

# Los Angeles County CORONER



2012



**Annual Report** 







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.





# **TABLE OF CONTENTS**

Department Head's Message	4
Administrative Services Bureau	7
Forensic Medicine Bureau	9
Forensic Laboratories Bureau	11
Operations Bureau	13
Public Services Division	
Death Statistics Table of Contents	20
Population of Los Angeles County	
Reported and Accepted Cases	22
Final Manner of Coroner's Cases	
Death Rates per 100,000 Population	24
Manners for Child Deaths	
Statistics Required by NAME	26
Coroner's Cases by Age	
Coroner's Cases by Gender	
Coroner's Cases by Race	29
Manner of Death by Month	30
Racial Distribution for Each Manner	31
Manner Distribution for Each Age Group	32
Accidental Deaths	33
Transportation Accidents	34
Accidental Falls	35
Homicidal Deaths	36
Suicidal Deaths	37
Natural Deaths	38
Circulatory System Disease among Natural Deaths	39
Nervous System Disease among Natural Deaths	40
Infectious Diseases among Natural Deaths	41
Neoplasms among Natural Deaths	
Toxicology Statistics Table of Contents	44
Cases with Drugs Detected by Manner	45
Alcohol Detected by Manner	45
Marijuana Detected by Manner	46
Cocaine Detected by Manner	46
Methamphetamine Detected by Manner	47
Heroin Detected by Manner	47
Phencyclidine Detected by Manner	
Licit Drugs by Classification	
Drugs by Classification	50





### **DEPARTMENT HEAD'S MESSAGE**

This report contains statistical information from the Los Angeles County Department of Coroner for the year 2012, as well as selected statistics from the previous ten years.

### **Significant Events**

During the year the Department had the following significant accomplishments:

- Construction of the new refrigerated crypt was completed
- Anthony T. Hernandez, Director, retired. Dr. Lakshmanan Sathyavagiswaran was appointed as Interim Director.
- The Department received five-year accreditation from the Accreditation Council for Graduate Medical Education.
- The Department received four-year accreditation of the Continuing Medical Education Program from Institute of Medical Quality/California Medical Association.
- Accreditation by the National Association of Medical Examiners was continued.
- A bar coded labeling system was implemented for laboratory specimens.

### Legislation

People v Dungo (55 Cal 4<sup>th</sup> 608), People v Rutterschmidt (55 Cal 4<sup>th</sup> 650), and People v Lopez (55 Cal 4<sup>th</sup> 569)—California Supreme Court cases clarifying the defendant's right to confront and cross-examine witnesses.

### **Presentations**

Poukens V, Sathyavagiswaran L, Sudden cardiac death in a young male with history of tako-tsubo (stress) cardiomyopathy: a case report. Presented at the annual meeting of the American Academy of Forensic Sciences, Atlanta, Georgia, February 2012.

Sathyavagiswaran L, Rogers C, Winter E, High-profile cases: the Los Angeles experience. Presented at the annual meeting of the American Academy of Forensic Sciences, Atlanta, Georgia, February 2012.

Sathyavagiswaran L, Rogers C, Medical Problems and Medical Neglect in the Elderly. Presented at the annual meeting of the American Academy of Forensic Sciences, Atlanta, Georgia, February 2012

Scheinin L, Sathyavagiswaran L, Confined space asphyxia: an unrecognized hazard in a plasma fractionation tank. Presented at the annual meeting of the American Academy of Forensic Sciences, Atlanta, Georgia, February 2012





### **Presentations**

Sathyavagiswaran L, Pediatrics—the Coroner's perspective. Presented at USC Keck School of Medicine Pathology & Laboratory Medicine Grant Rounds, Los Angeles, California, February 2012.

Sathyavagiswaran L, Medicolegal investigation of deaths and high-profile cases in Los Angeles County. Presented at Saudi International Conference of Forensic Sciences, Riyadh, Saudi Arabia, March 2012.

Sathyavagiswaran L, Osler Institute for United States residents—forensic pathology board review. Long Beach, California, March 2012.

Sathyavagiswaran L, Deaths at sea. Presented at USC Keck School of Medicine Pathology & Laboratory Medicine Grand Rounds, Los Angeles, California, March 2012.

Sathyavagiswaran L, Pediatric and adult medico-legal death investigation in Los Angeles County. Presented at California Association for Medical Laboratory Technology, Duarte, California, March 2012.

Sathyavagiswaran L, Role of the medical examiner in los Angeles County, California—from medical mysteries to celebrity cases. Presented at Infectious Disease Association of California, Huntington Beach, California, April 2012.

