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FOREWORD

The Los Angeles County Department of Health Services is committed to working with communities to improve the health of every resident. This report, The Health of Angelenos, provides an assessment of the health of the County's population and information on the many factors that influence health. This important tool and the availability of improved health data will:

- ➜ Help public and private organizations to define health-related priorities.
- ➜ Support planning activities for improving health.
- ➜ Evaluate the impact of actions to reduce the burden of specific diseases and types of injuries, and underlying health risk factors.
- ➜ Monitor progress in meeting national, state and county health objectives.
- ➜ Formulate recommendations for new or revised policies and programs.

To make lasting health improvements we need to strengthen our collective efforts to prevent illness and injuries. These efforts should promote healthier behaviors, such as getting children immunized, avoiding illicit drugs and tobacco products, not abusing alcohol, eating wisely and in moderation, wearing seatbelts and participating in regular physical activity. These prevention efforts go hand-in-hand with assuring access to health related services, including those that either prevent disease before it starts or early in its course, such as age- and gender-appropriate cancer screening and the early detection and effective management of chronic diseases. To achieve success in these efforts we must not ignore the social and environmental factors that can adversely affect health, such as poverty and income disparities, social status and social support, and conditions in the physical environment, air and water quality, housing conditions, and the presence of environmental toxins.

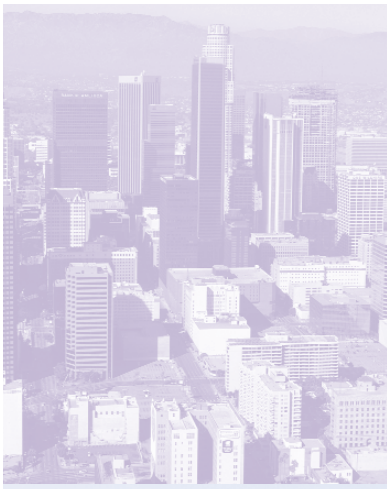
The data in this report describes health status, health risks, medical care access and the broader health determinants. Many of the findings illustrate the significant health disparities between racial and ethnic groups in our county, and mirror racial/ethnic trends seen throughout the nation. Reducing and eliminating these disparities is among the Department of Health Services' highest priorities.

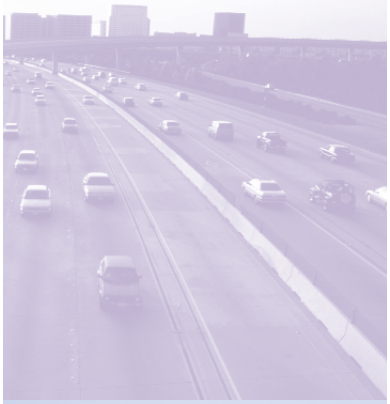
We provide this data, and continue work to deliver additional useful data, for our partners in the private sector, government agencies and communities. Together, we can improve the quality of life for all Angelenos.

Finally, we are pleased to provide health data to you on our website.
Visit us at lapublichealth.org.

Mark Finucane
Director

Jonathan E. Fielding, MD, MPH
Director of Public Health and Health Officer





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Gloria Molina

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Don Knabe

Michael D. Antonovich

Los Angeles County Department of Health Services

Mark Finucane, Director

Jonathan Fielding, MD, MPH, Director of Public Health and Health Officer

Donald C. Thomas, III, MD, Associate Director of Health Services, Clinical and Medical Affairs

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Paul Simon, MD, MPH, Director

Cheryl Wold, MPH, Chief, Health Assessment Unit

Health Assessment Unit staff: Isabel Cardenas, MPH; Daniel Magana, MPH; Meeran Ojha, MPH; Amy Paturel, MS, MPH; Thomas Rice, MA; and Zhiwei Zeng, MD, MPH.

With Carol Sutherland, PhD, MPH, Project Director, UCLA Center for Healthier Children, Families and Communities.

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Introduction

In the rapidly changing health care environment of the 21st century, information is more critical than ever before. Critical to the process of community health improvement is the availability of high-quality and comprehensive health data on the population. This report, *The Health of Angelenos*, is designed to provide such data at the county level, focusing not only on specific health conditions, but also on health behaviors, access to and utilization of health care services, and attributes of the social and physical environment that influence health.

In communities across the country, local citizens are developing partnerships with government agencies, health care providers, nonprofit community-based organizations, the business sector, and others to create a vision of health for their communities, set goals for improving community health and quality of life, and design programs to meet those goals. Local health departments play an active role in many of these efforts, providing leadership, information, and resources. These are natural partnerships. Given the growing recognition of the broad range of factors that directly influence health, many of which fall outside the traditional notions of health (e.g., poverty, education, and community safety), it is increasingly clear that to address our most challenging community health issues, public health professionals and institutions must work collaboratively with their communities to explore solutions.

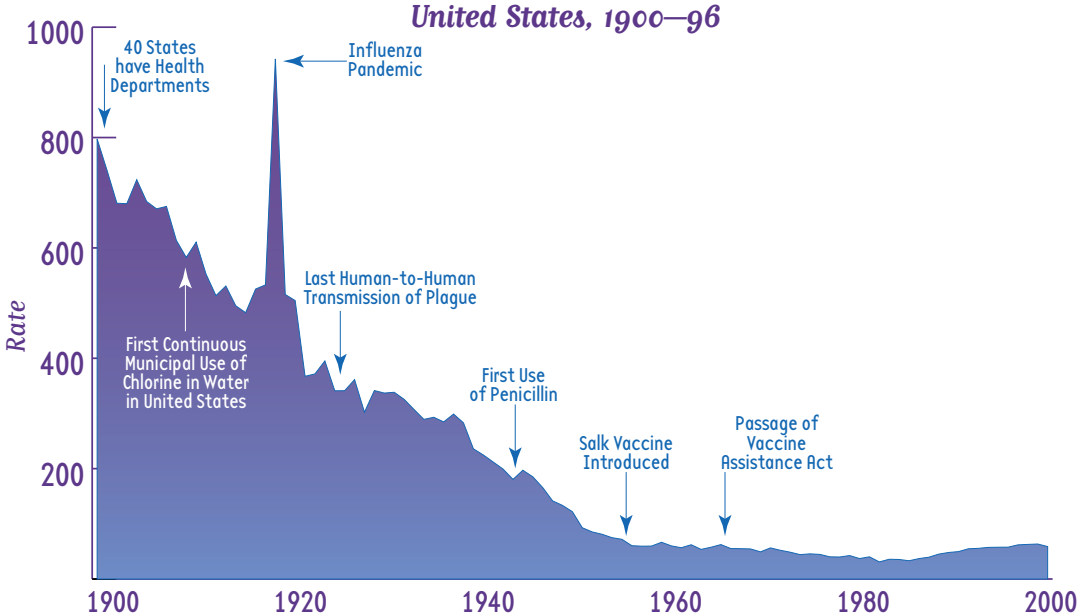
This report is not intended to provide a comprehensive compilation of all available health data on the county population but to provide information on key health indicators. Where available, statistics for Los Angeles County are compared with those for the state of California and with the national *Healthy People 2000* health promotion and disease prevention objectives. In addition, it is designed to highlight the importance of applying a broad view of health and its determinants when assessing population health and identifying opportunities for intervention. It is also hoped that this report will set the stage for continuing health improvement work in the Service Planning Areas (SPAs), cities, neighborhoods, and other communities. In extending this work to the community level, it is critical that the assessment process and the interventions that follow include the active participation of community members. The Los Angeles County Department of Health Services will prepare health profiles at the SPA level to support this work. During the production of this report, every effort was made to use the most recent data available. Data sources are included in each chapter and in the Appendix to assist the reader with finding the most up-to-date information.

The Role of Health Assessment

The 1988 landmark report by the Institute of Medicine, *The Future of Public Health*[1] highlighted the importance of health assessment for driving public health action. In that report, ongoing assessment of the health of the population is identified as one of the three core functions of local health departments; the other two are policy development and assuring the availability of necessary personal and public health services.

The report recommends that "every public health agency regularly and systematically collect, assemble, analyze, and make available information on the health of the community, including statistics on health status, community health needs, and epidemiologic and other studies of health problems."

Figure I.1: Crude Death Rate For Infectious Diseases, United States, 1900–96



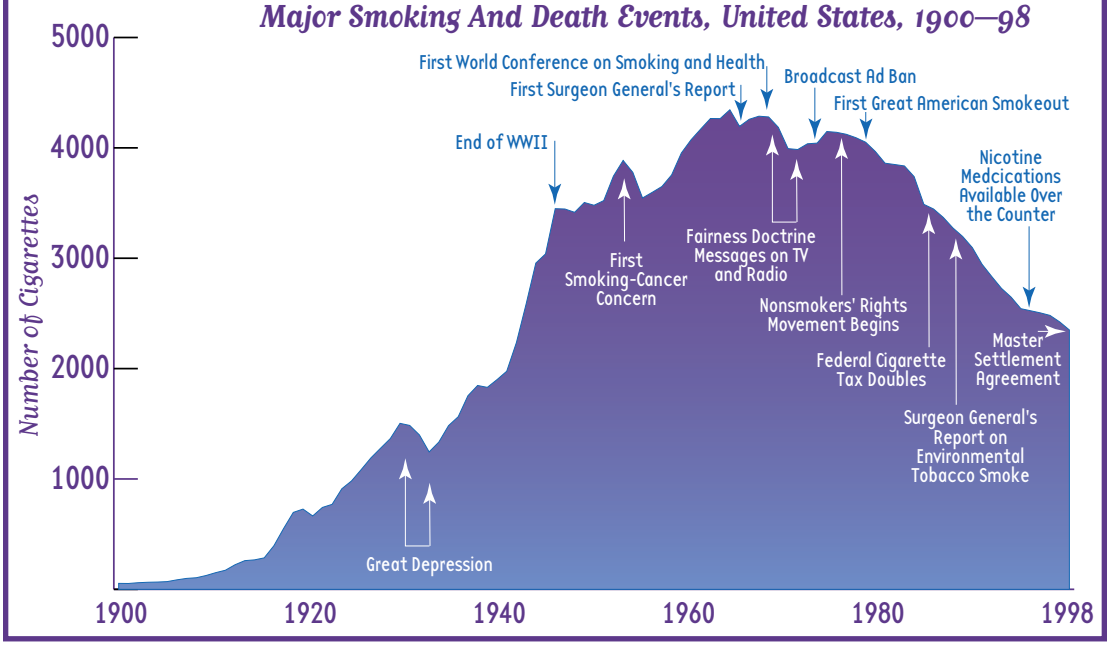
Source: CDC, MMWR, 1999

Systematic assessment of the population's health provides the cornerstone for identifying public health problems within the population, describing their impact across sub-populations, and monitoring trends over time. In addition, population health data are critically important to establish public health priorities, allocate resources, and evaluate the impact of programs and interventions to improve health.

Consider how dramatically the population's health has changed in the recent past. During the twentieth century, life expectancy increased by nearly thirty years among persons living in the United States.[2] Deaths from infectious diseases declined by more than 85% (see Figure I.1).

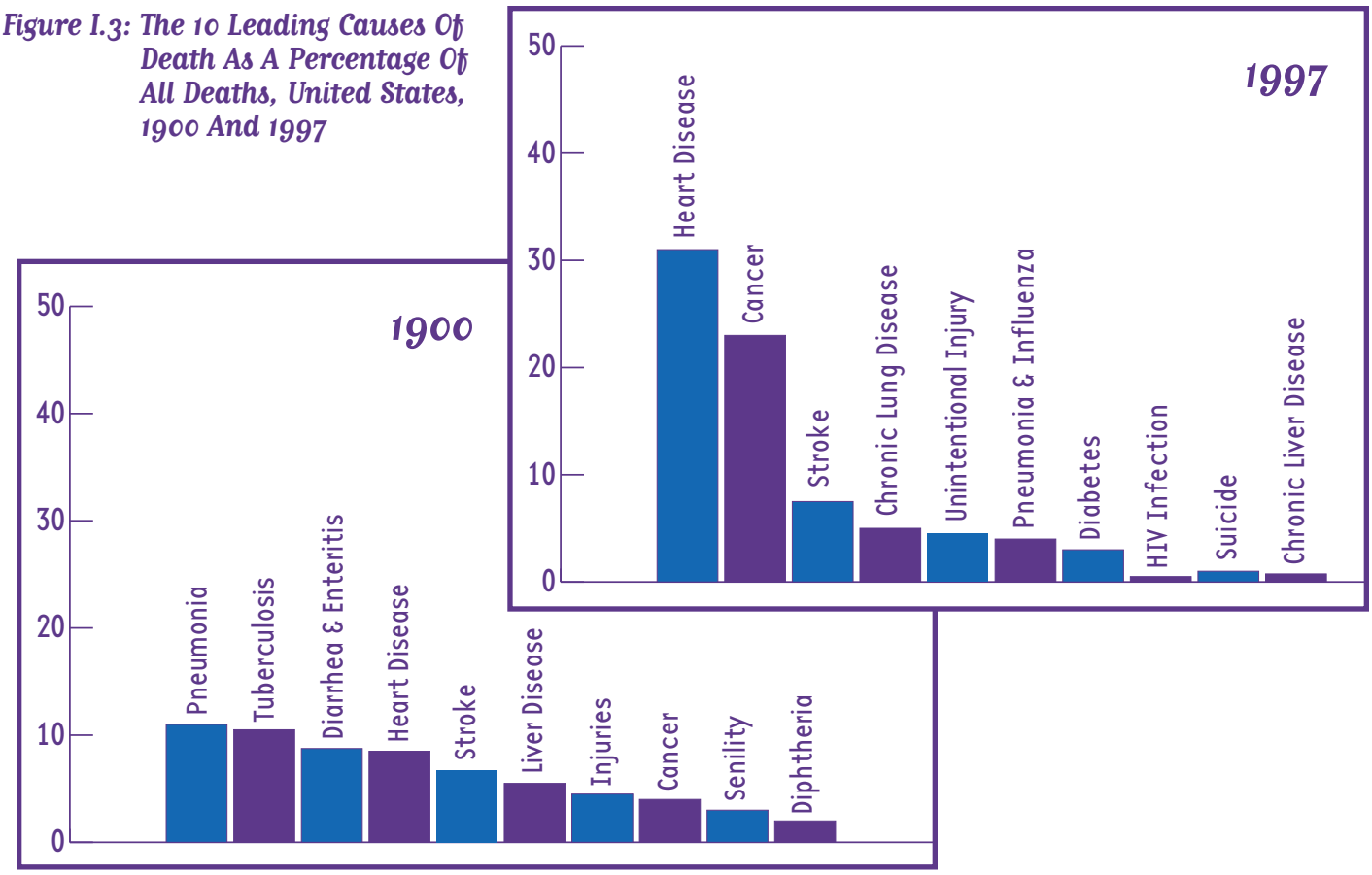
Behaviors that affect health have also changed dramatically during the past century. For example, the epidemic of cigarette smoking reached peak levels during the 1950s-1960s and, although per capita cigarette consumption has declined since the mid-1970s (see Figure I.2),[3] smoking remains the single leading preventable cause of death in the United States.[4]

Figure I.2: Annual Adult Per Capita Cigarette Consumption And Major Smoking And Death Events, United States, 1900–98



Source: CDC, MMWR, 1999

Figure I.3: The 10 Leading Causes Of Death As A Percentage Of All Deaths, United States, 1900 And 1997



Source: CDC, MMWR, 1999

While pneumonia, tuberculosis, and intestinal infections were the leading causes of death in 1900, heart disease, cancer, and stroke are now the leading killers (see Figure I.3).

In addition, many chronic health conditions that do not routinely cause death, such as depression and arthritis, have become the major sources of disability and reduced quality of life in the Los Angeles County population (see Chapter Four).

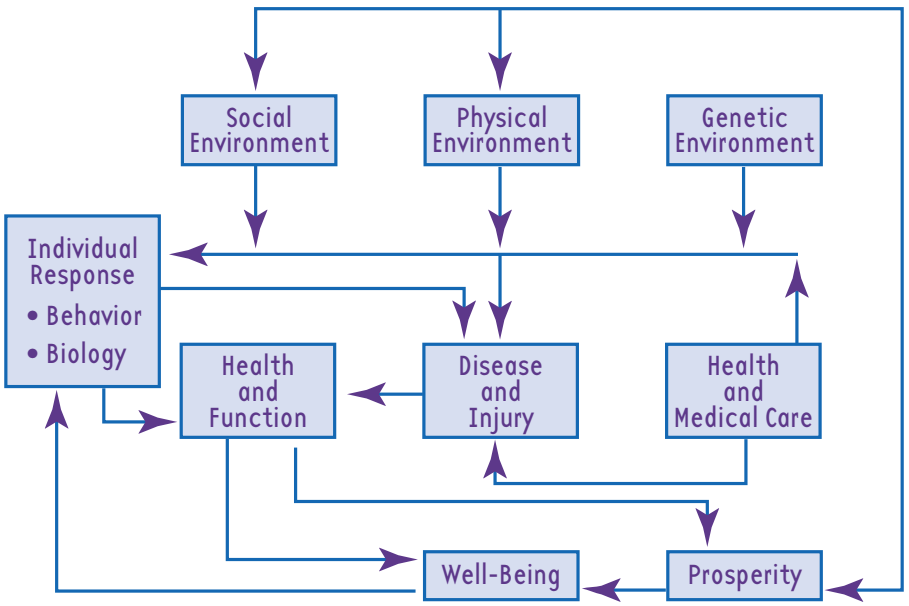
What Is *Health*?

As public health functions have evolved, so have the definitions of health. In the traditional biomedical model, health is defined rather narrowly as the absence of disease or illness. This definition is limited. It does not account for the ways in which persons perceive their own health and how they respond to illness. Some persons may feel healthy and lead productive lives despite having a chronic medical condition, while others may consider themselves in poor health and have limited function even in the absence of a defined illness.

The World Health Organization (WHO) proposed that health transcends the mere absence of disease and should be viewed more broadly as a state of complete physical, mental, and social well-being.[5] This definition provides an optimistic view of health and takes into account the fact that health is influenced by a wide range of psychological and social forces in addition to the physical and biological processes that have been the focus of modern medicine. In addition, this definition explicitly links health with quality of life and suggests that health provides the avenue through which persons lead productive and fulfilling lives. From the community perspective, the health of the population has a powerful influence on the degree to which a society prospers. For exam-

ple, healthy populations are more likely to have high levels of employment and productive work forces. This positive effect is reciprocal and amplified by the fact that a strong economy and improved socioeconomic conditions most often lead to improved health among community members.

Figure I.4: Evans-Stoddart Model: A Comprehensive Model Of The Determinants Of Health



In 1997, the Institute of Medicine's Committee on Using Performance Monitoring to Improve Community Health expanded the WHO definition of health as follows: "Health is a state of well-being and the capability to function in the face of changing circumstances. Health is, therefore, a positive concept emphasizing social and personal resources as well as physical capabilities. Improving health is a shared responsibility of health care providers, public health officials, and a variety of other actors in the community who can contribute to the well-being of individuals and populations."[6] By including a functional component, this definition accounts for variation in how individuals cope with illness. In addition, it suggests that health is influenced by a wide range of forces at the individual and population levels, that these forces may change over time, and that the effective promotion of health within communities requires collaboration between professionals from a variety of disciplines and the active participation of those who live in the communities.

What Determines Health?

A vast amount of research has been done to identify the factors that influence health in populations. Epidemiology, the population-based study of disease and an important part of the scientific foundation of public health, acquired greater quantitative capacity during the 20th century.[7] Much of this work has been integrated into a comprehensive model of the determinants of health, referred to as the Evans-Stoddart Model (see Figure I.4).[8] In this model, the determinants of health are organized into the following six categories: social environment (e.g., family structure, education, and employment), physical environment (e.g., the workplace, air quality, and water quality), genetic environment, individual response (i.e., behavior and biology), health care, and prosperity. Health outcomes are distinguished as three related but separate categories: disease and injury, health and function, and well-being.

Understanding the broad determinants of health provides decision makers with information for resource allocation. For example, smoking is recognized as the major cause of lung cancer and emphysema as well as a major contributor to other serious health problems such as cardiovascular disease. Health care services can help reduce smoking by providing drug treatment to smokers for nicotine addiction as well as counseling and education to nonsmokers to prevent smoking. However, application of a broader

health determinants perspective highlights the fact that the initiation of smoking is very powerfully influenced by one's social environment, including the influence of peers, tobacco advertising, and the price and availability of cigarettes. These social determinants have been very aggressively targeted in California over the past decade through public education campaigns, anti-tobacco advertising, legislation to restrict youth access to tobacco products, and increased cigarette prices through taxation. The cumulative effect of these policies and interventions has been a more rapid decline in the prevalence of smoking in California than in the rest of the country.[9]

Vision for the Future

The Health of Angelenos is the first edition of work that is continuously in progress. Future presentations of information will reflect community concerns, varied geographies, and the availability of new and more complete data. We hope this work contributes to the vital process of community health improvement and supports the continued use of data in education, program planning, policy development, and evaluation in Los Angeles County.

The availability and use of health data to identify health priorities is only the first in a series of steps along the road to improving the health of communities. Given scarce resources, we need to identify the most cost-effective interventions for improving health and evaluate these interventions once implemented. Recognizing the multiple determinants of health will broaden the discussion on the use of interventions. Informed decision-making throughout the process requires effective linkages between a multidisciplinary mix of partners representing local government, other public institutions, private health care, community health agencies, other community groups, and a well-informed public.

