Los Angeles County

Annual Report

Department of Coroner

Fiscal Year 2001-2002

County of Los Angeles
Board of Supervisors

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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 the Chief Medical Examiner-Coroner, subject to the general direction of the Board of Supervisors, and the nonphysician director was given authority to manage/direct all nonphysician operations and staff within the department, subject to the general direction of the Board of Supervisors.

Department Heads' Message

This report contains statistical information from the Los Angeles County Department of Coroner for fiscal year 2001-02, as well as statistics from the previous ten years showing significant trends in Coroner's workload and budget.

Significant Accomplishments

During the past ten years, *new technology* improved the Department's ability to transport and identify decedents, respond to public requests for information, and plan for future needs.

- The Department purchased a scanning electron microscope with an automatic stage, increasing the speed of analysis.
- A Livescan system has been installed for rapid identification of decedents.
- A computer network, initially installed in 1991, was upgraded substantially in 2000, providing easy access to Coroner's cases for public inquiries and statistical research.
- The laboratory has improved its ability to detect new drugs, using new instrumentation such as a gas chromatograph-mass spectrometer-mass spectrometer and automated minilyser using ELISA technology.
- The Department Internet site provides rapid access to general information, as well as e-mail addresses for key staff members.
- The Department purchased two multi-decedent vehicles, capable of transporting 14 decedents at once. These vehicles have been valuable in mass disasters.
- A videoconferencing system was completed recently. This allows for continuing medical education and interaction with other agencies and the criminal justice system.

The Department of Coroner has *improved efficiency* by developing programs to generate revenue and train pathologists and physicians.

- The Department trains pathologists in the subspecialty of forensic pathology, and also trains residents in pathology, neuropathology, emergency medicine, and other specialties.
- Nationally recognized accreditation programs insure high-quality service. The Department is accredited by the National Association of Medical Examiners until 2006, American Society of Crime Laboratory Directors until 2003, California Medical Association (continuing medical education) until 2004, and the Accreditation Council of Graduate Medical Education (residency) until 2005. The Department is also certified to provide credit under Peace Officers Standards and Training.
- Skeletons in the Closet, the Coroner's marketing program, has been very successful in generating additional revenue.
- The Department gives the annual West Coast Seminar, a regional conference covering topics of interest to the forensic community.
- As part of a countywide strategic planning program, the Department has prepared goals and objectives to improve service in the future.

The Department of Coroner is also active in *community service*, including countywide projects and Department projects.

- The Youthful Drunk Driver Visitation Program provides classes for individuals at risk for drunk driving accidents. Access to this program is by court order.
- The Department provides mass casualty training for hospitals, medical groups, and large corporations throughout the county.
- The Coroner participates in the Interagency Child Abuse Network, working with other county agencies to improve child protective services.
- Regional offices have been opened in the Santa Clarita Valley, Antelope Valley, and South Bay areas. These offices improve response time to calls in their respective areas.

Legislation

During the past ten years, several pieces of *key legislation* have changed the practice of forensic pathology in California.

- SB 297 (2001) - Requires Coroner to collect DNA samples from unidentified decedents and submit them to the California Department of Justice for possible identification (California Penal Code 14250).
- SB 1736 (2000) - Specifies procedures Coroner must use for identification of an unidentified body (California Government Code 27521, Health & Safety Code 102870).
- AB 1225 (1998) - Modifies procedures for Coroner's autopsy of victims of sudden infant death syndrome (California Government Code 27491.41).
- SB 1403 (1998) - Requires explicit consent for all postmortem tissue donation; implied consent may no longer be used for cornea procurement (California Government Code 27491.47).
- HR 3923 (1996) - Establishes a procedure for assisting families of aviation disaster victims (Title 49, United States Code, section 1136).
- SB 1230 (1995) - Establishes interagency domestic violence review teams (California Penal Code 11163.3).
- AB 3111 (1994) - Requires twelve-hour search for next of kin of tissue donors (California Health & Safety Code 7151.5).

Looking to the Future

During the coming year, the Department of Coroner has the following *goals*:

- Update the Deputy Medical Examiners' Manual, in compliance with accreditation standards of the National Association of Medical Examiners
- Develop procedures for videoconferencing with County agencies, attorneys, and other Coroner's offices
- Improve the turnaround time of Coroner's reports.
- Automate the transcription of medical protocols using voice recognition technology.
- Work with the California State Coroner's Association to develop and implement an advanced training curriculum for Coroner's investigators, which meets the California State Peace Officers' Standards and Training (POST).
- Replaced the Department's dilapidated telephone system with a state of the art communications system including hardware and software supporting auto-attendant and mailbox capabilities.
- Hire a marketing analyst to coordinate and enhance the Department's marketing services to include e-commerce cash register services, document services, professional witness testimony, gunshot residue services and other related functions.
- Work with the California State Coroners' Association and the State Office of Emergency Services to enhance the Mutual Aid Response Manual for Coroners throughout the state.
- Continue the implementation/funding phase of the Coroner Annex designed to house the biological functions of the Department, which include autopsy, laboratories, decedent storage, and evidence control. Target completion: 2-3 years.

Anthony Hernandez
Director, Department of Coroner

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

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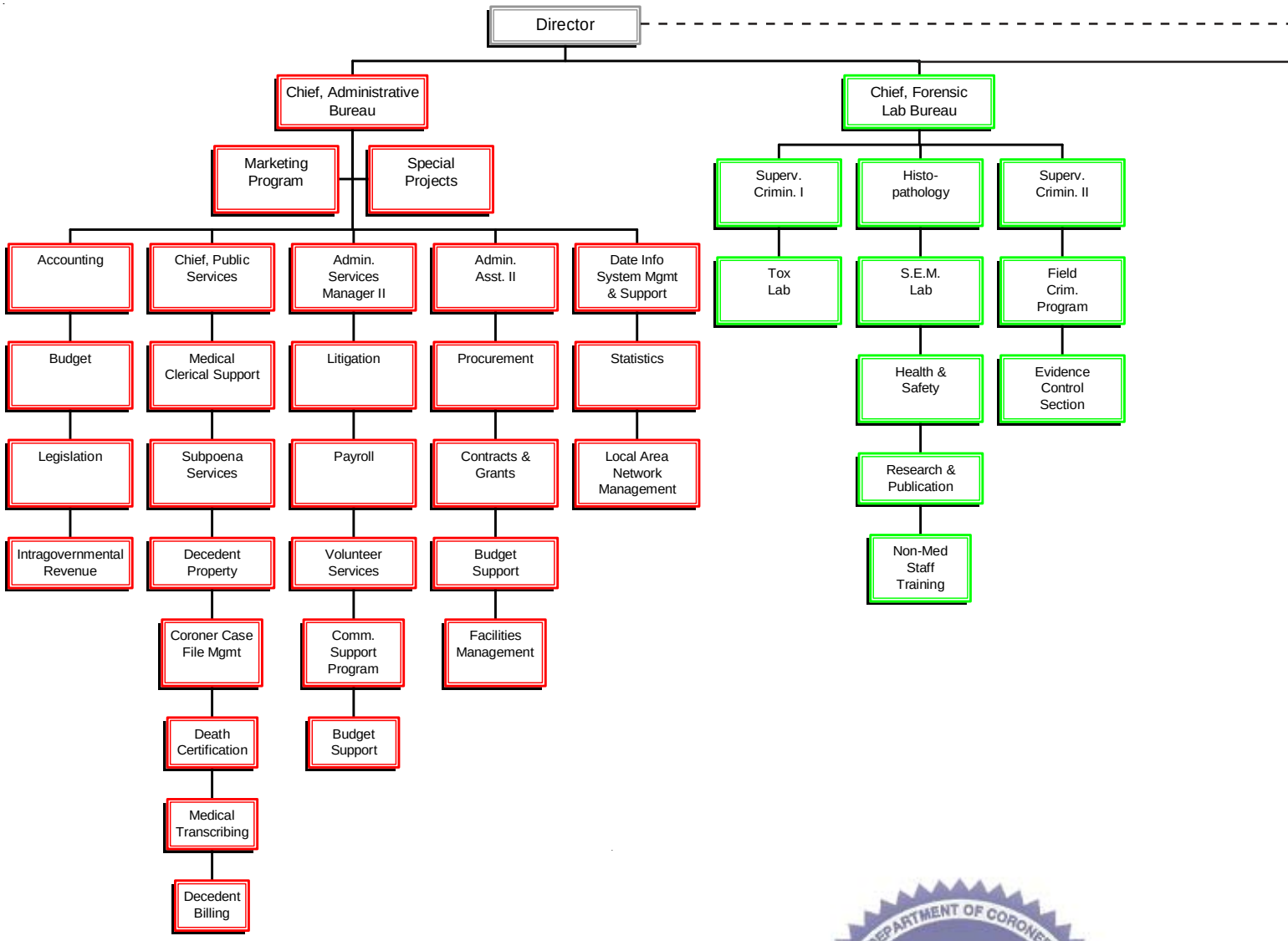
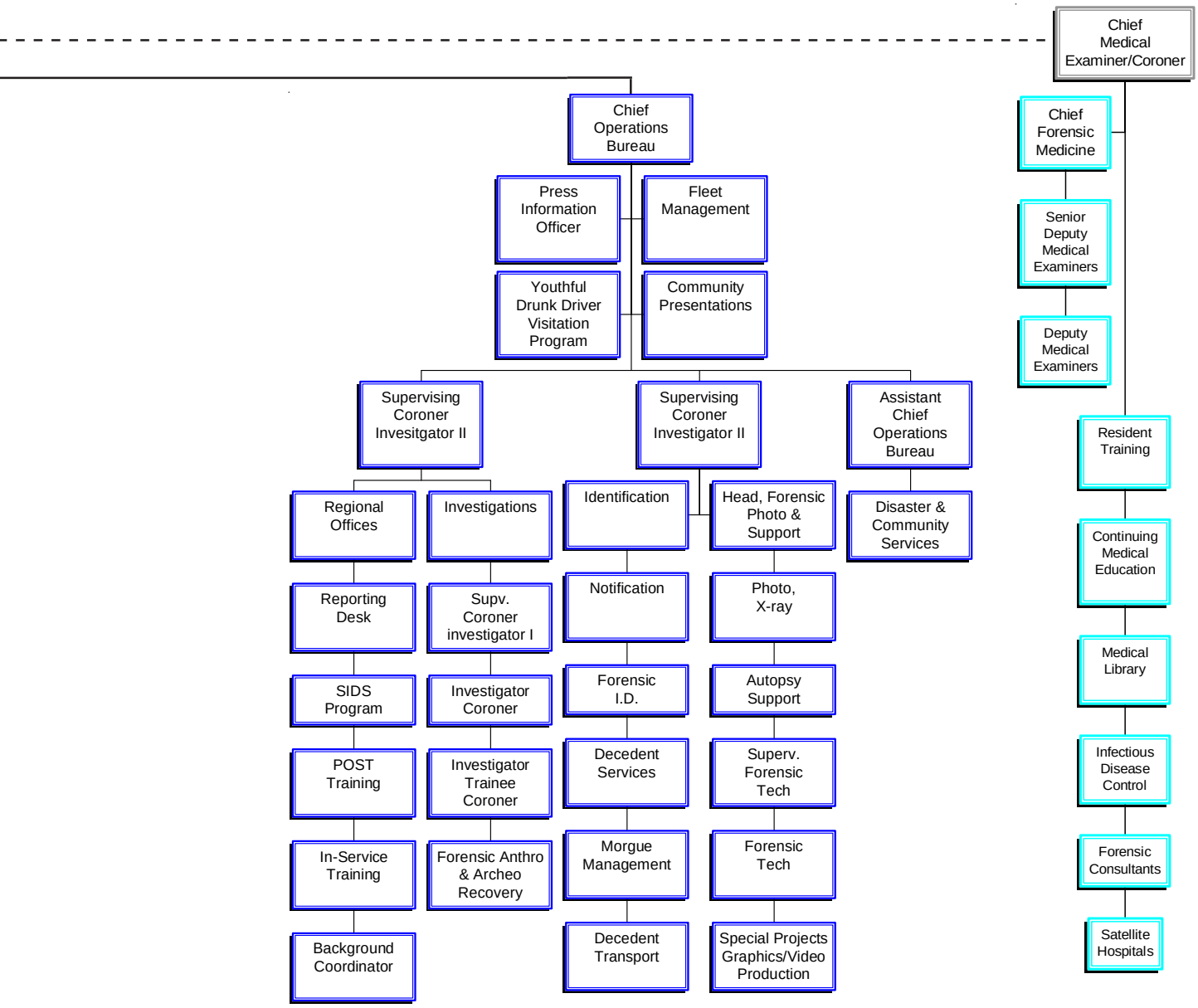
Los Angeles County





Department of Coroner

ADMINISTRATIVE SERVICES DIVISION

The Administrative Services Division 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 program, facilities management, and other related functions.

ACCOUNTING SECTION

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.

Accounting Section monitors all Departmental accounts, such as salary and benefits, overtime expenditures, services and supplies, and budget.

HUMAN RESOURCES

Human Resources is responsible for personnel issues which are inherent to 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.

PROCUREMENT

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

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 Driving 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 Web site at http://coroner.co.la.ca.us or by calling (323) 343-0760.

This division has recently established a Departmental Marketing Program. A Marketing Analyst will oversee the overall marketing capabilities of the Department

CONTRACT PROGRAMS

The Department administers contracts and agreements for various functions, such as tissue harvesting, regional offices, satellite hospitals, histopathology, transcribing, contract physicians, and urine drug screening for the Los Angeles County Superior Court. 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 being billed to the families. This has improved the collection rate, dramatically raising revenues.

SIDS PROGRAM (SB90)

The Department participates in the Sudden Infant Death Syndrome (SIDS) Interagency Council, and actively recovers cost from the State for fulfilling SIDS protocol requirements.

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 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 subcontractors in the implementation and support of new technologies such as e-commerce and voice recognition.

Forensic Medicine Division

The Forensic Medicine Division'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, 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, archeology, odontology, anthropology, anesthesiology, pediatrics, surgery, ophthalmologic pathology, pulmonary pathology, pediatric forensic pathology, cardiac pathology, emergency room medicine, psychiatry, psychology and radiology to assist the deputy medical examiners in evaluating their cases.

MEDICAL EDUCATION

The Department is approved by the California Medical Association for Continuing Medical Education activities and by the Accreditation Council for Graduate Medical Education for training in forensic pathology.

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 Child Abuse and Neglect Program. This Department also has its own Child Death Review Committee.

IDENTIFICATION OF UNIDENTIFIED BODIES (SB90)

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 (MECAP)

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

MEDICAL BOARD OF CALIFORNIA

Deaths resulting from physician gross medical negligence or incompetence are reported to the Medical Board of California.

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.

SIDS PROGRAM (SB90)

The Department participates in the Sudden Infant Death Syndrome (SIDS) Interagency Council, and actively recovers cost from the state for fulfilling SIDS protocol requirements.

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 tissue 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 hospitals (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 departments, 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.

FORENSIC LABORATORIES DIVISION

Histology laboratory is part of Forensic Laboratories Division

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 into 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, outside investigating agencies, the judicial system, and families of decedents with timely, accurate, and state-of-the-art forensic analyses, and to provide expert interpretation of those 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

immunochemical 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 bacteria, medical disorders, and toxins such as asbestos.

TOXICOLOGY

Using state of the art equipment and methods, the toxicology laboratory conducts chemical and instrumental analyses on post-mortem specimens to determine the extent that drugs may have contributed to the cause and manner of death. The laboratories' experienced forensic toxicologists offer expert drug interpretation which assist 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 an 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. Using a scanning electron microscope equipped with an energy dispersive x-ray detector, GSR analysis is used to determine whether an individual may have fired a weapon. Our laboratory also performs GSR analyses for many law enforcement agencies throughout California.