Sathyavagiswaran L, Forensic toxicology, blunt force/sharp force trauma, and Simpson case revisited, Basic Coroner's Academy, Santa Ana California, April 2012

Sathyavagiswaran L, Deaths at sea. Presented at the USC Trauma Emergency Surgery and Surgical Ciritical Care Symposium, San Marino, California, May 2012.

Calmes S, Rogers C. What goes on at the LA County Coroner's Office? Presented at the California Society of Anesthesiologists House of Delegates meeting, Los Angeles, California, May 2012.

Sathyavagiswaran L. Medical Legal Death Investigation—High Profile Cases, Presented at the Primeiro Congresso Paulista de Medicina Legal e Perícias Médicas, São Paulo, Brazil, June 2012.

Sathyavagiswaran L, Elder abuse and neglect death investigations. Presented at the CHA-Hollywood Presbyterian Medical Center Annual Geriatric Medicine Conference, Los Angeles, California, August 2012.

Calmes SH, Sathyavagiswaran L, Rogers C, Anderson D, Shafer S. Forensic medicine and anesthesiology: the Michael Jackson case. Presented at the annual meeting of the American Society of Anesthesiologists, Washington DC, October 2012.





Calmes S, Sathyavagiswaran L, Rogers C. Anesthesia-related deaths in Los Angeles County, 2009-2011. Poster presented at American Society of Anesthesiologists Annual Meeting, Washington DC, October 2012.

Calmes S, Augustine J. Are State Regulations for Liposuction Preventing Deaths? The Case of Los Angeles County. Presented at the American Society of Anesthesiologists Annual Meeting, Washington DC, October 2012.

Sandberg M, Sathyavagiswaran L, Cold Case Evidence - From Collection to the Courtroom. Presented at the annual meeting of the National Association of Medical Examiners, Baltimore MD, October 2012.

### **Publications**

Willoughby V, Heger A, Rogers C, Sathyavagiswaran L. Sexual assault documentation program. Am J Forensic Med Pathol 2012 Mar;33(1):22-5.

Marinovich AM, Rogers C, Sathyavagiswaran L. Deaths at sea: Los Angeles, 2000-2011. Acad Forensic Pathol 2012;2(3):294-9.

Lakshmanan Sathyavagiswaran, M.D. Chief Medical Examiner-Coroner/Interim Director





### **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 collection, regional offices, satellite hospitals, histopathology, medical transcription, neuropathology and physician services. The staff monitors and studies Department operations in the continuing evaluation of the appropriateness of contracting for other functions.





### **MORTUARY BILLING PROGRAM**

The Department bills the decedent's next of kin for transportation and handling costs associated with the decedent. This fee is collected pursuant to Section 27472 of the Government Code.

### 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).•



Theodore Curphey, M.D. Chief Medical Examiner-Coroner 1957-1967





### **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.•



Thomas T. Noguchi, M.D.
Chief Medical Examiner-Coroner 1967-1982





### **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 tool 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. 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.•



Ronald N. Kornblum, M.D. Chief Medical Examiner-Coroner 1982-1990





### **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.•







Detectives assist in recovering murder victim, 1951



Refrigerated Storage Area, Hall of Justice





### **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. •



Lakshmanan Sathyavagiswaran, M.D. Chief Medical Examiner-Coroner 1992-present

# **Los Angeles County**

# **Death Statistics**





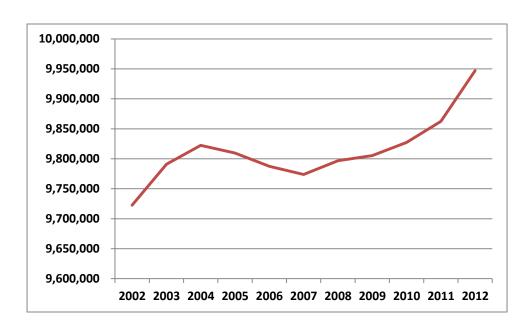
# **Death Statistics Table of Contents**

Population of Los Angeles County	21
Reported and Accepted Cases	22
Final Manner of Coroner's Cases	23
Death Rates per 100,000 Population	24
Manners for Child Death	25
Statistics Required by NAME	26
Coroner's Cases by Age	27
Coroner's Cases by Gender	28
Coroner's Cases by Race	29
Manner of Death by Month	30
Racial Distribution for Each Manner	31
Manner Distribution for Each Age Group	32
Accidental Deaths	33
Transport Accidents	34
Accidental Falls	35
Homicidal Deaths	36
Suicidal Deaths	
Natural Deaths	38
Circulatory System Disease among Natural Deaths	39
Nervous System Disease among Natural Deaths	40
Infectious Diseases among Natural Deaths	41
Neoplasms among Natural Deaths	42