Endnotes

1. Institute of Medicine. The Future of Public Health. Washington DC, National Academy Press, 1988.

2. Centers for Disease Control and Prevention. Control of infectious diseases. MMWR, 1999; 48:621-29.

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7. Centers for Disease Control and Prevention. Achievements in Public Health, 1900-1999: Changes in the Public Health System. MMWR, 1999; 48(50);1141-7.

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Demographic & Social Health Indicators

Research has shown that socioeconomic status, education, employment and social networks are important indicators of a community's health. Research has documented the powerful effect of social environment on health.[1] With rare exception, lower socioeconomic status is associated with a greater burden of disease and shorter life expectancy. Education and employment are often correlated with improved health status. In addition, persons with strong social support networks are, on average, more likely to be healthy than those living in more isolated circumstances.

Table 1.1: Select Demographic Characteristics, Los Angeles County, 1997

Population Trends[1]	Number	Change
1970	7,041,982	
1980	7,477,239	6%
1990	8,901,987	19%
2000	9,838,861	11%
2010	10,604,452	8%
2020	11,575,693	9%
Persons by Gender[2]	**Number**	**Percentage**
Male	4,797,597	49.8%
Female	4,837,166	50.2%
Total	9,634,763	
Age Distribution[2]	**Number**	**Percentage**
<5 years	759,722	8%
5-14 years	1,402,834	15%
15-44 years	4,595,580	48%
45-64 years	1,867,372	19%
65-74 years	551,988	6%
75+ years	457,261	5%
Race/Ethnicity[2]	**Number**	**Percentage**
White	3,235,051	34%
Latino	4,220,832	44%
African-American	901,785	9%
Asian/Pacific Islander	1,230,207	13%
American Indian	46,888	<1%

1. California State Department of Finance Demographic Research Unit.
2. Los Angeles County Chief Administrative Office, Urban Research Division, P.E.P.S.

Demographics:
Distribution of the Population by Age and Race or Ethnicity

The population of Los Angeles County was nearly 9.6 million in 1997 representing 30% of the California population. The growth in total population has slowed during the 1990s compared to the rapid growth seen during the 1960s through the 1980s (see Table 1.1). Changing migration patterns indicate that more people have moved out of Los Angeles County than into the county in recent years. However, the increasing birth rate has fueled a population growth rate of 0.5% annually.

Most communities in Los Angeles County are multiethnic. Approximately one-third of all zip codes in the county do not have an ethnic group that constitutes a majority (>50%). According to 1997 estimates, 44% of the county's population are Latino, 34% are white, 13% are Asian/Pacific Islander, and 9% are African American (see Table 1.1). In addition, almost one-third of county residents were born outside the United States. Most Latinos (76%) in Los Angeles County are of Mexican origin, and approximately 15% of the Latino population are from Central and South America. Most Asians are from China, the Philippines, Korea, and Japan, with increased immigration from Southeast Asian countries such as Vietnam and Cambodia.

Sixty-eight percent of households in Los Angeles County are made up of families, and 33% are nonfamily households—people who live alone or with unrelated persons. The proportion of children living in married couple families is 64%, down from 78% in 1970. Twenty-one percent of children live with one parent and the remaining 15% live with grandparents, other relatives, or other caretakers.

Linguistic Characteristics of the Population

Studies have shown a direct link between the poor health status of some ethnic populations and barriers that are related to language use and culture[3]. Immigrants and other non-English speaking groups may experience significant problems obtaining health-related information and services[2]. Limited English-speaking ability can be a significant barrier to accessing health care, public assistance programs, community services, and other resources.

Table 1.2: Language Use By The Foreign-Born Population, 1990

	United States	L.A. County
Population	249,000,000	8,900,000
Foreign-born population	8%	33%
Foreign-born arrived 1980-90	44%	53%
Speak language other than English at home	14%	45%
Do not speak English very well	6%	25%

Note: Language data refer to the population aged five years and older.

Source: Russell Safe Foundation, New York, Ethnic Los Angeles, 1996. U.S. Department of Commerce, 1990 U.S. Census of Population, Social and Economic Characteristics (Washington, D.C.: GPO, 1990), 266.

Due in large part to the ethnic diversity and size of the population, both California and Los Angeles have a high proportion of non-English speaking residents, and a substantial portion of all the non-English speakers in the nation[4] (see Table 1.2). Nearly one-half (45%) of the population of Los Angeles County reports speaking a language

other than English at home. Los Angeles County's cultural and linguistic diversity requires culturally-sensitive community programs and interventions to promote the health of all residents.

Table 1.3: Language Spoken At Home In The Los Angeles Region And Los Angeles County, 1990

	Los Angeles Region	% Increase Since 1980	Los Angeles County	% Increase Since 1980
English only	8,209,000	+0.05	4,436,000	-7
Spanish	3,520,000	+74	2,555,000	+69
Chinese	257,000	+179	210,000	+173
Tagalog	202,000	+149	158,000	+136
Vietnamese	122,000	+223	50,000	+162
Korean	165,000	+163	124,000	+133
Japanese	83,000	+17	63,000	+10
All others	736,000	+41	528,000	+38

Note: Language data refer to the population aged five years and older.

Source: Russell Sage Foundation, New York, Ethnic Los Angeles, 1996. U.S. Department of Commerce, 1990 U.S. Census of Population, Social and Economic Characteristics (Washington, D.C.: GPO, 1990), 266.

Educational Attainment

The public education system is a crucial component of community health and individual opportunity. Illiteracy is linked to low-paying jobs that do not provide health insurance, lack of health information, and poor living conditions.[5] Furthermore, children living with parents who have little education experience more health problems than other children, even after adjusting for socio-economic factors.[6] Data on high school dropouts also provides valuable information on health problems associated with teenagers. There is evidence that teenagers who drop out of high school may be at increased risk of unwanted pregnancy, sexually transmitted diseases, substance abuse, and violence.[7]

Table 1.4: Limited English-Speaking Students In Los Angeles County, 1997-98

	Total	% of Total
English only or fluent bilingual	1,020,934	65%
Limited English proficient		
Spanish	491,037	31%
Armenian	12,721	0.8%
Korean	8,739	0.6%
Cantonese	8,114	0.5%
Vietnamese	6,207	0.4%
Cambodian	6,213	0.4%
Tagalog	5,028	0.4%
Mandarin	5,454	0.3%
All other limited English proficient	17,717	1%
Total	1,582,164	100%

Source: Los Angeles County Children's Planning Council, United Way of Greater Los Angeles, Los Angeles County Children's Score Card, 1998.

Table 1.5: Education, Los Angeles County And California

	L.A. County	California
Public school enrollment (1997–98)	1,583,283	5,727,303
White	20%	39%
Latino	57%	41%
African-American	12%	9%
Asian	8%	8%
Filipino	2%	2%
Pacific Islander	1%	1%
Public school high school graduation rates (1996–97)[1]	40%	36%
White	43%	40%
Latino	30%	23%
African-American	38%	29%
Asian	67%	60%
Filipino	51%	45%
Pacific Islander	59%	33%
Public school dropout rate[2]	5%	3%
White	2%	2%
Latino	6%	5%
African-American	7%	5%
Asian	2%	2%
Filipino	2%	2%
Pacific Islander	4%	4%
Public school teachers (1996–97)[3]	65,000	249,000
White	64%	79%
Latino	17%	11%
African-American	11%	5%
Asian	6%	4%

1. Percentage of 12th grade graduates in Los Angeles County public schools completing all courses required for U.C. and/or C.S.U entrance for 1996–1997.

*2. Dropouts as a percent of enrollment, 1 Year Rate Formula: (Gr. 9–12 Dropouts/ Gr. 9-12 Enrollment)*100, 1996–1997.*

3. Full-time equivalent public school teachers

Source: CBEDS—California Basic Educational Data System, Educational Demographics Unit, California Department of Education Los Angeles County Office of Education.

Numerous challenges face Los Angeles County public school systems. The proportion of children "at-risk" in the school system has increased dramatically as a result of the high number of children living in poverty and the high number of children with limited English-language abilities.

Table 1.5 highlights a number of key figures on educational attainment rates in Los Angeles County. In addition:

- ➜ Nearly 30% of Los Angeles County adults ages 25 and over have not completed high school.

- ➜ Latinos make up 62% of those without a high school diploma followed by African-Americans (26%), Asians (20%), and whites (13%).
- ➜ In the decade between 1980 and 1990, the proportion of adults with less than a fifth grade education increased by 70%.

Economic Resources

Poverty and income disparities, employment rates, and housing characteristics are important factors that influence the health of a community. Median household income is a useful indicator to characterize household/family economic resources and the distribution of income in a given community. Income is a predictor of a family's economic well-being, which subsequently determines a family's ability to obtain adequate housing, nutrition, and health insurance, and may be related to health behaviors. Table 1.6 highlights a number of key figures related to income. In addition:

- ➜ The median income in Los Angeles County was $43,942 in 1998.
- ➜ 13% of Los Angeles County households had incomes over $100,000, and 18% had incomes below $15,000 in 1998.

Table 1.6: Income, Poverty and Unemployment, Los Angeles County, 1998

Household Income	Households	Percentage
Less than $15,000	552,036	18
$15,000–$34,999	806,930	26
$35,000–$49,999	475,317	15
$50,000–$74,999	579,840	19
$75,000–$99,000	295,132	9
$100,000+ and over	397,479	13
Total Households	3,106,734	100
Persons Below Poverty Level	**Number**	**Percentage**
All Persons	2,151,885	22
0–4	257,559	34
5–14	451,424	32
15–24	333,637	27
25–34	386,134	23
35–44	297,622	18
45–54	180,847	16
55–64	103,757	15
65–74	77,215	14
75 and over	63,690	14
Labor Force Status[1]		
Unemployed	326,488	7.0

1. All persons aged 16 and over.

Source: United Way of Greater Los Angeles, 1999. State of the County Report: Los Angeles 1998-99.

- ➜ 22% of Los Angeles County residents lived below the poverty level in 1998.
- ➜ 34% of children ages 0 to 4 lived below the poverty level in 1998.

Like income, unemployment has adverse consequences such as poverty, lack of health insurance, and stress. Several studies have shown unemployment as one of many socioeconomic factors that explain differences in risk factors, morbidity and mortality between population groups.

- ➜ 7% of persons age 16 and over were unemployed in Los Angeles County, compared to 6% in the entire state in 1998.
- ➜ The unemployment rate (7%) did not vary by gender in Los Angeles County in 1998.

Availability and affordability of adequate housing impacts the health and economic well-being of individuals and communities. Los Angeles County has one of the most expensive housing markets in the United States, causing problems for the poor and low-income population. The availability of affordable housing in the county has declined. These factors have forced many low and moderate-income families out of the market.

- ➜ Median rent in 1995 was reported at $654, and median home value was $192,800.[8]
- ➜ 53% of housing units were rented, and 47% were owner occupied in 1995.[9]

Violent Crime

Violence and violent crime impacts the health and safety, quality of life, and economic and social well-being of a community. Indicators of violent crime include rates of homicide, suicide, firearm-related deaths, assault injuries, rape, domestic violence, and child abuse.[10] Crime statistics have significant limitations; it is estimated that 43% of violent crime in the U.S. is not reported.[11] In addition, statistics typically reflect the characteristics of the perpetrator rather than those of the victim, and can reflect law enforcement activities rather than true prevalence of crime. For example, drug arrests are not an accurate measure of drug use but of the activities enlisted to curb use. However, these statistics do reflect an important dimension of social and environmental conditions related to community health.

- ➜ Los Angeles County's homicide arrest rate (11.7 per 100,000) was higher than the state's (7.3 per 100,000) in 1996.
- ➜ In 1996 juvenile felony arrests in Los Angeles County numbered 24,013 (724.3 per 100,000 youth ages 10 to 17) and accounted for just under half of all juvenile arrests.[12]
- ➜ From 1975 to 1997, arrests in Los Angeles County declined by 45% for youth and 28% for adults.[13]
- ➜ Gang-related deaths decreased by 44% from 1995 to 1997 in Los Angeles County.[14]

More specific information on violence and unintentional injury is presented in Chapters Three and Four of this report.

Demographic and Social Indicators—Data Sources

1. California State Department of Finance
   Demographic Research Unit

2. County of Los Angeles, Urban Research Division

3. United Way of Greater Los Angeles

4. Children's Planning Council
   Los Angeles County

5. Los Angeles County Office of Education

6. California Department of Education

See Appendix for complete references on these and other data resources.

Endnotes

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2. Russell Sage Foundation. Waldinger, R, Bozorgmehr, M, eds. Ethnic Los Angeles. New York: Russell Sage Foundation, 1996.

3. See note 1 above.

4. See note 2 above.

5. See note 1 above.

6. See note 1 above.

7. See note 1 above.

8. United Way of Greater Los Angeles, 1999. State of the County Report: Los Angeles 1998-1999.

9. See note 8 above.

10. See note 1 above.

11. See note 8 above.

12. See note 8 above.

13. See note 8 above.

14. See note 8 above.

Chapter Two

Access To Health Care

Access to quality medical care is an important determinant of health. Availability of health insurance and a regular source of care make it easier for people to access timely and effective care. Other factors can become barriers to receiving care and affect the quality of care received. These include language and cultural differences between the patient and provider, difficulties with transportation and scheduling appointments, and limited financial means to pay for health-related expenses.

Access to health care services is critical not only for the treatment of acute and chronic illnesses, but also for the receipt of preventive health services. These services include routine physical exams, immunizations, health education, and screening procedures such as serum cholesterol levels, mammography, and pap smears.

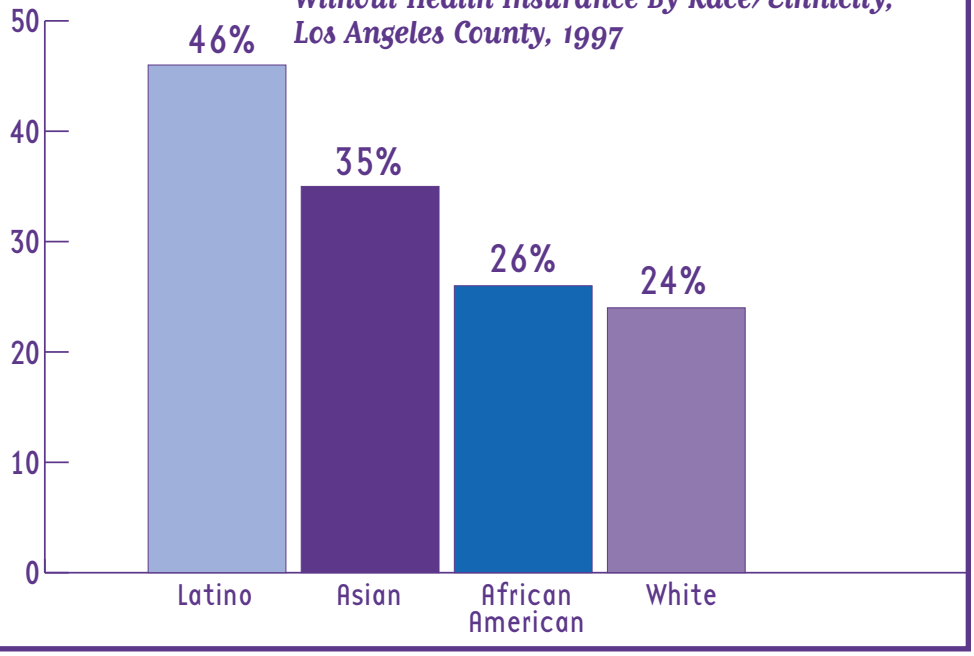
Health Insurance

Persons without health insurance coverage are less likely to have a regular source of care, are more likely to report an unmet need for health care, and are less likely to receive preventive health care services.[1,2] *The Healthy People 2000* goal calls for everyone to have health insurance.

An estimated 2.7 million people in Los Angeles County have no health insurance. Approximately two million of the uninsured are adults between the ages of 18 to 64. In addition, there are an estimated 700,000 uninsured children in the county, representing one-fourth of all children below age 18. Because the majority of uninsured people are also poor, they are less likely to have the ability to pay for services, less likely to have a regular source of care, and more likely to experience difficulty getting care.

➜ Approximately 34% of adults ages 18 to 64 (approximately two million adults) in Los Angeles county have no health insurance.

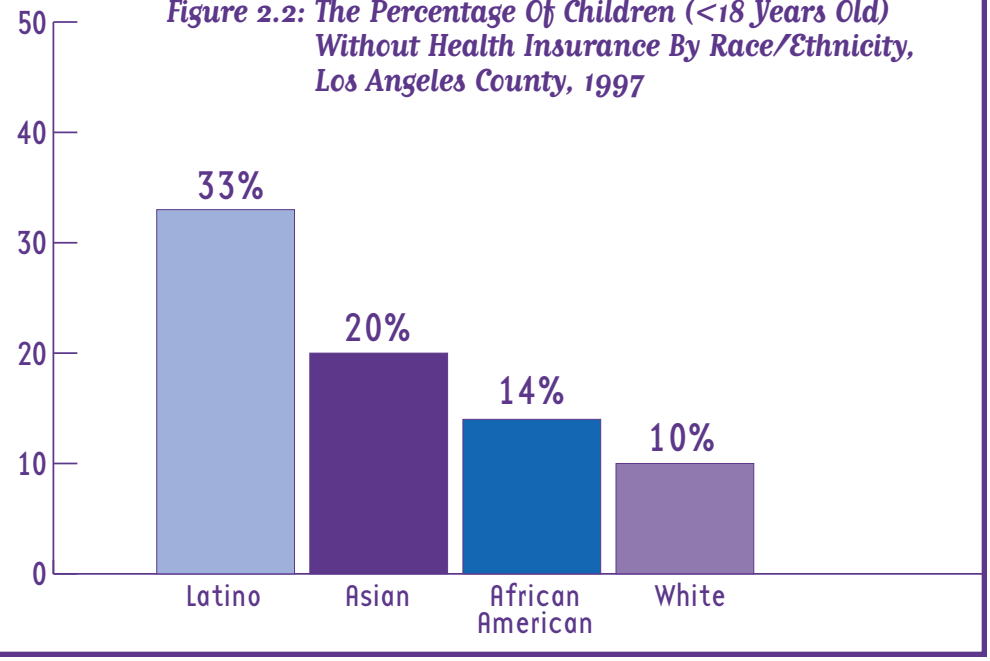
Figure 2.1: The Percentage Of Adults, 18—64 Years Old, Without Health Insurance By Race/Ethnicity, Los Angeles County, 1997



Source: 1997 Los Angeles County Health Survey (1997 LACHS).

- Latinos (46%) and Asians (35%) have the highest percentages of uninsured, nonelderly adults. Percentages of uninsured are lower among African-Americans (26%) and whites (24%) (see Figure 2.1).
- Young adults, ages 18 to 29 years, comprise over 35% of all uninsured adults in Los Angeles County.
- 60% of uninsured adults, nearly 1.2 million people in Los Angeles County, are medically indigent, meaning that they are uninsured and living in households with incomes below 200% of the federal poverty level.
- The percentage who are uninsured is higher among adults with less than a high school education (54%) than among those who are college graduates (23%).
- Nearly 25% of children 0 to 17 years old (approximately 700,000 children) are uninsured in Los Angeles County. The prevalence of uninsured is 29% among adolescents (ages thirteen to seventeen), 24% among children between 5 and 12 years, and 24% among children less than 5 years of age.
- Percentages of uninsured are highest among Latino (33%) and Asian children (20%). Lower rates are found among African-American (14%) and white children (10%) (see Figure 2.2).
- Most (81%) uninsured children in Los Angeles County (560,000 in number) are living in families with incomes at or below 200% of the federal poverty level.

Figure 2.2: The Percentage Of Children (<18 Years Old) Without Health Insurance By Race/Ethnicity, Los Angeles County, 1997



Source: 1997 LACHS.

Table 2.1: Health Insurance Coverage, Adults 18—64 Years Of Age

	L.A. County[1]	California[2]
No health insurance coverage	34%	26%
White	24%	17%
African-American	26%	23%
Latino	46%	44%
Asian/Pacific Islander	35%	27%

Note: Use caution when making direct comparisons between Los Angeles County and California data. The data is derived from two survey instruments with slightly altered questions and which were given in different years. The purpose in presenting this data is to show trends and patterns within each of the populations that were sampled.

1. 1997 LACHS.

2. Current Population Survey, 1997.

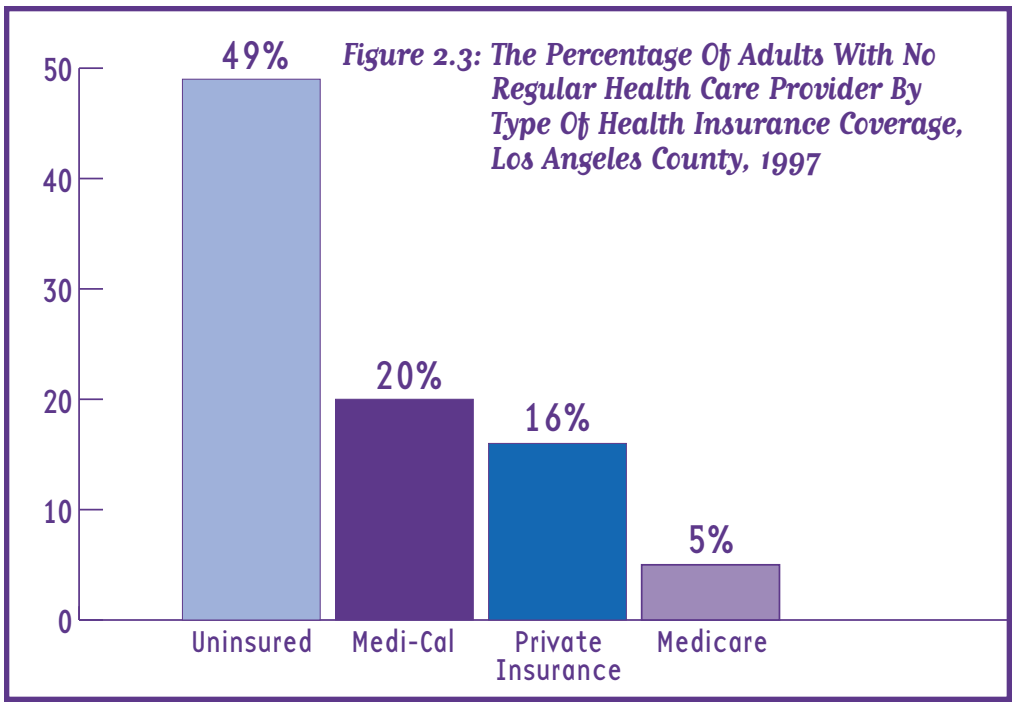


Figure 2.3: The Percentage Of Adults With No Regular Health Care Provider By Type Of Health Insurance Coverage, Los Angeles County, 1997

Source: 1997 LACHS.

