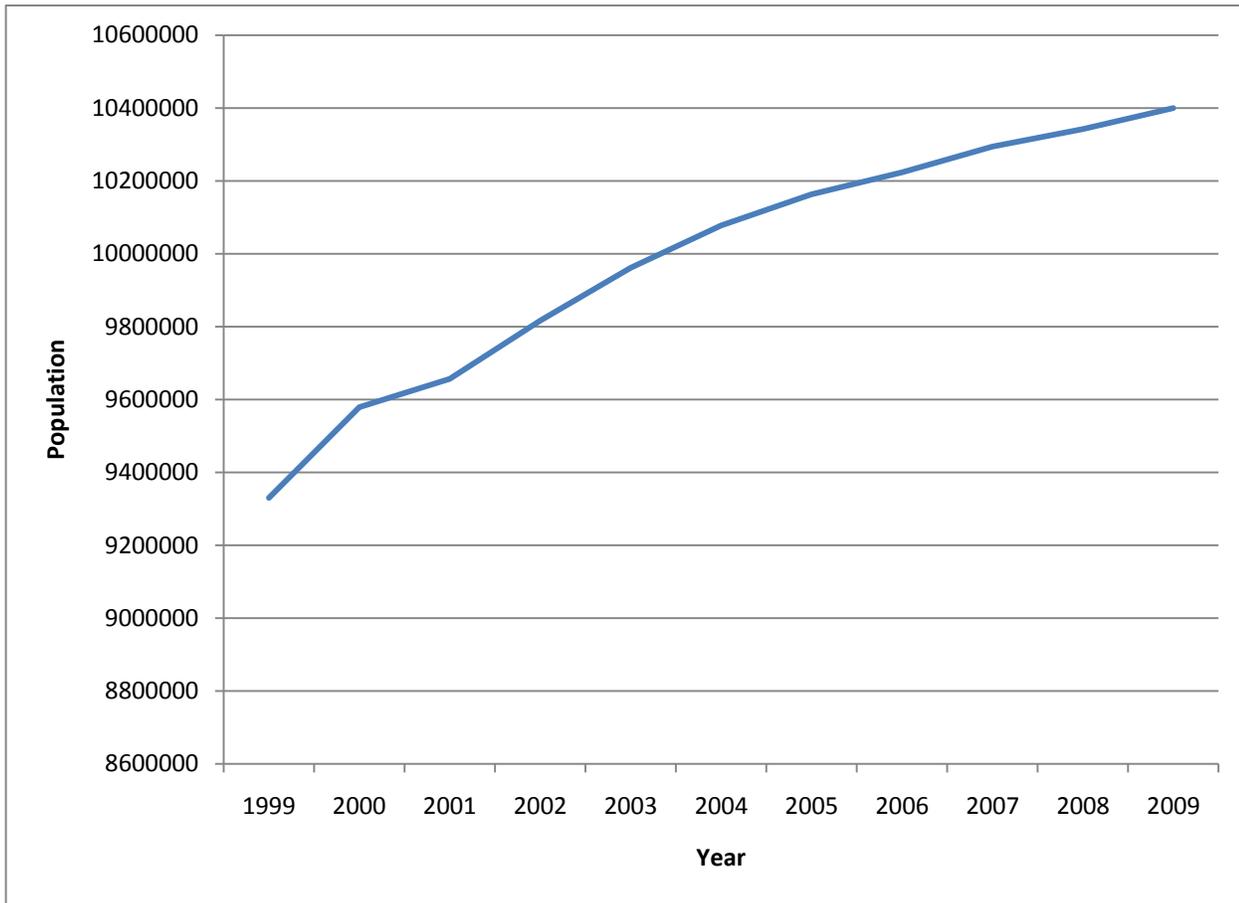


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## Population of Los Angeles County, 1999-2009



Population of Los Angeles County

<u>Year</u>	<u>Population</u>
1999	9,330,110
2000	9,579,022
2001	9,656,730
2002	9,816,792
2003	9,961,407
2004	10,077,865
2005	10,163,097
2006	10,223,263
2007	10,294,280
2008	10,342,429
2009	10,399,410

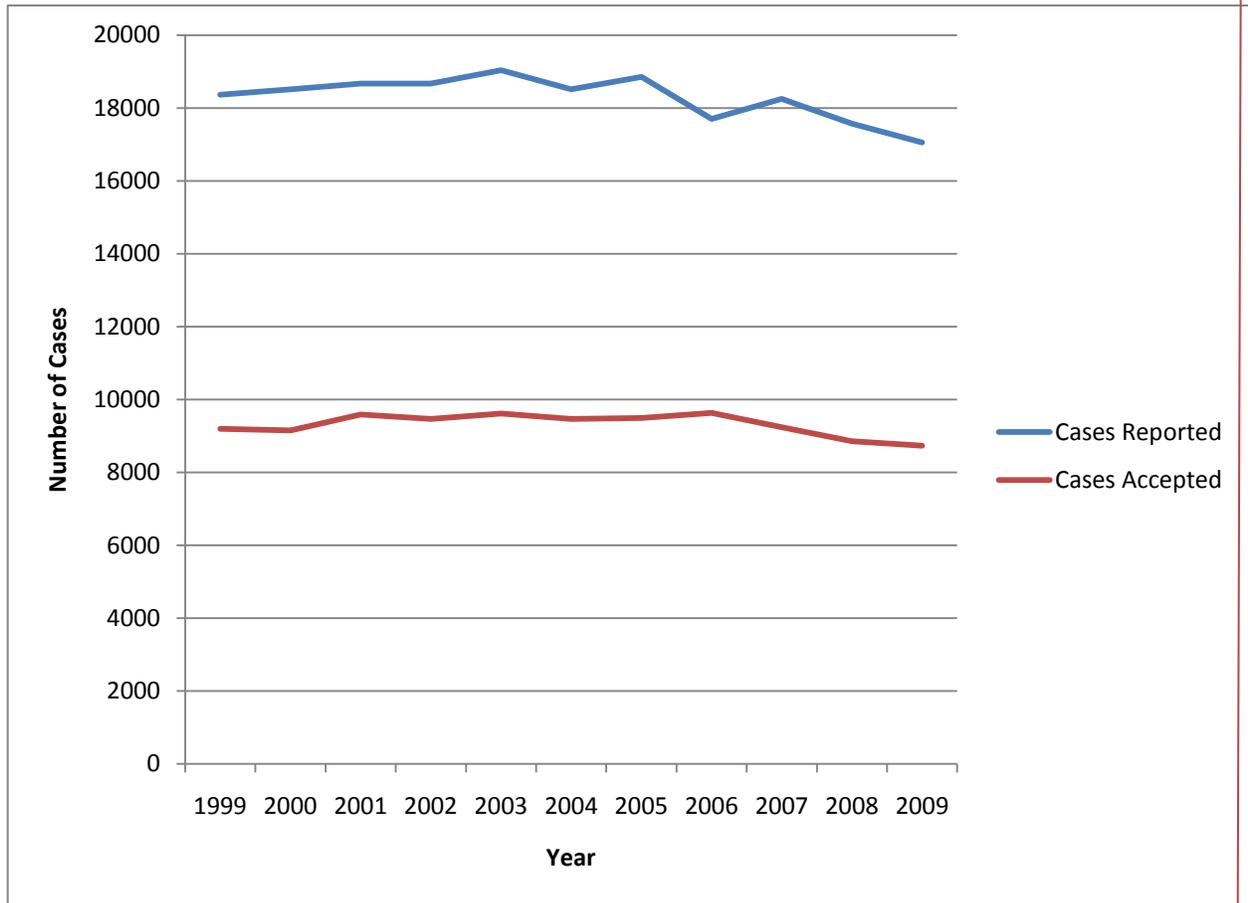


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## Number of Reported and Accepted Cases per Year, 1999-2009



Reported and Accepted Cases

<u>Year</u>	<u>Cases Reported</u>	<u>Cases Accepted</u>
1999	18,362	9,197
2000	18,512	9,156
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