# Population of Los Angeles County, 2002-2012

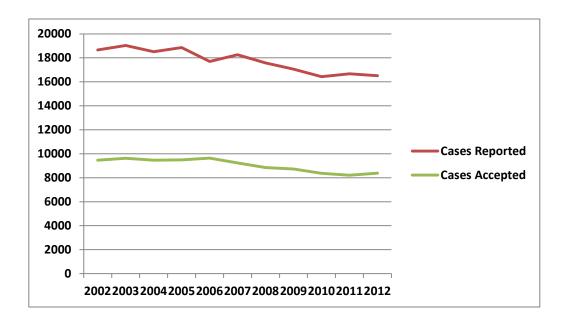


<u>Year</u>	<u>Population</u>
2002	9,722,444
2003	9,791,022
2004	9,822,508
2005	9,809,557
2006	9,787,327
2007	9,773,894
2008	9,796,812
2009	9,805,233
2010	9,827,070
2011	9,862,431
2012	9,946,947





# Number of Reported and Accepted Cases per Year, 2002-2012

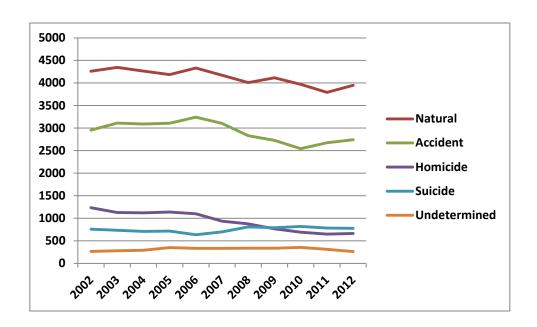


<u>Year</u>	Cases Reported	Cases Accepted
2002	18665	9470
2003	19039	9620
2004	18509	9465
2005	18854	9494
2006	17704	9637
2007	18254	9237
2008	17572	8854
2009	17053	8734
2010	16434	8371
2011	16668	8207
2012	16508	8397





# Final Manner of Coroner's Cases, 2002-2012

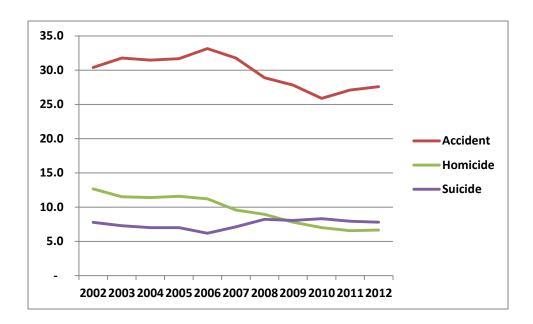


<u>Year</u>	<u>Natural</u>	<u>Accident</u>	<u>Homicide</u>	<u>Suicide</u>	<u>Undetermined</u>
2002	4261	2955	1232	757	265
2003	4344	3110	1127	732	279
2004	4265	3090	1121	709	289
2005	4186	3106	1137	716	349
2006	4330	3243	1098	635	331
2007	4170	3104	936	696	331
2008	4007	2830	876	807	334
2009	4115	2728	765	791	335
2010	3968	2544	689	818	352
2011	3793	2673	647	784	310
2012	3954	2743	662	776	262





# Death Rates per 100,000 Population, 2002-2012

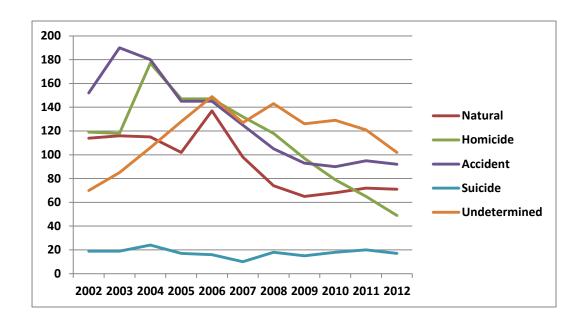


<u>Year</u>	<u>Accident</u>	<u>Homicide</u>	<u>Suicide</u>
2002	30.4	12.7	7.8
2003	31.8	11.5	7.3
2004	31.5	11.4	7.0
2005	31.7	11.6	7.0
2006	33.1	11.2	6.2
2007	31.8	9.6	7.1
2008	28.9	8.9	8.2
2009	27.8	7.8	8.1
2010	25.9	7.0	8.3
2011	27.1	6.6	7.9
2012	27.6	6.7	7.8





# Manner for Child Deaths (Ages under 18), 2002-2012



<u>Year</u>	<u>Natural</u>	<u>Homicide</u>	<u>Accident</u>	<u>Suicide</u>	<u>Undetermined</u>
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
2012	71	49	92	17	102





## Statistics Required by National Association of Medical Examiners, 2012

Number of deaths reported: 16508

Number of cases accepted: 8397

Number of cases by manner of death:

Accident: 2743

Homicide: 662

Natural: 3954

Suicide: 776

Undetermined: 262

Scene visits: 3449

Number of bodies transported: 6060

External examinations:

By physician: 2212

By investigator: 2277

Partial autopsies: 230

Complete autopsies: 3678

Hospital autopsies under ME jurisdiction: 0

Cases where toxicology was performed: 4248

Bodies unidentified after examination: 11

Organ and tissue donations:

Total organ donors: 129

Total tissue donors: 642

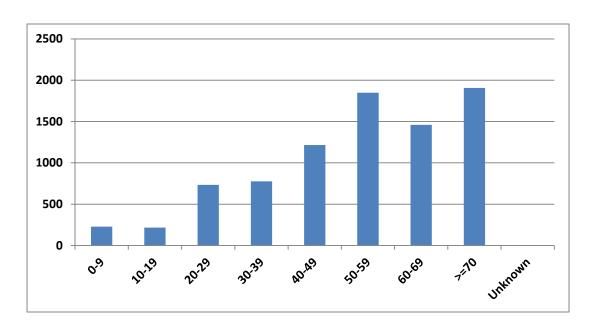
Unclaimed bodies: 500

Exhumations: 0





# Number of Coroner's Cases by Age, 2012

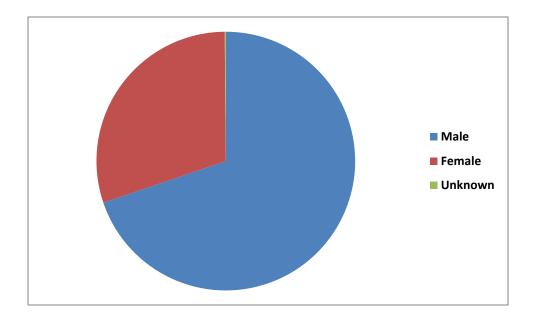


<u>Age</u>	Number of Cases
0-9	228
10-19	217
20-29	734
30-39	777
40-49	1216
50-59	1850
60-69	1460
>=70	1909
Unknown	6





# Coroner's Cases by Gender, 2012

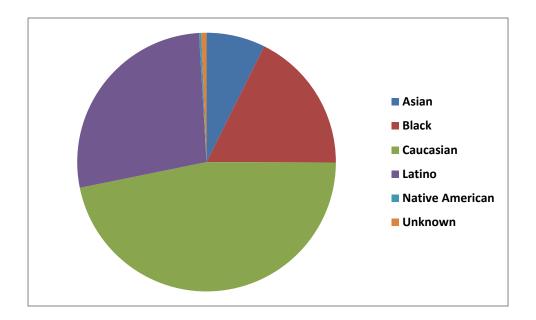


<u>Gender</u>	<b>Number of Cases</b>
Male	5858
Female	2528
Unknown	11





# Coroner's Cases by Race, 2012

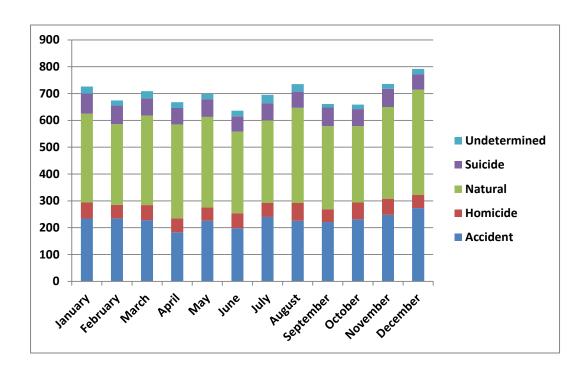


<u>Race</u>	Number of Cases
Asian	617
Black	1487
Caucasian	3927
Latino	2288
Native American	23
Unknown	55





# Manner of Death by Month, 2012

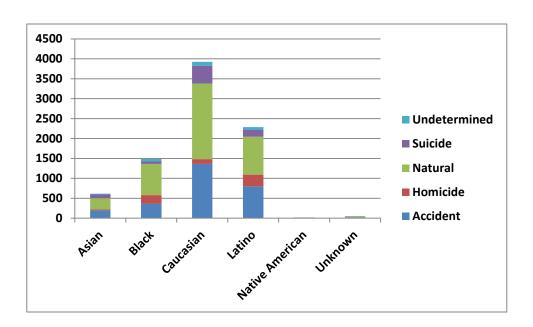


<u>Month</u>	<u>Accident</u>	<u>Homicide</u>	<u>Natural</u>	<u>Suicide</u>	<u>Undetermined</u>
January	234	60	333	75	26
February	235	50	302	69	19
March	228	56	334	64	27
April	183	52	350	61	22
May	226	50	338	66	20
June	198	56	304	57	21
July	240	52	310	64	31
August	226	66	355	60	28
September	221	48	309	70	13
October	231	63	284	64	17
November	248	60	342	68	18
December	273	49	393	58	20