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

EVIDENCE CONTROL

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

Operations Division

The livescan system enables The Operations Division to identify decedents rapidly

This bureau is responsible for the 24-hour day, 7-day week operations of many direct services provided by the department, which includes Coroner Investigations, Forensic Photo and Support, and the Forensic Services Unit. In addition, the bureau is responsible for disaster and community services, fleet management, and other ancillary programs such as regional satellite offices and the Youthful Drunk Driving Visitation Program (YDDVP).

INVESTIGATIONS

In accordance with state mandate, all law enforcement, health facilities, and funeral directors are required to report deaths, which may fall under the jurisdiction of the Coroner. The report initiates an investigation from this division, which may require dispatching an investigator to the scene of a homicide, accident, or suicide or to a hospital or mortuary. Investigators will interview witnesses, follow up on leads, collect evidence, make identification, notify the next of kin, and interface with law enforcement agencies.

Investigators are also responsible for testimony in court on Coroner cases along with preparation of investigative reports for use in the determination of cause and mode of death. Under state law, all Coroner Investigators are sworn peace officers. The Department of Coroner is a Peace Officer Standards and Training (P.O.S.T.) certified agency.

IDENTIFICATION OF UNIDENTIFIED BODIES (SB90)

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.

NURSING HOME DEATHS (SB90)

The department participates in a state-mandated program to investigate certain nursing home deaths to determine whether a death may be certified as natural by a private physician or handled as a Coroner's case.

P.O.S.T.

The California State Commission on Peace Officers Standards and Training (P.O.S.T.) establishes minimum standards for selection and training requirements for peace officers. We comply with the regulations of the Commission for the Basic Specialized Investigator Program.

Forensic Support Section includes autopsy technicians, photography and x-ray

REGIONALIZATION-SATELLITE OFFICES

Investigative capabilities have been extended to offices in the Antelope Valley, Santa Clarita Valley and South Bay areas. This provides a more rapid Coroner's response to the scene of death in these areas due to the close proximity of the regional facility.

YOUTHFUL DRUNK DRIVING VISITATION PROGRAM

The Department participates with the courts in a program of visitation to the Coroner's facility for first-time drunk driving offenders and other offenses as an alternative form of sentencing.

DISASTER PREPARATION AND RESPONSE

The program ensures appropriate departmental response as one of the eight lead county agencies to significant minor incidents and major disasters involving multiple fatalities that require successful operation of an Emergency Operation Center (EOC) and field command posts. This may include coordinated activity with major airports, homeland defense agencies, law enforcement, the State Office of Emergency Services, and mutual aid from Coroners throughout the state. The program provides planning support through participation in emergency planning and exercises and also through up-to-date manuals.

A plan has been developed to form public/private emergency response partnership 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, CWIRS radio communications, a mobile command post, and appropriate ancillary communications equipment. The department also has eleven disaster cache trailers situated throughout the County. The Department has emergency short-wave radio communications ability as well.

Investigations Section is responsible for scene investigation and disaster response

FORENSIC SUPPORT

This unit 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 examination and autopsy, assisting the deputy medical examiners in the performance of the autopsy, preparation and gathering of toxicology specimens, x-ray, photography, dental and fingerprint examination for identification of Jane/John Does, and preparation of bodies for release to a mortuary. Staff who have been specially trained also fulfill audio-visual and graphic production requirements for the entire department.

DECEDENT SERVICES

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 including those in public view, private homes, and hospitals.

Decedent processing includes the weighing and measuring of bodies, the collection and documentation of personal effects, and the collection of physical and medical evidence, fingerprinting of decedents using LIVE-SCAN technology and tagging. Bodies are maintained in refrigerated crypts while awaiting examination and release to mortuaries or for county cremation.

The Decedent Services Unit is responsible for day-to-day decedent handling prior to release for photograph, x-ray and autopsy. Additionally, staff are responsible for the accountability of all human remains and specimens in the crypt areas.

PUBLIC SERVICES DIVISION

Public Services maintains Coroner's records

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, 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 reports. Revenue generated from document, microscopic slides, photograph sales and transportation billing for a one year period totals over $1,200,000.00. The Coroner is mandated by Government Code to retain all files permanently; consequently the Department maintains 100+ years of records which are accessed on a regular basis at the request of the public. Since 1991 all inactive case files have been scanned (microfilm was previously utilized). Approximately 16,000 pages are copied from optical disk and microfilm to fill requests received from the public each year.

DEATH CERTIFICATION AND MEDICAL/CLERICAL SECTION

The division is responsible for the completion and daily issuance of the Death Certificates to the mortuaries and preparation of amendments stating the final cause of death. Medical/Clerical Section is responsible for reporting SIDS 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 contract is utilized for routine transcription and an in-house staff of three full-time employees is employed to handle 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 safe-guarded 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

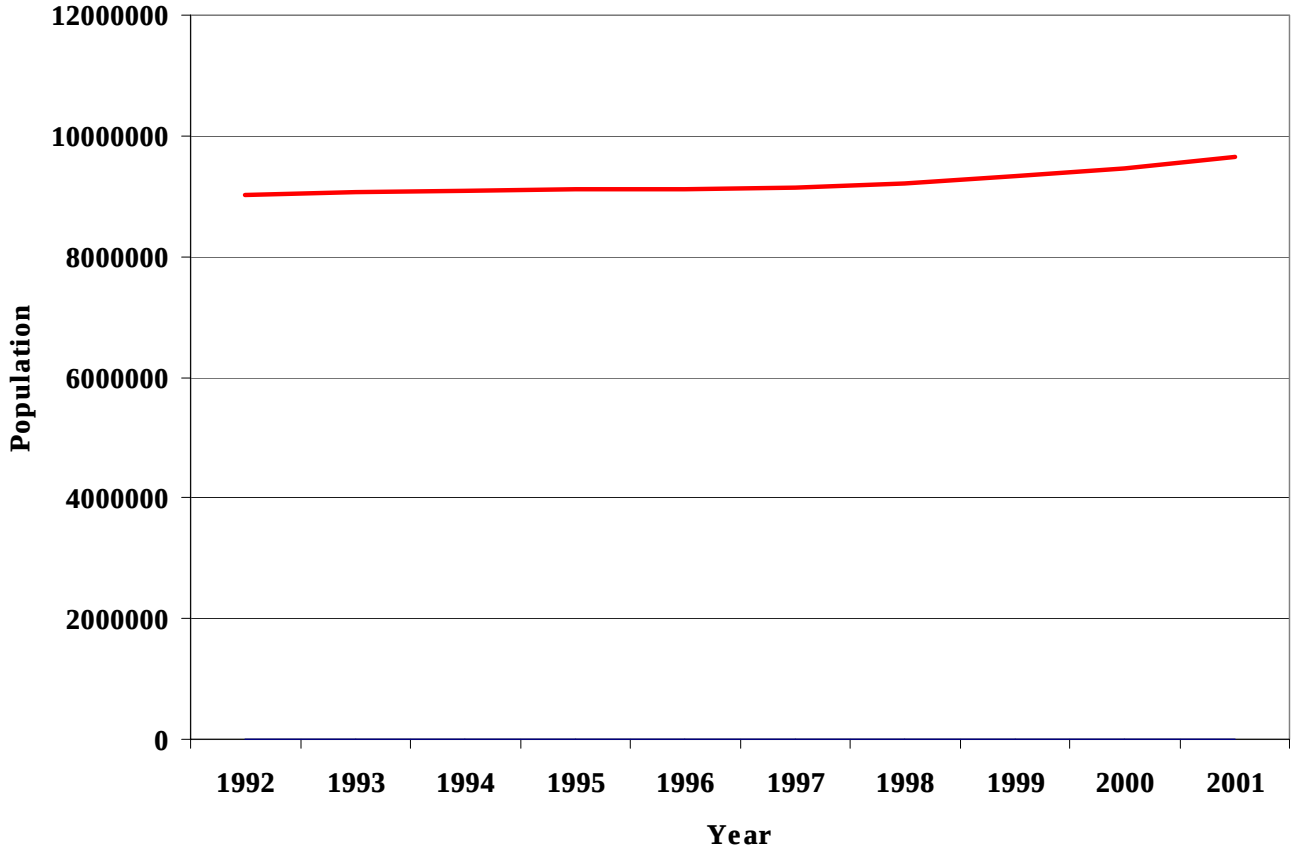
Approximately 4,000 subpoenas are received and processed by the Public Services Division Subpoena Control Section in a one-year period. This unit is responsible for the scheduling of all Deputy Medical Examiners for court appearances, depositions and appointments with law enforcement, district attorney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

Death Statistics

Statistics for 1992-2001

During the past ten years, the population of Los Angeles County has increased approximately 7%.

Population of Los Angeles County per year*



YEAR	POPULATION
1992	9,008,000
1993	9,072,200
1994	9,095,200
1995	9,103,900
1996	9,104,700
1997	9,147,100
1998	9,225,800
1999	9,330,110
2000	9,457,400
2001	9,653,900

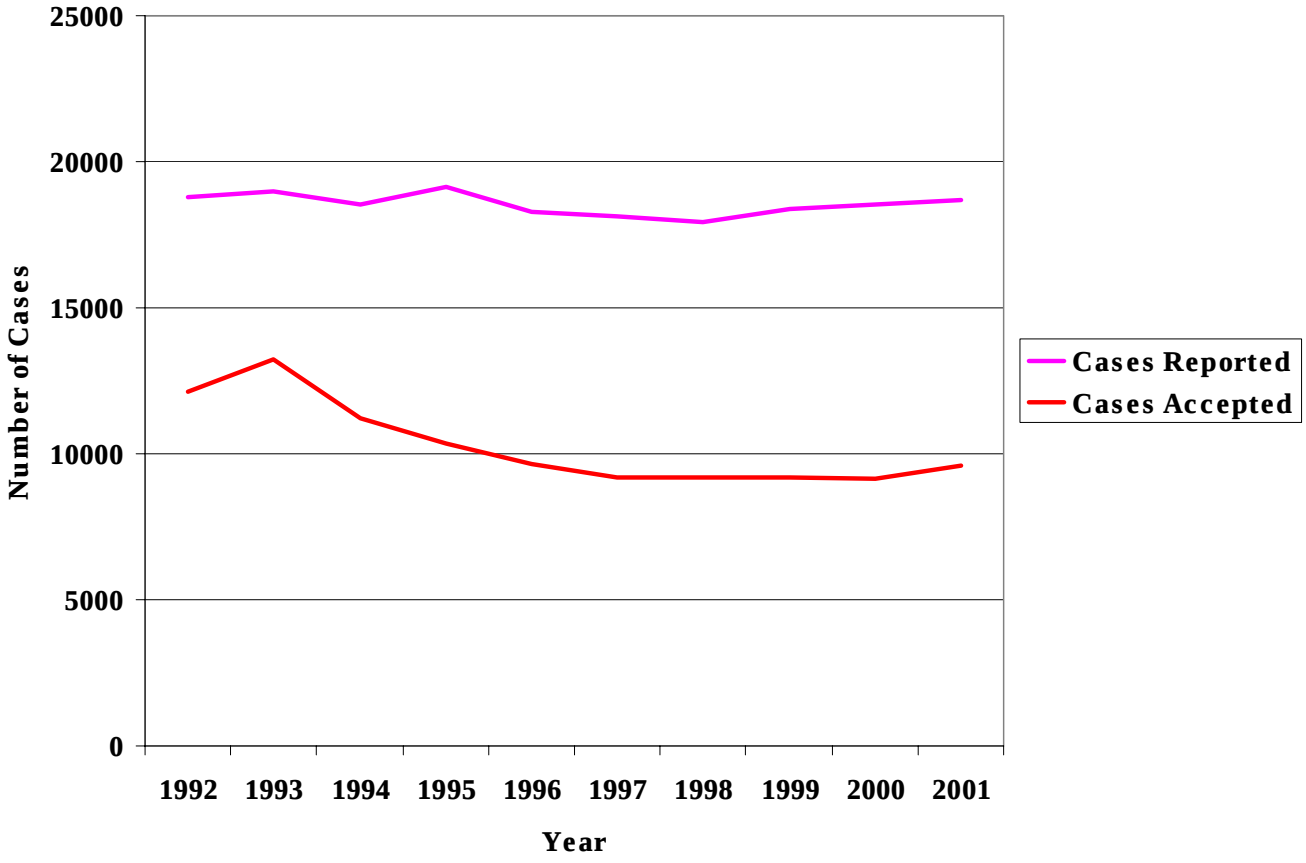
*Source:

State of California, Department of Finance, *Revised Historical City, County and State Population Estimates, 1991-2000, with 1990 and 2000 Census Counts*. Sacramento CA, March 2002

State of California, Department of Finance, *E-1 City/County Population Estimates, with Annual Percent Change, January 1, 2001 and 2002*. Sacramento CA, May 2002

Number of Reported and Accepted Cases per Year

The number of cases reported to the Coroner has remained roughly constant, while the number of cases accepted has decreased.



YEAR	CASES REPORTED	CASES ACCEPTED
1992	18,794	12,100
1993	19,005	13,217
1994	18,550	11,213
1995	19,160	10,347
1996	18,295	9,656
1997	18,113	9,202
1998	17,924	8,981
1999	18,362	9,197
2000	18,512	9,156
2001	18,665	9.591

Policy Changes

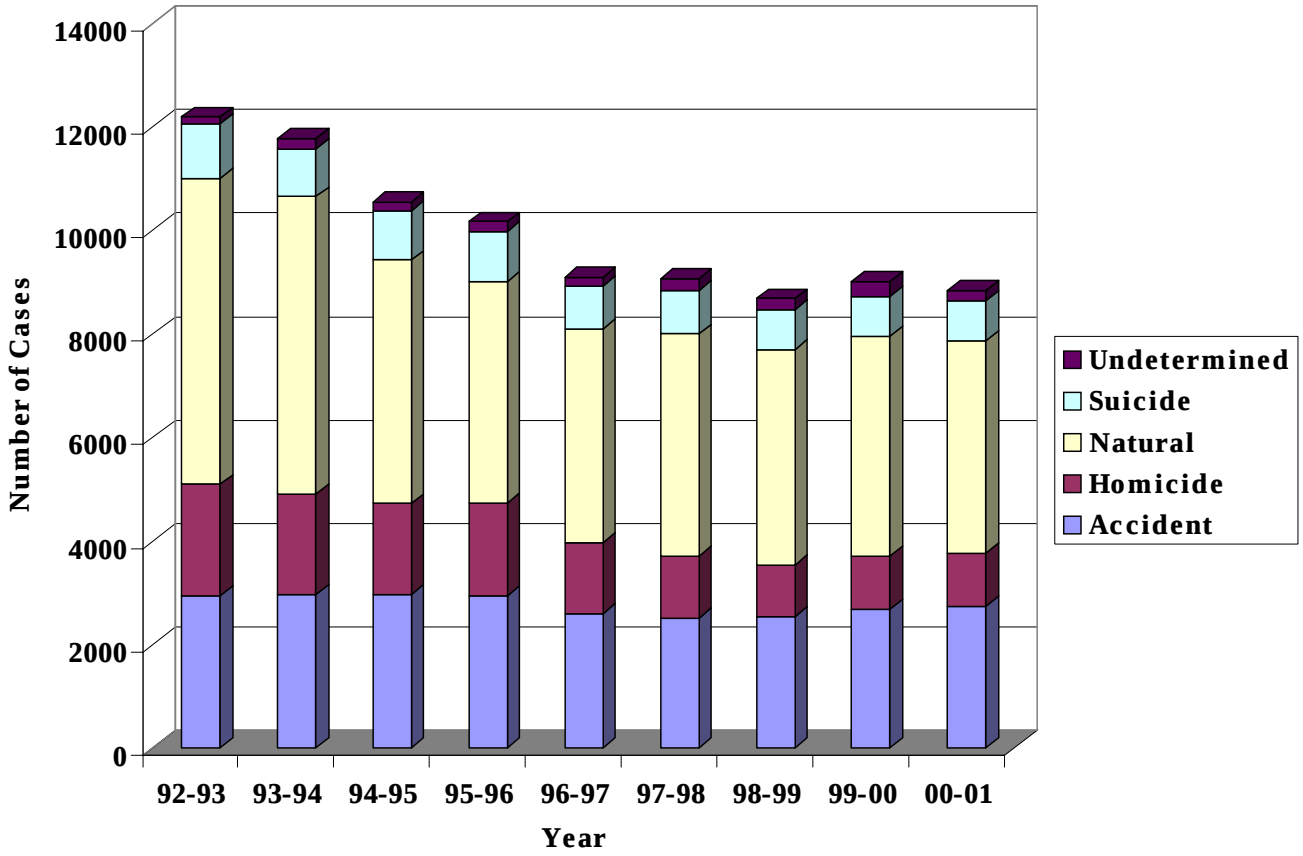
Budget limitations in the early 1990's required the Department to establish policies for more cost-effective use of Coroner's services. California law (California Government Code section 27491) states:

> The Coroner shall have discretion to determine the extent of inquiry to be made into any death occurring under natural circumstances...if inquiry determines that the physician of record has sufficient knowledge to reasonably state the cause of a death occurring under natural circumstances, the coroner may authorize that physician to sign the certificate of death.