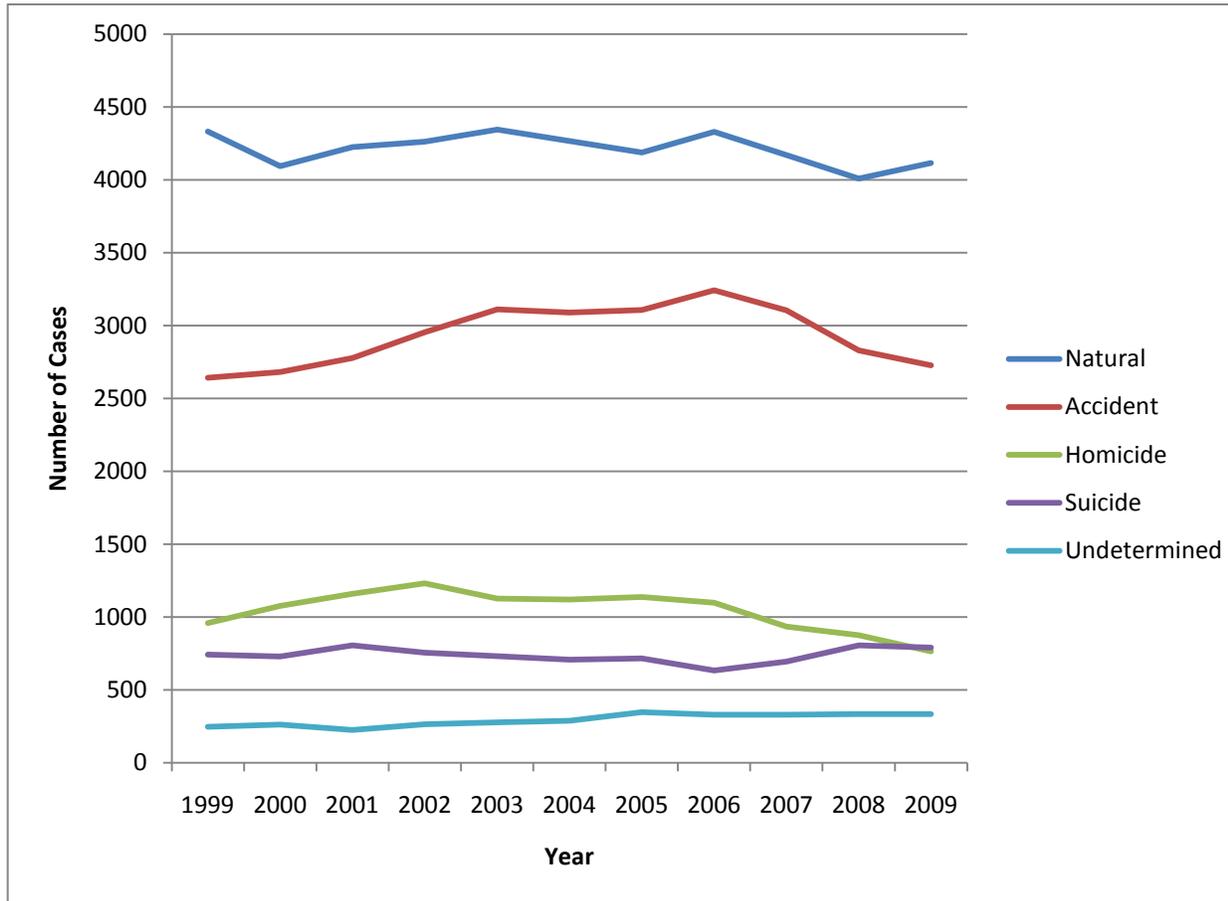


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### Final Mode of Coroner's Cases, 1999-2009



Final Mode of Coroner's Cases

<u>Year</u>	<u>Natural</u>	<u>Accident</u>	<u>Homicide</u>	<u>Suicide</u>	<u>Undetermined</u>
1999	4,331	2,641	960	744	247
2000	4,094	2,681	1,078	729	263
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

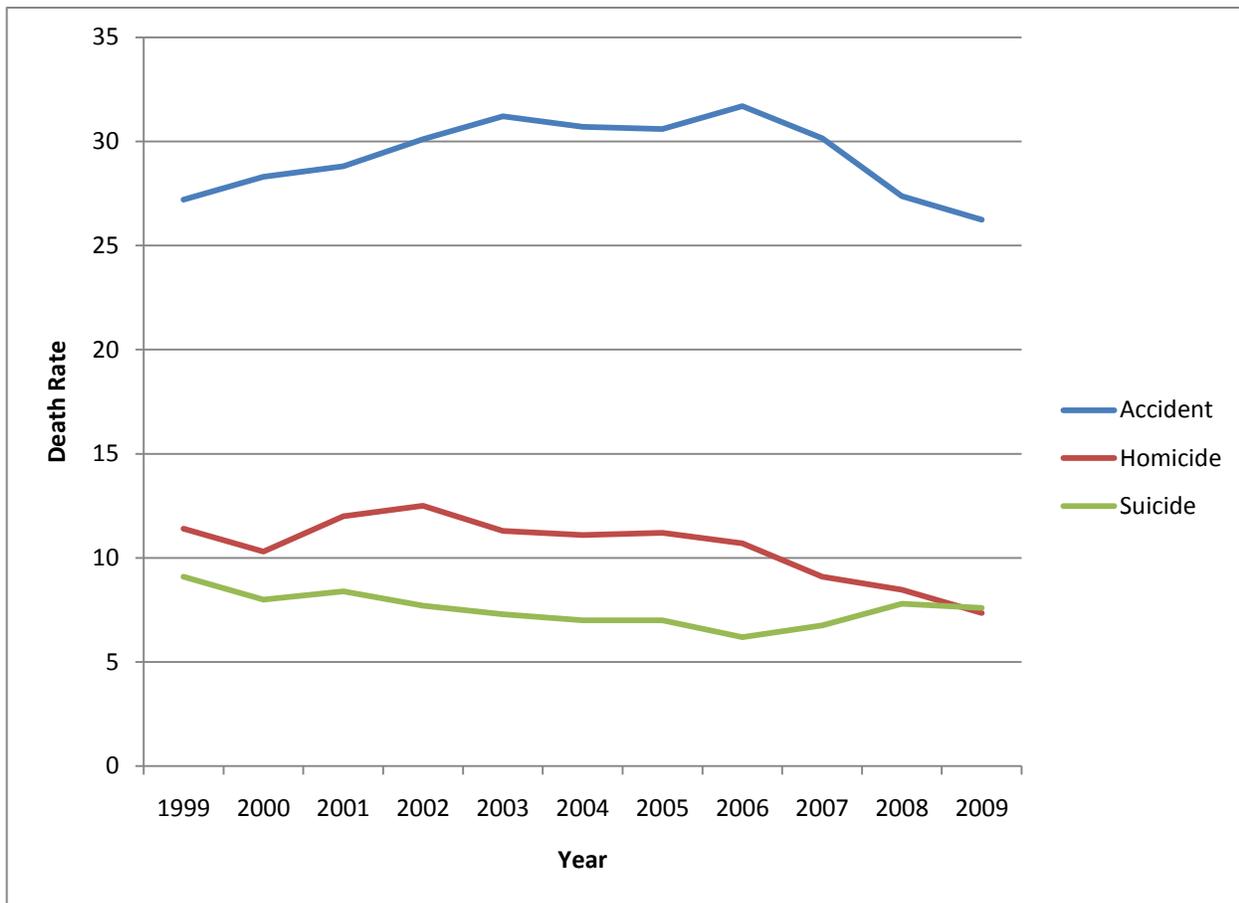


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## Death Rates per 100,000 Population, 1999-2009



Death Rates per 100,000 Population

<u>Year</u>	<u>Accident</u>	<u>Homicide</u>	<u>Suicide</u>
1999	27.2	11.4	9.1
2000	28.3	10.3	8.0
2001	28.8	12.0	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	30.2	9.1	6.8
2008	27.4	8.5	7.8
2009	26.2	7.4	7.6



# Los Angeles County Department of Coroner Annual Report



2009

## Modes for Child Death (Ages under 18), 1999-2009



Modes for Child Death

<u>Year</u>	<u>Natural</u>	<u>Homicide</u>	<u>Accident</u>	<u>Suicide</u>	<u>Undetermined</u>
1999	154	144	162	28	43
2000	150	136	149	24	52
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



## Los Angeles County Department of Coroner Annual Report



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### Statistics Required by National Association of Medical Examiners, 2009

Number of deaths reported:	17,053
Number of cases accepted:	8,734
Number of cases by manner of death:	
Accident:	2,728
Homicide:	765
Natural:	4,115
Suicide:	791
Undetermined:	335
Scene visits:	3,564
Number of bodies transported:	6,012
External examinations:	
By physician:	2,200
By investigator:	2,311
Partial autopsies:	245
Complete autopsies:	3,978
Hospital autopsies under ME jurisdiction:	3
Cases where toxicology was performed:	5,266
Bodies unidentified after examination:	25
Organ and tissue donations:	
Total transplanted organs:	386
Total tissues donated:	420
Unclaimed bodies:	797
Exhumations:	1

Statistics Required by National Association of Medical Examiners

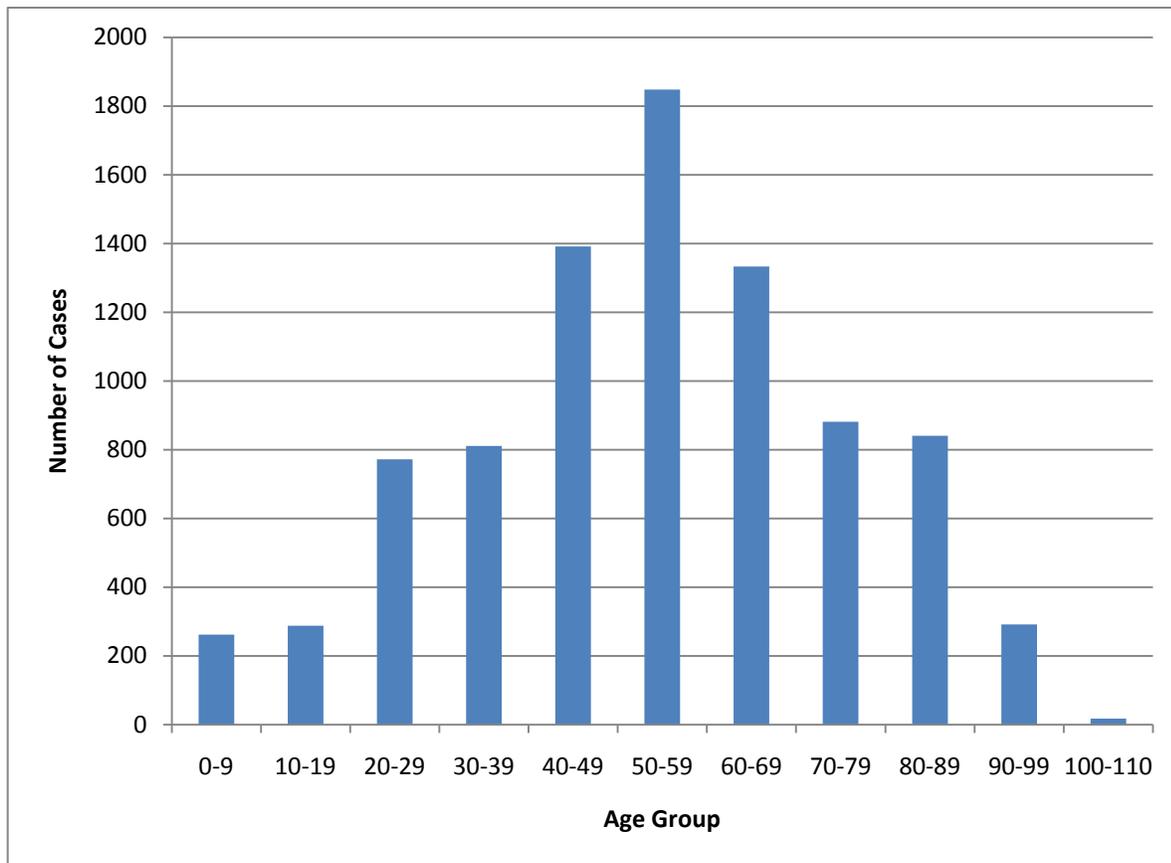


# Los Angeles County Department of Coroner Annual Report



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## Number of Coroner's Cases by Age, 2009