➜ 18% of uninsured children live in households where one or both parents have job-based health insurance coverage (annual income of less than $32,100 for a family of four) and, therefore, may be eligible for Medi-Cal or Healthy Families insurance coverage (under 1997 eligibility criteria).

➜ The proportion of uninsured adults (ages 18 to 64) is higher in Los Angeles County (34%) than in California (26%) (see Table 2.1).

Regular Source of Care

Having a regular source of health care is associated with lower rates of hospitalization for certain chronic medical conditions and with greater use of preventive health services.[3,4,5]

➜ 25% of adults in the county report that they do not have a regular health care provider. The percentage without a regular provider is highest among those without health insurance (49%), followed by those covered by Medi-Cal (20%), those with private insurance (16%), and those covered by Medicare (5%) (see Figure 2.3).

➜ Among adults, Latinos (36%) have the highest percentage lacking a regular source of care, followed by Asians (30%), whites (17%) and African-Americans (17%).

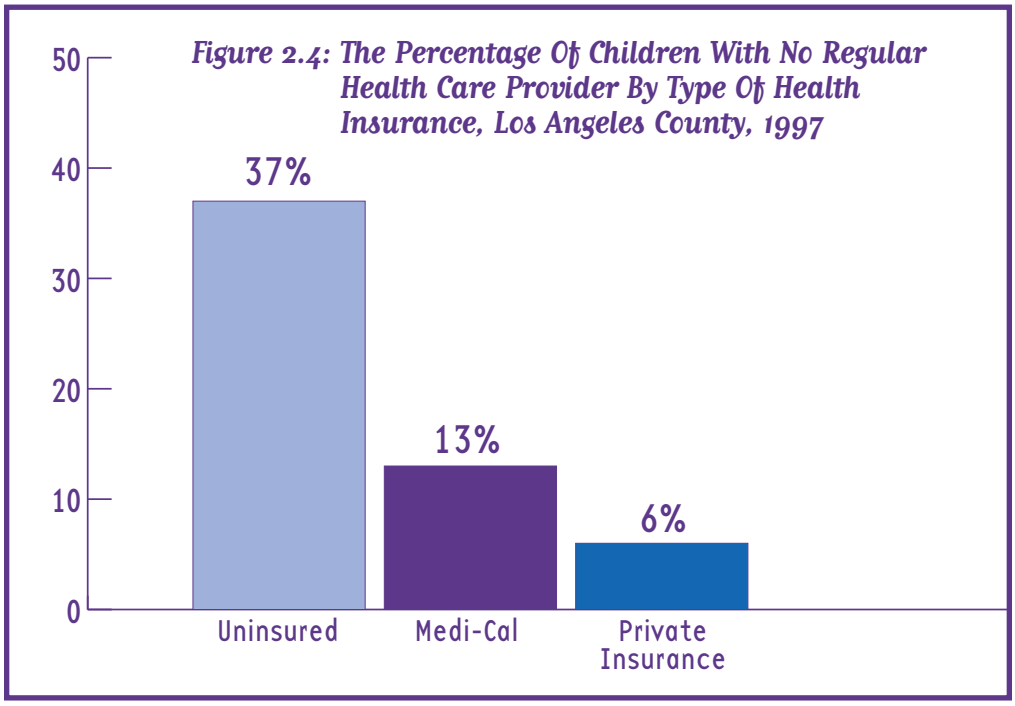


Figure 2.4: The Percentage Of Children With No Regular Health Care Provider By Type Of Health Insurance, Los Angeles County, 1997

Source: 1997 LACHS.

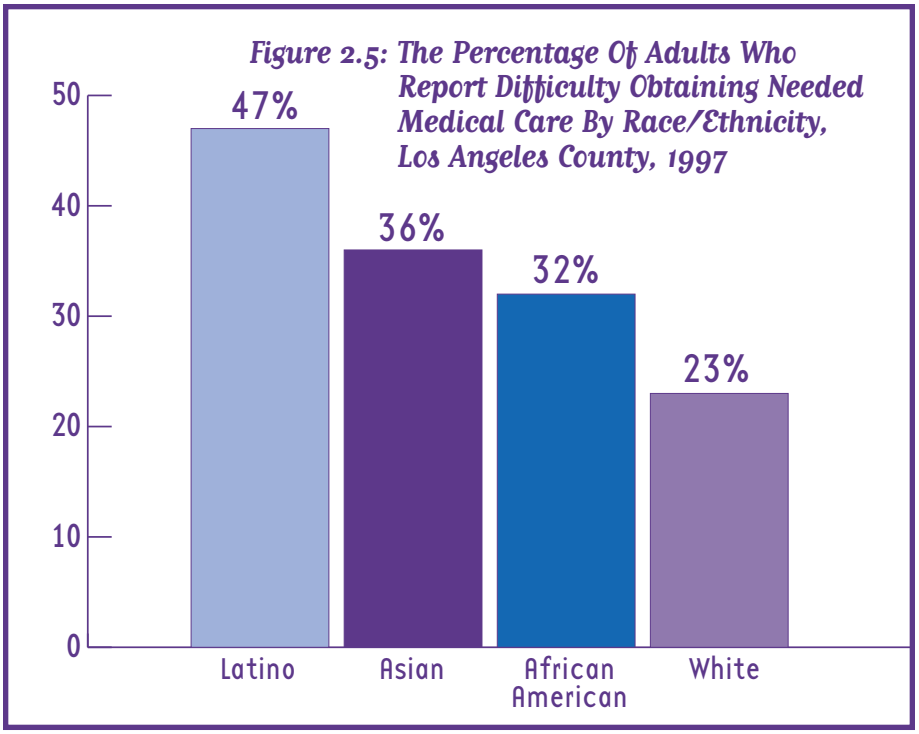
➜ The percentage of adults having no regular source of care decreases with advancing age, from 39% in 18 to 29 year olds to 12% in those 50 years and older.

➜ 15% of children do not have a regular medical provider. The percentage of children without a regular medical provider is higher among children without health insurance (37%) than among those covered by Medi-Cal (12%) and those with private insurance (5%) (see Figure 2.4).

Other Barriers to Health Care Access

Health insurance is not the only barrier to obtaining health care. The *1993 Institute of Medicine Report on Access to Health Care in America* discussed other barriers to accessing care and grouped them into three broad categories: financial, structural, and personal barriers. Financial barriers address the financing and reimbursement systems for care and funding for special health care programs. Structural barriers include the availability of services as well as how effectively these services are organized and delivered. Scheduling or waiting time for appointments, the proximity of providers, and the lack of available or adequate public transportation are examples of such structural factors. Personal factors include income, level of education, ethnic and cultural background, language, and personal beliefs regarding medicine and the acceptability of medical services.

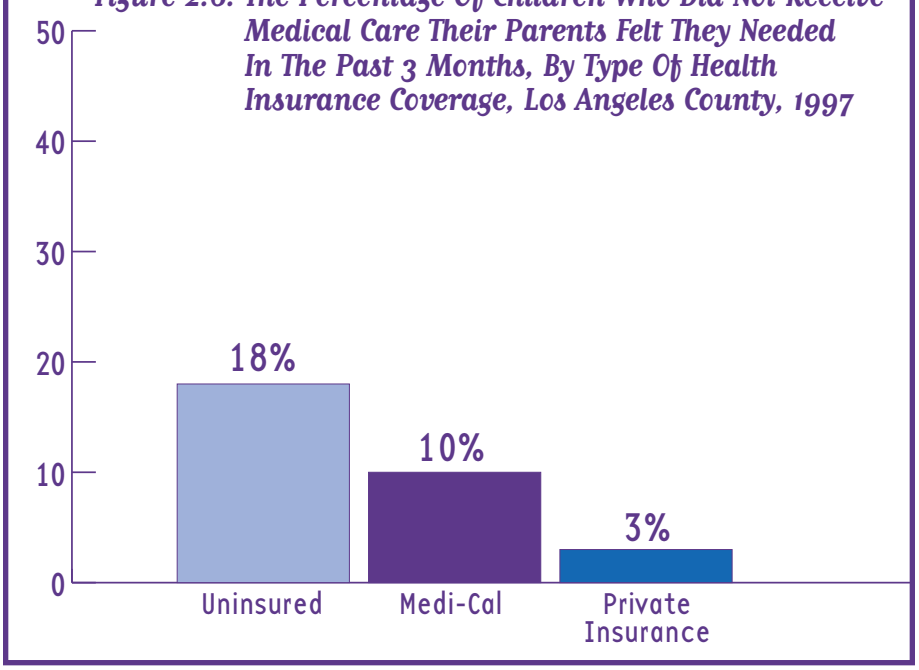
Figure 2.5: The Percentage Of Adults Who Report Difficulty Obtaining Needed Medical Care By Race/Ethnicity, Los Angeles County, 1997



Source: 1997 LACHS.

- ➜ 35% of adults (≥18 years of age) in Los Angeles County report that it is very difficult or somewhat difficult for them to obtain needed medical care.
- ➜ The number reporting that it is very difficult or somewhat difficult to obtain needed care is highest among Latinos (47%), followed by Asians (36%), African-Americans (32%), and whites (23%) (see Figure 2.5).
- ➜ Among adults who consider their health to be only fair to poor, 21% have not seen a health care provider in the past year.
- ➜ 9% of children did not receive the medical care their parents felt they needed in the past three months. Among those without health insurance, 18% did not receive medical care their parents felt they needed in the past twelve months, compared to 10% among those covered by Medi-Cal and 3% among those with private insurance (see Figure 2.6).
- ➜ 18% of adults in the county report that they needed to see a doctor for a health problem in the past 12 months but did not do so because they couldn't

Figure 2.6: The Percentage Of Children Who Did Not Receive Medical Care Their Parents Felt They Needed In The Past 3 Months, By Type Of Health Insurance Coverage, Los Angeles County, 1997



Source: 1997 LACHS.

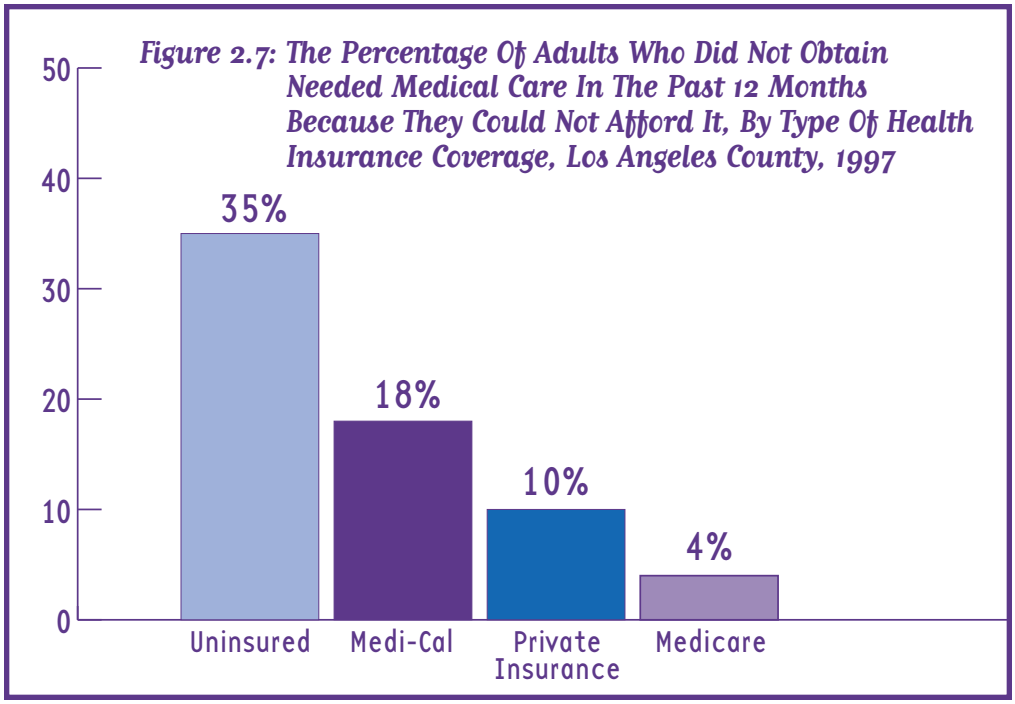


Figure 2.7: The Percentage Of Adults Who Did Not Obtain Needed Medical Care In The Past 12 Months Because They Could Not Afford It, By Type Of Health Insurance Coverage, Los Angeles County, 1997

Source: 1997 LACHS.

afford it. Among those without health insurance, 35% did not see a doctor in the past 12 months because they could not afford it, compared to 18% among those covered by Medi-Cal, 10% among those with private insurance, and 4% among those covered by Medicare (see Figure 2.7). Overall, 10% of all Californians reported that they could not see a doctor due to the cost of medical care. Among those without insurance coverage, 32% reported they could not see a doctor because they could not afford it, compared to 21% among Medi-Cal recipients, 5% among Medicare recipients, and 5% among those with private insurance (see Table 2.2).

- ➜ 16% of adults in the county report that they needed prescription medicine in the past 12 months but did not get it because they couldn't afford it.
- ➜ 8% of adults in the county report that they needed mental health services in the past 12 months but didn't get them because they couldn't afford it.
- ➜ 28% of Los Angeles County parents have difficulty paying for their children's medical expenses. The percentage that have difficulty paying is much higher for children without health insurance (62%) than for children covered by Medi-Cal (26%) or private insurance (10%) (see Figure 2.8).

Table 2.2: Financial Barriers To Receipt Of Health Care By Insurance Status, Adults, 18 Years Of Age And Older

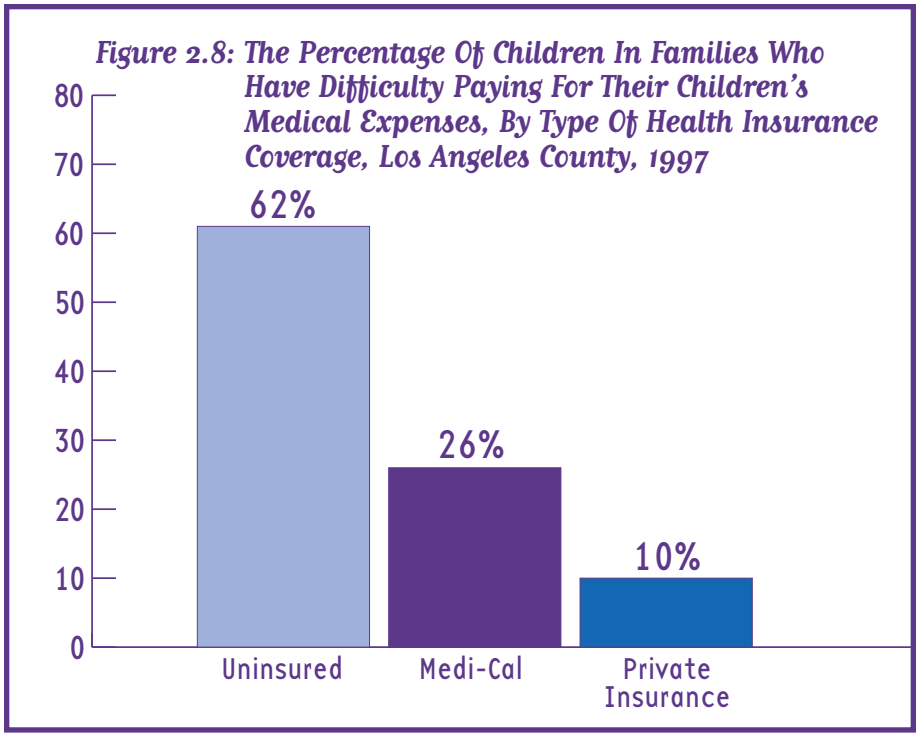
	L.A. County[1]	California[2]
Did not see doctor due to cost in last 12 months (total)	**18%**	**10%**
Private insurance	10%	5%
Medicare	4%	5%
Medi-Cal	18%	21%
No coverage	35%	32%

Note: Use caution when making direct comparisons between Los Angeles County and California data. While the results of each survey are valid, the data is derived from two survey instruments with slightly altered questions and which were given in different years. The purpose in presenting this data is to show trends and patterns within each of the populations that were sampled.

1. 1997 LACHS.

2. California Behavioral Risk Factor Surveillance Survey, 1998.

➜ 17% of children are in families that have difficulty arranging transportation to and from their child's health care provider. The percentage that have difficulty arranging transportation is highest among Latinos (23%), followed by African-Americans (12%), Asians (9%), and whites (7%) (see Figure 2.9).



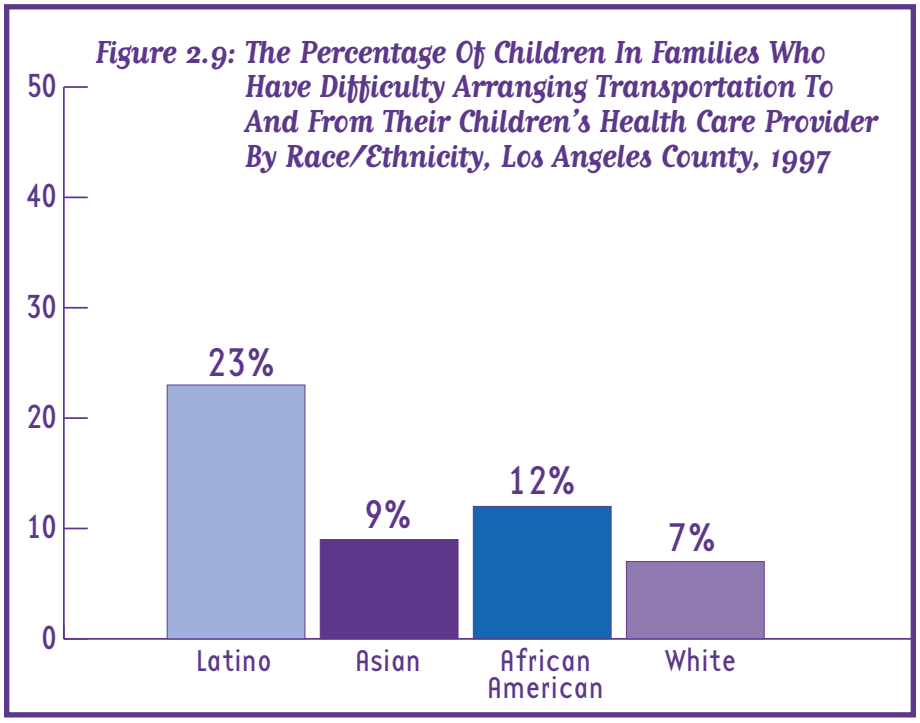
Source: 1997 LACHS.

Use of Preventive Services

➜ 73% of Los Angeles County women, 18 years and older, had a pap smear in the past two years. The percentage that had a pap smear was highest among those with private health insurance (83%), intermediate among those covered by Medi-Cal (74%), and lowest among those without insurance (60%). In California, 78% of women had a pap smear in the past two years (see Table 2.3).

➜ 79% of African-American women, 18 years and older in the county, had a pap smear in the past two years, followed by white (75%), Latino (70%), and Asian (68%) women.

➜ 70% of women, 18 years and older in the county, had a breast exam by a physician, nurse, or other health professional in the past two years. The percentage that had a breast exam was highest among those covered by Medicare (81%) and private insurance (80%), intermediate among those covered by Medi-Cal (71%), and lowest among those without health insurance (53%). In the state of California, 75% of women had a breast exam in the past two years (see Table 2.3).



Source: 1997 LACHS.

Table 2.3: Women's Use Of Clinical Preventive Services

	L.A. County[1]	California[2]
Pap smear done in past 2 years, ≥18 years of age	73%	78%
Clinical Breast exam done in past 2 years, ≥18 years of age	70%	75%
Mammogram done in past 2 years, ≥50 years of age	76%	81%

Note: Use caution when making direct comparisons between Los Angeles County and California data. The data is derived from two survey instruments with slightly altered questions and which were given in different years. The purpose in presenting this data is to show trends and patterns within each of the populations that were sampled.

1. 1997 LACHS.

2. California Behavioral Risk Factor Surveillance Survey, 1998.

- ➜ 76% of women, 50 years and older in the county, had a mammogram in the past two years. The percentage that had a mammogram was highest among those covered by private insurance (82%) and Medicare (81%), intermediate among those with Medi-Cal coverage (72%), and lowest among those without health insurance (60%). In California, 81% of women had a mammogram in the past two years (see Table 2.3).
- ➜ 77% of African-American women, 50 years and older in the county, had a mammogram in the past two years, followed by white (77%), Latino (75%), and Asian (68%) women.
- ➜ Only 28% of Los Angeles County men, 18 years and older, had a testicular exam in the past two years. The percentage that had a testicular exam was highest among those covered by Medicare (43%), intermediate among those with private insurance (32%) and Medi-Cal coverage (28%), and lowest among those without health insurance (17%).