In 1993 the Department changed its policy to allow attending physicians to sign death certificates for patients they had seen within 180 days of death, provided that the mode of death was natural. This resulted in a substantial decrease in the number of cases accepted as Coroner's cases, and a decrease in County cost.

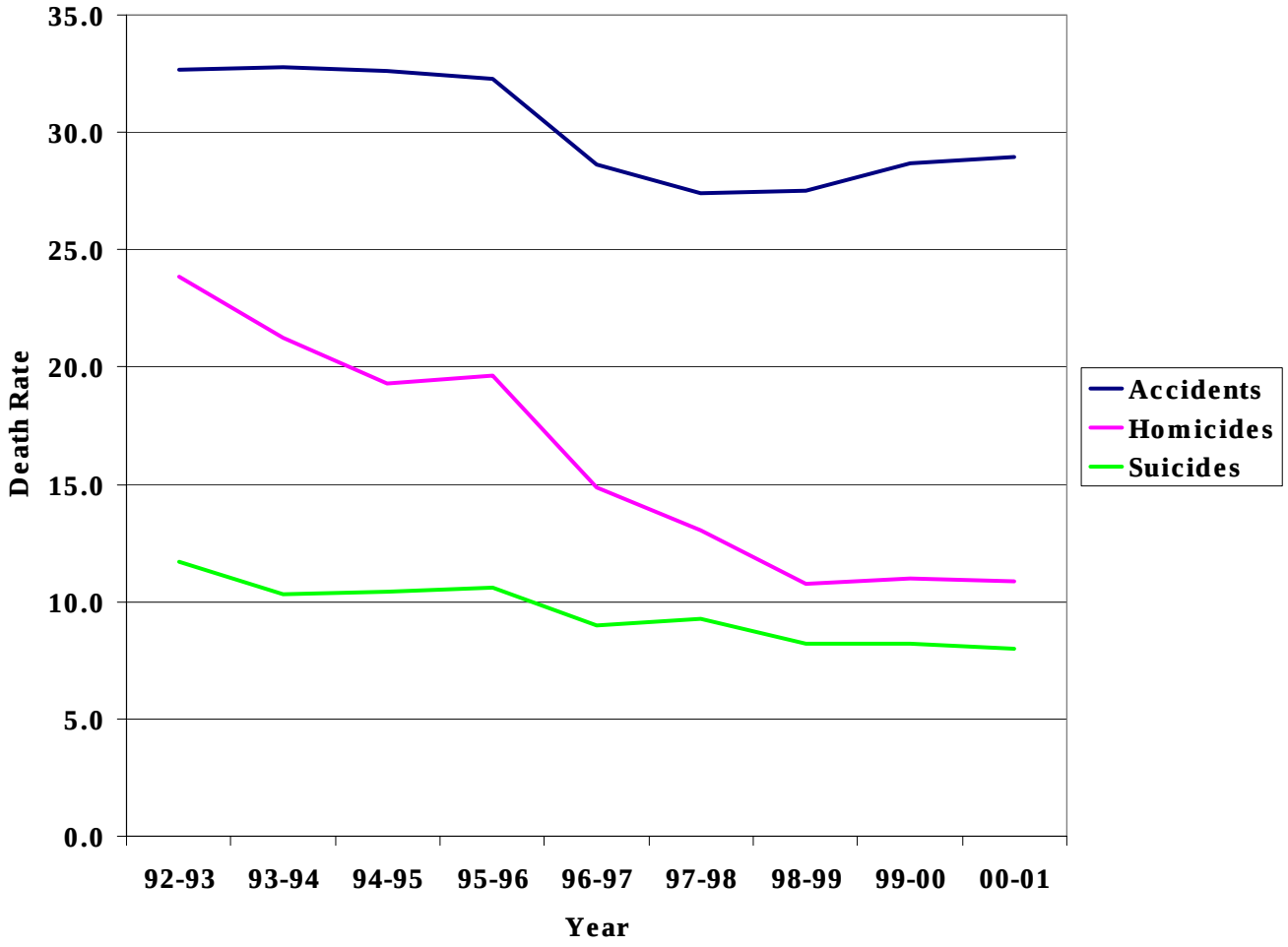
As a result of this policy, the proportion of natural deaths among Coroner's cases decreased from 48% in 1992-93 to a low of 42% in 1995-96. Also contributing to the decrease in the number of accepted Coroner's cases was a marked decrease in the number of homicides, from 2148 in 1992-93 to a low of 993 in 1998-99, with a corresponding decrease in death rates.

Final Modes of Coroner's Cases by Year



Year	Accident	Homicide	Natural	Suicide	Undetermined
92-93	2,945	2,148	5,903	1,055	133
93-94	2,976	1,928	5,743	937	180
94-95	2,965	1,756	4,701	946	175
95-96	2,938	1,790	4,282	967	188
96-97	2,606	1,353	4,147	818	169
97-98	2,506	1,192	4,299	847	219
98-99	2,540	993	4,167	759	221
99-00	2,675	1,026	4,258	766	274
00-01	2,736	1,030	4,109	757	216
01-02	2,780	1,247	4,219	802	241

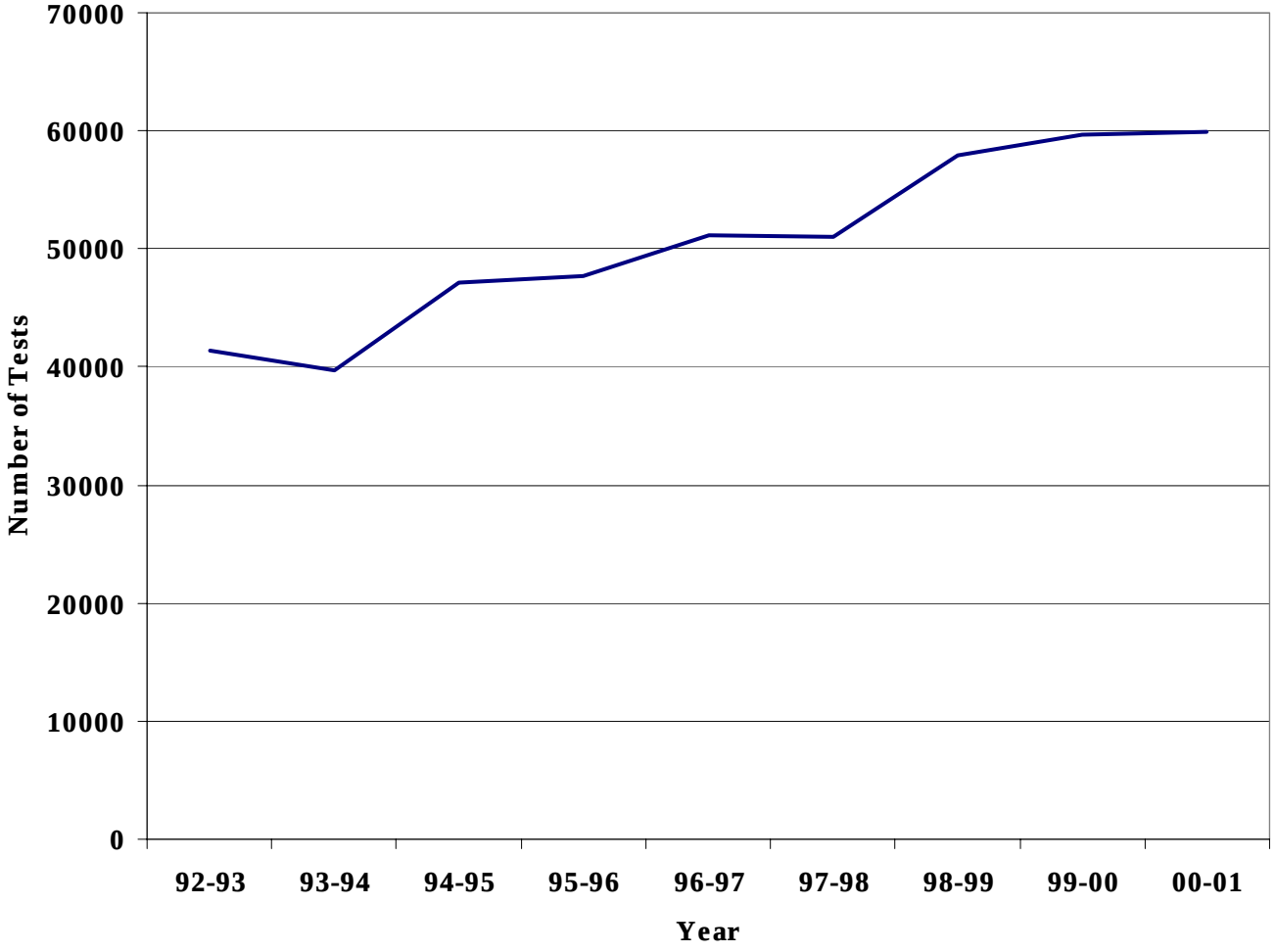
Death Rates per 100,000 Population



YEAR	ACCIDENT	HOMICIDE	SUICIDE
92-93	32.7	23.8	11.7
93-94	32.8	21.3	10.3
94-95	32.6	19.3	10.4
95-96	32.3	19.7	10.6
96-97	28.6	14.9	9.0
97-98	27.4	13.0	9.3
98-99	27.5	10.8	8.2
99-00	28.7	11.0	8.2
00-01	28.9	10.9	8.0

Number of Toxicology Tests per Year

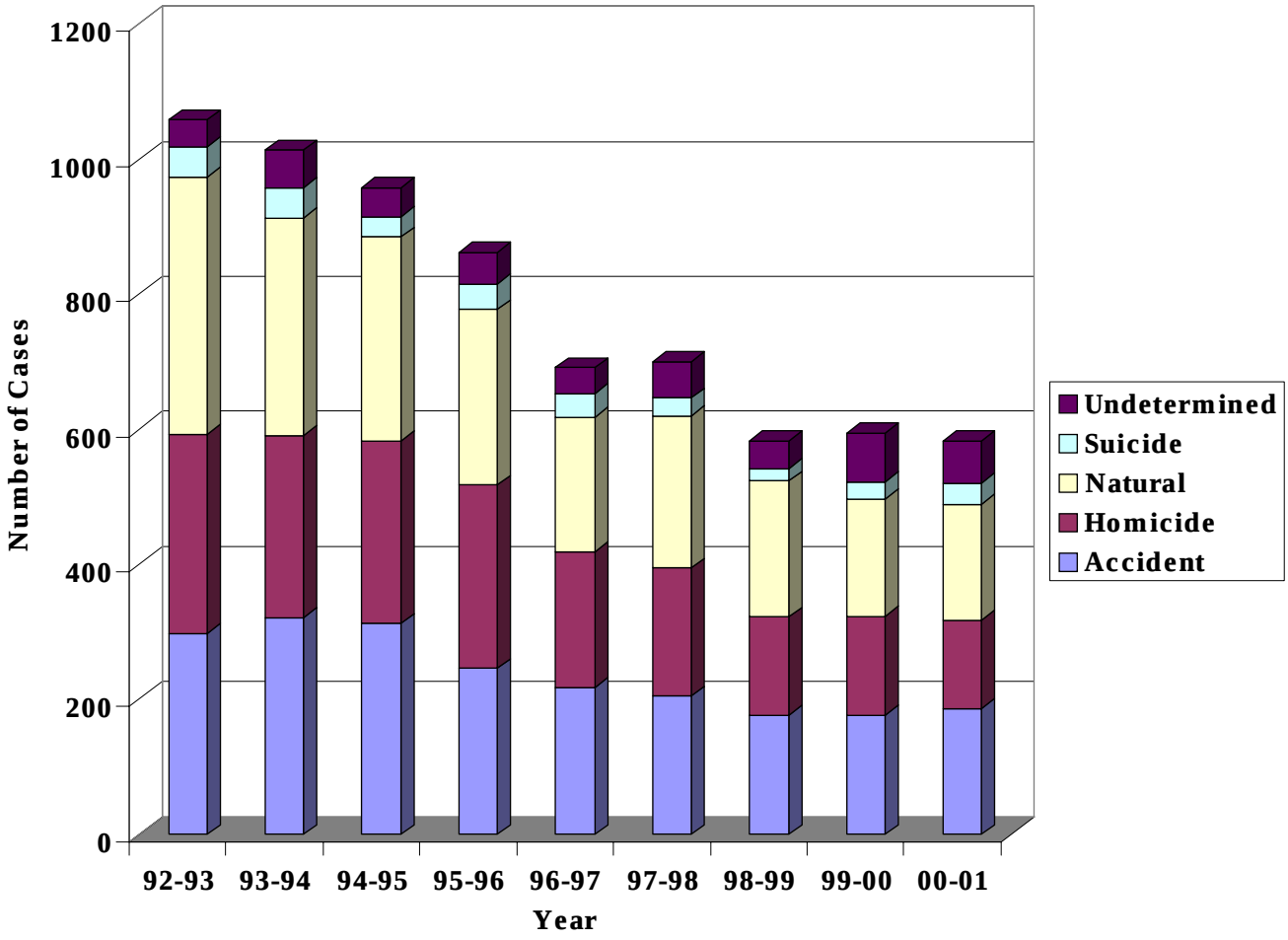
Although the number of Coroner's cases has decreased, the cases have become more complex, with a resulting increase in the need for support services such as toxicology.



YEAR	*TOXICOLOGY TESTS*
92-93	41,337
93-94	39,678
94-95	47,101
95-96	47,705
96-97	51,130
97-98	51,062
98-99	57,943
99-00	59,679
00-01	59,941

Modes for Child Death by Year

Among children (age 0-17), the absolute number of deaths has decreased. Children have a higher proportion of homicides, but a much lower proportion of suicides, than do adults.