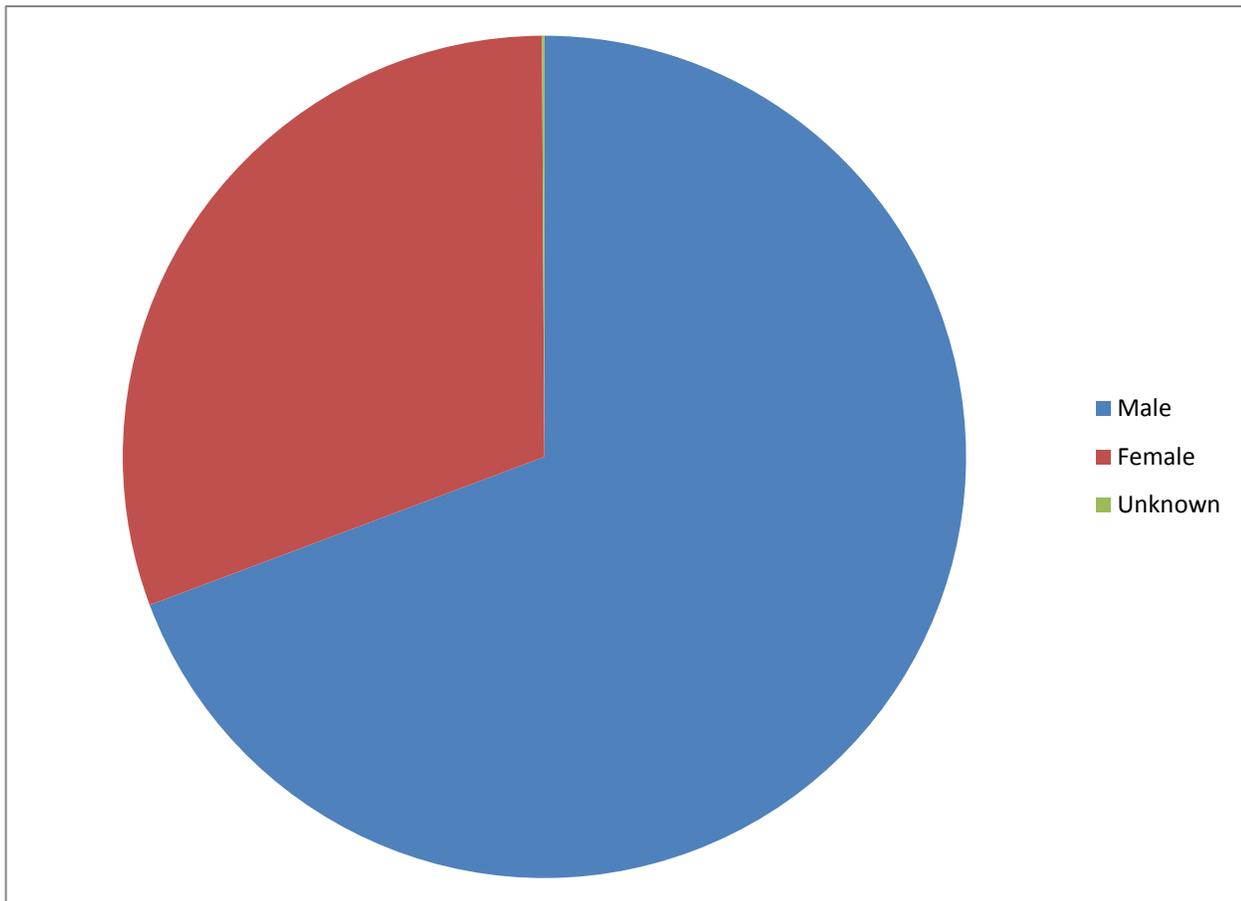


<u>Age</u>	<u>Number of Cases</u>
0-9	262
10-19	288
20-29	772
30-39	811
40-49	1391
50-59	1848
60-69	1333
70-79	881
80-89	840
90-99	291
100-110	17

Coroner's Cases by Age



Coroner's Cases by Gender, 2009

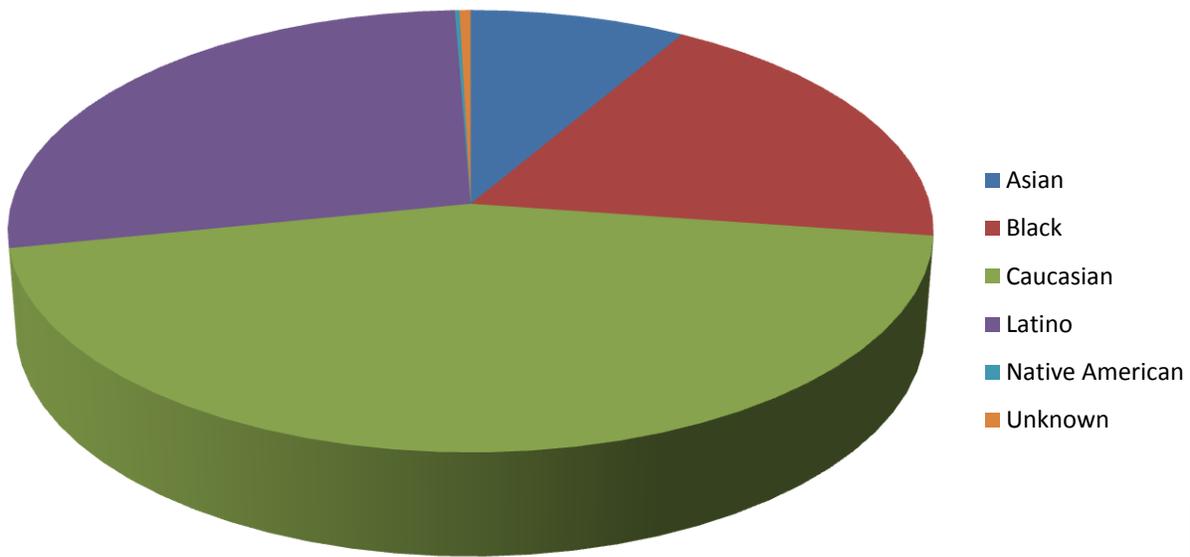


Coroner's Cases by Gender

<u>Gender</u>	<u>Number of Cases</u>
Male	6051
Female	2675
Unknown	8



Coroner's Cases by Race, 2009



Coroner's Cases by Race

<u>Race</u>	<u>Number of Cases</u>
Asian	743
Black	1,641
Caucasian	3,888
Latino	2,408
Native American	16
Unknown	38

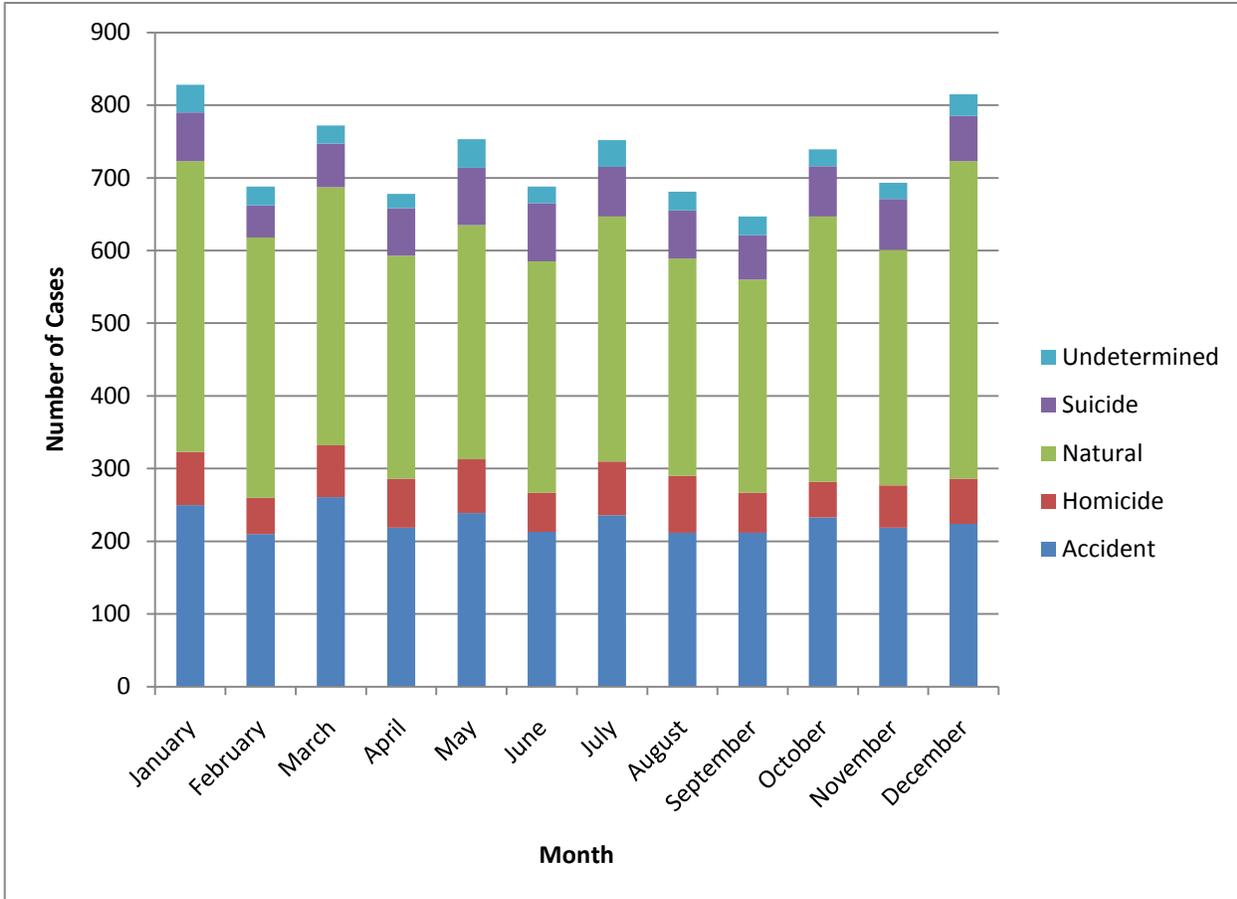


# Los Angeles County Department of Coroner Annual Report



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## Mode of Death by Month, 2009