Access to Health Care—Data Sources

1. Los Angeles County Department of Health Services—Public Health
   Office of Health Assessment and Epidemiology
   1997 Los Angeles County Health Survey

2. California Department of Health Services
   Cancer Surveillance Section
   CATI Unit
   California Behavioral Risk Factor Survey

See Appendix for complete references on these and other data resources.

Endnotes

1. Bloom, B, Simpson, G, Cohen, RA, Parson, PE. Access to health care. Part 2: Working-age adults. National Center for Health Statistics. Vital Health Stat 1997;10 (197).

2. Makuc, DM, Freid, VM, Parsons, PA. Health insurance and cancer screening among women. Advance data from vital and health statistics; no 254. National Center for Health Statistics. 1994.

3. Bindman, AB, Grumbaugh, K, Osmond, D, et al. Preventable hospitalizations and access to health care. JAMA 1995; 274: 305–11.

4. Lambrew, JM, DeFriese, GH, Carey, TS, Ricketts, AK. The effects of having a regular doctor on access to primary care. Med Care 1996; 34: 138–51.

5. Bindman, AB, Grumbaugh, K, Osmand, D, Vranizan, K, Stewart, AL. Primary care and receipt of preventive services. J Gen Internal Med 1996; 11: 269–76.

Health Risks and Health Risk Behaviors

Many risk factors for disease are behavioral in nature and can be modified. The health risks and health risk behaviors discussed in this chapter include tobacco, alcohol, and drug use; sexual risk behaviors; nutrition and fitness; and injury risk behavior.

Tobacco use, diet and physical activity patterns, alcohol and drug use, violence and injury are major contributors to the leading causes of death in the United States (see Figure 3.1). Promoting behavioral changes and the adoption of healthier practices and lifestyles is crucial to making lasting improvements in the health status of the population.

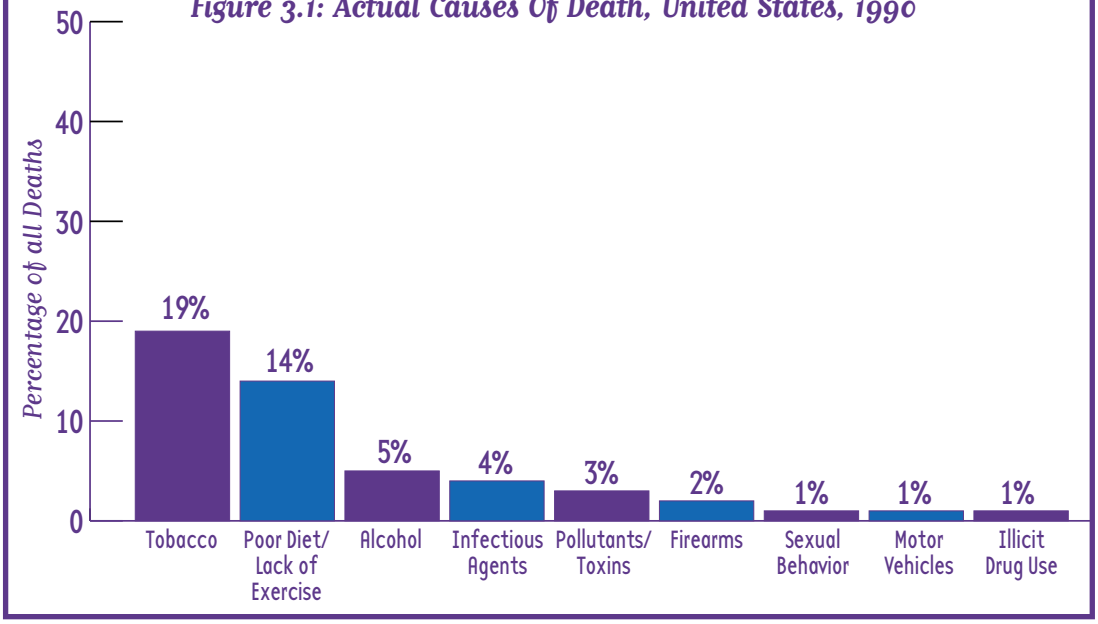
Tobacco, Alcohol and Drug Use

As shown in Figure 3.1, it is estimated that alcohol, tobacco, and drug use and abuse account for approximately one quarter of all deaths in the United States each year.[1] Health behaviors related to alcohol, tobacco, and drug use in Los Angeles County and in California are shown in Table 3.1.

Tobacco

Tobacco use is the leading cause of preventable death and illness in the United States, resulting in an estimated 430,000 deaths and more than $50 billion in direct health care expenditures each year.[2] In Los Angeles County, there were an estimated $3.1 billion in smoking-attributable medical expenditures for 1993.[3] Tobacco use is a major risk factor for cardiovascular disease, respiratory disease, cancers of the lung, esophagus, pancreas, bladder, and can lead to other illnesses such as respiratory infections and stomach ulcers.[4]

Figure 3.1: Actual Causes Of Death, United States, 1990



Source: McGinnis, JM, Foege, WH. Actual causes of death in the United States, JAMA 1993:270;2207-12.

Table 3.1: Health Behaviors: Alcohol, Tobacco, And Drug Use, Los Angeles County, California, Year 2000 Objectives

	L.A. City	L.A. County	California	HP 2000
Adult cigarette smoking prevalence[1]				
Male	*	22%	21%	15%
Female	*	14%	15%	15%
White	*	20%	20%	*
Latino	*	16%	14%	15%
African-American	*	20%	25%	18%
Asian/Pacific Islander	*	16%	15%	*
Adolescent (ages 12–17) cigarette smoking prevalence[2,3]	*	10%	11%	6%
White	*	10%	14%	*
Latino	*	12%	10%	*
African-American	*	6%	3%	*
Asian/Pacific Islander	*	6%	9%	*
Daily adult alcohol consumption				
Nondrinker[1,5]	*	42%	*	*
Light drinker (0<drinks/day<.42)[1,5]	*	37%	*	*
Moderate drinker (.42<drinks/day<2)[1,5]	*	14%	*	*
Heavy drinker (>2 drinks/day)[1,5]	*	5%	*	*
High school students who drank alcohol[4]				
Lifetime alcohol use[4,6]	78%	*	75%	*
Current alcohol use[4,7]	47%	*	47%	13%
Episodic heavy drinking[4,8]	26%	*	27%	28%
High school students who have injected illegal drugs in a lifetime[4,9]				
Total	2%	*	2%	*
Male	3%	*	2%	*
Female	2%	*	1%	*
High school students who used marijuana[4]				
Lifetime marijuana use[4,10]	46%	*	47%	*
Current marijuana use[4,11]	25%	*	26%	3%
High school students who used cocaine[4]				
Lifetime cocaine use[4,12]	12%	*	11%	*
Current cocaine use[4,13]	4%	*	4%	1%

1. 1997 Los Angeles County Health Survey (1997 LACHS), Los Angeles County Department of Health Services.

2. California Department of Health Services, Tobacco Control Section, California Tobacco surveys, Behavioral Factor Survey/California Adult and Youth Tobacco Surveys, 1996.

3. Cigarette smoking prevalence defined as having smoked at least once in the last 30 days.

4. Adolescents 12 to 17 years of age from Los Angeles Unified School District (LAUSD), Youth Risk Behavior Surveillance, United States 1997.

5. Based on National Institute on Alcohol Abuse and Alcoholism guidelines: a drink is considered one can or bottle of beer, one glass of wine or cocktail or shot of liquor.

6. Ever had at least one drink of alcohol.

7. Drank alcohol on >1 of the 30 days preceding the survey.

8. Drank five or more drinks of alcohol on at least one occasion on >1 of the 30 days preceding the survey.

9. Respondents were classified as injecting-drug users only if they reported injecting illegal drugs not prescribed by a physician.

10. Ever used marijuana.

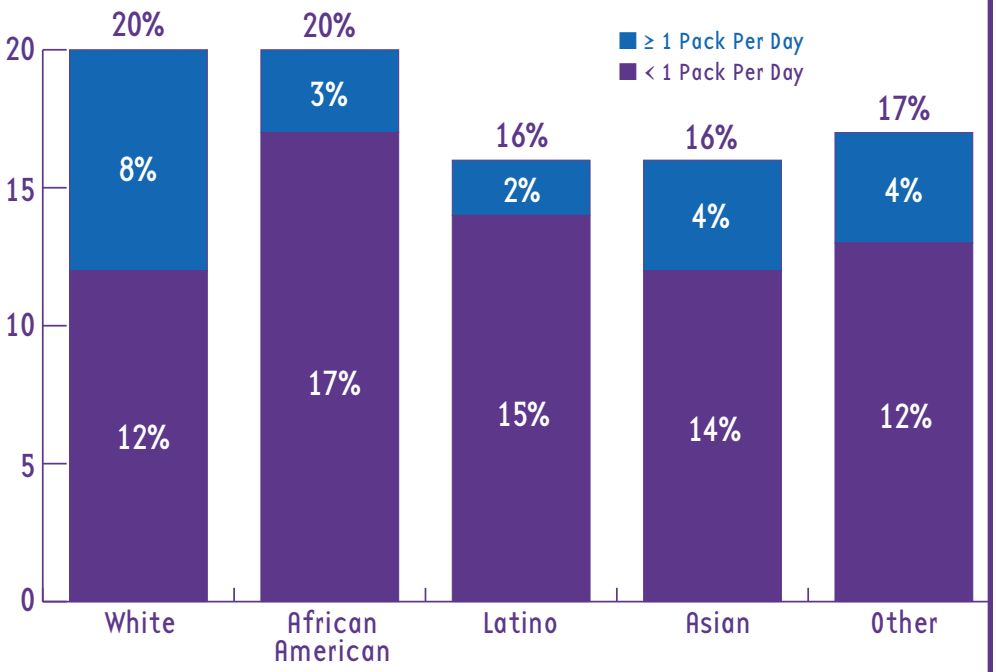
11. Used marijuana one or more times during the 30 days preceding the survey.

12. Ever tried any form of cocaine, including powder, "crack," and "freebase."

13. Used cocaine one or more times, during the 30 days preceding the survey.

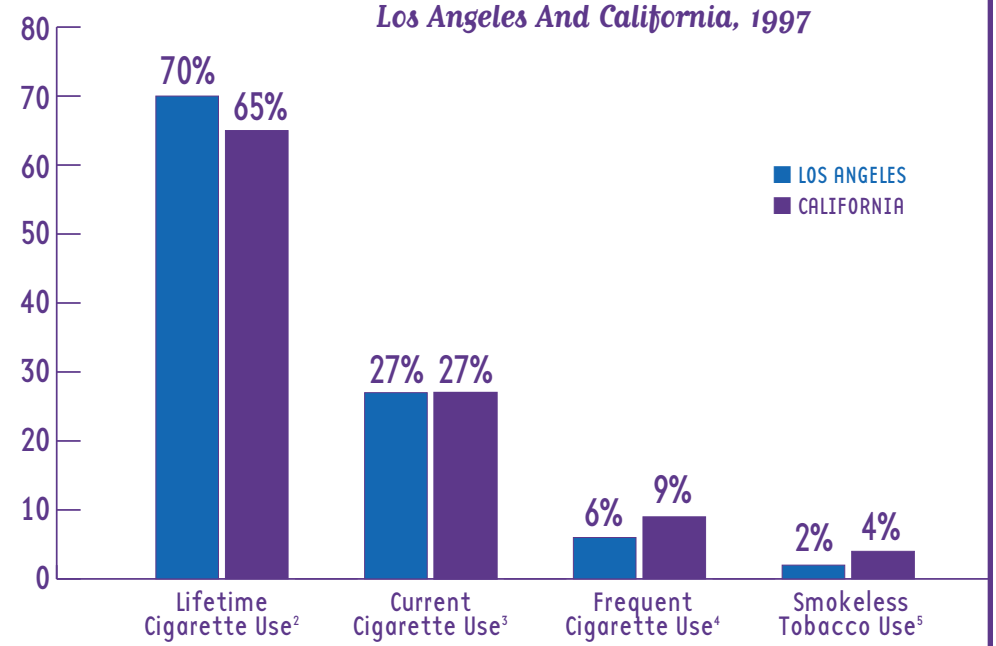
* *Data not available*

Figure 3.2: Prevalence Of Smoking Among Adults, 18+, By Race/Ethnicity, Los Angeles County, 1997



Source: 1997 LACHS.

Figure 3.3; Tobacco Use By High School Students[1], Los Angeles And California, 1997



1. Adolescents 12 to 17 years of age from Los Angeles Unified School District (LAUSD).
2. Ever tried cigarette smoking, even one or two puffs.
3. Smoked cigarettes on ≥1 of the 30 days preceding the survey.
4. Smoked cigarettes on ≥20 of the 30 days preceding the survey.
5. Used chewing tobacco or snuff on ≥1 of the 30 days preceding the survey.

Source: Youth Risk Behavior Surveillance, United States, 1997.

- ➜ 20% of the Los Angeles County adult population use tobacco, 18% smoke cigarettes and 2% use tobacco in the form of cigars, smokeless tobacco, and pipes.
- ➜ More males (22%) than females (14%) smoke cigarettes. More white and African-American (20% each) adults smoke than do Latino and Asian groups (16% each), as shown in Figure 3.2.
- ➜ The number of cigarettes smoked per day varies by race/ethnicity. Among smokers, 40% of whites, 24% of Asians, 14% of African-Americans, and 10% of Latinos smoke one pack or more per day.

Tobacco use is a significant problem among adolescents. In 1996 an estimated 10% of adolescents (12 to 17 years old) had smoked at least once in the last 30 days as reported by the California Tobacco Survey. This smoking prevalence represents a nearly 3% increase since 1990. Among California's counties and regions, Los Angeles County moved from 17th in adolescent cigarette smoking prevalence in 1990 to 14th in 1996. Never-smoked prevalence fell 3% during this period.

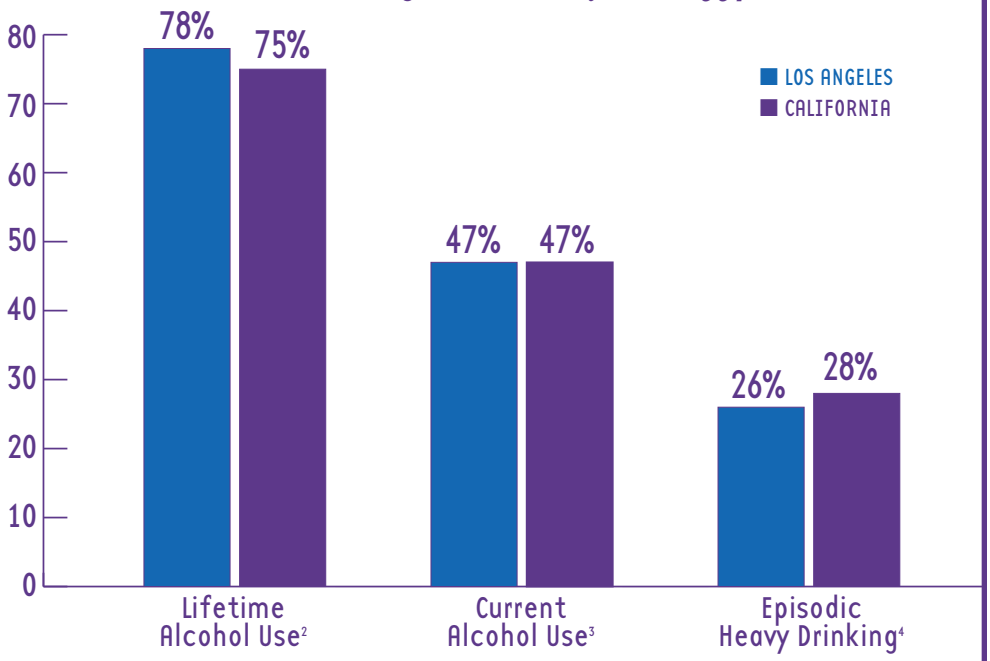
Alcohol

Alcohol use and abuse cause approximately 100,000 deaths in the United States annually by contributions to cirrhosis of the liver, cancers, motor-vehicle crashes, intentional and unintentional injuries at home and work, and drowning. In addition, alcohol abuse is responsible for numerous other mental health, social, and economic ills. Alcohol-related hospital discharges in Los Angeles County averaged 10,000 per year from 1991 to 1995. There were also 81,208 alcohol-related arrests (98% misdemeanor and 2% felony offenses) among adults in Los Angeles County in 1997. Important adverse health outcomes related to alcohol abuse are reported in the mortality and injury sections of Chapter Four.

- ➜ An estimated 5% of Los Angeles County adults are heavy drinkers. More than 8% of men and 2% of women report heavy drinking (1997 Los Angeles County Health Survey).
- ➜ More than 26% of high school students in the Los Angeles Unified School District (LAUSD) reported heavy, or binge (more than five drinks in a row), drinking on at least one occasion in the 30 days preceding the survey.

During the five-year period

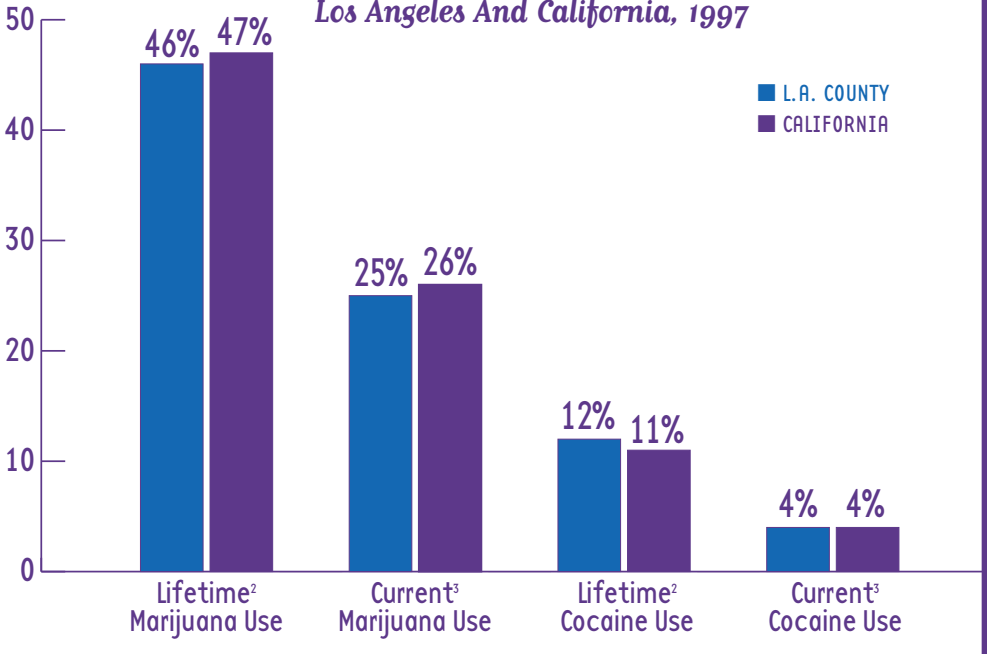
Figure 3.4: Alcohol Use By High School Students,[1] Los Angeles And California, 1997



1. Adolescents 12–17 years of age from Los Angeles Unified School District (LAUSD)
2. Ever had at least one drink of alcohol.
3. Drank alcohol on ≥1 of the 30 days preceding the survey.
4. Drank ≥5 drinks of alcohol ≥1 of the days preceding the survey.

Source: Youth Risk Behavior Surveillance, United States, 1997.

Figure 3.5: Illegal Drug Use By High School Students' Los Angeles And California, 1997



1. Adolescents 12–17 years of age from Los Angeles Unified School District (LAUSD)
2. Ever used.
3. Used one or more times during the 30 days preceding the survey.

Source: Youth Risk Behavior Surveillance, United States, 1997.

between 1991 and 1995, the number of alcohol-involved traffic incidents (fatal and nonfatal) decreased by approximately one-third in Los Angeles County. In addition, the percentage of total fatal traffic incidents involving alcohol declined from 40% in 1991 to 23% in 1995.

Drugs

Drug use and abuse causes approximately 20,000 deaths in the United States annually due to homicide and injuries, overdose, suicide, pneumonia, HIV infection, Hepatitis, and endocarditis. In addition, approximately 60% of all California and Los Angeles County 1996 adult arrestees in 1996 were using at least one illicit drug within a three-day period before their arrest.[5] In addition to the increased criminal activity and involvement with the criminal justice system among those who use and traffic in drugs, the economic and social losses due to drug use and abuse are immense.

- ➜ Of total drug treatment admissions to programs administered by Los Angeles County in the fourth quarter 1996, heroin accounted for 53%, alcohol for 20%, cocaine for 14%, and methamphetamine for 6%; marijuana admissions decreased slightly to 4% during the same period.[6]
- ➜ Of the drug-related hospital discharges among Los Angeles County residents in 1996, approximately 26% were related to cocaine, 25% to heroin or opiates, and 6% to marijuana.
- ➜ The number of persons who misuse other forms of illicit medication in Los Angeles County is unknown.
- ➜ In 1997, the percentage of high school students in Los Angeles who reported ever using marijuana was 49% for males and 43% for females. In addition, 28% of males and 23% of females reported using marijuana on one or more occasions during the 30 days preceding the 1997 YRBS Survey. The prevalence rates of marijuana use were similar among high school students surveyed in California (see Figure 3.5).
- ➜ 12% of both males and females reported using cocaine at some point in their lives, while 5% of males and 3% of females reported using cocaine on one or more occasion in the 30 days preceding the survey.