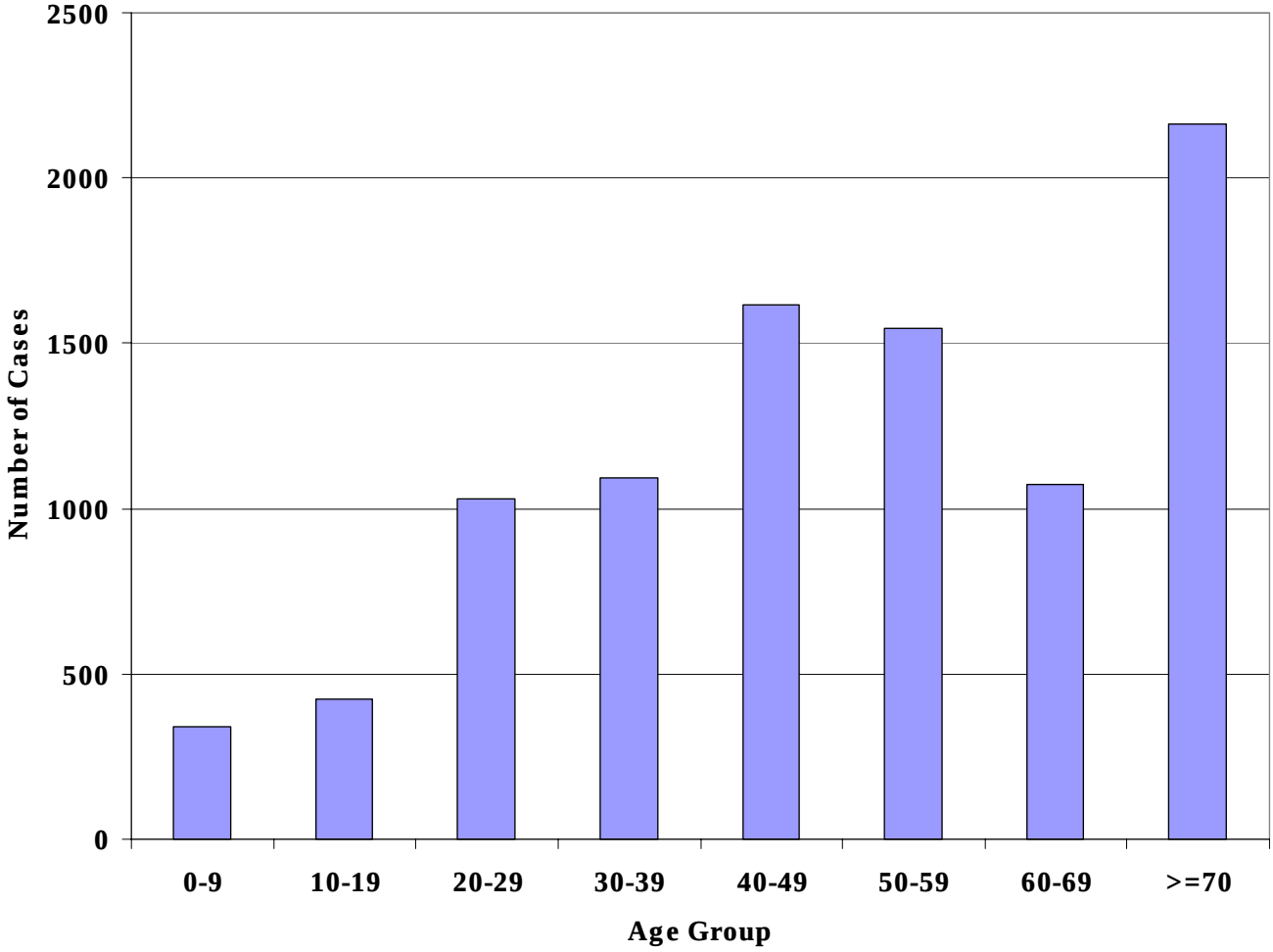


Year	Accident	Homicide	Natural	Suicide	Undetermined
92-93	297	295	381	45	40
93-94	321	269	322	45	56
94-95	312	271	301	30	43
95-96	246	271	260	38	47
96-97	217	202	199	35	38
97-98	205	189	226	26	54
98-99	176	146	201	19	40
99-00	176	147	173	26	72
00-01	186	131	172	31	62

Statistics for 2001-02

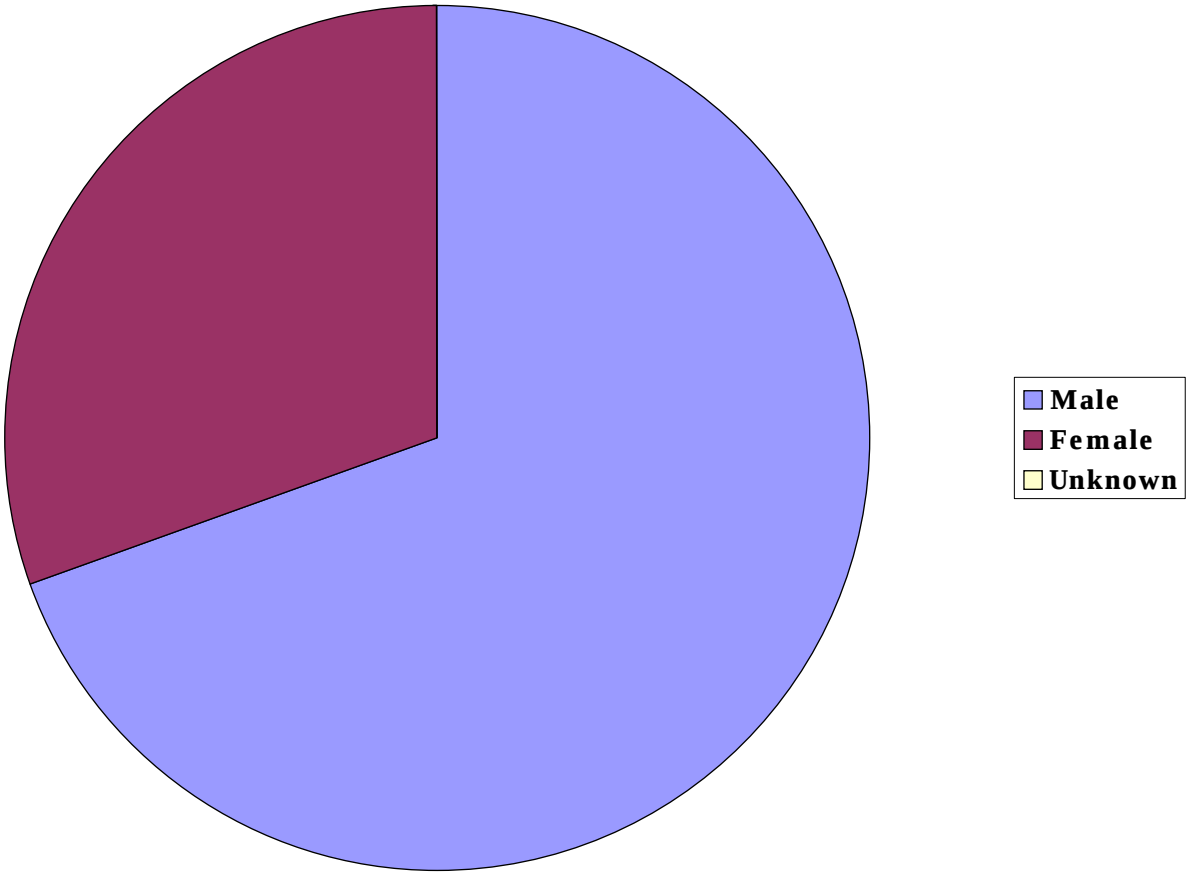
Age Distribution of Decedents, 2001-02

The figures in this section provide demographic information for deaths in the most recent period, 2001-02.



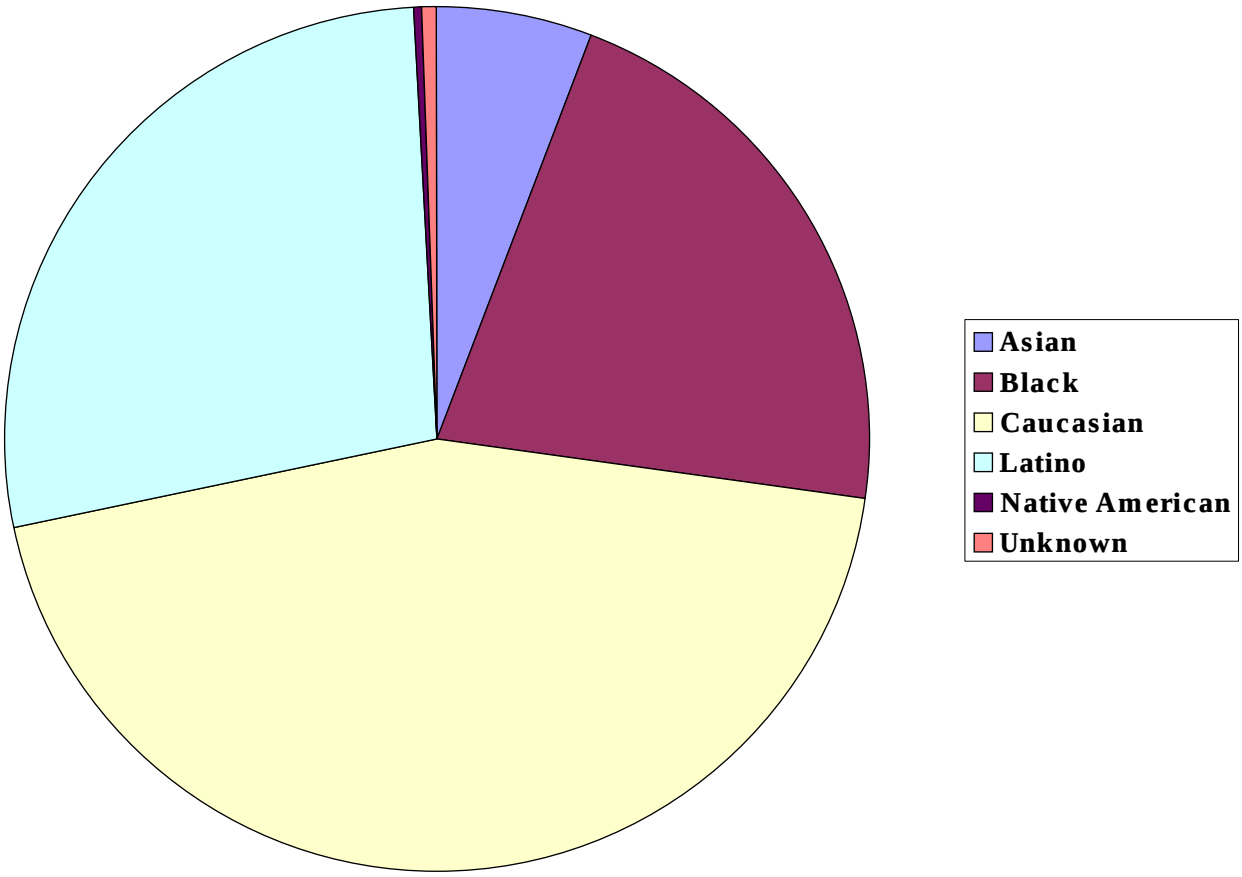
AGE GROUP	*NUMBER OF CASES*
0-9	340
10-19	423
20-29	1,031
30-39	1,092
40-49	1,618
50-59	1,545
60-69	1,075
>=70	2,165
TOTAL	9,289

Gender Distribution of Decedents



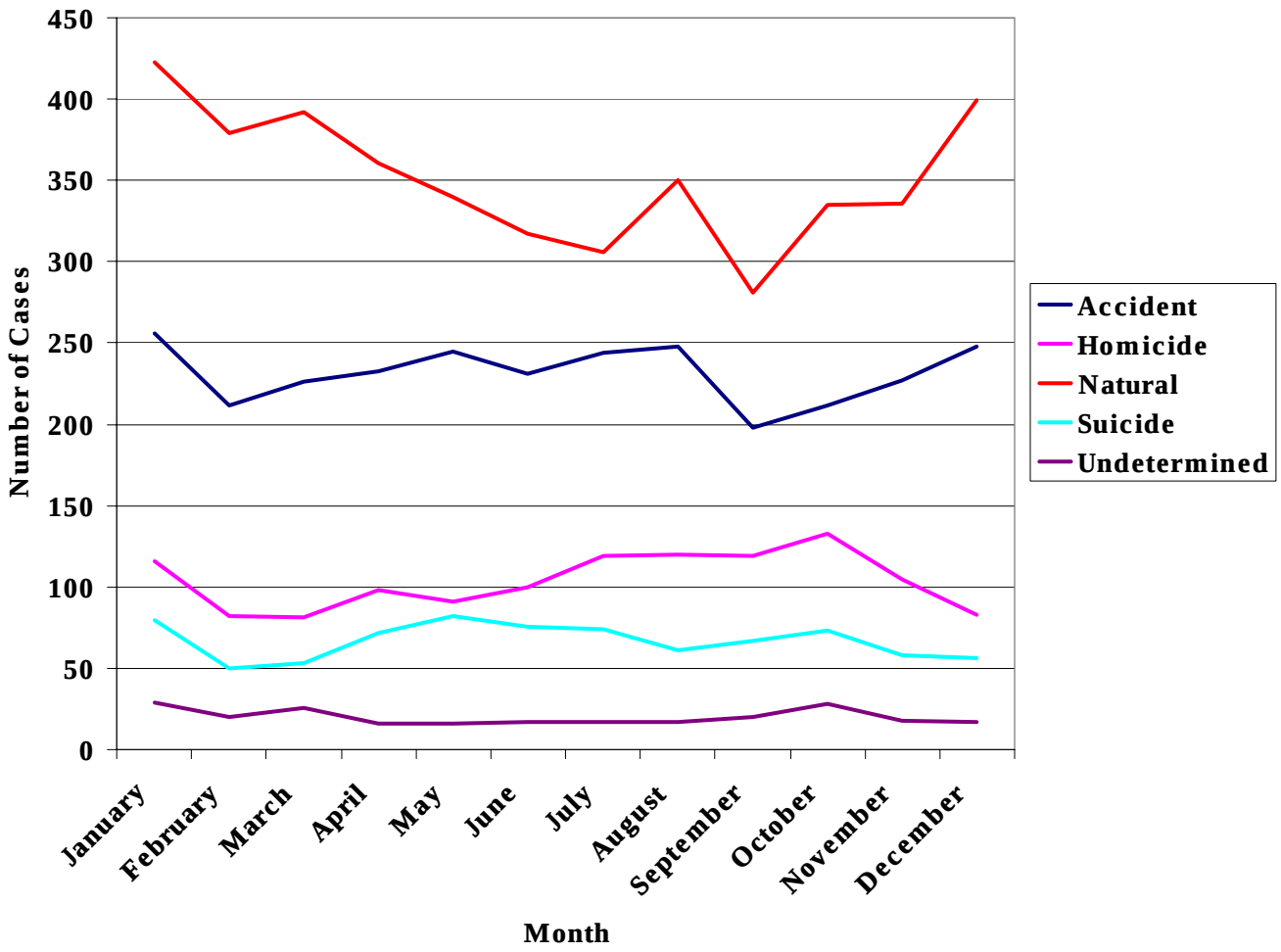
GENDER	***NUMBER OF CASES***
Male	6,458
Female	2,824
Unknown	7
TOTAL	***9,289***