# **Racial Distribution for Each Manner, 2012**

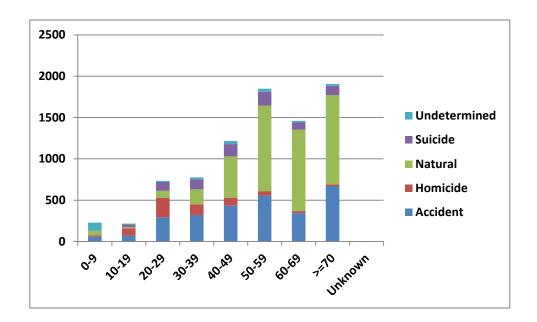


	<u>Accident</u>	<u>Homicide</u>	<u>Natural</u>	<u>Suicide</u>	<u>Undetermined</u>
Asian	197	23	285	92	20
Black	365	214	786	58	64
Caucasian	1361	122	1900	449	95
Latino	799	296	951	168	74
Native American	9	1	13	0	0
Unknown	12	6	19	9	9





# Manner Distribution for Each Age Group, 2012

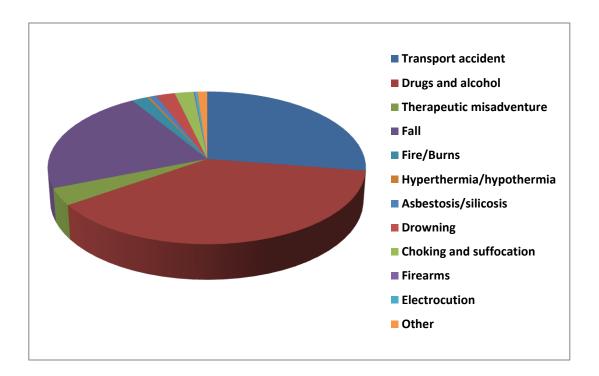


	<u>0-9</u>	<u>10-19</u>	<u>20-29</u>	<u>30-39</u>	<u>40-49</u>	<u>50-59</u>	<u>60-69</u>	<u>&gt;=70</u>	<u>Unknown</u>
Accident	57	72	292	321	433	555	342	671	0
Homicide	18	84	235	128	98	55	26	17	1
Natural	57	19	86	182	500	1037	985	1087	1
Suicide	0	33	106	123	148	166	88	112	0
Undetermined	96	9	15	23	37	37	19	22	4





# **Accidental Deaths, 2012**



Transport accident	753
Drugs and alcohol	1038
Therapeutic misadventure	100
Fall	613
Fire/Burns	50
Hyperthermia/hypothermia	8
Asbestosis/silicosis	21
Drowning	59
Choking and suffocation	59
Firearms	3
Electrocution	9
Other	30
Total	2743





# **Transportation Accidents 2012**

Pedestrians	Collision with car, pick-up truck or van	206	
	Collision with pedal cycle or motorcycle	3	
	Collision with heavy transport vehicle or bus	11	
	Collision with railway train or railway vehicle	14	
	Other and unspecified transport accidents	10	
	Total pedestrians	l	244
Pedal Cyclists	Collision with motorcycle	1	
The second of th	Collision with car, pick-up truck or van	19	
	Collision with heavy transport vehicle or bus	4	
	Fall from pedal cycle	10	
	Collision with fixed object	4	
	Other and unspecified transport accidents	2	
	Total pedal cyclists		40
	Total podal dyonoto		
Motorcycle Riders	Collision with motorcycle	1	
	Collision with car, pick-up truck or van	75	
	Collision with heavy transport vehicle or bus	4	
	Collision with fixed or stationary objects	23	
	Non-collision accident (fell or thrown)	17	
	Other and unspecified transport accidents	4	
	Total motorcycle riders		124
	Total motorcycle nuers		127
Car Occupants	Collision with horse	1	
Car Goodparke	Collision with car, pick-up truck or van	116	
	Collision with heavy transport vehicle or bus	9	
	Collision with railway train or railway vehicle	2	
	Collision with fixed or stationary objects	130	
	Non-collision accident (fell or thrown)	34	
	Other and unspecified transport accidents	3	
	Total car occupants		295
	Total car cocapanie		
Other Transport Accidents	Occupant of pick-up truck or van	12	
Carlor Transport / teolacine	Occupant of heavy transport vehicle	7	
	Occupant of bus	2	
	Off-road vehicle	3	
	Farm vehicle	1	
	Fall from horse	1	
	Water craft	1	
	Aircraft	1	
	Other and unspecified transport accidents	22	
	Total other transport accidents		50
	ו סומו טווופו וומווסףטוו מכטועפוווס		30
	Total transport accidents	<u> </u>	753