Tobacco, Alcohol and Drug Use—Data Sources

1. Los Angeles County Department of Health Services, Tobacco Control Program

2. California Department of Health Services, Tobacco Control Section

3. Los Angeles County Department of Health Services—Public Health
   Office of Health Assessment and Epidemiology
   1997 Los Angeles County Health Survey

3. California Department of Health Services
   California Behavioral Survey, CATI Unit

4. United States Department of Health Services
   Centers for Disease Control and Prevention
   Epidemiology Program Office, MMWR Series

5. UCLA Drug Abuse Research Center
   Neuropsychiatric Institute

See Appendix for complete references on these and other data resources.

Sexual Behavior

Many sexual behaviors and practices impact the health of the population. For example, consistent use of contraceptives, including condoms, prevents the occurrence of unplanned pregnancies. Use of condoms also prevents the spread of HIV and other sexually transmitted diseases (See Maternal and Infant Health, Chapter Three, for more about birth outcomes including teen births). This chapter focuses primarily on failure to use condoms and other behavior practices among adults and youth that increase the risk for sexually transmitted diseases. Data on sexual practices and health outcomes are limited to surveillance systems that track the incidence of specific diseases and health interview surveys that collect self-reported information on sexual practices.

- ➜ In 1998 the majority of AIDS cases in Los Angeles County (67%) were attributed to sexual transmission of HIV.
- ➜ The results of the 1997 Los Angeles County Health Survey (1997 LACHS), indicate that approximately 6% of all adults in Los Angeles County were at increased risk for HIV or another sexually transmitted disease based on having had more than one sexual partner during the previous year and not always using a condom.
- ➜ Among men who had sex with a man in the past 12 months, 34% had more than one sexual partner in the past 12 months and reported not always using a condom (1997 LACHS).
- ➜ Among men who had sex with a woman in the past 12 months, 7% had sex with more than one female partner in the past 12 months and did not always use a condom.
- ➜ Among women who had sex with a man, 3% had sex with more than one male partner in the past 12 months and did not always use a condom.
- ➜ Among sexually active high school students, 50% of females and 60% of males used condoms when they last had sexual intercourse (1997 YRBS-Los Angeles Unified School District).
- ➜ Approximately 13% of high school students (19% of males and 7% of females) had four or more sexual partners in the year preceding the administration of the 1997 Los Angeles Youth Risk Behavior Survey (LAUSD).

Additional information about sexual risk behaviors can be found in Table 3.2.

Sexual Behavior—Data Sources

1. Los Angeles County Department of Health Services—Public Health
   Office of Health Assessment and Epidemiology
   1997 Los Angeles County Health Survey

2. California Department of Health Services
   CATI Unit
   California Behavioral Risk Factor Survey

3. United States Department of Health Services
   Centers for Disease Control and Prevention
   Epidemiology Program Office, MMWR Series

4. Los Angeles County Department of Health Services
   HIV Epidemiology Program

See Appendix for complete references on these and other data resources.

Table 3.2: Sexual Behavioral Risk Factors, 1997, Los Angeles County, California, Year 2000 Objectives

	L.A. County	California	HP 2000
Condom use in the last 12 months among sexually active adults, 18 years and older[1]			
Total	43%	*	*
Male	48%	*	*
Female	37%	*	*
High school students who used condom during last sexual intercourse among sexually active high school students[2,3,4]			
Total	54%	56%	*
Male	60%	63%	75%[5]
Female	50%	50%	60%[5]
More than one sexual partner in the last 12 months among adults, 18 years and older[1]			
Total	10%	*	*
Male	15%	*	*
Female	4%	*	*
High school students who have had four or more sexual partners during lifetime[2,3,4]			
Total	13%	12%	*
Male	19%	15%	*
Female	7%	9%	*
AIDS cases diagnosed by risk of transmission in 1997:[6,7]			
Males			
Male-male sexual contact	64%	*	*
Male-male sexual contact/IDU	5%	*	*
IDU	7%	*	*
Male heterosexual contact[8]	3%	*	*
Females			
IDU	25%	*	*
Female heterosexual contact[8]	45%	*	*
HIV test administered in past 2 years, adults 18 years and older[1]			
White	30%	*	*
Latino	43%	*	*
African-American	47%	*	*
Asian	26%	*	*
High school students who received HIV/AIDS prevention education in school[2,3,4]			
Total	85%	92%	*
Male	88%	92%	*
Female	83%	91%	*
High school students who have talked about HIV/AIDS with parents or adult family members[2,3,4]			
Total	59%	61%	*
Male	54%	57%	*
Female	64%	64%	*

* *Data not available*

1. 1997 LACHS, Los Angeles County Department of Health Services.

2. Weighted data from Los Angeles Unified School District (LAUSD).

3. Unweighted California data did not include students from the LAUSD.

4. Youth Risk Behavior Surveillance(YRBS)-United States, 1997, MMWR, CDC.

5. Sexually active males and females 15–19 years of age.

6. Advanced HIV disease (AIDS) cases diagnosed in 1997.

7. Los Angeles County Department of Health Services, HIV Epidemiology Program, Advanced HIV Disease (AIDS) Quarterly Surveillance Summary, Issued January 15, 2000.

8. Heterosexual contact with a person who is HIV-infected or at increased risk for HIV.

Nutrition

Nutrition and physical activity patterns are strongly linked to optimal health and well-being. Studies have shown that poor nutrition plays a key role in the onset of numerous diseases and medical conditions. Dietary practices are associated with the prevention of conditions including cardiovascular disease, cancer, and cerebrovascular disease.[7] Furthermore, obesity is a major risk factor for diabetes, hypertension, and coronary artery disease.[8] Consumption of saturated fats can raise cholesterol levels, block arteries and thus increase the risk for coronary artery disease.[9]

On the other hand, consuming a lowfat diet that is also high in fruits, vegetables, and whole grains is clearly associated with a variety of health benefits, including a reduction in the risk for a number of diseases.[10] In addition, adequate consumption of specific nutrients will help prevent certain health conditions. For example, increased calcium intake reduces the risk for osteoporosis[11,12] and increased consumption of folic acid lowers the risk for heart disease. By following the recommended guidelines for nutrition and fitness, Angelenos have the opportunity to reduce their risk of chronic disease and other conditions.

- ➜ California residents on average eat 3.8 servings of fruit and vegetables per day, lower than the Healthy People 2000 goal of 5.0 servings per day (see Table 3.3).
- ➜ According to California statistics, of those people eating at least one meal out on a daily basis, 48% of them ate at a fast food restaurant.[13]

Table 3.3: Nutrition

		L.A. County	California	HP 2000
Daily average number of servings of fruit and vegetables		*	3.8[1]	5.0
Daily percent of people who ate at least one meal out		*	41.0%[1]	*
Daily percentage of people who ate at a fast food restaurant while eating at least one meal out		*	48.0%[1]	*
High school students who had eaten five or more servings of fruits and vegetables[2]	Total	30.5%	32.5%	*
	Male	34.6%	35.4%	*
	Female	27.0%	30.1%	*
Overweight	Total	47.0%[3]	*	20.0%
	Mild/moderate overweight[4]	33.0%	*	*
	Severe overweight[5]	14.0%	*	*
	Male	55.0%[3]	*	20.0%
	Female	39.0%[3]	*	20.0%

1. California Dietary Practices Survey: Focus on Fruits and Vegetables, 1989–1997, California Department of Health Services, Sacramento, CA, 1998.

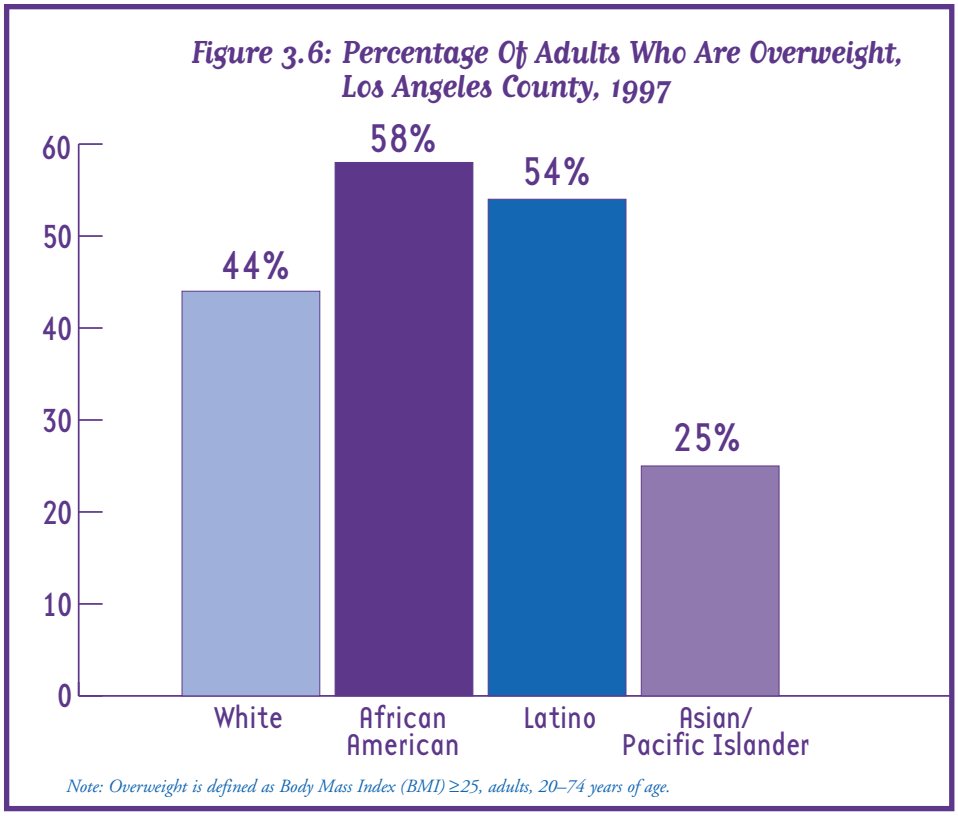
2. Students who had eaten ≥5 servings during day preceding the survey, 1997 YRBS, MMWR, CDC.

3. Overweight is defined as Body Mass Index (BMI) ≥25, adults, 20–74 years of age, 1997 Los Angeles County Health Survey (1997 LACHS).

4. Mild/moderate overweight is defined as Body Mass Index (BMI) ≥25 and >30, adults, 20–74 years of age, 1997 LACHS.

5. Severe overweight is defined as Body Mass Index (BMI) ≥30, adults, 20–74 years of age, 1997 LACHS.

* *Data not available*

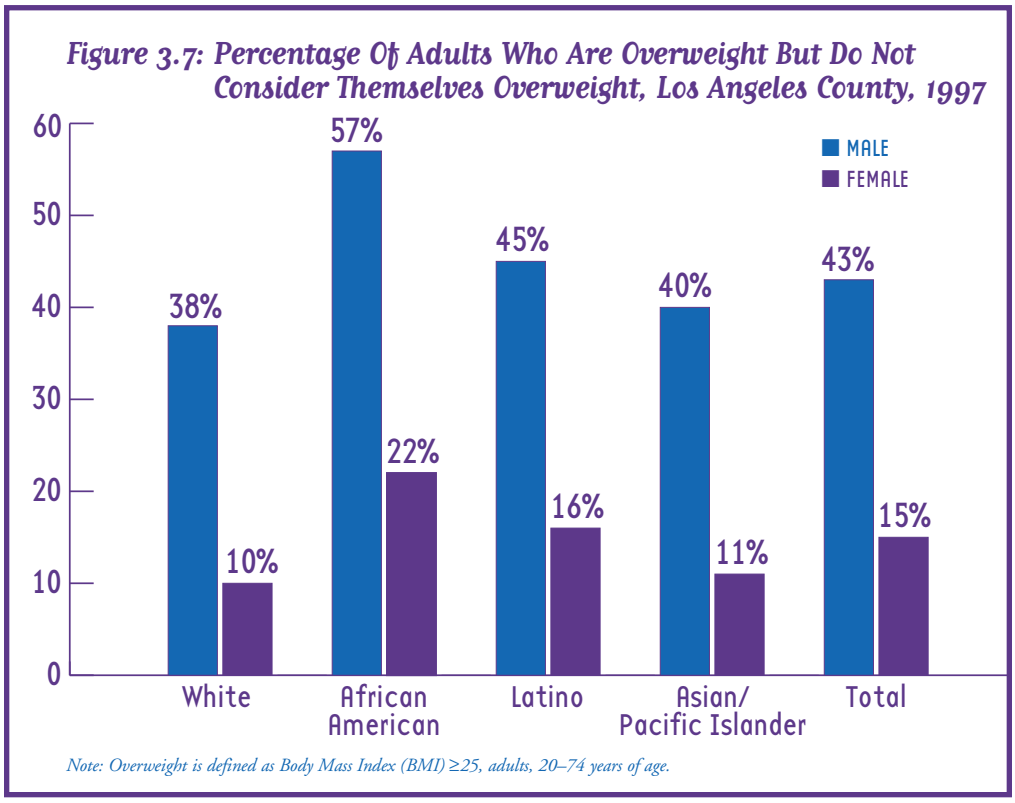


Source: 1997 LACHS, Los Angeles County Department of Health Services.

- 1997 California Dietary Practices Survey found that 53% of Californians report drinking milk on any given day. Latinos reported the highest rate (61%) followed by whites (55%) and African-Americans (32%).[14]
- 59% of Californians agree that the reason they are not eating more fruits and vegetables is because they are hard to get at work, and 57% report that they are hard to buy in restaurants.[15]
- 85% of Californians report that they are not eating a low-fat diet because they are not in the habit of doing so.

Overweight

- Overweight is a significant problem in Los Angeles County, affecting nearly one-half of the adult population (see Table 3.3). Further analyses show that the prevalence of overweight varies across racial and ethnic groups (see Figure 3.6). Therefore, cultural and environmental factors should be considered when developing intervention programs to change dietary practices.



Source: 1997 LACHS, Los Angeles County Department of Health Services.

- 43% of men and 15% of women who are overweight based on their body mass index (BMI) do not consider themselves to be overweight. These percentages vary by race/ethnicity (see Figure 3.7). This group of individuals is likely to benefit from weight loss but may not make the effort to lose weight because they do not recognize or acknowledge their overweight status.

Physical Activity

- ➜ 20% of men and 23% of women in California do not exercise outside of work (see Table 3.4). Physical inactivity is a major risk factor for cardiovascular disease while moderate to high levels of physical activity are associated with a lower risk of premature mortality.[17,18]
- ➜ 35% percent of students in Los Angeles walked or bicycled for at least 30 minutes on five or more of the seven days preceding the survey, i.e. moderate physical activity, compared to 26% in all of California (see Table 3.4).
- ➜ Latinos and African-Americans had the highest proportions of adults who do not exercise outside of work compared to other groups. Among Latinos, 42% of males and 39% of females do not exercise outside of work. In comparison, among African-Americans, 32% of females and 28% of males do not exercise outside of work (see Figure 3.8).

Table 3.4: Physical Activity

	L.A. City[2]	L.A. County	California	HP 2000
Adults who do not exercise outside of work.[1]				
Total	*	*	21.4%	15.0%
Male	*	*	20.3%	*
African-American	*	*	27.7%	20.0%
Latino	*	*	41.5%	25.0%
Female	*	*	22.5%	*
African-American	*	*	31.9%	20.0%
Latino	*	*	39.0%	25.0%
High school students who participated in moderate physical activity[3]				
Total	34.6%	*	26.0%[5]	*
Male	36.3%	*	27.6%[5]	*
Female	33.1%	*	24.6%[5]	*
High school students who participated in vigorous physical activity[4]				
Total	60.8%	*	65.2%[5]	75.0%
Male	69.7%	*	73.8%[5]	*
Female	53.0%	*	57.9%[5]	*

1. California Behavioral Risk Factor Survey, 1995

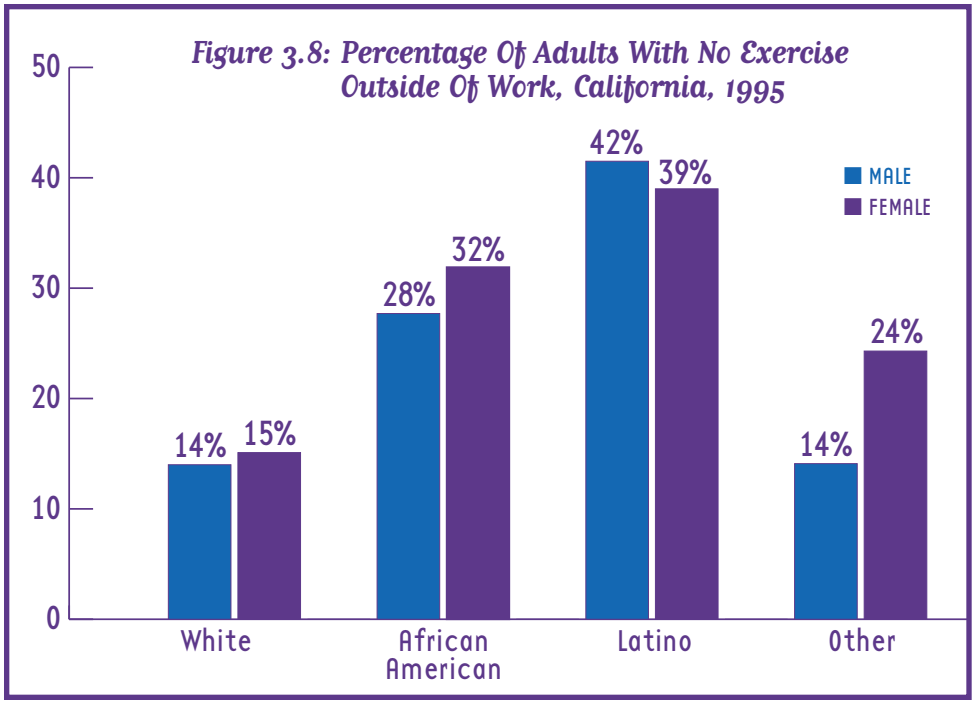
2. Kann L, Kinchen, SA, Williams BI, et.al. Youth Risk Behavior Surveillance-United States, 1997. In: CDC Surveillance Summaries, Aug. 14, 1998. MMWR. 1998;47(no. SS-3). Note: Weighted data provided for Los Angeles includes only city-wide statistics.

3. Walked or bicycled for at least 30 minutes on ≥5 of the 7 days preceding the survey. Note: Not mutually exclusive from vigorous physical activity.

4. Activities that caused sweating and hard breathing for at least 20 minutes on ≥3 of the 7 days preceding the survey. Note: Not mutually exclusive from moderate physical activity.

5. Unweighted data for California does not include high school students from the LAUSD.

** Data not available.*



Source: California Behavioral Risk Factor Survey, 1995.

Nutrition, Overweight and Physical Activity—Data Sources

1. Los Angeles County Department of Health Services—Public Health
   Nutrition Program

2. Los Angeles County Department of Health Services—Public Health
   Office of Health Assessment and Epidemiology
   1997 Los Angeles County Health Survey

3. California Department of Health Services
   Cancer Prevention and Nutrition Program
   Research Unit

4. California Department of Health Services
   Cancer Surveillance Section
   CATI Unit
   California Behavioral Risk Factor Survey

5. United States Department of Health and Human Services
   Centers for Disease Control and Prevention
   Epidemiology Program Office
   MMWR Series

See Appendix for complete references on these and other data resources.

Injury Risk Behavior

This section addresses some of the behavioral risk factors associated with injuries. Chapter Four shows data on injury outcomes in Los Angeles County. Injuries are often classified on the basis of the intent and the behaviors of the people involved, thus, unintentional or intentional. Unintentional injuries, formerly referred to as "accidents," include those due to motor vehicle-related injuries, falls, poisoning, and drowning. Intentional injuries include homicide and suicide, and injuries from physical assaults or weapons. From 1993 through 1995, injuries accounted for 51,695 deaths, ranking them as the third leading cause of death in California.

Injuries occur as a result of complex interaction between behavioral, psychological, social, and physical factors. Many of these factors are potentially modifiable and, therefore, injuries are largely preventable occurrences with identifiable risk factors. For example, driving while intoxicated on alcohol is a major risk factor for motor vehicle crashes, and not wearing a seat belt is a major risk for injury in a crash.[19] In order to reduce injury-related morbidity and mortality, injury prevention efforts must address these and other risk factors at the individual and population levels (i.e. personal counseling and public education campaigns) and in the policy arena (i.e. policies, laws, and regulations that create safer environments and mandate safer behaviors).

This section presents data on selected behaviors associated with increased risk for intentional and unintentional injuries. Because of the limited data available at the county level, this section should not be viewed as a complete accounting of injury risk factors.

Table 3.5: Injury Risk Behavior

		L.A. County	California
Seat belt use, adults 18+		89%[1]	85%[2]
Adults, 18+, who reported not always using seat belts.[1]	Men	14%	*
	Women	9%	*
	18–29 years	14%	*
	30–39 years	10%	*
	40–49 years	9%	*
	50+ years	11%	*
Children, 0-17, whose parents reported not always using seat belts or child car seat.[1]	<4 years	2%	*
	5–12 years	6%	*
	13–17 years	6%	*
Children and youth, under 18, whose parents reported always using seat belts or child car seats.		95%[1]	*
Driving under the influence[4] (arrests per 100,000)		17.6	19.7
	Total number of juvenile arrests	13.0	108.0
	Total number of adult arrests	1,654.0	6,256.0
Adults, 18+, who reported having guns in the home.		20%[1]	30%[3]

1. 1997 LACHS, Los Angeles County Department of Health Services.
2. California Behavioral Risk Factor Survey, 1995.
3. CDHS, EPIC, EPIC Gram, Gun Ownership in California, 1998.
4. 1996 California Department of Justice, Division of Criminal Justice Information Services.
** Data not available*

➜ Episodic consumption of alcohol is associated with violent behavior and alcohol-impaired driving, thereby increasing the risk for intentional and unintentional injury.[20] In 1996, there were 17.6 arrests for driving under the influence of alcohol per 100,000 Los Angeles County drivers (see Table 3.5).