Racial Distribution of Decedents



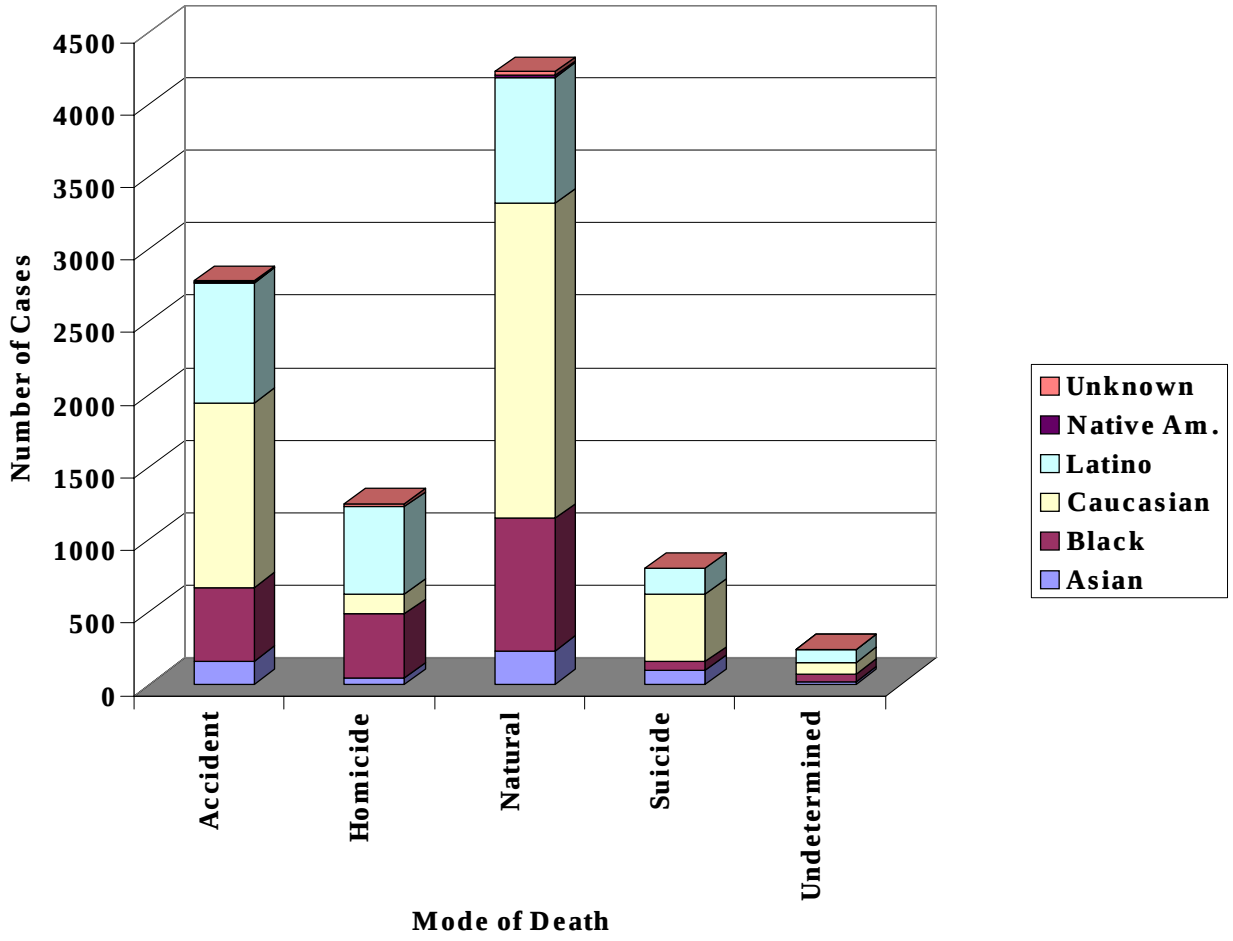
RACE	***NUMBER OF CASES***
Asian	546
Black	1,970
Caucasian	4,134
Latino	2,566
Native American	13
Unknown	60
TOTAL	***9,289***

Number of Deaths per Month for each Mode



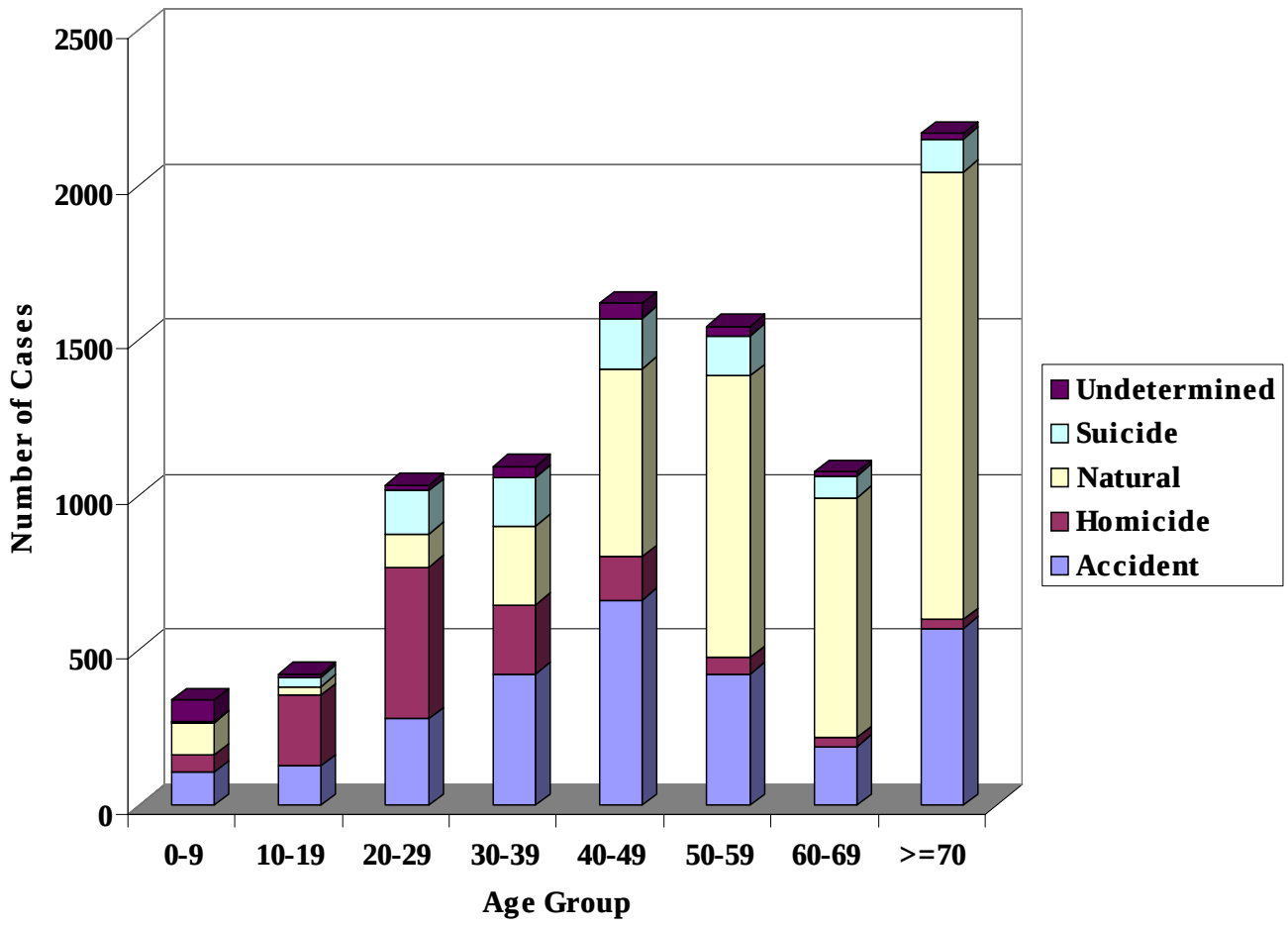
MONTH	*ACCIDENT*	*HOMICIDE*	*NATURAL*	*SUICIDE*	*UNDET.*	*TOTAL*
January	256	116	423	80	29	904
February	212	82	379	50	20	743
March	226	81	392	53	26	778
April	233	98	361	72	16	780
May	245	91	340	82	16	774
June	231	100	317	76	17	741
July	244	119	306	74	17	760
August	248	120	350	61	17	796
September	198	119	281	67	20	685
October	212	133	335	73	28	781
November	227	105	336	58	18	744
December	248	83	399	56	17	803
TOTAL	***2,780***	***1,247***	***4,219***	***802***	***241***	***9,289***

Racial Distribution for each Mode



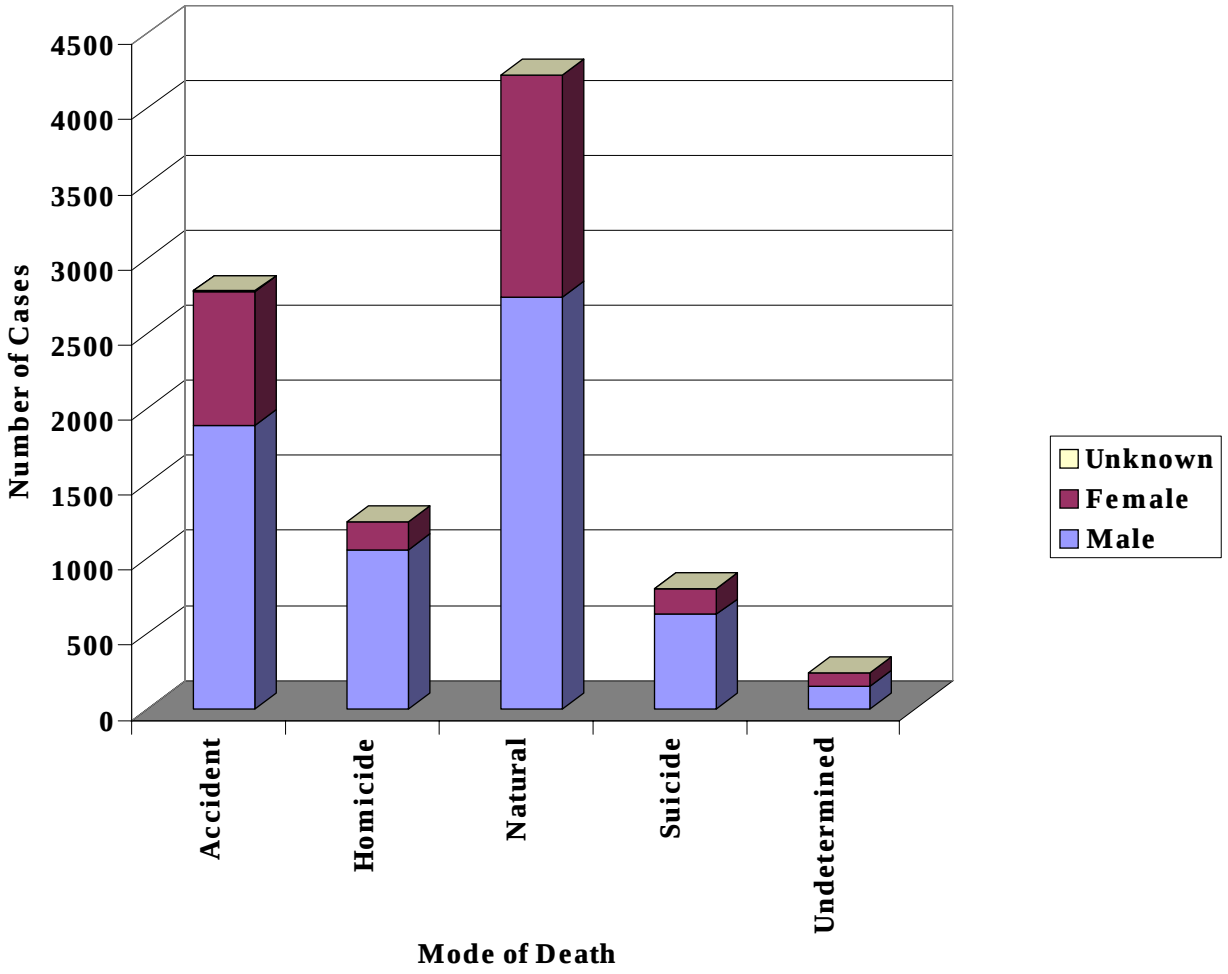
MODE	*ASIAN*	*BLACK*	*CAUCASIAN*	*LATINO*	*NATIVE AMERICAN*	*UNKNOWN*	*TOTAL*
Accident	158	506	1,276	827	3	10	**2,780**
Homicide	43	441	137	603	0	23	**1,247**
Natural	231	910	2,172	870	10	26	**4,219**
Suicide	95	59	470	177	0	1	**802**
Undet.	19	54	79	89	0	0	**241**
TOTAL	**546**	**1,970**	**4,134**	**2,566**	**13**	**60**	**9,289**

Mode Distribution for Each Age Group, 2001-02



AGE	ACCIDENT	HOMICIDE	NATURAL	SUICIDE	UNDET.	TOTAL
0-9	106	56	105	1	72	**340**
10-19	127	228	27	32	9	**423**
20-29	279	490	107	138	17	**1,031**
30-39	424	223	252	158	35	**1,092**
40-49	661	140	605	165	47	**1,618**
50-59	422	54	908	131	30	**1,545**
60-69	191	27	772	71	14	**1,075**
>=70	570	29	1,443	106	17	**2,165**
TOTAL	***2,780***	***1,247***	***4,219***	***802***	***241***	***9,289***

Gender Distribution for Each Mode, 2001-02



MODE	*MALE*	*FEMALE*	*UNKNOWN*	*TOTAL*
Accident	1,887	891	2	2,780
Homicide	1,058	186	3	1,247
Natural	2,737	1,481	1	4,219
Suicide	625	177	0	802
Undet.	151	89	1	241
TOTAL	6,458	2,824	7	9,289

Causes of Accidental Deaths, 2001-02

CAUSE OF DEATH	*NUMBER OF CASES*
Drugs and Alcohol	1,023
Motor Vehicle	836
Therapeutic Misadventure	33
Fall	464
Burn	38
Natural and Environmental	123
Drowning	65
Choking and Suffocation	58
Firearms	6
Electrocution	12
Other*	122
Total	**2,780**

*Allergy-anaphylaxis (3 cases), animal attack (2 cases), blunt trauma (62 cases), botulism (1 case), explosion (3 cases), sharp force trauma (3 cases), unknown (48 cases)

Primary Drug in Accidental Deaths

DRUG	*NUMBER OF CASES*
Alcohol	57
Amphetamine/Methamphetamine	54
Cocaine	165
Methadone	6
Codeine	37
Heroin-morphine	167
Propoxyphene	1
Unspecified narcotic	102
Multiple Drugs	357
Other*	35
Total	***1,023***

*Acetaminophen (6 cases), antibiotics (1 case), antidepressants (8 cases), barbiturates (1 case), carbon monoxide (2 cases), coumadin (2 cases), diphenhydramine (2 cases), ephedrine (1 case), fungicide (1 case), insulin (2 cases), natural gas (1 case), parasympatholytic agents (1 case), phencyclidine (3 cases), phenytoin (1 case), propranolol (1 case), tranquilizers (2 cases)

Vehicles Involved in Accidental Vehicular Deaths, 2001-02

CLASSIFICATION	***NUMBER OF CASES***
Automobile/truck	526
Bicycle/moped	22
Pedestrian	230
Train	11
Motorcycle	27
Aircraft	1
Water craft	4
Unknown	15
Total	***836***

Accidental Falls, 2001-02

CLASSIFICATION	***NUMBER OF CASES***
Same level fall	327
Fall on stairs	23
Fall from ladder	15
Fall from cliff	2
Fall from roof	6
Fall during sports	2
Fall from chair or bed	23
Fall from tree	5
Unknown	61
Total	***464***

Natural and Environmental Disease Among Accidental Deaths, 2001-02

CLASSIFICATION	***NUMBER OF CASES***
Primary natural disease	94
Pneumoconiosis (including asbestos)	20
Mesothelioma	3
Pneumonitis-pulmonary fibrosis	2
Hypothermia	4
Total	***123***