Mode of Death by Month

<u>Month</u>	<u>Accident</u>	<u>Homicide</u>	<u>Natural</u>	<u>Suicide</u>	<u>Undetermined</u>	<u>Total</u>
January	250	73	400	67	38	828
February	210	50	358	44	26	688
March	261	71	355	60	25	772
April	219	67	307	65	20	678
May	239	74	322	79	39	753
June	213	54	318	80	23	688
July	236	74	337	68	37	752
August	212	78	299	66	26	681
September	212	55	293	61	26	647
October	233	49	365	69	23	739
November	219	58	324	70	22	693
December	224	62	437	62	30	815

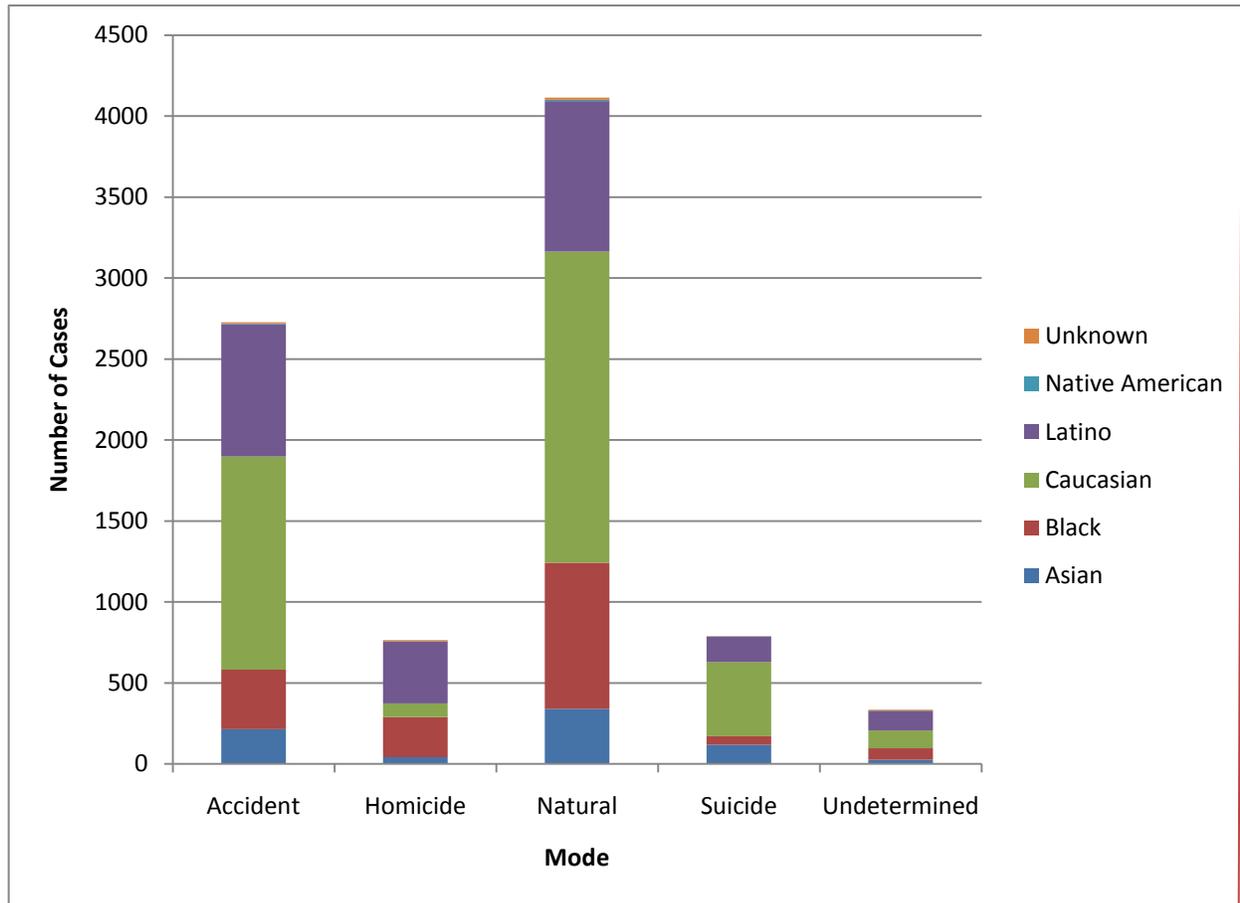


# Los Angeles County Department of Coroner Annual Report



2009

## Racial Distribution for Each Mode, 2009



Racial Distribution for Each Mode

	<u>Accident</u>	<u>Homicide</u>	<u>Natural</u>	<u>Suicide</u>	<u>Undetermined</u>	<u>Total</u>
Asian	215	43	340	119	26	743
Black	368	247	903	52	71	1641
Caucasian	1315	84	1921	458	110	3888
Latino	818	383	928	158	121	2408
Native American	3	1	9	2	1	16
Unknown	9	7	14	2	6	38

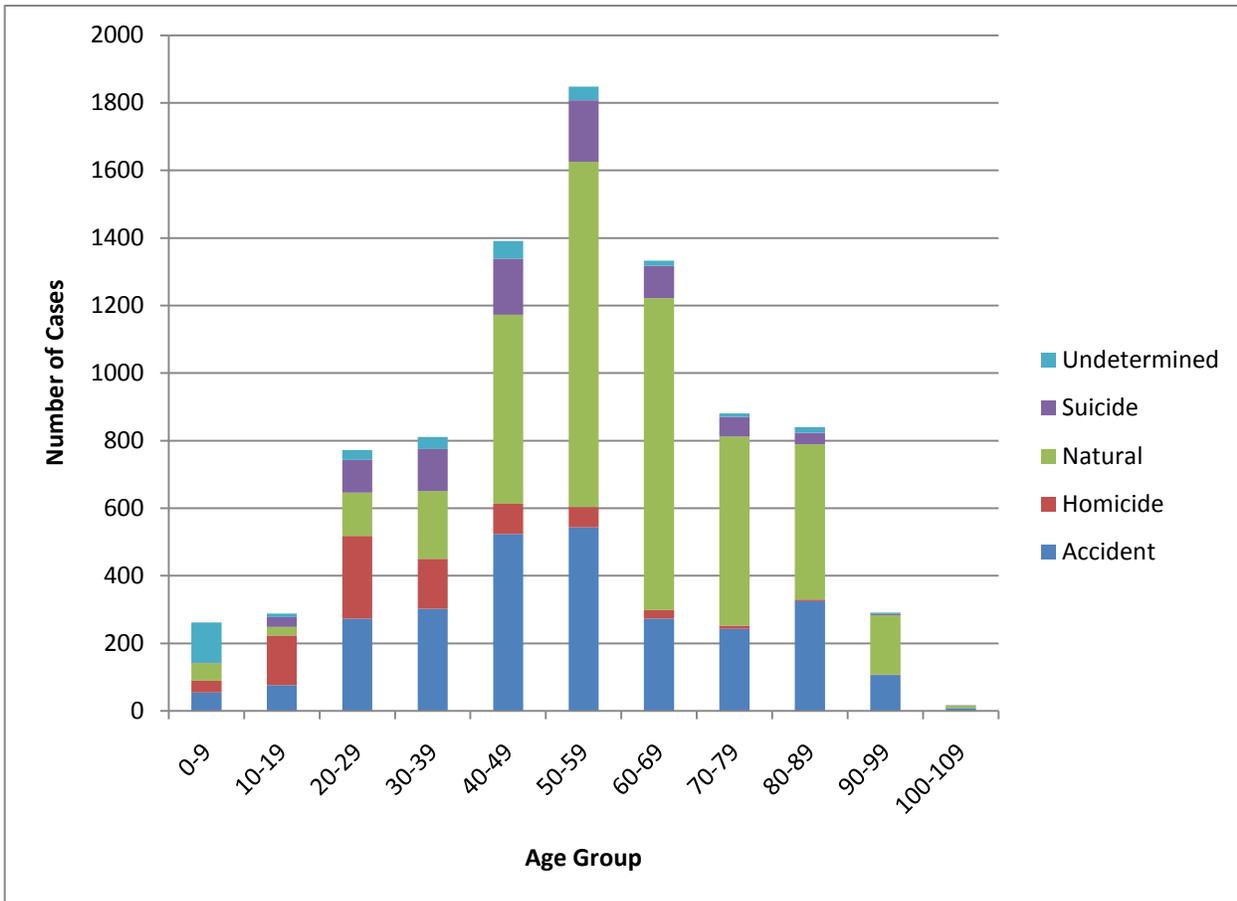


# Los Angeles County Department of Coroner Annual Report



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## Mode Distribution for Each Age Group, 2009