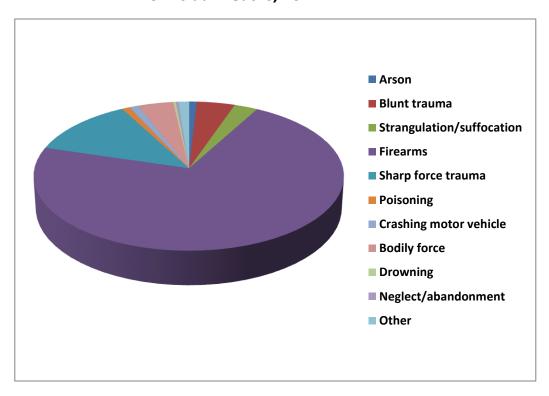
# Accidental Falls, 2012

Fall on same level from slipping, tripping and stumbling	474
Fall involving skateboard	1
Fall while being carried or supported by other persons	1
Fall involving wheelchair	13
Fall involving bed	23
Fall involving chair	3
Fall involving other furniture	1
Fall on or from stairs and steps	38
Fall on or from ladder	13
Fall from scaffolding	2
Fall from, out of or through building or structure	19
Fall from tree	3
Fall from cliff	6
Diving into water causing injury other than drowning	3
Other fall from one level to another	11
Other and unspecified falls	2
Total accidental falls	613





# Homicidal Deaths, 2012

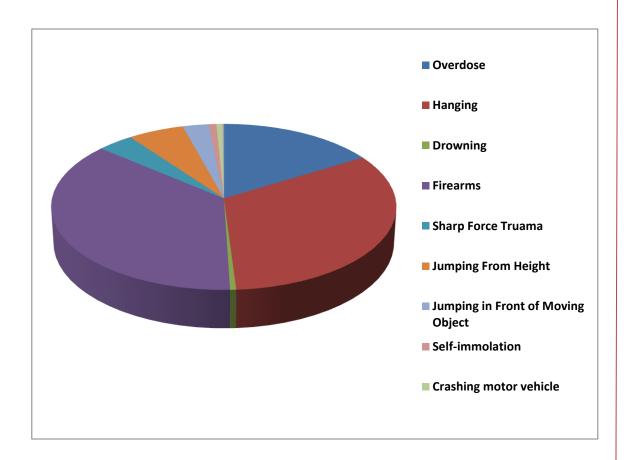


Arson	6
Blunt trauma	29
Strangulation/suffocation	18
Firearms	474
Sharp force trauma	83
Poisoning	6
Crashing motor vehicle	7
Bodily force	27
Drowning	2
Neglect/abandonment	2
Other	8
Total homicides	662





## Suicidal Deaths, 2012

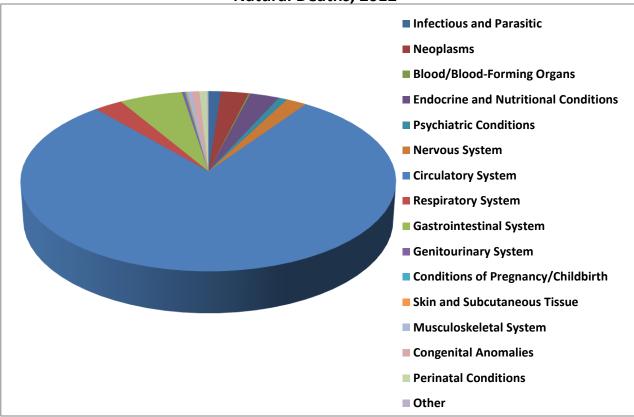


Overdose	126
Hanging	254
Drowning	4
Firearms	285
Sharp Force Trauma	29
Jumping From Height	45
Jumping in Front of Moving Object	21
Self-immolation	6
Crashing motor vehicle	5
Electrocution	1
Total suicides	776





#### Natural Deaths, 2012



Infectious and Parasitic	47
Neoplasms	105
Blood/Blood-Forming Organs	6
<b>Endocrine and Nutritional Conditions</b>	112
Psychiatric Conditions	33
Nervous System	79
Circulatory System	3116
Respiratory System	114
Gastrointestinal System	240
Genitourinary System	11
Conditions of Pregnancy/Childbirth	5
Skin and Subcutaneous Tissue	5
Musculoskeletal System	16
Congenital Anomalies	30
Perinatal Conditions	30
Other	5
Total	3954