Causes of Homicidal Deaths, 2001-02

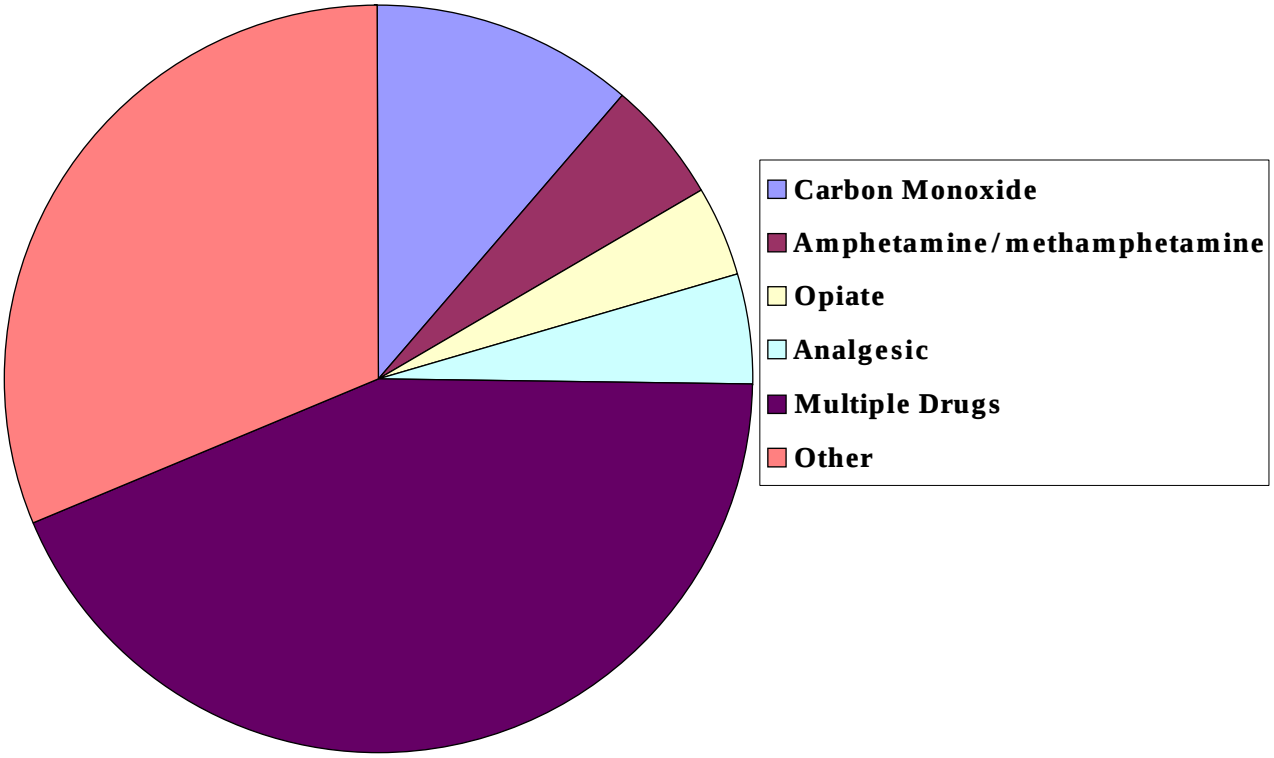
CAUSE OF DEATH	*NUMBER OF CASES*
Blunt trauma	56
Strangulation/suffocation	30
Firearms	993
Sharp force trauma	99
Arson fire	11
Motor vehicle	3
Drowning	5
Child abuse	18
Pushed from height	2
Assaulted using drugs	9
Other*	21
Total	***1,247***

*Primary natural disease (5 cases), explosion (1 case), undetermined after autopsy (4 cases), not stated (11 cases)

Causes of Suicidal Deaths, 2001-02

Cause of Death	*Number of Cases*
Overdose	131
Asphyxia	208
Drowning	4
Firearms	359
Sharp Force Trauma	28
Jumping from Height	43
Motor Vehicle	20
Burns	4
Unknown	5
Total	***802***

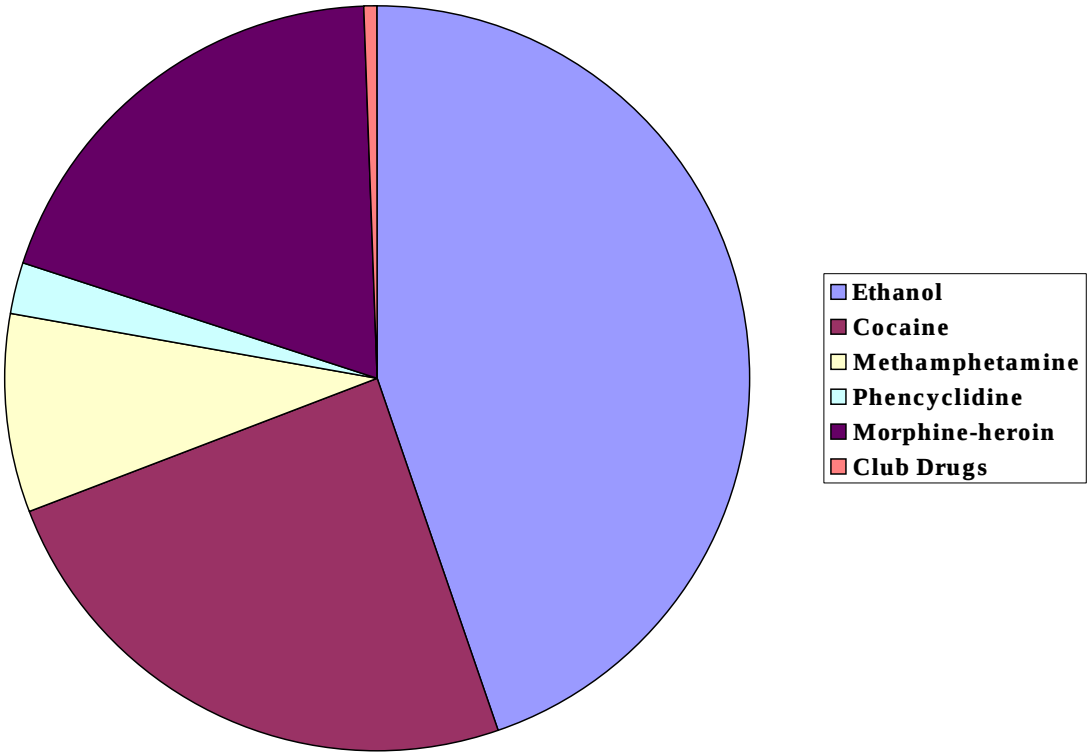
Primary Drug Used in Suicidal Overdoses, 2001-02



DRUG	***NUMBER OF CASES***
Carbon monoxide	15
Amphetamine/methamphetamine	7
Opiate	5
Analgesic	6
Multiple drugs	57
Other*	41
Total	***131***

*Antidepressants (3 cases), barbiturates (2 cases), cardiovascular drugs (1 case), cocaine (3 cases), corrosive substances (2 cases), cyanide (1 case), diphenhydramine (2 cases), ethylene glycol (1 case), gases other than carbon monoxide (2 cases), salicylate (2 cases), unknown (22 cases)

Common Drugs of Abuse, 2000-01



DRUG	*NUMBER OF CASES*
Ethanol	1,250
Cocaine	690
Methamphetamine	237
Phencyclidine	64
Morphine-heroin	542
Club Drugs*	19

*Ketamine, MDMA, GHB

Natural Deaths

Cases where the underlying cause of death was a natural disease are broken down below.

Causes of Natural Death, 2001-02

CAUSE OF DEATH	*NUMBER OF CASES*
Infectious and Parasitic	46
Neoplasms	126
Endocrine, Nutritional, Metabolic	97
Hematologic	5
Psychiatric Disorders	83
Disorders of Nervous System	61
Disorders of Circulatory System	3,199
Disorders of Respiratory System	178
Disorders of Digestive System	193
Disorders of Genitourinary System	18
Pregnancy and Childbirth	12
Skin and Subcutaneous Tissue	5
Musculoskeletal System	2
Congenital Anomalies	67
Perinatal Conditions	20
Other*	107
Total	***4,219***

*Allergy (1 case), cardiac arrhythmia (9 cases), sudden infant death syndrome (20 cases), undetermined cause (5 cases), urinary complication (1 case), unknown (71 cases)

Infectious Diseases Among Natural Deaths 2001-02

CAUSE OF DEATH	*NUMBER OF CASES*
AIDS	9
Cysticercosis	3
Klebsiella infection	1
Pertussis	1
Tuberculosis	3
Sarcoidosis	2
Streptococcal infection	4
Viral enteritis	1
Viral encephalitis	1
Viral hepatitis	6
Infection, undetermined virus	5
Infection, undetermined organism	10
Total	***46***

Neoplasms Among Natural Deaths, 2001-02

PRIMARY SITE	*NUMBER OF CASES*
Bladder	1
Brain	2
Breast	7
Cervix	4
Colon	5
Esophagus	3
Gallbladder	1
Hodgkin's Disease	2
Kidney	1
Larynx	5
Leukemia	4
Liver	12
Lung	28
Lymphoma	1
Melanoma	1
Myeloma	2
Mesothelioma	7
Neck	4
Ovary	2
Pancreas	5
Prostate	5
Rectum	1
Skin	1
Stomach	1
Thymus	1
Other*	120
Total	***126***

*Adenocarcinoma, primary site unknown (3 cases), endocrine tumor (2 cases), hematopoietic tumor (1 case), hemangioma (2 cases), leiomyoma (2 cases), meningioma (1 case), neurofibroma (1 case), unknown (8 cases)

Respiratory System Disease Among Natural Deaths, 2001-02

CAUSE OF DEATH	*NUMBER OF CASES*
Acute epiglottitis	1
Acute interstitial pneumonitis	15
Airway obstruction, unspecified	5
Asthma	16
Bronchitis	19
Emphysema	59
Influenza	2
Pneumonia	57
Pulmonary fibrosis	4
Total	***178***

Central Nervous System Disease Among Natural Deaths, 2001-02

CAUSE OF DEATH	*NUMBER OF CASES*
Alzheimer's Disease	1
Amyotrophic lateral sclerosis	1
Cerebellar ataxia	1
Cerebral palsy	6
Encephalitis	1
Encephalopathy, unspecified	5
Epilepsy	34
Meningitis	2
Multiple sclerosis	2
Muscular dystrophy	2
Myasthenia gravis	1
Parkinson's Disease	1
Spinocerebellar disease	1
Transverse myelitis	1
Nervous system disease, unspecified	2
Total	***61***

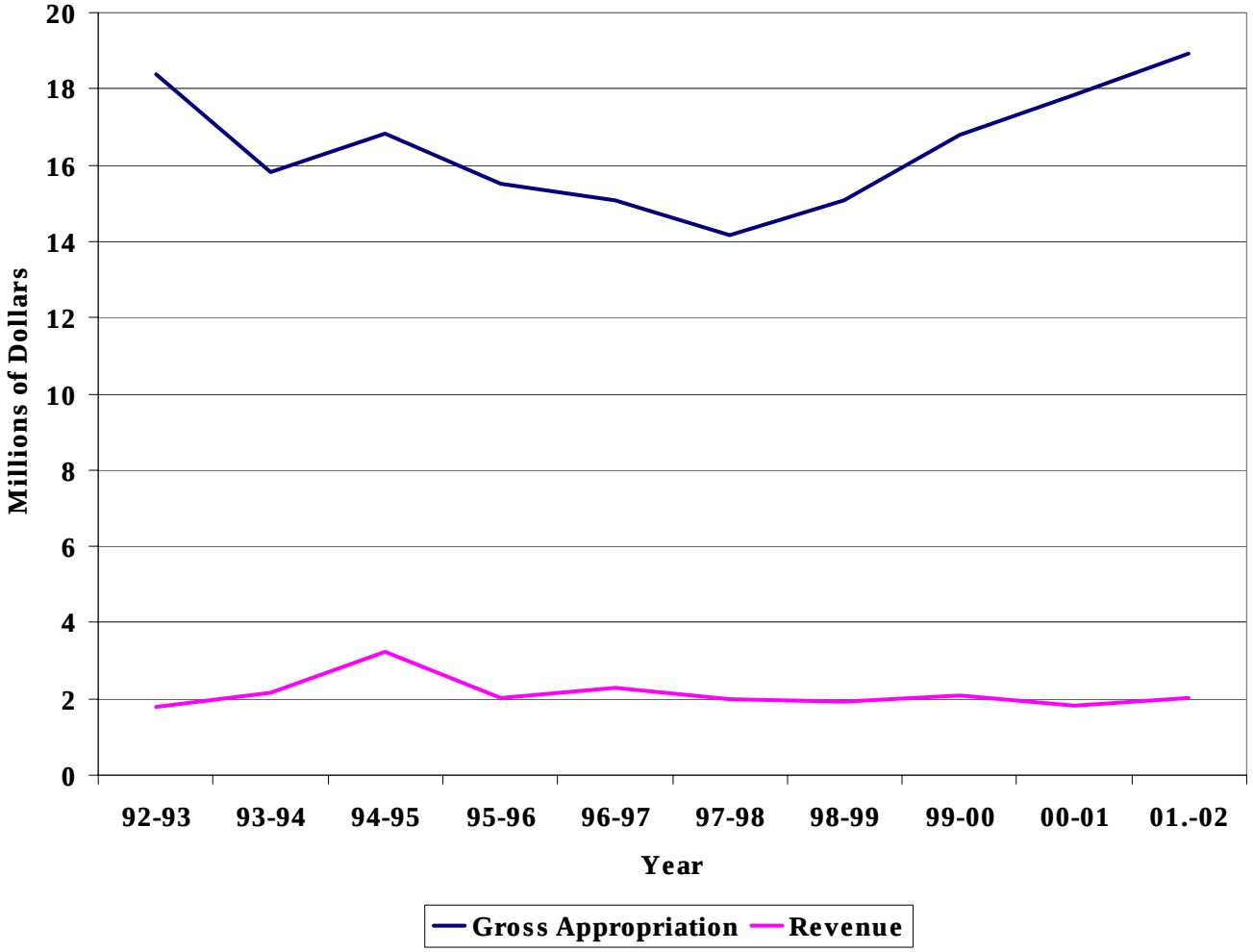
Circulatory System Disease Among Natural Deaths, 2001-02

CAUSE OF DEATH	*NUMBER OF CASES*
Aneurysms:	
Cerebral	17
Aortic	23
Arteriosclerotic disease	2,624
Asymmetric septal hypertrophy	4
Cardiomyopathy:	
Alcoholic	7
Dilated	34
Hypertrophic	22
Idiopathic	103
Cerebral hemorrhage/infarction	36
Coronary artery vasculitis	2
Endocarditis	2
Hypertensive disease	209
Myocarditis	28
Pericarditis	3
Pulmonary hypertension	3
Thrombosis/embolism	44
Valvular disease:	
Aortic stenosis	7
Mitral stenosis	2
Mitral valve prolapse	5
Mitral disease, unspecified	3
Rheumatic heart disease	2
Valvular disease, unspecified	4
Circulatory disease, unspecified	15
Total	***3,199***

Budget And Workload Statistics

Budget Statistics

This graph shows the gross appropriation for the Department of Coroner, together with the amount of revenue generated by reimbursement for state mandated programs, Skeletons in the Closet gift shop, document reproduction fees, Youthful Drunk Driver Visitation Program, and other activities. Dollar amounts are adjusted for inflation to the year 2000.