Mode Distribution for Each Age Group

<u>Age Group</u>	<u>Accident</u>	<u>Homicide</u>	<u>Natural</u>	<u>Suicide</u>	<u>Undetermined</u>
0-9	55	34	52	1	120
10-19	76	147	26	29	10
20-29	273	245	128	97	29
30-39	302	148	201	124	36
40-49	524	89	560	165	53
50-59	543	61	1022	181	41
60-69	273	26	923	96	15
70-79	243	9	560	58	11
80-89	325	5	459	34	17
90-99	106	1	176	5	3
100-109	8	0	8	1	0

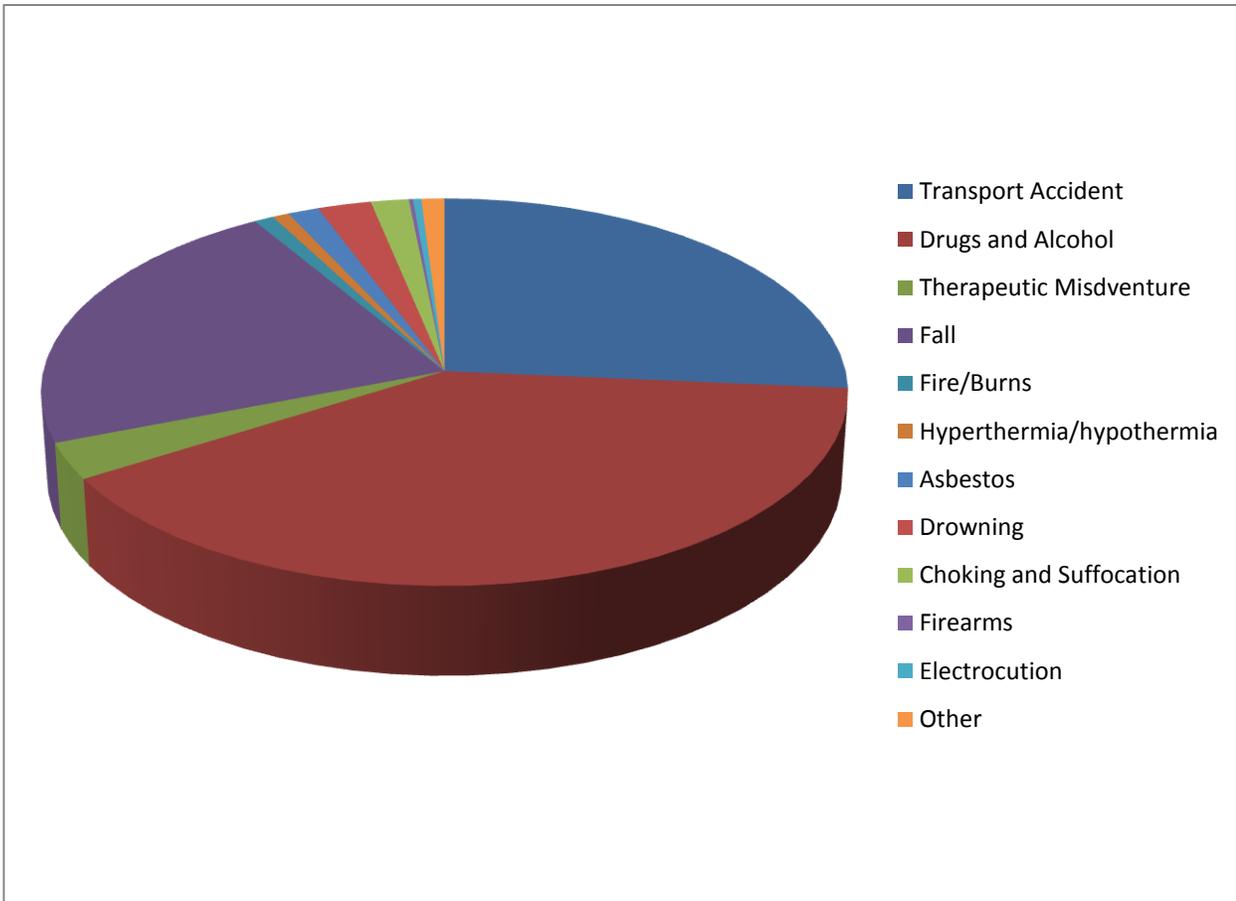


# Los Angeles County Department of Coroner Annual Report



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## Accidental Deaths, 2009



Accidental Deaths

<u>Type of Accident</u>	<u>Number of Cases</u>
Transport Accident	720
Drugs and Alcohol	1083
Therapeutic Misadventure	83
Fall	606
Fire/Burns	24
Hyperthermia/hypothermia	20
Asbestos	38
Drowning	65
Choking and Suffocation	46
Firearms	5
Electrocution	10
Other	28
<b>Total</b>	<b>2728</b>



# Los Angeles County Department of Coroner Annual Report



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## Transportation Accidents, 2009

<b>Pedestrians</b>	Collision with car, pick-up truck, or van	195
	Collision with pedal cycle or motorcycle	1
	Collision with heavy transport vehicle or bus	12
	Collision with railway train or railway vehicle	7
	Other and unspecified transport accidents	4
	<b>Total pedestrians</b>	<b>219</b>
<b>Pedal Cyclists</b>	Collision with motorcycle or pedal cycle	2
	Collision with car, pick-up truck, or van	27
	Fall from pedal cycle	5
	<b>Total pedal cyclists</b>	<b>42</b>
<b>Motorcycle Riders</b>	Collision with motorcycle	1
	Collision with car, pick-up truck, or van	56
	Collision with heavy transport vehicle or bus	5
	Collision with fixed or stationary objects	24
	Non-collision accident (fell or thrown)	6
	Other and unspecified transport accidents	1
	<b>Total motorcycle riders</b>	<b>93</b>
<b>Car Occupants</b>	Collision with car, pick-up truck, or van	139
	Collision with heavy transport vehicle or bus	9
	Collision with railway train or railway vehicle	2
	Collision with fixed or stationary objects	116
	Non-collision accident (fell or thrown)	54
	Other and unspecified transport accidents	2
	<b>Total car occupants</b>	<b>322</b>
<b>Other Transport Accidents</b>	Occupant of pick-up truck or van	12
	Occupant of heavy transport vehicle	9
	Occupant of bus	2
	Fall from horse	3
	Special Construction Vehicle	1
	Off-road vehicle	1
	Watercraft	2
	Aircraft	17
	Other and unspecified transport accidents	5
	<b>Total other transport accidents</b>	<b>80</b>
	<b>Total transport accidents</b>	<b>720</b>

Transportation Accidents



## Los Angeles County Department of Coroner Annual Report



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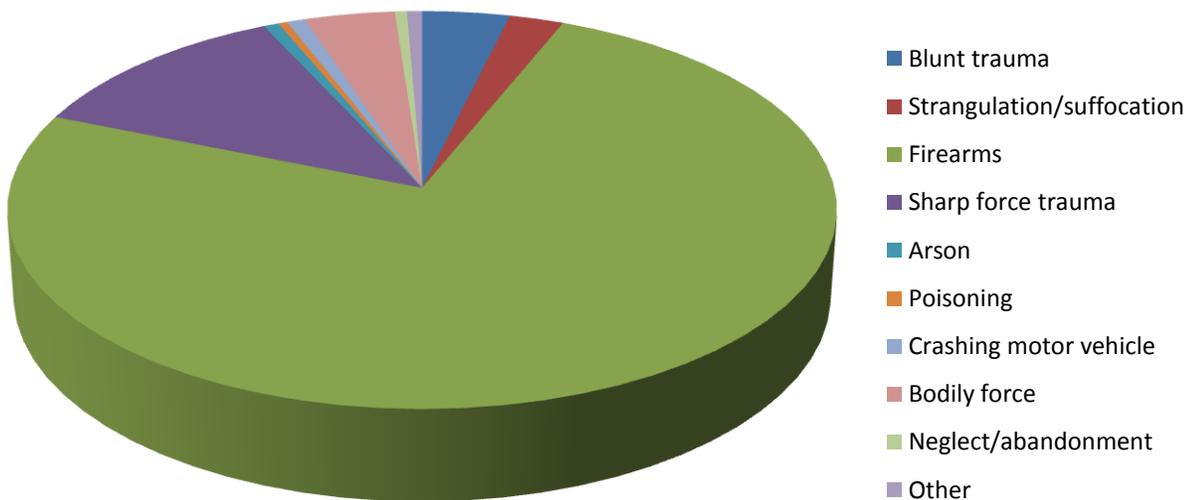
### Accidental Falls, 2009

Fall on same level from slipping, tripping and stumbling	458
Fall while being carried or supported by other persons	1
Fall involving wheelchair	8
Fall involving bed	24
Fall involving chair	12
Fall involving other furniture	1
Fall on or from stairs and steps	43
Fall on and from ladder	8
Fall from, out of or through building or structure	29
Fall from tree	4
Fall from cliff	2
Diving into water causing injury other than drowning	3
Other fall from one level to another	10
Other fall on same level	1
Other and unspecified falls	2
<b>Total Accidental Falls</b>	<b>606</b>

Accidental Falls



### Homicidal Deaths, 2009



Homicidal Deaths

<u>Method of Homicide</u>	<u>Number of cases</u>
Blunt trauma	29
Strangulation/suffocation	18
Firearms	572
Sharp force trauma	91
Arson	5
Poisoning	3
Crashing motor vehicle	6
Bodily force	30
Neglect/abandonment	4
Other	7
<b>Total homicides</b>	<b>765</b>