## **Circulatory System Disease among Natural Deaths, 2012**

Aneurysms	Cerebral	24
	Aortic	42
	Other	2
Arteriosclerotic disease		2370
Cardiomyopathy	Alcoholic	8
	Dilated	17
	Hypertrophic	123
	Idiopathic	52
	Right ventricular dysplasia	6
Cerebral hemorrhage/infarction		79
Endocarditis		3
Hypertensive disease		304
Myocarditis		8
Pulmonary hypertension		2
Thrombosis/embolism		52
Valvular disease	Aortic valve disease	4
	Mitral valve disease	8
	Rheumatic disease	2
Other		10
Total		3116





## Nervous System Disease among Natural Diseases, 2012

Meningitis	5
Amyotrophic lateral sclerosis	1
Parkinson Disease	2
Alzheimer Disease	5
Corticobasal degeneration	1
Multiple sclerosis	3
Seizure disorder	47
Sleep apnea	1
Refsum Disease	1
Muscular dystrophy	5
Cerebral palsy	8
Total	79





## Infectious Disease among Natural Deaths, 2012

Bacterial infections	Clostridium	3
	Mycobacterium tuberculosis	1
	Neisseria meningitidis	1
	Streptococcus	2
	Staphylococcus	1
	E. coli	2
Viral infections	Herpes zoster	1
	Hepatitis C	17
	Human immunodeficiency virus	13
	Viral gastroenteritis	4
	Viral hepatitis	1
Fungal infections	Coccidioides	1
Total		47





## Neoplasms among Natural Deaths, 2012

Bladder	3
Brain	4
Breast	3
Chest wall	1
Colon	16
Esophagus	3
Head and neck	5
Heart	2
Larynx	3
Leukemia	7
Liver	1
Lung	18
Lymphoma	5
Mesothelioma	10
Myeloma	2
Neurofibroma	1
Pancreas	3
Prostate	1
Retroperitoneum	1
Salivary gland	1
Skin	1
Stomach	4
Testis	2
Uterus	3
Metastatic/unknown primary site	5
Total	105

## **Los Angeles County**

# **Toxicology Statistics**

**Toxicology Statistics** 





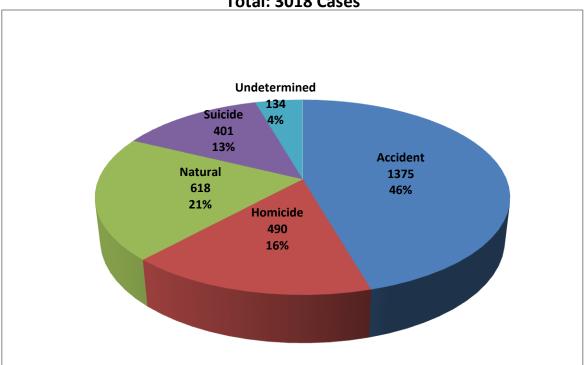
## **Table of Contents for Toxicology Statistics**

Cases with Drugs Detected by Manner	45
Alcohol Detected by Manner	45
Marijuana Detected by Manner	46
Cocaine Detected by Manner	46
Methamphetamine Detected by Manner	47
Heroin Detected by Manner	47
Phencyclidine Detected by Manner	48
Licit Drugs by Classification	49
Drugs by Classification	50

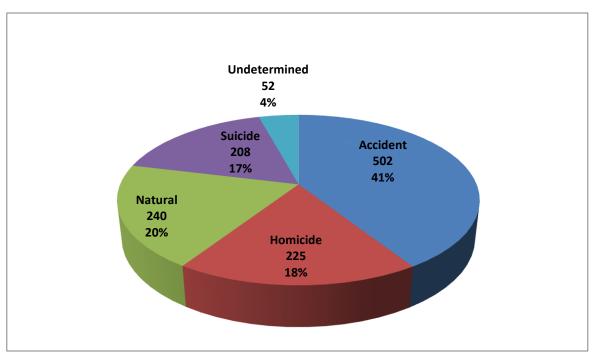




## 2012 All Cases with Drugs Detected by Manner Total: 3018 Cases



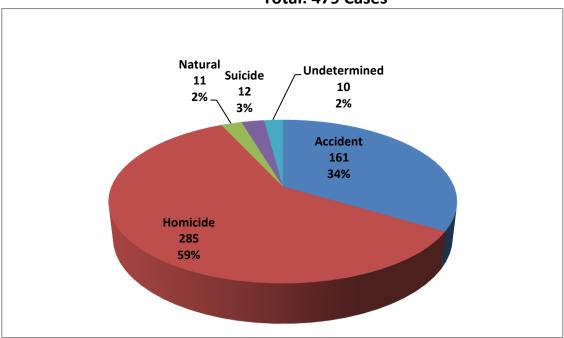
#### 2012 Alcohol Detected by Manner Total: 1227 Cases