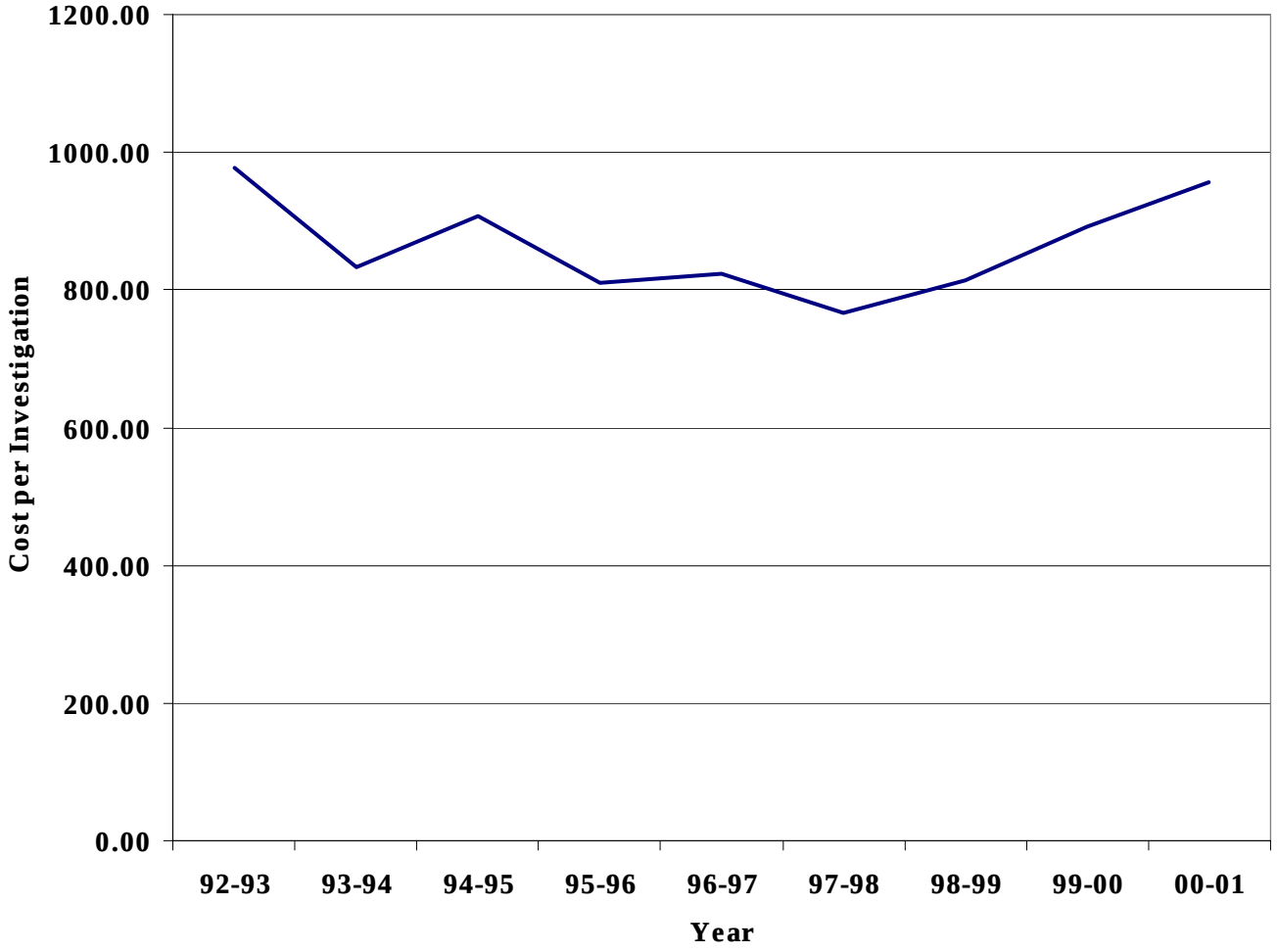


Gross Appropriation and Revenue (Inflation Adjusted)

YEAR	INFLATION FACTOR*	GROSS APPROP.	INFLATION-ADJUSTED APPROP.	REVENUE GENERATED	INFLATION-ADJUSTED REVENUE
92-93	1.23	$14,950,000	$18,388,500	$1,451,000	$1,784,730
93-94	1.19	$13,289,000	$15,813,910	$1,826,000	$2,172,940
94-95	1.16	$14,498,000	$16,817,680	$2,788,000	$3,234,080
95-96	1.13	$13,736,000	$15,521,680	$1,776,000	$2,006,880
96-97	1.10	$13,707,000	$15,077,700	$2,092,000	$2,301,200
97-98	1.07	$13,250,000	$14,177,500	$1,847,000	$1,976,290
98-99	1.06	$14,217,631	$15,070,689	$1,801,014	$1,909,075
99-00	1.03	$16,296,912	$16,785,819	$2,032,906	$2,093,893
00-01	1.00	$17,845,000	$17,845,000	$1,818,000	$1,818,000
01-02	0.98	$19,292,683	$18,906,829	$2,076,493	$2,034,963

*Data adjusted for inflation to the year 2000. Source: *United States Bureau of Labor Statistics, Consumer Price Index* (http://www.bls.gov/cpi/)

Average Gross Apropriation per Investigation (inflation adjusted)



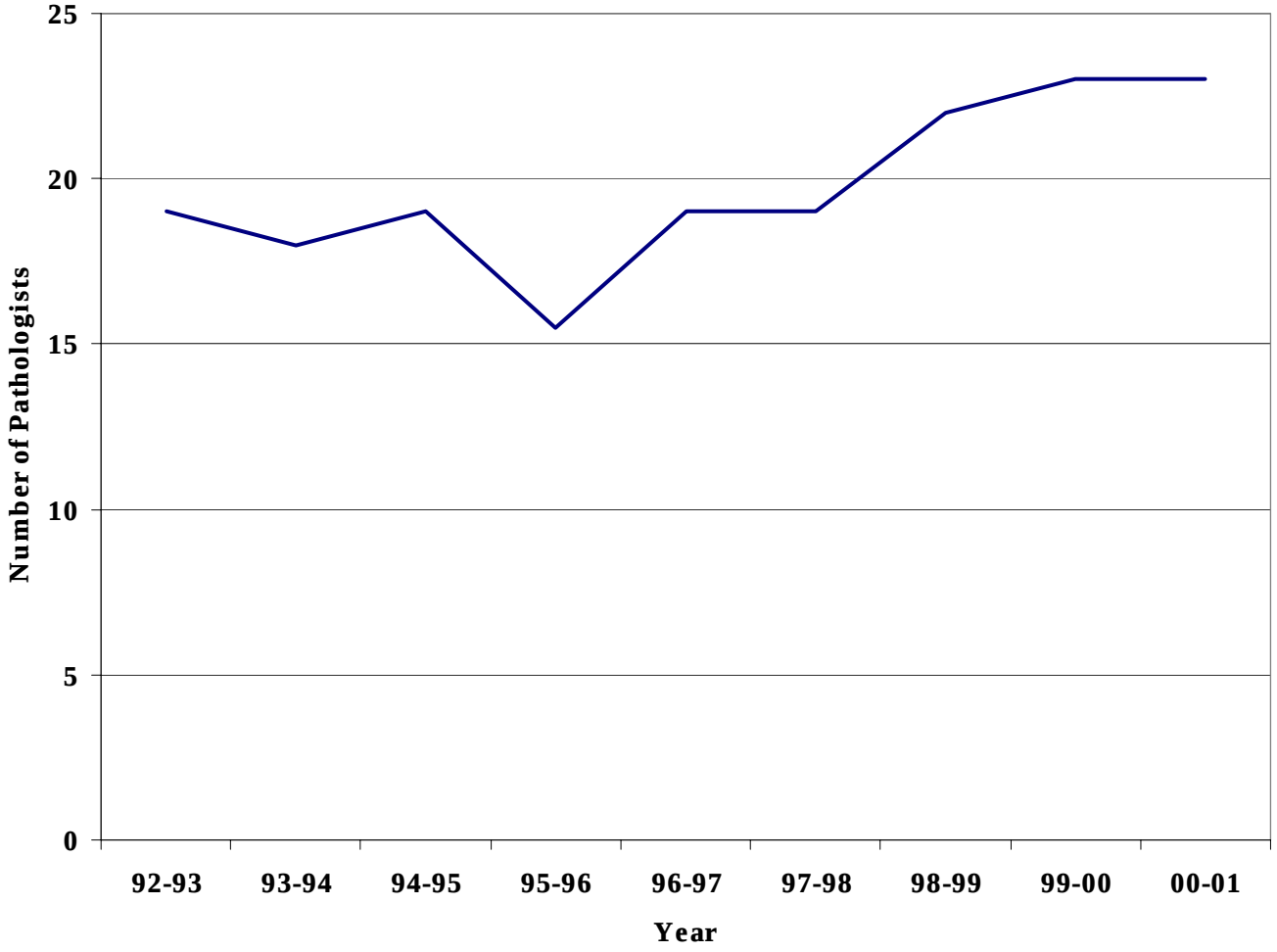
This graph shows the average inflation-adjusted gross appropriation per investigation, including reported cases where the Coroner did not have jurisdiction (rejections).

YEAR	*INVESTIGATIONS*	*APPROPRIATION*	*COST PER INVESTIGATION*	*INFLATION FACTOR**	*-INFLATION-ADJUSTED COST PER INVESTIGATION*
92-93	18,794	$14,950,000	$795.47	1.23	$978.42
93-94	19,005	$13,289,000	$699.24	1.19	$832.09
94-95	18,550	$14,498,000	$781.56	1.16	$906.61
95-96	19,160	$13,736,000	$716.91	1.13	$810.11
96-97	18,295	$13,707,000	$749.22	1.10	$824.14
97-98	18,500	$13,250,000	$716.22	1.07	$766.35
98-99	18,521	$14,217,631	$767.65	1.06	$813.71
99-00	18,814	$16,296,912	$866.21	1.03	$892.20
00-01	18,665	$17,845,000	$956.07	1.00	$956.07

*Data adjusted for inflation to the year 2000. Source: *United States Bureau of Labor Statistics, Consumer Price Index* (http://www.bls.gov/cpi/)