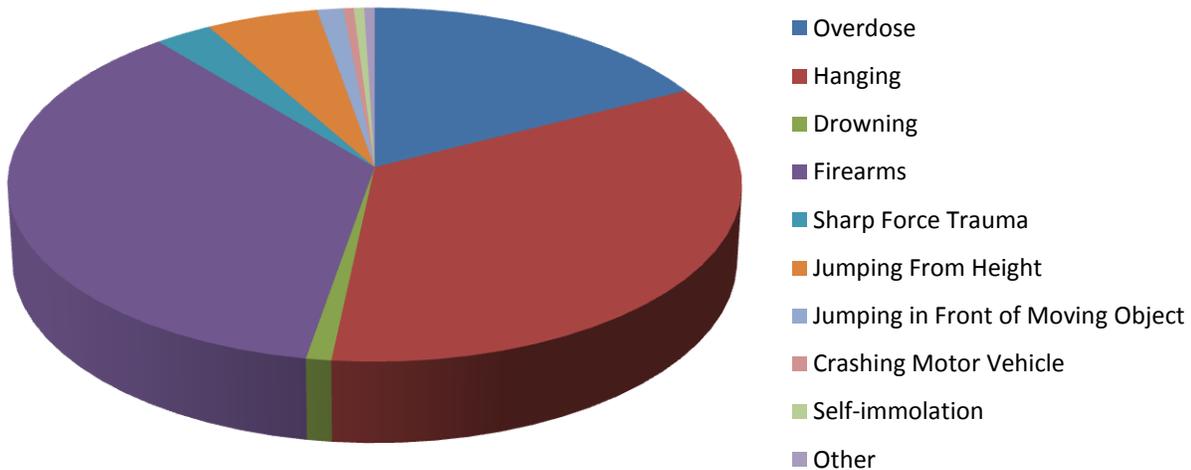


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## Suicidal Deaths, 2009



Suicidal Deaths

<u>Method of Suicide</u>	<u>Number of Cases</u>
Overdose	138
Hanging	271
Drowning	8
Firearms	287
Sharp Force Trauma	22
Jumping From Height	43
Jumping in Front of Moving Object	10
Crashing Motor Vehicle	4
Self-immolation	4
Other	4
<b>Total Suicides</b>	<b>791</b>

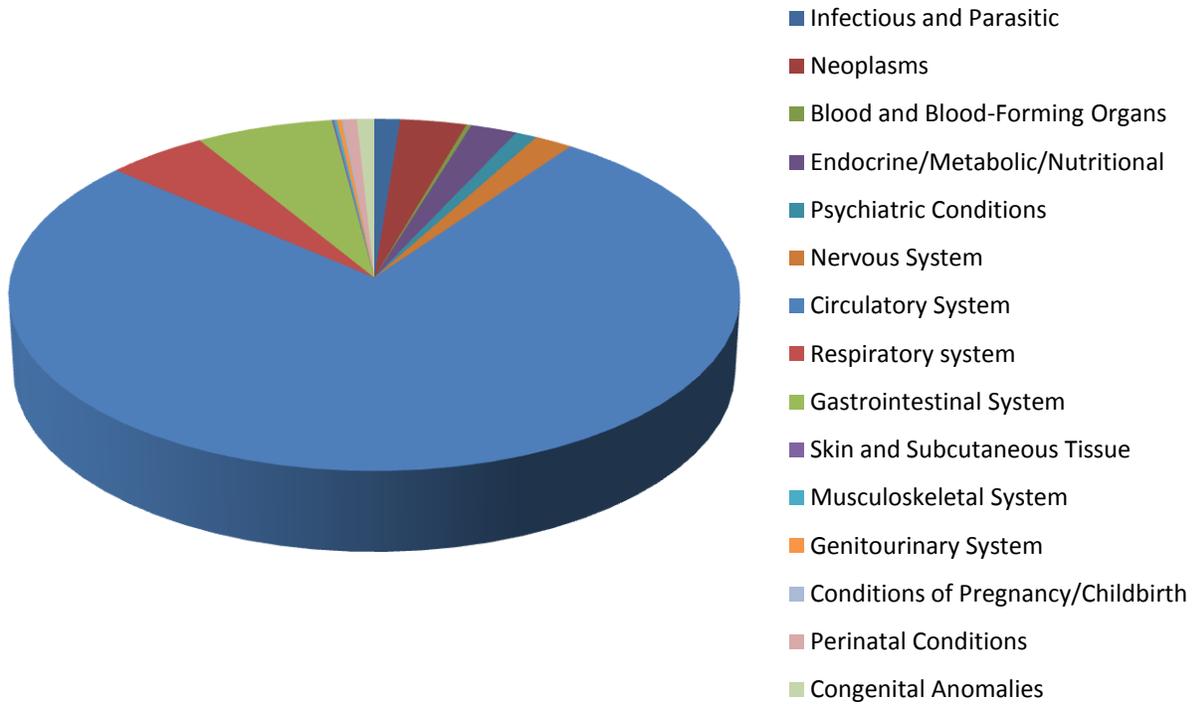


# Los Angeles County Department of Coroner Annual Report



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## Natural Deaths, 2009



Natural Deaths

<u>Category</u>	<u>Number of Cases</u>
Infectious and Parasitic	52
Neoplasms	134
Blood and Blood-Forming Organs	10
Endocrine/Metabolic/Nutritional	94
Psychiatric Conditions	44
Nervous System	77
Circulatory System	3176
Respiratory system	204
Gastrointestinal System	277
Skin and Subcutaneous Tissue	4
Musculoskeletal System	6
Genitourinary System	10
Conditions of Pregnancy/Childbirth	4
Perinatal Conditions	26
Congenital Anomalies	35
<b>Total Natural Deaths</b>	<b>4153</b>



**Los Angeles County  
Department of Coroner  
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**Circulatory System Disease among Natural Deaths, 2009**

<b><u>Condition</u></b>	<b><u>Number of Cases</u></b>
Aneurysms	
Cerebral	24
Aortic	35
Other arteries	4
Arteriosclerotic disease	2504
Cardiomyopathy	
Alcoholic	6
Dilated	30
Hypertrophic	127
Idiopathic	42
Right ventricular dysplasia	4
Cerebral hemorrhage/infarction	89
Endocarditis	6
Hypertensive disease	239
Myocarditis	5
Pericarditis	2
Pulmonary hypertension	1
Thrombosis/embolism	50
Valvular disease	
Aortic valve disease	1
Mitral valve disease	1
Conduction system disorders	3
Cardiac arrest/heart failure	3
<b>Total</b>	<b>3176</b>

**Circulatory System Disease among Natural Deaths**



**Los Angeles County  
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**Nervous System Disease among Natural Deaths, 2009**

<b><u>Cause of Death</u></b>	<b><u>Number of Cases</u></b>
Acute hemorrhagic leukoencephalitis	1
Alzheimer Disease	4
Amyotrophic lateral sclerosis	1
Cerebral/epidural abscess	1
Cerebral palsy	6
Encephalitis	1
Epilepsy	44
Meningitis	7
Multiple sclerosis	3
Muscular dystrophy	3
Parkinson Disease	4
Polyneuropathy	1
Sleep apnea	1
<b>Total</b>	<b>77</b>

**Nervous System Disease among Natural Deaths**



# Los Angeles County Department of Coroner Annual Report



2009

## Infectious Diseases among Natural Deaths, 2009

<u>Cause of Death</u>	<u>Number of Cases</u>
Bacterial infections:	
<i>Clostridium difficile</i>	1
<i>Escherichia coli</i>	1
<i>Mycobacterium tuberculosis</i>	1
<i>Neisseria meningitides</i>	2
<i>Streptococcus</i>	9
<i>Staphylococcus</i>	3
Scarlet Fever	1
<i>Pseudomonas</i>	1
Unspecified bacteria	1
Viral infections:	
Herpes zoster	1
Hepatitis B	1
Hepatitis C	8
Human immunodeficiency virus	19
Fungal infections:	
<i>Cryptococcus</i>	1
Other infections:	
Cysticercosis	1
Syphilis	1
<b>Total</b>	<b>52</b>

Infectious Disease among Natural Deaths



## Los Angeles County Department of Coroner Annual Report



2009

### Neoplasms among Natural Deaths, 2009

<u>Primary Site</u>	<u>Number of Cases</u>
Adrenal	1
Bladder	2
Brain	5
Breast	6
Cervix	2
Colon	9
Esophagus	4
Hemangioma	1
Kidney	3
Leukemia	5
Liver	11
Lung	23
Lymphoma	3
Mediastinum	1
Meninges	4
Mesothelioma	11
Myeloma	1
Oropharynx	2
Ovary	1
Pancreas	6
Prostate	3
Rectum	2
Refractory anemia with excess blasts	1
Small intestine	1
Soft tissue	1
Stomach	3
Thyroid	1
Thymus	2
Tongue	1
Uterus	7
Metastatic/unknown primary site	11
<b>Total</b>	<b>134</b>

Neoplasms among Natural Deaths



**Los Angeles County  
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**Los Angeles County  
Toxicology Statistics**

**Toxicology Statistics**



# Los Angeles County Department of Coroner Annual Report



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Table of Contents for Toxicology Statistics