Among public high school students in the city of Los Angeles:

➜ 36.7% reported riding in a vehicle at least one or more times within the last month with a driver who had been drinking (see Table 3.5A).

➜ 17% reported carrying a weapon including a gun, knife, or club, within the last 30 days (see Table 3.5A).

➜ Within the last 12 months, 23.2% of students in Los Angeles reported having considered attempting suicide (see Table 3.5A).

➜ Within the last 12 months, 12.6% of students in Los Angeles reported having attempted suicide compared to 8.3% in the rest of the state (see Table 3.5).

Table 3.5A: Injury Risk Behavior Among High School Students, 1997

	L.A. City[1]	California[2]
High school students who reported always wearing seat belts when riding in a car or truck driven by someone else	91.8%	93.9%
High school students who rarely or never wore motorcycle helmets among those that rode motorcycles in the past 12 months	46.7%	26.4%
High school students who reported driving after drinking alcohol	9.3%	9.8%
High school students who rode with a driver who had been drinking alcohol. (one or more times within last thirty days)	36.7%	29.8%
High school students who reported carrying a weapon within last 30 days	17%	16.7%
High school students who carried a weapon on school property within last 30 days	5.8%	7.4%
High school students who carried a gun	6%	4.7%
High school students who reported being in a physical fight in the past year	36.7%	28.6%
High school students who reported having considered attempting suicide (within last 12 months)	23.2%	22.3%
High school students who reported attempting suicide (within last 12 months)	12.6%	8.3%

1. Weighted data provided for Los Angeles includes only city-wide statistics.
2. Unweighted data for California does not include high school students from the LAUSD.

Source: Kann, L, Kinchen, SA, Williams, BI, et al. Youth Risk Behavior Surveillance-United States, 1997. In: CDC Surveillance Summaries, Aug. 14, 1998. MMWR. 1998; 47 (no. SS-3).

➜ Having access to loaded household firearms is a risk factor for firearm-related injuries.[21,22,23] Among Los Angeles County residents who reported having a gun in the home, 28% were white, followed by African American (22%), Asian (18%), and Latino (12%). These survey results should be considered minimum estimates of gun ownership. Overall, these numbers are influenced by self-reporting bias since response to this particular question may be influenced by many factors. For example, a respondent may be hesitant to admit to purchasing a gun, especially if the purchase was illegal or not appropriately registered with local authorities. Low-income individuals may resort to buying cheap handguns through illegal means, further adding to underestimation of the prevalence of handguns in the home (see Figure 3.9).

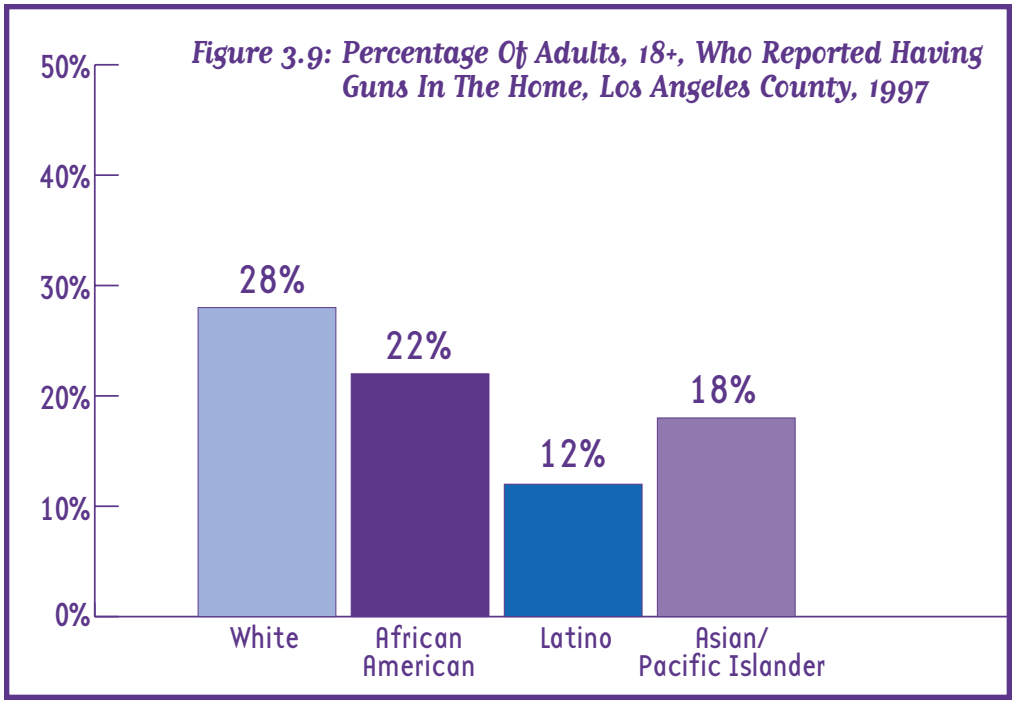


Figure 3.9: Percentage Of Adults, 18+, Who Reported Having Guns In The Home, Los Angeles County, 1997

Source: 1997 LACHS, Los Angeles County Department of Health Services.

Injury Risk Behavior—Data Sources

1. Los Angeles County Department of Health Services—Public Health
   Injury and Violence Prevention Program

2. Los Angeles County Department of Health Services—Public Health
   Office of Health Assessment and Epidemiology
   1997 Los Angeles County Health Survey

3. California Department of Health Services
   Cancer Surveillance Section
   CATI Unit
   California Behavioral Risk Factor Survey

4. United States Department of Health and Human Services
   Centers for Disease Control and Prevention
   Epidemiology Program Office
   MMWR Series

See Appendix for complete references on these and other data resources.

Environmental Health Indicators

Health and human well-being depend heavily on the quality of the local environment such as the housing in which we live and the services in our community, as well as the absence of pollution in the air, water, and land. Environmental hazards can pose unique threats to the health of individuals and communities by producing disorders such as lung disease or cancers and increasing the risk of transmission of infectious diseases. Environmental health data is needed to assess health risks to the public from air pollution, pesticide and other chemical contamination of food, drinking water, and consumer products. Moreover, these data are essential in order to promote health and quality of life by preventing and controlling disease, birth defects, disability, and death resulting from interactions between people and their environment.

Air Quality

Air pollution is a risk factor for a variety of illnesses varying from watery eyes and fatigue to respiratory diseases and some cancers. Pollutants measured include the concentration of particulate matter (PM10), ozone (O3), carbon monoxide (CO) and nitrogen oxide (NO2). Exposure to these pollutants at high concentrations and for extended periods can cause deleterious health effects and contribute to lung disease, asthma, and other illnesses, particularly in children. Sources of air pollution include emissions from motor vehicles, planes, ships, trains, and industrial facilities.

In greater Los Angeles County, the concentrations of most harmful pollutants increase during the day, level off in the evening, and decrease at night because the presence of sunlight and heat causes specific chemical reactions to occur. In addition, certain areas in Southern California tend to concentrate pollutants more because of the geography of the area, e.g., mountains, valleys. Thus, some monitoring stations will show that standards have been exceeded a greater percentage of days annually than other stations. Air quality is usually measured as the number of days that a certain pollutant exceeded the federal or state safety standard.

Air samples are monitored by the South Coast Air Quality Management District (SCAQMD) in 13 different locations throughout Los Angeles County. Data from the SCAQMD show the following:

- ➜ Overall, the air quality of the Los Angeles County region has improved considerably due to more strict regulations of pollution caused by automobile exhaust. The worst offenders of clean air in this region are ozone, total suspended particulate, and carbon monoxide. No areas exceed standards for nitrogen dioxide, sulfur dioxide, lead or sulfate.
- ➜ Ozone is perhaps the most harmful pollutant. Nearly all monitoring areas exceeded the state ozone standards on at least one day in 1997 for both eight hour and one hour peak concentration measurements. Areas exceeding the ozone standard were the East and West San Gabriel Valleys, East and West San Fernando Valleys, Pomona and Walnut Valleys, and Santa Clarita Valley.
- ➜ Three areas exceeded the state regulations for carbon monoxide in 1997. In South Central Los Angeles County, the state standard was exceeded on 18 days, in South West Coastal Los Angeles County on one day, and in West San Fernando Valley on one day.
- ➜ The areas with the most number of days exceeding the standard for total suspended particulate were East and West San Gabriel Valleys, East and West San Fernando Valleys, Pomona and Walnut Valleys, and Santa Clarita Valley.

Lead

Lead poisoning is an important health problem throughout communities in the United States. Due to the high rate of childhood lead poisoning, the federal government views it as the primary environmental health hazard facing American children (CDC, 1991). Children between ages zero and six are at a greater risk for exposure to lead. Normal hand-to-mouth activities in the infant and toddler years facilitate the ingestion of lead. Exposure to deteriorating lead-based paint and lead contaminated dust found in the home are the primary sources of lead poisoning for children. There is no safe blood lead level for children. A level of 10 ug/dL or above is considered an "elevated blood lead level." If a child's blood lead level is 20 ug/dL or remains at 15 ug/dL after two tests, CDC requires case management by local health professionals.

Lead poisoning in children can result in growth inhibition, reduced cognitive function, delayed mental development, and neurological disabilities. Although elevated blood levels in adults also have adverse health effects such as anemia, hypertension, decreased fertility, and nervous system dysfunction, children most often suffer more permanent health damage. In addition, children up to age six do not store lead in their bones as efficiently as adults, causing lead to circulate more freely. Thus adequate nutrition for children is important in the prevention of the harmful effects of lead.

The focus of lead poisoning prevention has primarily been concentrated on children. Fortunately, lead poisoning in children is a preventable public health problem. Childhood lead poisoning prevention programs such as periodic screening, environmental interventions, as well as educational and nutritional campaigns have had a tremendous impact on reducing the occurrence of lead poisoning.

A variety of work and hobby environments expose people to lead and may result in lead exposures for their families. Occupational lead exposure accounts for approximately 90% of adult lead poisoning cases. Occupations in which a worker is potentially exposed include smelting and refining industries, battery manufacturing plants, gasoline stations, construction and residential painting. Hobbies and activities such as furniture remodeling and refinishing, home renovations, making stained glass and pottery, and using indoor firing ranges are also highly associated with lead exposure.

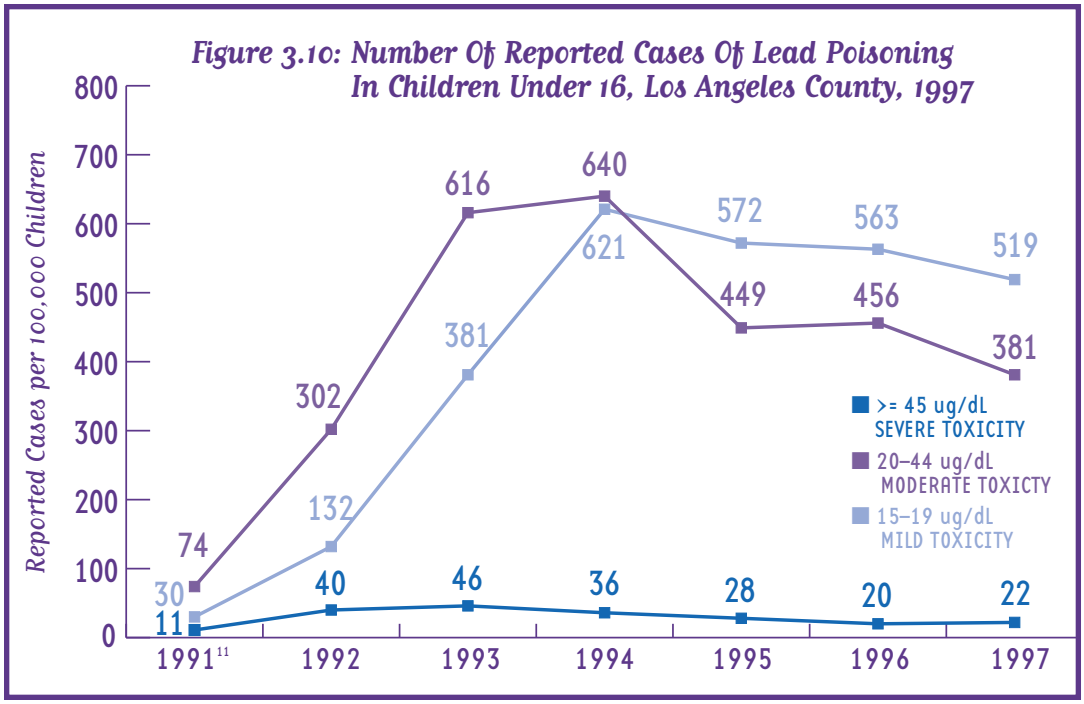
- ➜ There has been a steady decline in the number of severe toxic lead poisoning cases in children under 16. However, there has not been a significant change in the number of mild lead toxicity cases (see Figure 3.10).

Under California state law, laboratories are required to report blood lead levels of 25 ug/dL and above.

- ➜ From 1991 to 1996 there was a significant increase in the number of blood lead screenings. However, between 1996 to 1997 there was nearly a 50% decrease in the number of blood lead screenings (see Figure 3.11).
- ➜ Incidence of blood lead poisoning is highest among infants aged zero to two.
- ➜ Latino children had the highest number of reported lead poisoning cases in Los Angeles County, followed by African-Americans, whites, and Asians.

Food Safety

Food safety is an important factor affecting health. Annually, 9,000 Americans die and millions more become ill as the result of contaminated food. As a result, the



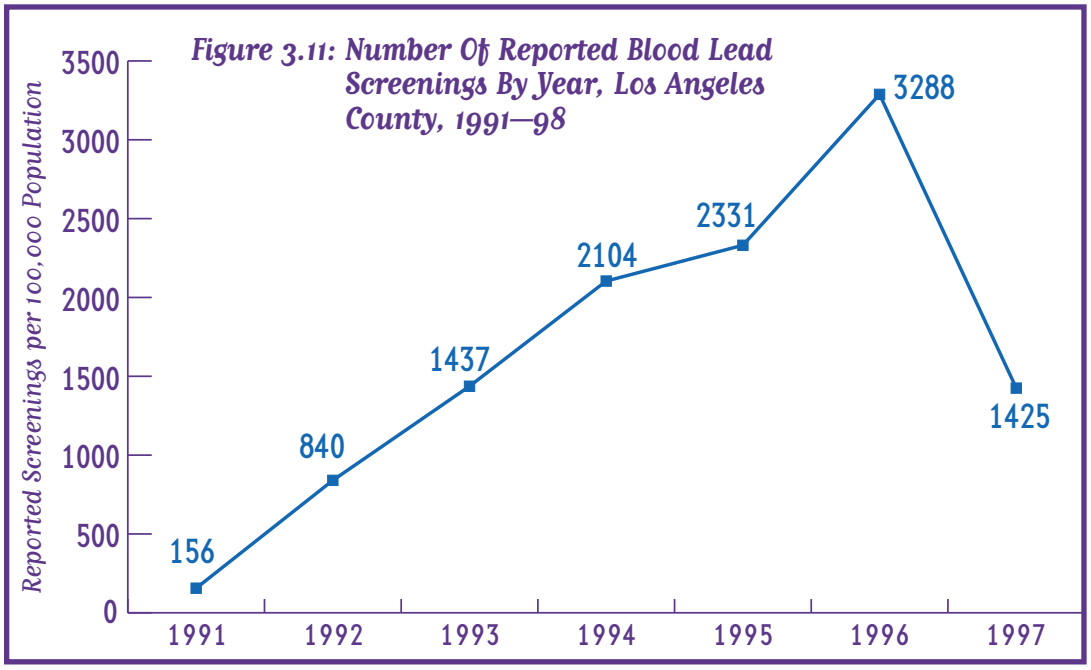
Source: Los Angeles County Department of Health Services, Childhood Lead Poisoning Prevention Program, Epidemiology Unit.

Department of Health Services has taken a lead role in promoting appropriate food handling practices in preventing food-borne illness.

Los Angeles County Department of Health Services recently established prevention programs, surveillance activities, and set standards to protect and improve the public's health. It has recently established a classification system that grades restaurants and other retail food handling facilities through periodic inspections. The purpose of the grading system is to create public awareness about food handling, hygiene, and sanitation practices in restaurants. Points are taken off for everything from minor violations such as broken tiles and employees not wearing appropriate attire, to larger violations such as inappropriate food storage temperatures, unsafe food handling practices by employees, and poor sanitary conditions.

The following is a summary of the findings for the six-month period of January 1 through June 30, 1998:

➜ The average inspection score for food establishments has increased from 88 to 92 (from a B to an A). The average score was 90.3.



Source: Los Angeles County Department of Health Services, Childhood Lead Poisoning Prevention Program, Epidemiology Unit.

➜ The average number of violations found per inspection has decreased from 4.6 to 3.7.

➜ The percentage of restaurant closures as a result of inspections has decreased from 5% to 2%.

➜ The inspection frequency has increased slightly to a little over two inspections per year per facility.

The overall positive trends in food inspection results are most likely attributable to factors such as restaurant operators' increased attention to food sanitation principles, enhanced educational materials, and food sanitation training activities for employees. Increased public awareness of the system has played a critical role in prompting restaurant owners to improve the conditions of their restaurants.

Environmental Health Indicators Data Sources

1. South Coast Air Quality Management District (SCAQMD)

2. Los Angeles County Department of Health Services—Public Health
   Lead Programs, Epidemiology Information

3. United States Department of Health and Human Services
   Centers for Disease Control and Prevention
   Lead Poisoning Prevention Program
   Division of Environmental Hazards and Health Effects
   National Center for Environmental Health

4. Los Angeles County Department of Health Services—Public Health
   Environmental Health

See Appendix for complete references on these and other data resources.

Endnotes

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2. *Fiore, MC, Bailey, WC, Cohen, SJ, Dorfman, SF, Goldstein, MC, Gritz, ER, Heyman, J, Jaen, CR, Kottke, TE. Smoking Cessation, Clinical Practice Guideline No 18. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research. (AHCPR publication no. 96-0692). 1996.*
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10. *See note 7 above.*
11. *Dawson-Hughes, B, Dallal, GE, Krall, EA, et al. A controlled trial of the effect of calcium supplementation on bone density in postmenopausal women. N Engl J Med 1990; 323:878-83.*
12. *Reid, JR, Ames, RW, Evans, MC, et al. Effect of calcium supplementation on bone loss in postmenopausal women. N Engl J Med 1993; 328:460-64.*
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14. *See note 13 above.*
15. *See note 13 above.*
16. *Center for Disease Control and Prevention. Public health focus: physical activity and the prevention of coronary heart disease. MMWR 1993;42:669-72.*
17. *Pate, RR, Pratt, M, Blair, SN, et al. Physical activity and public health: a recommendation from the Centers for Disease Control and Prevention and the American College of Sports Medicine. JAMA 1995;273:402-07.*
18. *Campbell, BJ, Campbell, FA. Injury reduction and belt use associated with occupant restraint laws. In: Graham, JD, ed. Preventing automobile injury: new findings from evaluation research. Dover, MA: Auburn House;1999: 24-50.*
19. *U.S. Department of Health and Human Services. Eight Special Report to the U.S. Congress in Alcohol and Health. Washington, DC: Public Health Service; 1994. NIH Publication No. 94-3699.*
20. *Wintemute, GJ, Teret, SP, Krause, JF, Wright, MA, Bradfield, G. When children shoot children: 88 unintended deaths in California. JAMA 1987;257: 3107-09.*
21. *Kellerman, A, Rivara, FP, Somes, G, et. al. Suicide in the home in relation to gun ownership. N Engl J Med 1992; 327:467-72.*
22. *Kellerman, A, Rivara, FP, Rushforth, NB, et. al. Gun ownership as a risk factor for homicide in the home. N Engl J Med 1993; 329:1084-91.*

Chapter Four

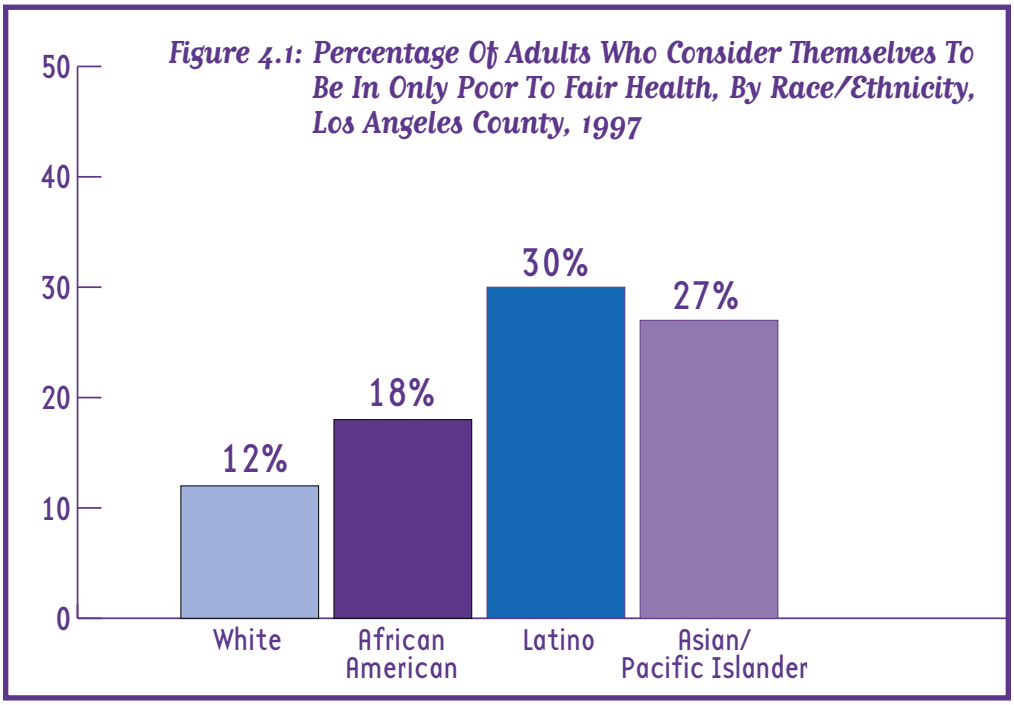
Health Outcomes

The health of Angelenos cannot be assessed without considering how Los Angeles County residents perceive their own health or illness and also examining the incidence of particular diseases. To that end, this chapter will address the following issues: self-perceived health status; burden of disease and injury; maternal and infant health; chronic disease; communicable disease; injury and violence; and, leading causes of mortality.