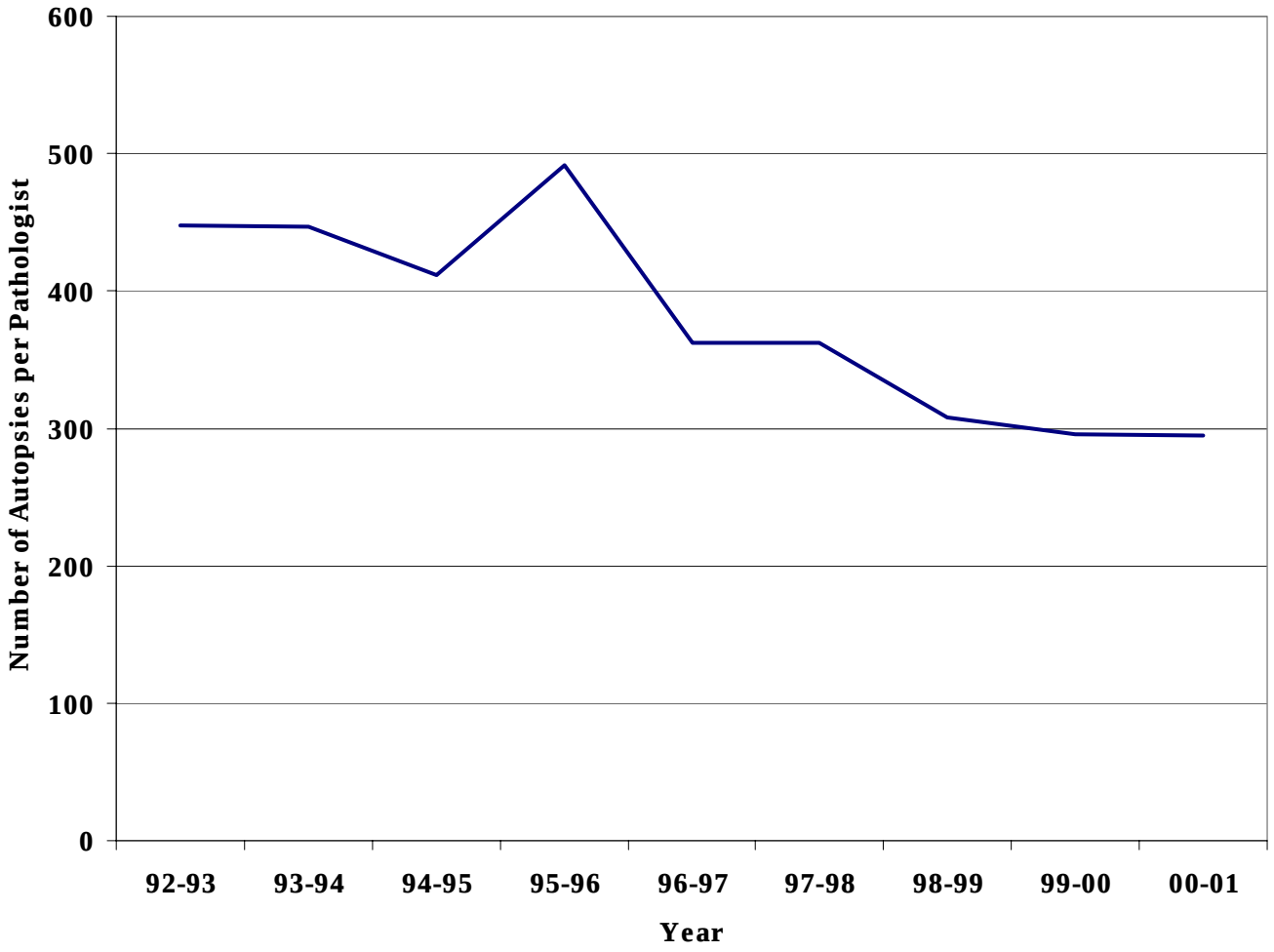
Workload Statistics

Number of Pathologists on January 1 of each Year



YEAR	*NUMBER OF PATHOLOGISTS*
92-93	19
93-94	18
94-95	19
95-96	15.5
96-97	19
97-98	19
98-99	22
99-00	23
00-01	23

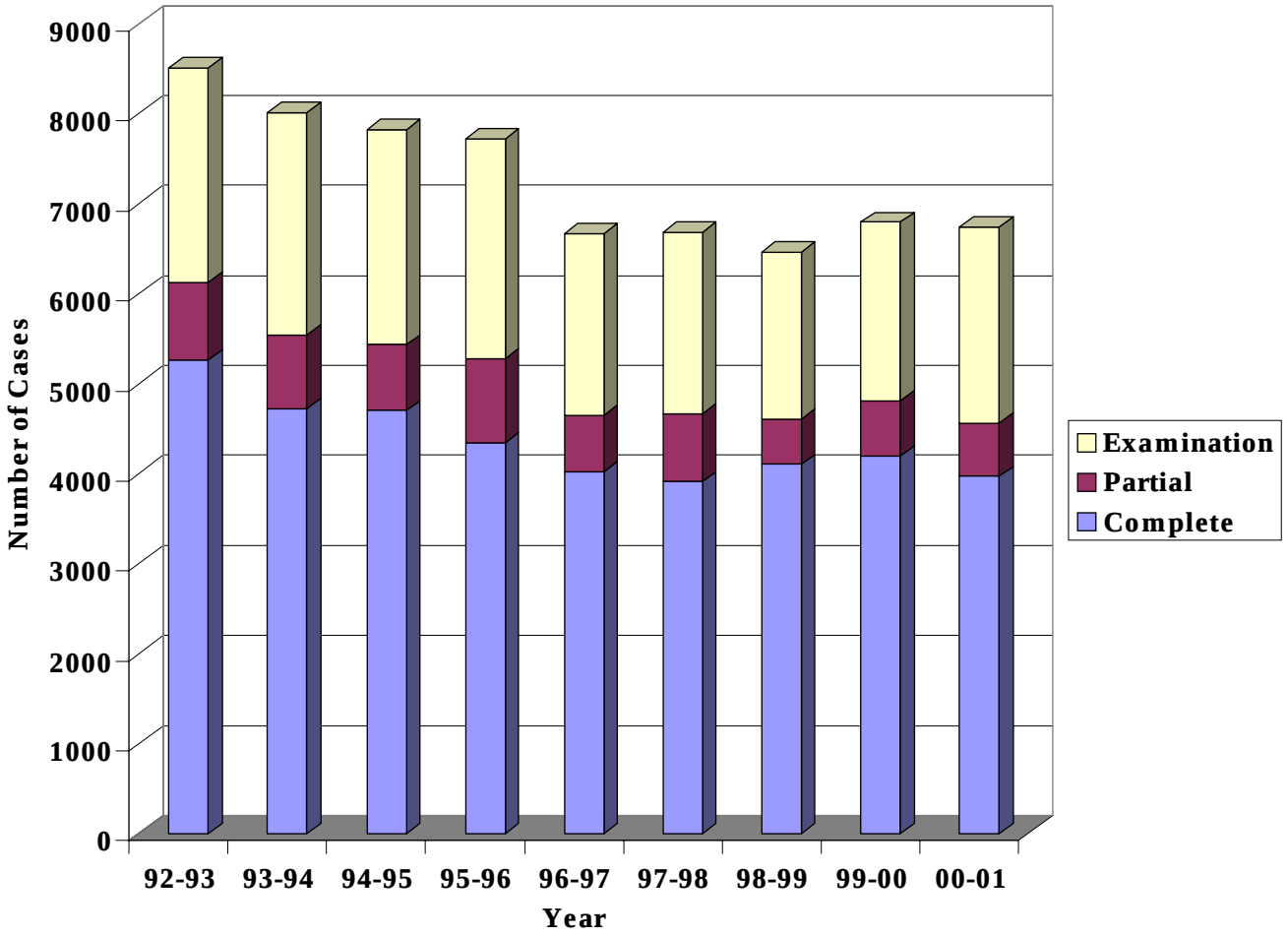
Average Number of Cases per Pathologist



YEAR	NUMBER OF PATHOLOGISTS	NUMBER OF AUTOPSIES	AUTOPSIES PER PATHOLOGIST
92-93	19	8,505	448
93-94	18	8,051	447
94-95	19	7,824	412
95-96	15.5	7,618	491
96-97	19	6,890	363
97-98	19	6,882	362
98-99	22	6,773	308
99-00	23	6,801	296
00-01	23	6,790	295

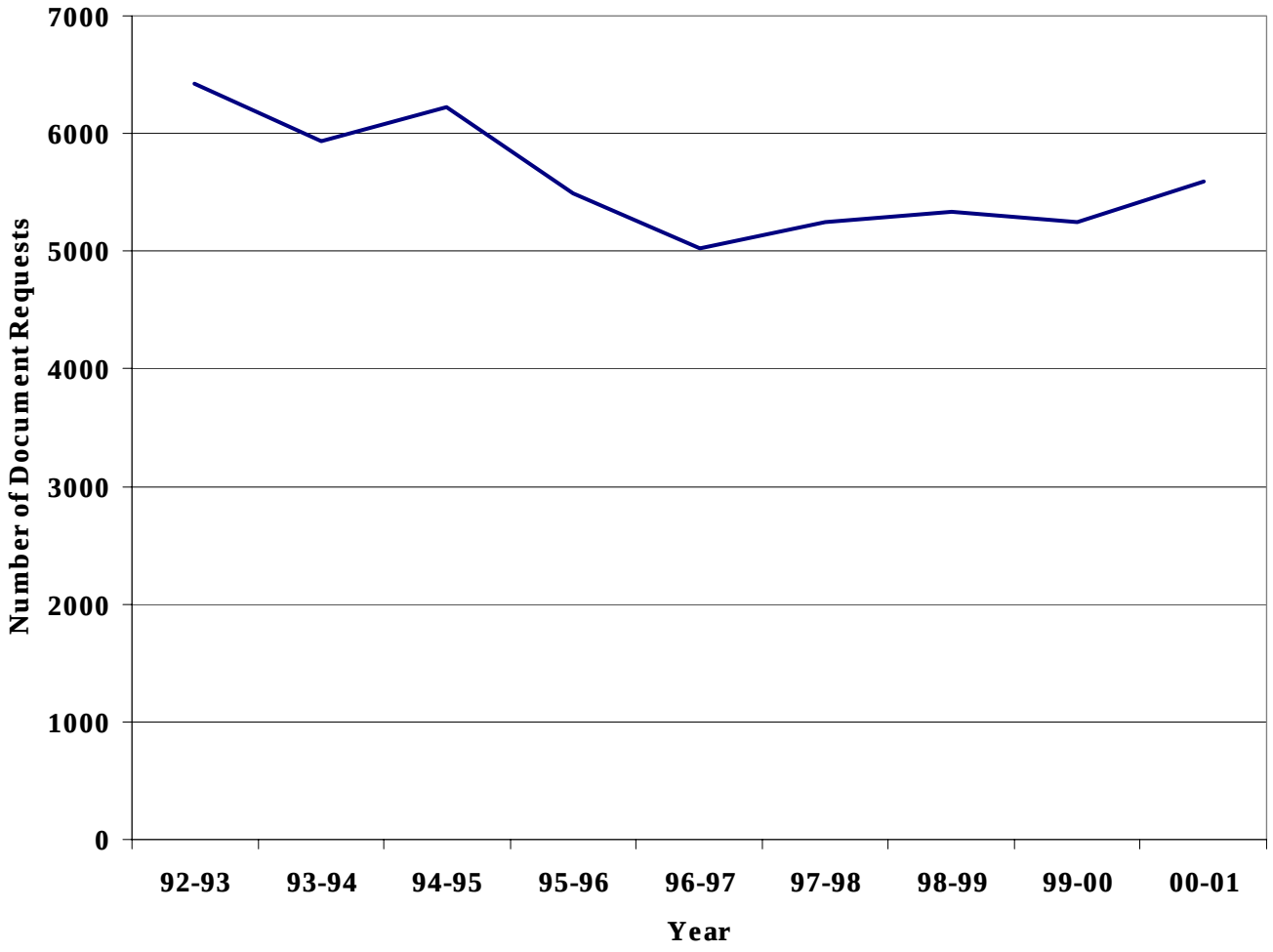
Note: Accreditation standards of the National Association of Medical Examiners require no more than 400 cases per pathologist per year. Ideally pathologists should do no more than 250 cases per year each.

Extent of Autopsy for Each Year



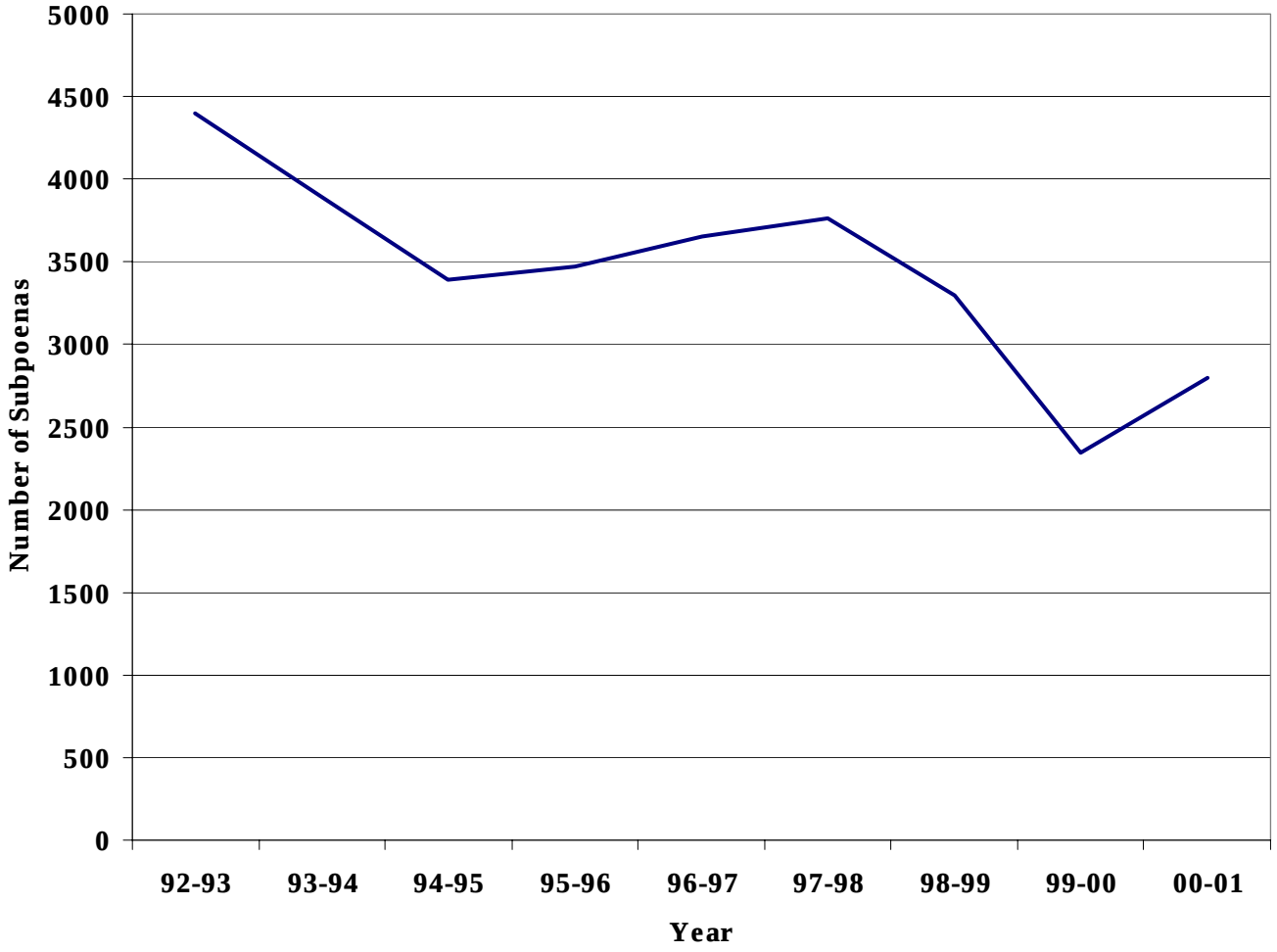
Year	*Complete*	*Partial*	*External Exam*
92-93	5,260	865	2,387
93-94	4,718	817	2,474
94-95	4,699	729	2,394
95-96	4,337	941	2,436
96-97	4,020	623	2,021
97-98	3,908	748	2,023
98-99	4,098	505	1,861
99-00	4,189	618	1,982
00-01	3,966	593	2,182

Number of Document Requests Filled per Year



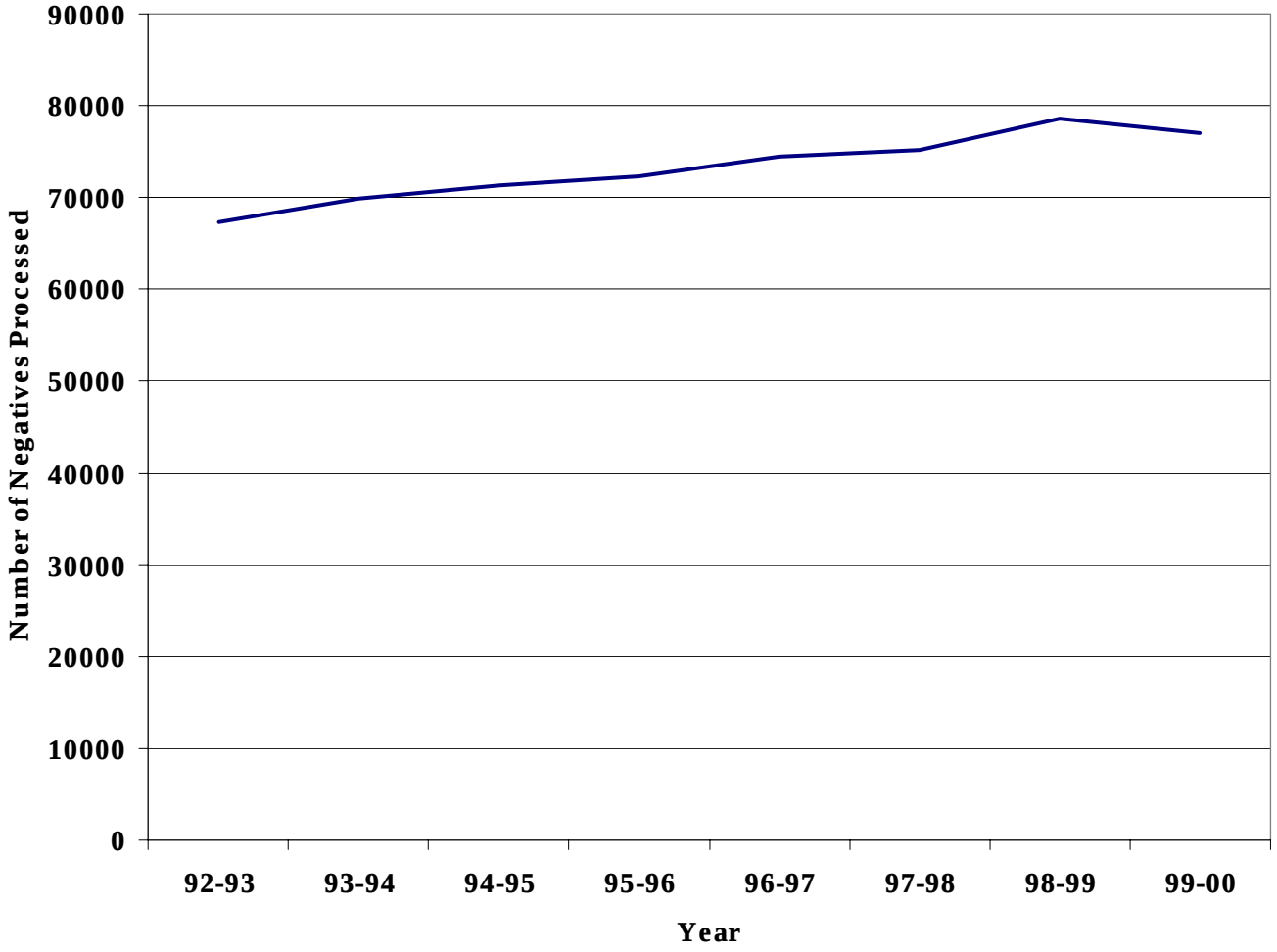
YEAR	*DOCUMENT REQUESTS FILLED*
92-93	6,428
93-94	5,930
94-95	6,227
95-96	5,495
96-97	5,030
97-98	5,242
98-99	5,335
99-00	5,248
00-01	5,589

Number of Subpoenas Processed per Year



YEAR	*SUBPOENAS PROCESSED*
92-93	4,400
93-94	3,892
94-95	3,395
95-96	3,474
96-97	3,652
97-98	3,761
98-99	3,295
99-00	2,343
00-01	2,797

Number of Photographic Negatives Processed per Year



YEAR	*NEGATIVES*
92-93	67,300
93-94	69,900
94-95	71,340
95-96	72,375
96-97	74,500
97-98	75,100
98-99	78,650
99-00	77,000

"Law & Science Serving the Community"

Acknowledgements

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