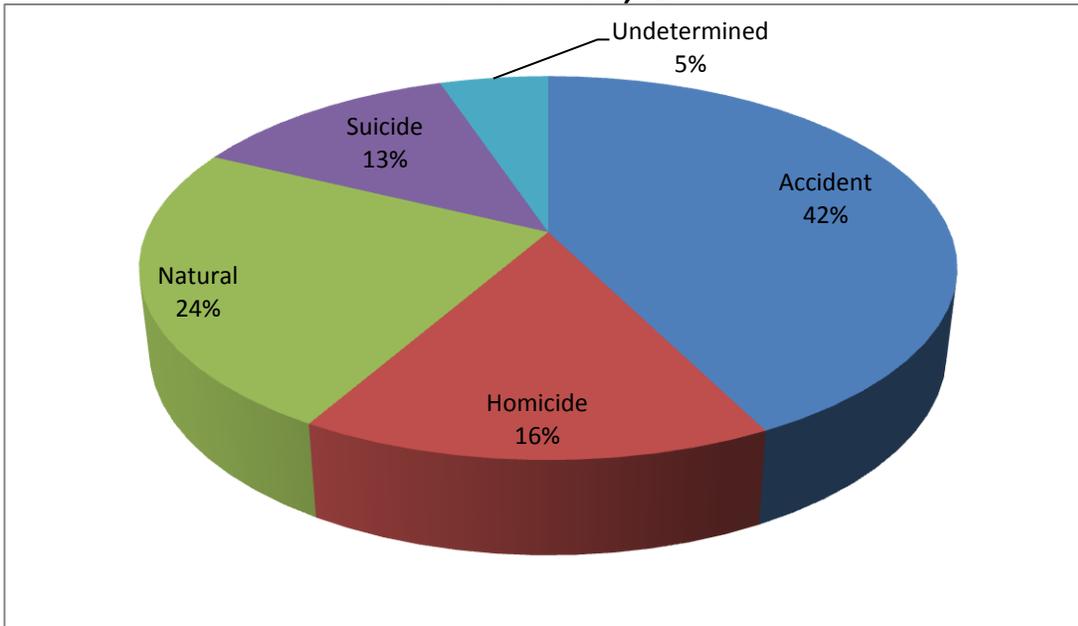


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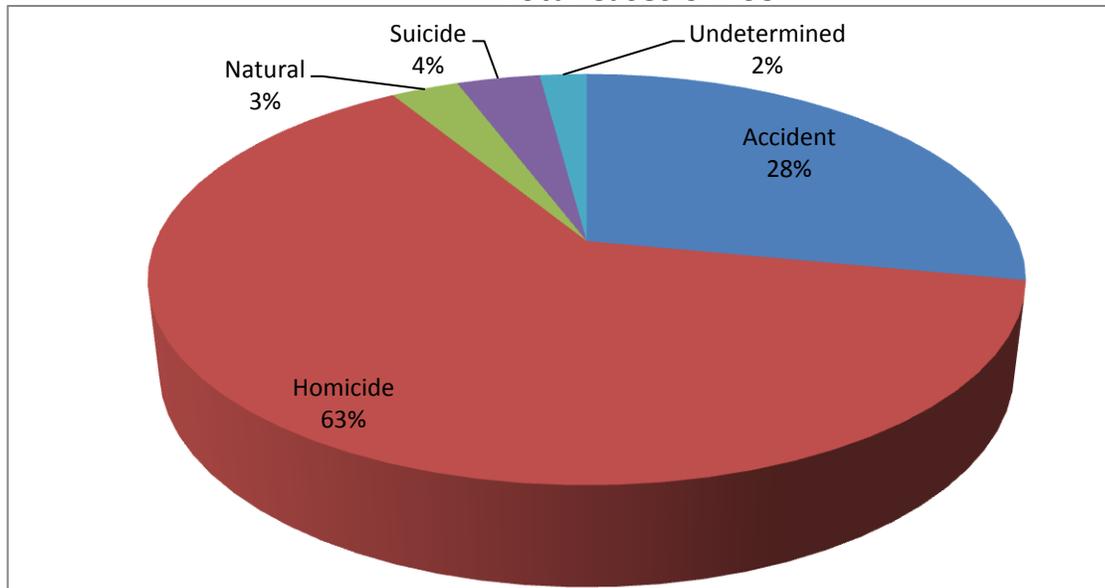
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## 2009 Number of Cases with Drugs Detected by Mode Total Cases of 3,329



Accident - 1417    Homicide - 524    Natural - 796    Suicide - 421    Undetermined - 171

## 2009 Marijuana Detected by Mode Total Cases of 435



Accident - 122    Homicide - 275    Natural - 13    Suicide - 16    Undetermined - 9

Toxicology Statistics

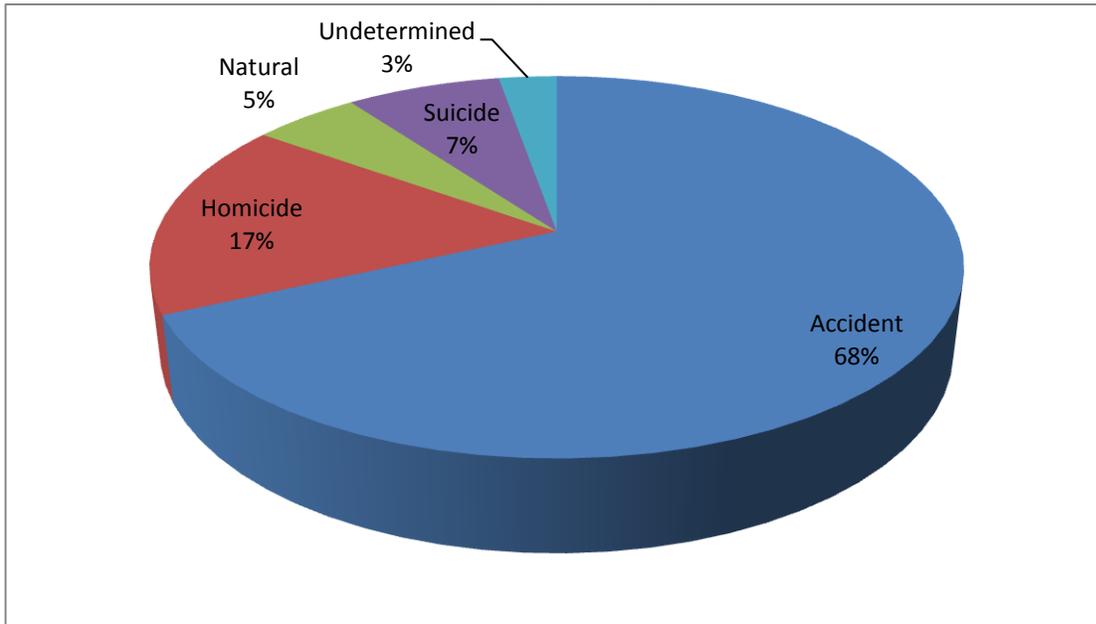


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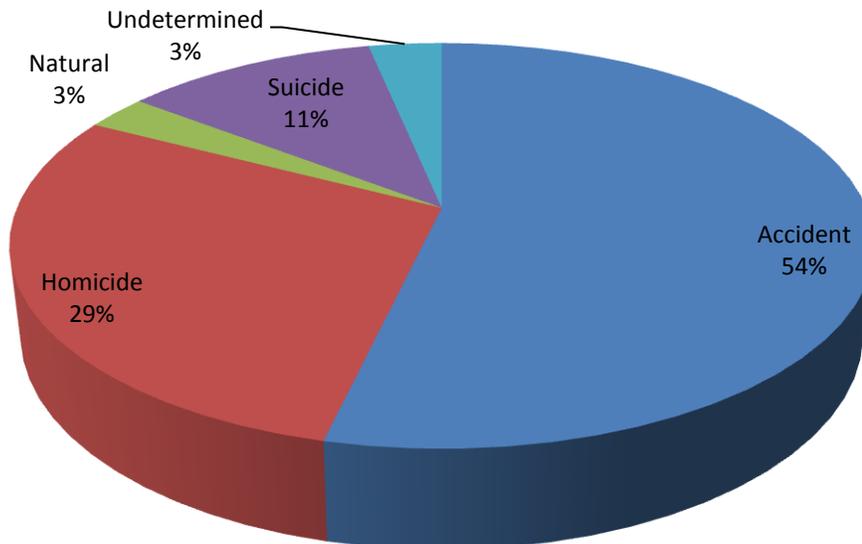
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## 2009 Cocaine (Benzoylcegonine) Detected by Mode Total Cases of 436