Self-Perceived Health Status

How people view their own health is an important indicator of health status. As defined by the Institute of Medicine, health encompasses not only the absence of disease but also "a state of well-being and the capability to function in the face of changing circumstances."[1] Although health status is strongly associated with the presence or absence of disease, health is by definition a subjective state. Moreover, this subjective state has important ramifications. For example, persons who consider themselves to be in poor health may be more likely to be depressed, to have impaired function, and to lead less productive and fulfilling lives. In addition, self-perceived health status is an important determinant of perceived need (and demand) for health care and other health-related services.

Figure 4.1: Percentage Of Adults Who Consider Themselves To Be In Only Poor To Fair Health, By Race/Ethnicity, Los Angeles County, 1997



Source: 1997 LACHS.

- According to the 1997 Los Angeles County Health Survey (1997 LACHS), 52% of adults in the county consider their health to be very good to excellent, 27% consider their health to be good, and 21% consider their health to be poor to fair.
- The percentage that consider their health to be only poor to fair is highest among Latinos (30%) and Asians (27%), intermediate among African-Americans (18%), and lowest among whites (12%) (see Figure 4.1).
- The percentage that consider their health to be only poor to fair is higher among women (24%) than men (17%) (1997 LACHS).

- The percentage that consider their health to be only poor to fair is higher among those with family incomes below 100% of the 1997 federal poverty level (40%) than among those with family incomes between 100% to 200% of the federal poverty level (27%) or greater than 200% of the federal poverty level (13%) (see Figure 4.2).[2]

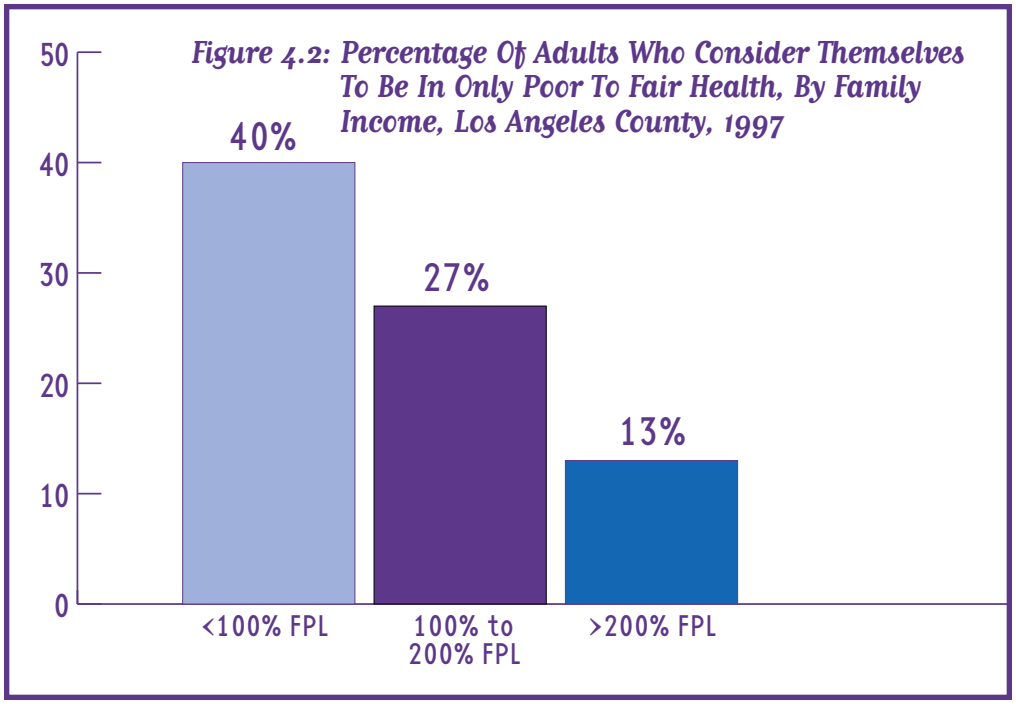


Figure 4.2: Percentage Of Adults Who Consider Themselves To Be In Only Poor To Fair Health, By Family Income, Los Angeles County, 1997

Source: 1997 LACHS.

- The percentage that consider their health to be only poor to fair is higher among those who are severely overweight (31%) and mildly to moderately overweight (21%) than among those who are not overweight (16%).[3]

Self-Perceived Health Status—Data Sources

Los Angeles County Department of Health Services—Public Health
Office of Health Assessment and Epidemiology
1997 Los Angeles County Health Survey

California Department of Health Services
Cancer Surveillance Section
CATI Unit
California Behavioral Risk Factor Survey

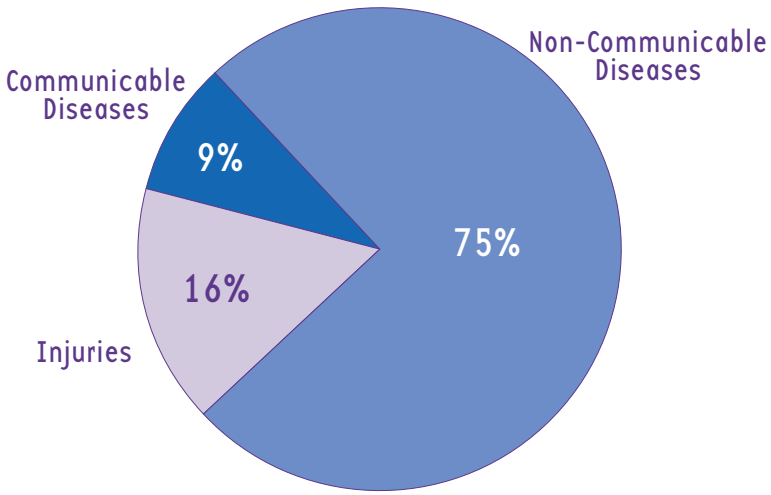
See Appendix for complete references on these and other data resources.
See page 83 for endnotes.

Burden of Disease and Injury

Ongoing assessment of the burden of disease and injury in the population is essential for planning public health programs and health care services and for evaluating their effectiveness. In the past, disease and injury burden has most often been assessed by examining patterns of mortality in the general population and in various subpopulations such as racial/ethnic groups, age groups, and residents of particular locales. A major limitation of this approach, however, is that it does not account for illness and disability associated with conditions that do not typically cause death. For example, the important contributions of depression and other mental illness on overall disease burden would be greatly underestimated by looking only at mortality data. Similarly, the impact of chronic disabling conditions such as arthritis is not adequately reflected in mortality statistics.

To address this limitation, a new measure of disease and injury burden, referred to as the disability-adjusted life year (DALY), has recently been developed. The DALY is a

Figure 4.3: Burden Of Disease And Injury Among Males, Los Angeles County, 1996

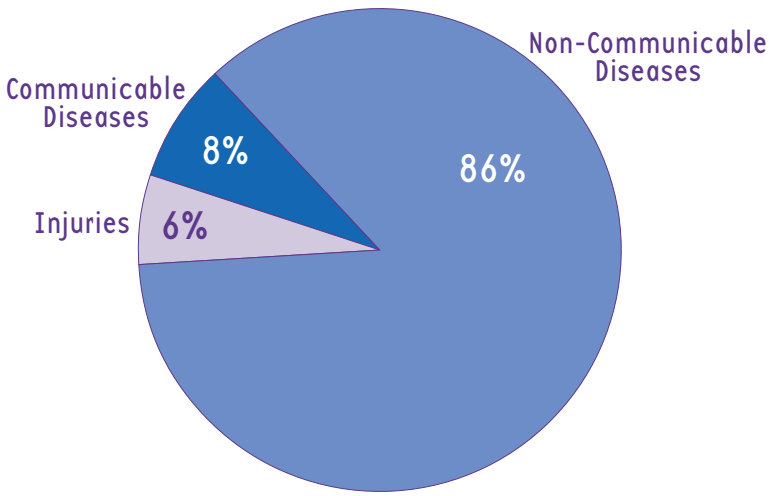


Source: 1997 Los Angeles County Mortality Statistics; supplemental data provided by the Harvard University Burden of Disease Unit.

measure of the number of years of life lost (YLL) due to premature death plus the number of years lived with disability (YLD) associated with specific health conditions. As such, the DALY is a measure that accounts for both death and disability, and can be used to compare the full burden of disease and injury in different populations. The World Health Organization (WHO) and Harvard University recently published a report on global patterns of disease and injury burden based on DALYs.[4] They found that, in 1990, the three leading causes of premature death and disability worldwide were respiratory infections, infections causing diarrhea and dehydration, and conditions arising during the birth period. By the year 2020, however, they project a dramatic shift in the leading causes of premature death and disability worldwide and that heart disease, depression and motor vehicle-related injuries will rise to the top of the list.

The Los Angeles County Department of Health Services is currently developing DALY estimates for the total county population and for the eight service planning areas (SPAs) using a modified version of the methodology employed by WHO and the Harvard University Burden of Disease Unit. The preliminary results indicate that, in 1997, non-communicable diseases (such as cancer, heart disease, diabetes, and birth defects) accounted for 75% of the total disease and injury burden among males and 86% among females in the county (see Figures 4.3 and 4.4). Communicable (infectious) diseases accounted for 9% of the burden in males and 8% in females. Injuries accounted for the remaining 16% in males and 6% in females.

Figure 4.4: Burden Of Disease And Injury Among Females, Los Angeles County, 1997



Source: 1997 Los Angeles County Mortality Statistics; supplemental data provided by the Harvard University Burden of Disease Unit.

The leading cause of DALYs in men in 1997 was coronary heart disease, followed by homicide and other violence, alcohol dependence, drug overdose, and depression. In women, the leading cause of DALYs was also coronary heart disease, followed by alcohol dependence, diabetes, depression, and osteoarthritis.

Age-adjusted rates of premature death (YLLs), disability (YLDs), and overall disease/injury burden (DALYs) in the county population, show marked differences by gender and race/ethnicity. The rate of DALYs is higher in males (119 per 1,000) than females (94 per 1,000). This difference is attributable to a 50% higher rate of premature death among men (67 per 1,000) than women (44 per 1,000). The DALYs rate is highest among African-Americans (190 per 1,000), followed by American Indians/Alaska Natives (149 per 1,000), whites (113 per 1,000), Latinos (94 per 1,000), and Asians/Pacific Islanders (77 per 1,000).

A more detailed report recently released by the Los Angeles County Department of Health Services includes DALYs estimates for the eight SPAs and information on the leading causes of premature death and disability in each of these areas.[5]

Burden of Disease—Data Sources

1. Los Angeles County Department of Health Services—Public Health
   Office of Health Assessment and Epidemiology
   Epidemiology Unit

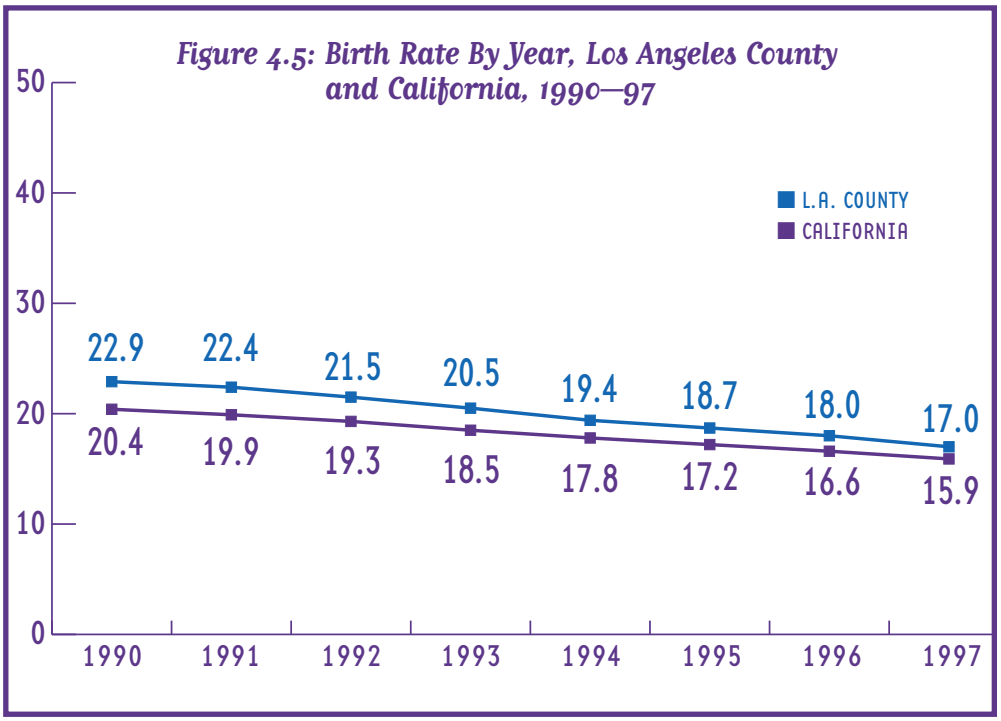
2. Harvard University School of Public Health
   Center for Population and Development Studies
   Burden of Disease Unit

See Appendix for complete references on these and other data resources.
See page 83 for endnotes.

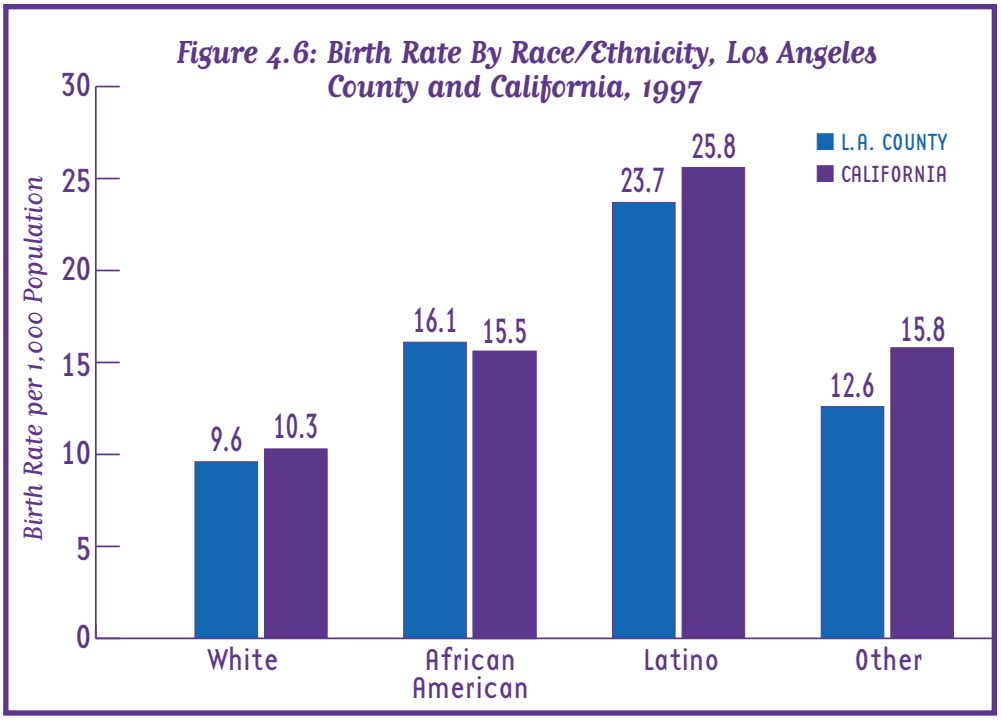
Maternal and Infant Health

Los Angeles County and California, especially in the 1990s, have seen significant improvements in the amount of early prenatal care received and in the reduction of infant mortality, a testament to the results that can be achieved when focused interventions are applied. Maternal and infant health is considered an index of overall health within a community. Thus, improvement in the health of mothers and infants is an important priority and opportunity for elevating a community's health status. Indicators most often used to assess maternal and infant health are receipt

Figure 4.5: Birth Rate By Year, Los Angeles County and California, 1990—97



Source: Los Angeles County Department of Health Services, MCAH Program, Perinatal Indicators, Los Angeles County, 1997.



Source: Los Angeles County Department of Health Services, MCAH Program, Perinatal Indicators, Los Angeles County, 1997.

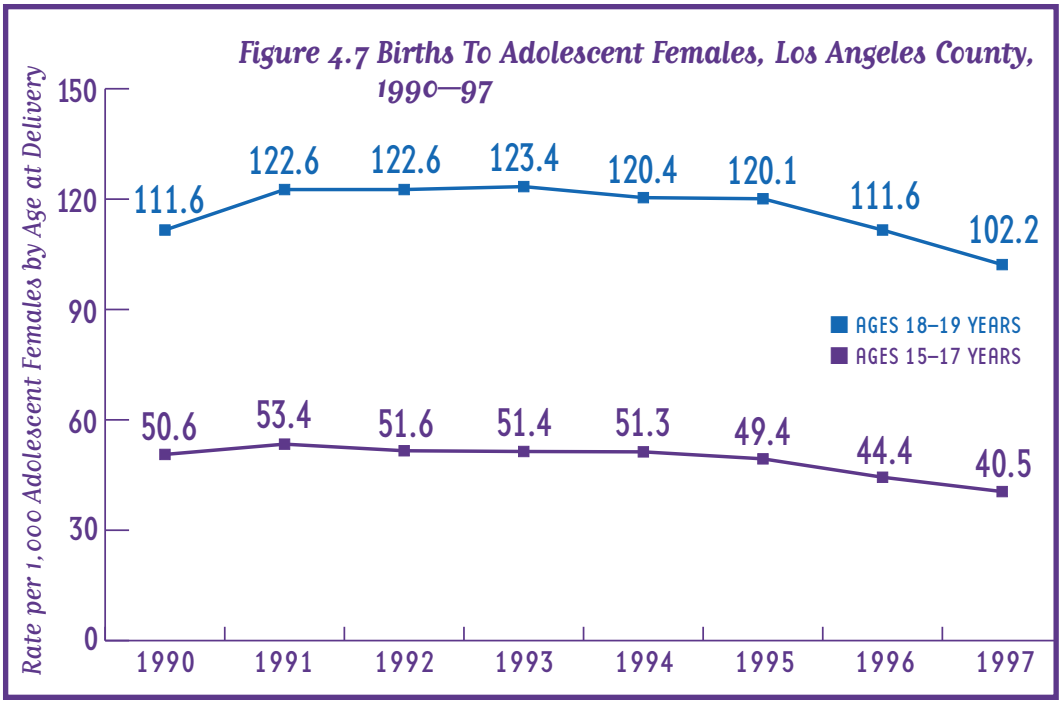
and adequacy of prenatal care, incidence of low birth weight babies, and infant mortality. These indicators are interrelated and are sensitive to a wide range of social, biological, health and environmental factors.[6] Ultimately these traditional maternal and infant health indicators are important barometers of children's health and their chances of a healthier survival.

Birth Rate

- ➜ There was a decline in the birth rate for Los Angeles County and California from 1990 to 1997 (see Figure 4.5).
- ➜ The total number of live births in 1997 in Los Angeles County (162,036) made up approximately 31% of the total live births in the state of California (524,174).
- ➜ Los Angeles County's birth rate (17.0 per 1,000 residents) was slightly higher than that of the state's (15.9 per 1,000 residents) in 1997 (see Figure 4.5).
- ➜ The 1997 birth rate in Los Angeles County was highest for Latinos (23.7 per 1,000 residents) followed by African-Americans (16.1 per 1,000 residents), Asians (12.6 per 1,000 residents) and whites (9.6 per 1,000 residents) (see Figure 4.6).
- ➜ In 1997 an estimated 35% of live births to mothers ages 20 or older occurred in women with less than a high school education. This percentage has remained relatively unchanged from 1990 to 1997.

Teen Births

The United States has the highest teenage pregnancy rate among developed countries. An estimated one million teenagers become pregnant each year; 95% of those pregnancies are unintended and almost one-third end in abortions.[7] Health departments, in conjunction with local community partnerships and organizations, have implemented comprehensive, integrated youth programs to help prevent teen pregnancies and related problems.