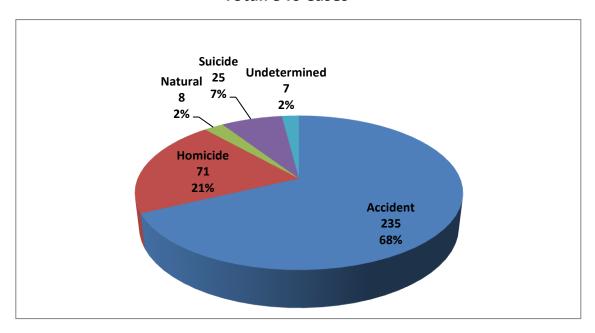




# 2012 Marijuana Detected by Manner Total: 479 Cases



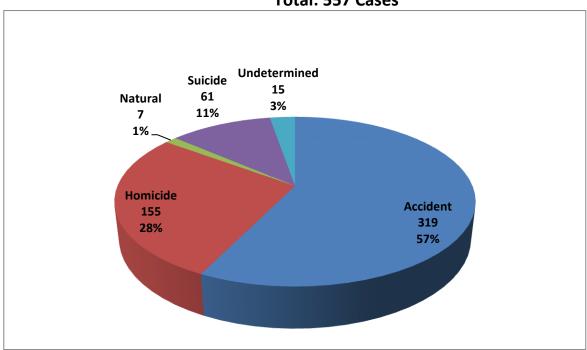
# 2012 Cocaine Detected by Manner Total: 346 Cases



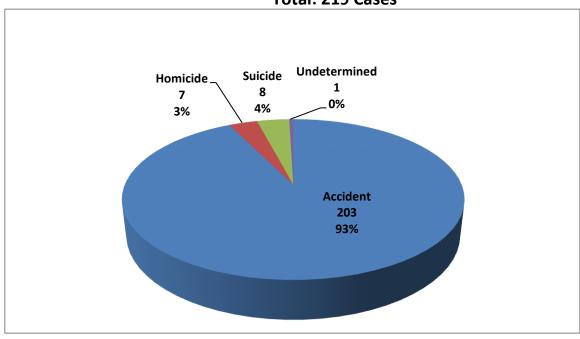




# 2012 Methamphetamine Detected by Manner Total: 557 Cases



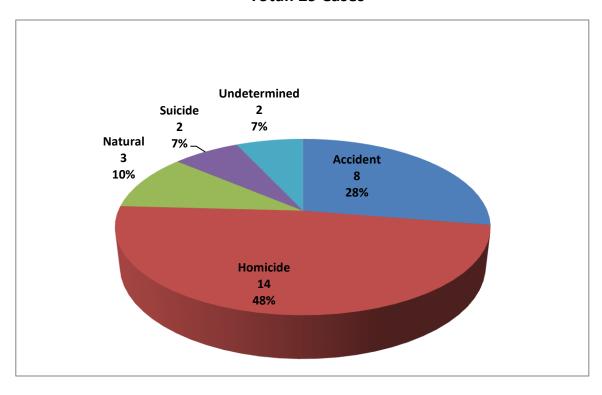
# 2012 Heroin Detected by Manner Total: 219 Cases







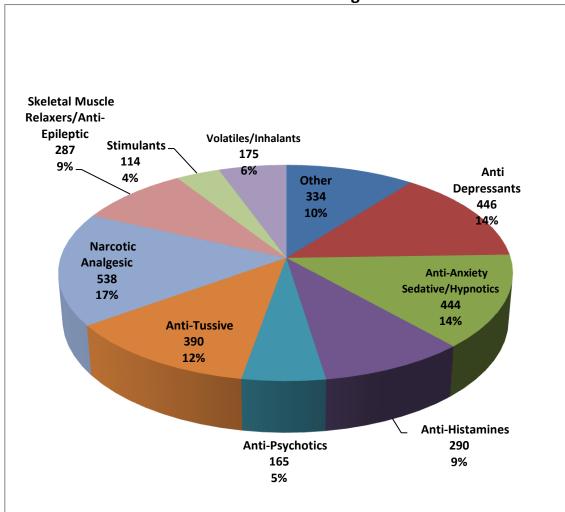
# 2012 Phencyclidine Detected by Manner Total: 29 Cases







### 2012 Licit\* Drugs by Classification Total: 3183 Drug Instances



\*Note: This **excludes** licit compounds such as alcohol, marijuana (as its medicinal use is licit in California) and **includes** diverted licit compounds (as the compounds themselves are licit while their usage was not).





# **2012 Drugs by Classification Total: 6271 Drug Instances**