Accident – 297 Homicide – 73 Natural – 22 Suicide – 32 Undetermined - 12

## 2009 Methamphetamine Detected by Mode Total Cases of 397



Accident – 213 Homicide – 115 Natural – 11 Suicide – 45 Undetermined - 13

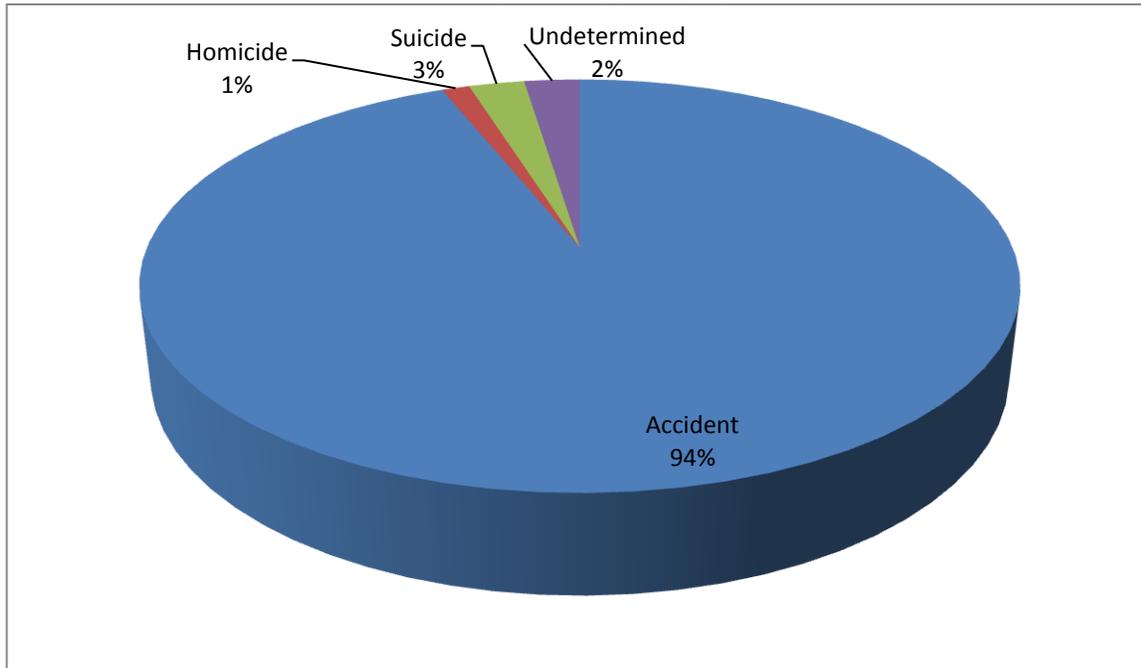


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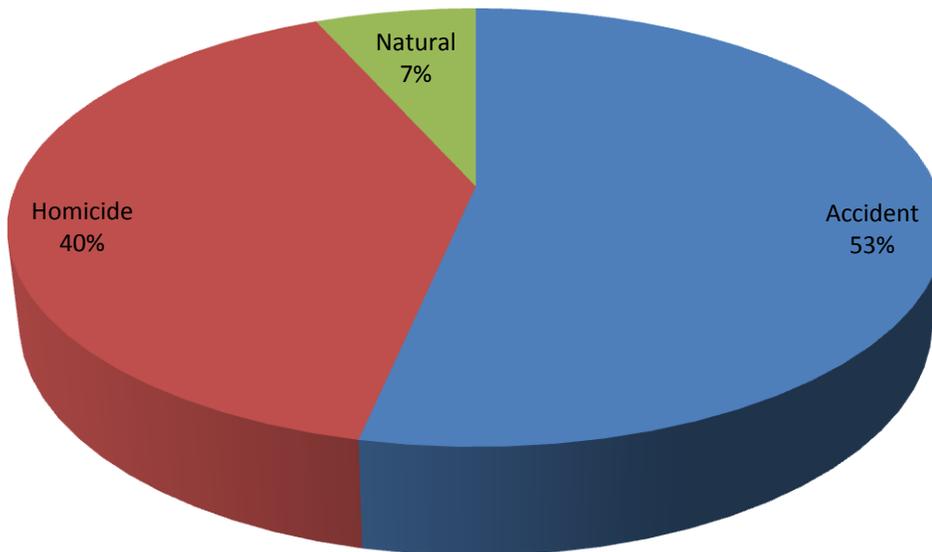
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## 2009 Heroin (6-monoacetyl morphine) Detected by Mode Total Cases of 246



Accident – 231 Homicide – 3 Suicide – 6 Undetermined - 6

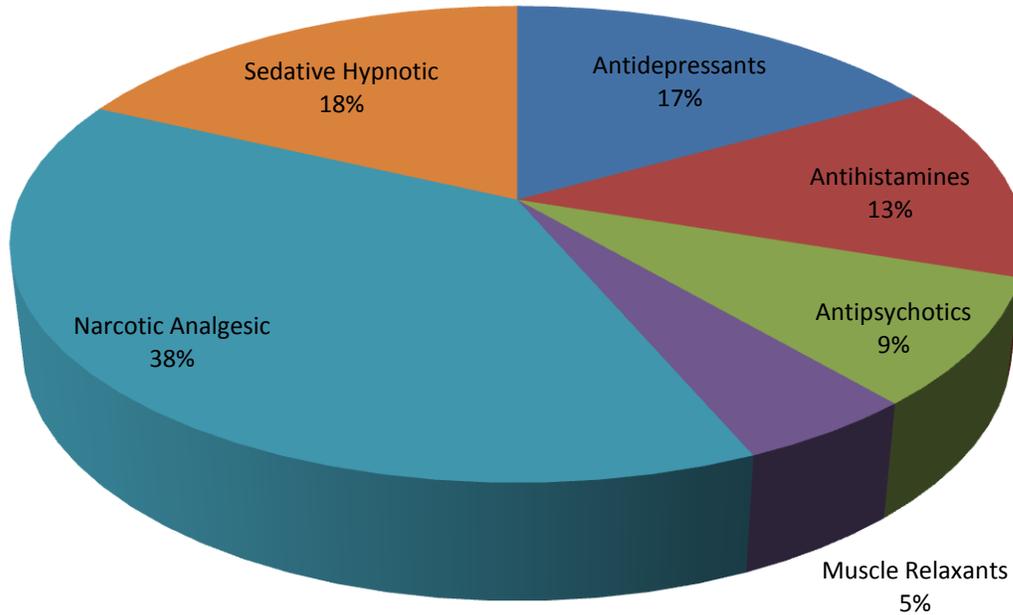
## 2009 Phencyclidine Detected by Mode Total Cases of 30



Accident – 16 Homicide – 12 Natural – 2



2009 Drugs by Classification  
Total Cases of 2622



Antidepressants – 442 Antihistamines – 349 Antipsychotics – 225  
Muscle Relaxants – 127 Narcotic Analgesic – 1007 Sedative Hypnotic - 472

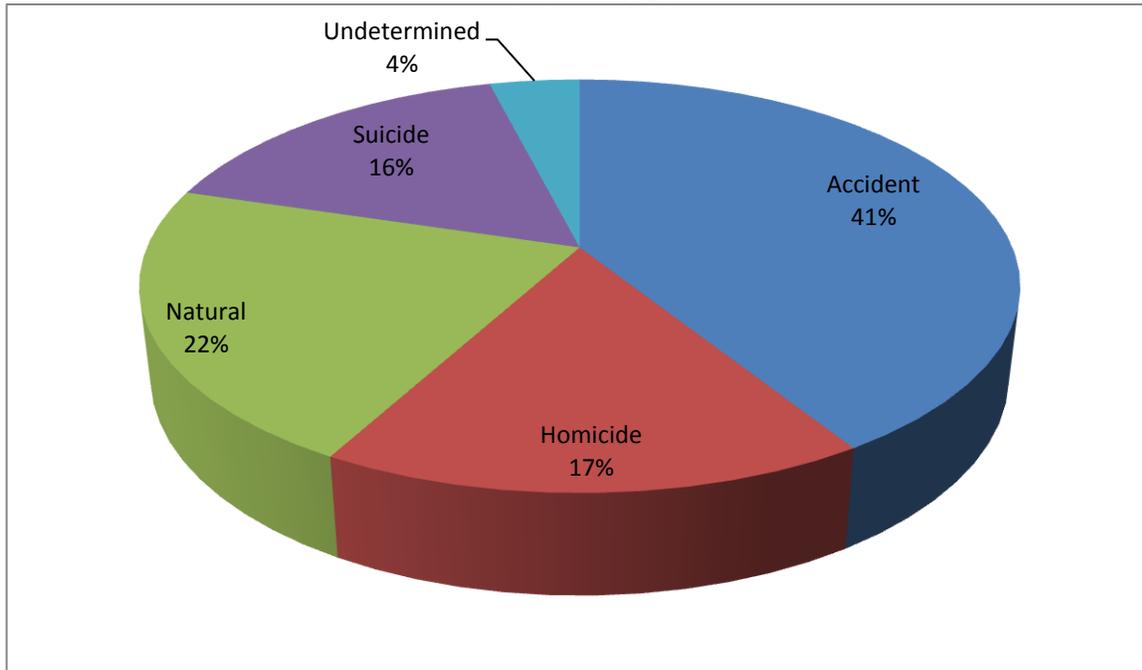


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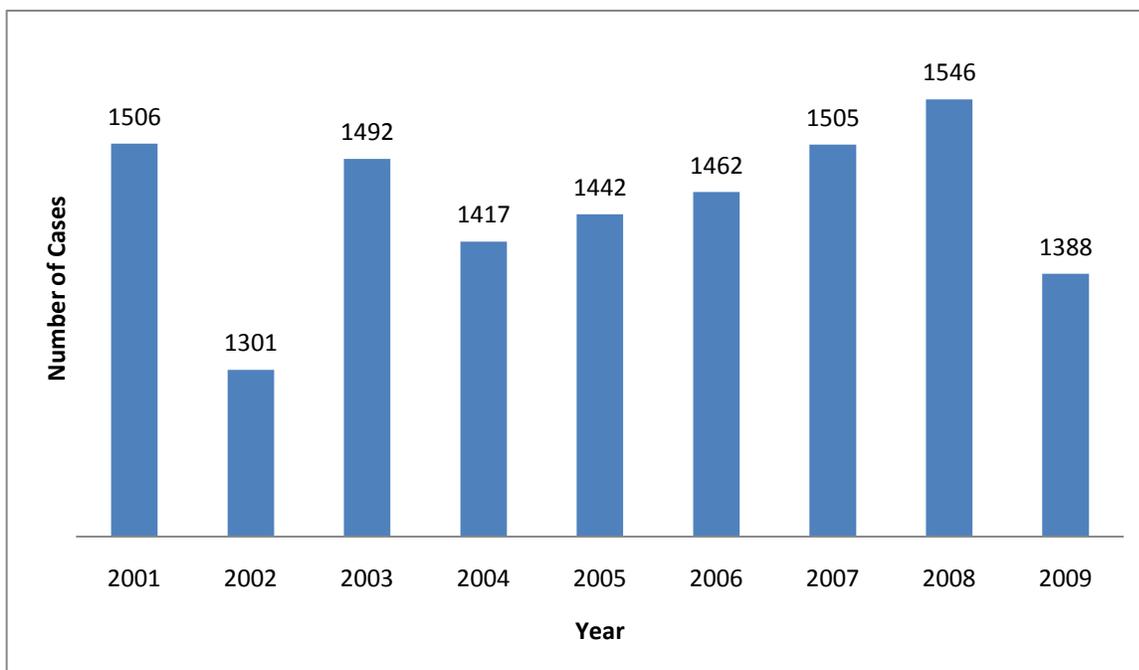
2009

## 2009 Alcohol Detected by Mode Total Cases of 1388



Accident – 570 Homicide – 235 Natural – 301 Suicide – 227 Undetermined – 55

## 2001-2009 Alcohol Detected by Year





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