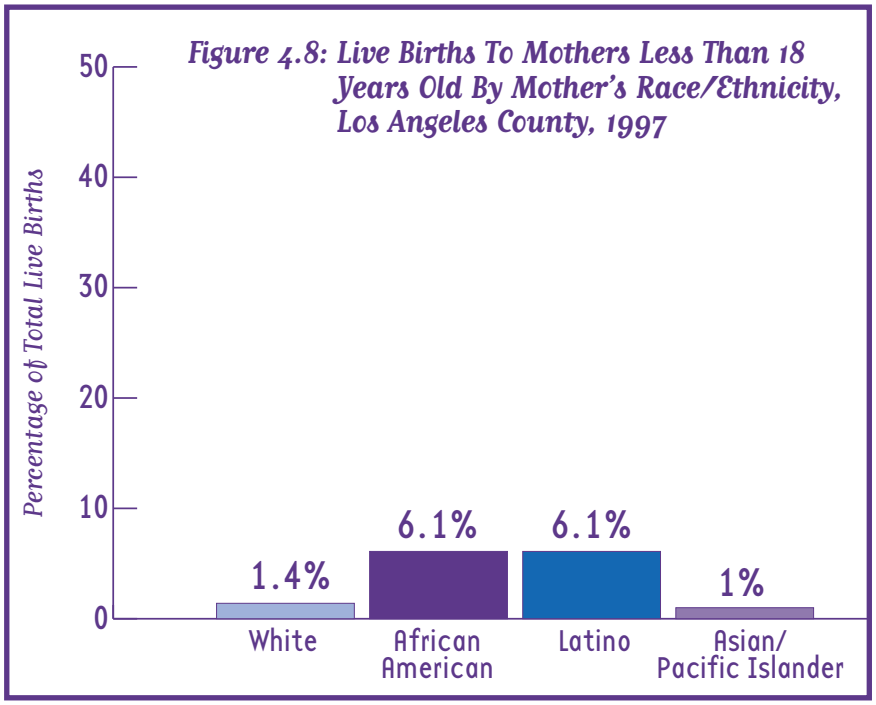
Source: Los Angeles County Department Of Health Services, MCAH Program, Perinatal Indicators, Los Angeles County, 1997.

- ➜ In 1997, the Los Angeles County teen birth rate was higher than the rate statewide, 15.2 and 13.6 births per 1,000 females under age 17, respectively; however, both geographic areas have experienced a decline in births to teens (see Table 4.1 and Figure 4.7).
- ➜ The highest proportion of births to teens in 1997 occurred among Latinos and African-Americans (6.1%), followed by whites (1.4%) and Asians (1.0%) (see Figure 4.8).

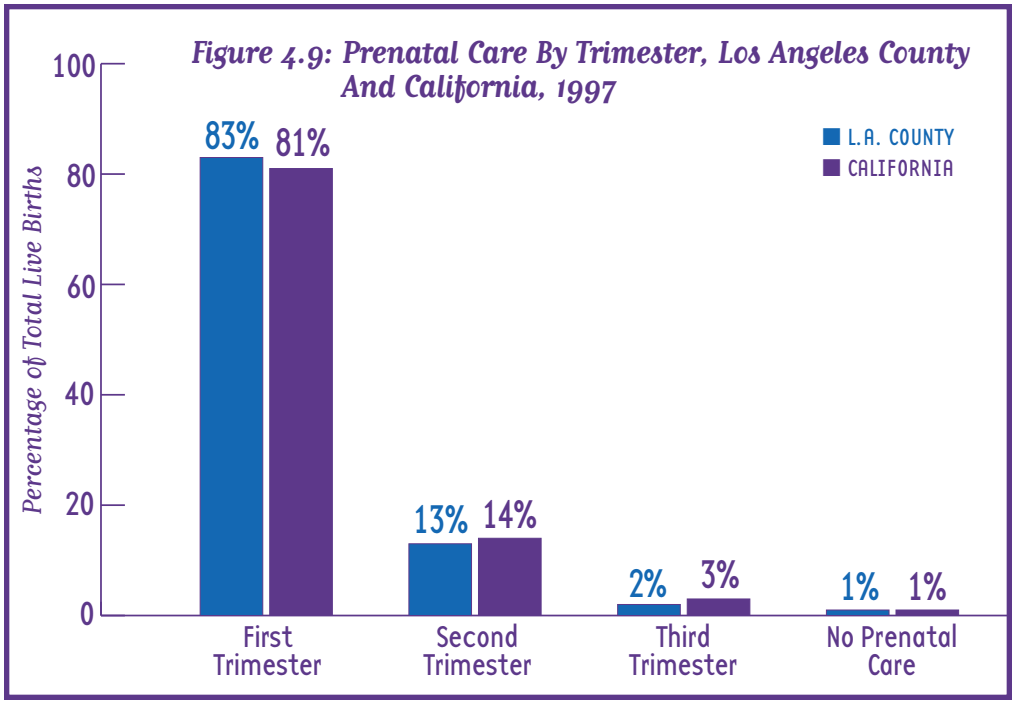
Prenatal Care

Prenatal care is widely acknowledged as the most cost-effective way to improve the outcome of pregnancy for all women and infants, particularly when it is received early in a pregnancy.

- ➜ The percentage of mothers who received prenatal care in the first trimester was 83% for Los Angeles County and 81% for California in 1997 (see Figure 4.9).
- ➜ In 1997, the proportion of mothers in Los Angeles County, who received no prenatal care or received care only during the third trimester was 2% and 1%, respectively (see Figure 4.9).
- ➜ The percentage of women receiving first trimester prenatal care has



Source: Los Angeles County department of Health Services, MCAH Program, Perinatal Indicators, Los Angeles County, 1997.



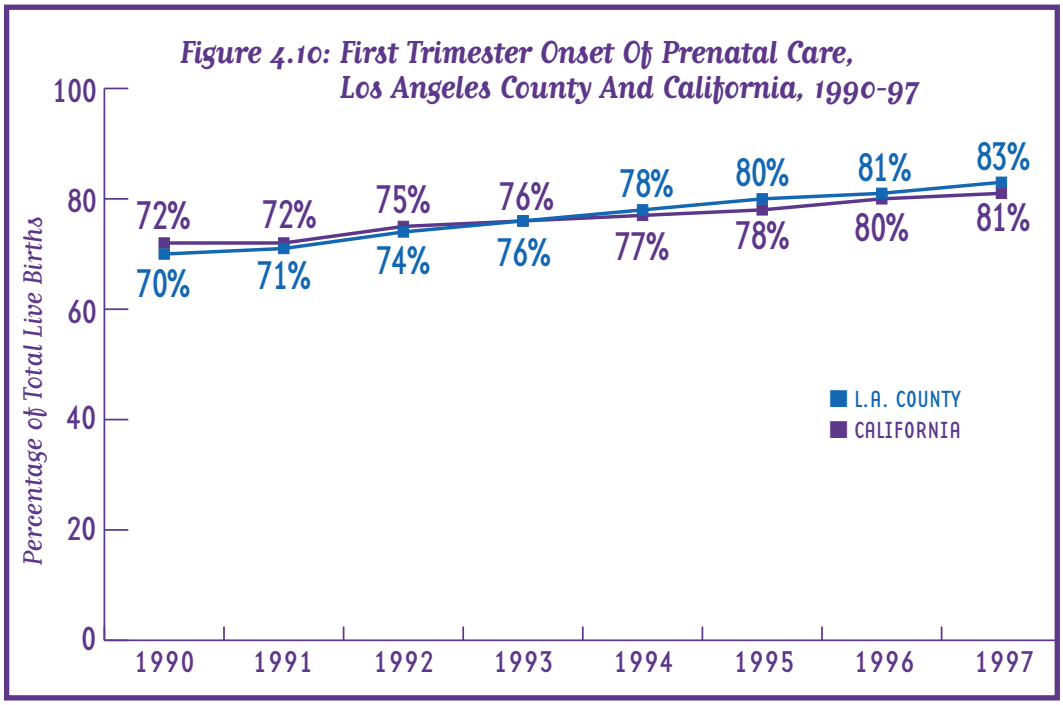
Source: Los Angeles County Department of Health Services, MCAH Program, Perinatal Indicators, Los Angeles County, 1997.

increased steadily from 1990 to 1997 for both Los Angeles County and California (see Figure 4.10).

- ➜ Fifty percent of the women who gave birth in 1997 received prenatal care paid for by Medi-Cal (see Figure 4.11).
- ➜ Los Angeles County and California did not meet the Healthy People 2000 goal of 90% of mothers receiving first trimester prenatal care in 1997.
- ➜ African-Americans and Hispanics have the lowest proportion of births that receive adequate prenatal care as defined by the Kessner Index, a combined measure of the adequacy and amount of prenatal care received.

Low Birth Weight

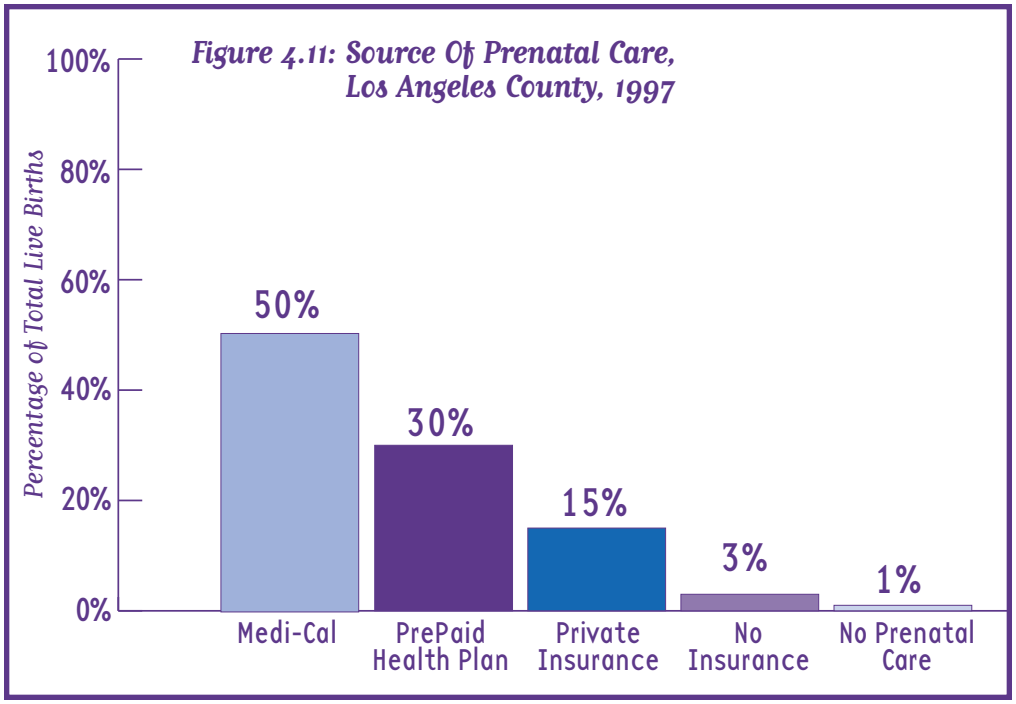
Low birth weight is one of the leading causes of infant mortality. Infants who weigh less than 5.5 pounds (2,500 grams) at birth are considered low birth weight. Low birth weight infants are nearly twice as likely as normal weight infants to exhibit severe developmental delays throughout childhood.[8] Factors associated with low birth weight include teen pregnancy, unintended or unwanted pregnancy, lack of prenatal care, poor nutrition during pregnancy, maternal smoking, substance abuse, and stress.



Source: Los Angeles County Department of Health Services, MCAH Program, Perinatal Indicators, Los Angeles County, 1997.

- ➜ In 1997, low birth weight infants constituted 6% of all births for both Los Angeles County and California.

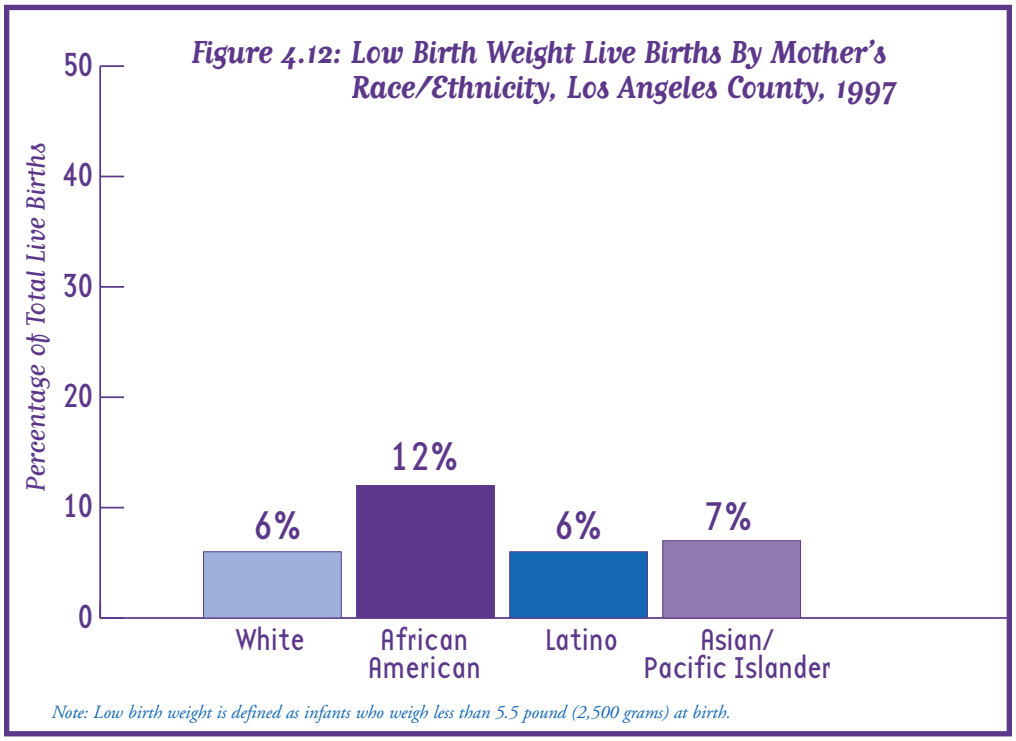
- Both Los Angeles County and California's proportions of low birth weight infants exceeded the *Healthy People 2000* goal of 5% in 1997.
- African-Americans (12%) had the highest proportion of low birth weight infants in Los Angeles County, followed by Asians (7%), whites (6%), and Latinos (6%) in 1997 (see Figure 4.11).
- From 1990 to 1997, the proportion of low birth weight births remained relatively unchanged.



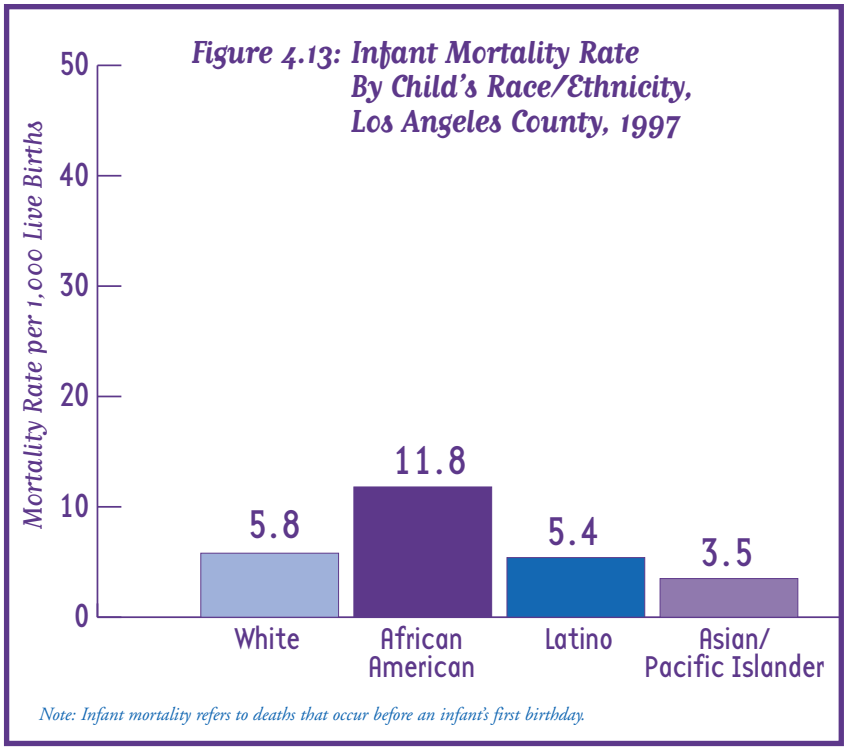
Source: Los Angeles County Department of Health Services, MCAH Program, Perinatal Indicators, Los Angeles County, 1997.

Infant Mortality

- Infant mortality rates in Los Angeles County were comparable to those of California in 1997, with 5.9 infant deaths per 1,000 live births. Both geographic areas also had lower rates than the *Healthy People 2000* goal of 7.0 infant deaths per 1,000 live births.
- African-Americans had the highest infant mortality rate of any racial group with 11.8 infant deaths per 1,000 live births in 1997 (see Figure 4.13).
- The infant mortality rate for both Los Angeles County and California declined from 1990 to 1997 (see Figure 4.14).



Source: Los Angeles County Department of Health Services, MCAH Program, Perinatal Indicators, Los Angeles County, 1997.

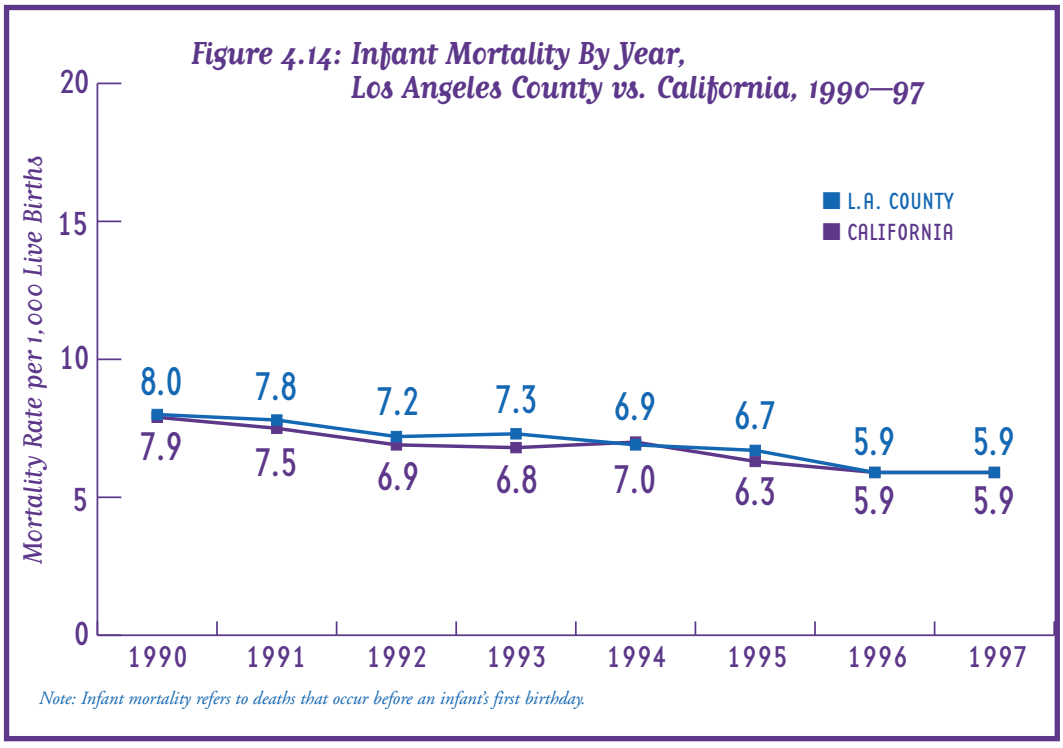


Source: Los Angeles County Department of Health Services, MCAH Program, Perinatal Indicators, Los Angeles County, 1997.

Maternal and Infant Health—Data Sources

1. Los Angeles County Department of Health Services—Public Health
   MCAH Assessment and Planning Unit (MAP)
2. Los Angeles County Department of Health Services—Public Health
   Data Collection and Analysis Unit
3. Los Angeles County Department of Health Services—Public Health
   Office of Health Assessment and Epidemiology
   1997 Los Angeles County Health Survey
4. California State Department of Finance
   Demographic Research Unit
5. California Department of Health Services
   Office of Health Information and Research
   Center for Health Statistics

See Appendix for complete references on these and other data resources.
See page 83 for endnotes.



Source: Los Angeles County Department of Health Services, MCAH Program, Perinatal Indicators, Los Angeles County, 1997.

Chronic Disease

Heart disease, cancer, diabetes, and stroke are major causes of mortality in the United States and other industrialized nations. In addition, these and other chronic conditions, such as arthritis and depression, are leading causes of disability and diminished quality of life. Measuring the incidence and prevalence of these conditions in the population represents a significant challenge. The 1997 Los Angeles County Health Survey (1997 LACHS) is a random-digit-dial telephone survey of 8,004 households in the county intended to provide health information on Los Angeles County residents currently living with several of these chronic conditions. Additionally, data on the incidence of various forms of cancer is available from the Cancer Surveillance Program at the University of Southern California School of Medicine. The impact of many of these conditions on life expectancy will be described at the end of this chapter.

Table 4.2: Chronic Disease, Adults, 18 Years And Older

		L.A. County[1]	California[2]
Heart disease			
	Total	5%	*
	White	6%	*
	African-American	6%	*
	Latino	3%	*
	Asian	6%	*
Diabetes			
	Total	6%	6%
	White	5%	5%
	African-American	9%	7%
	Latino	6%	7%
	Asian	5%	*
Hypertension			
	Total	16%	21%
	White	17%	22%
	African-American	28%	27%
	Latino	12%	14%
	Asian	14%	*

** Data not available*

1. 1997 LACHS.

2. California Behavioral Risk Factor Survey, 1998.

Heart Disease

Although deaths from heart disease have declined in the United States and many other industrialized countries over the past 30 years, heart disease remains the leading cause of death in the United States. Risk factors for heart disease that can be addressed through prevention programs include smoking, obesity, lack of physical activity, personal stress, diabetes, high blood pressure, and high serum cholesterol levels.

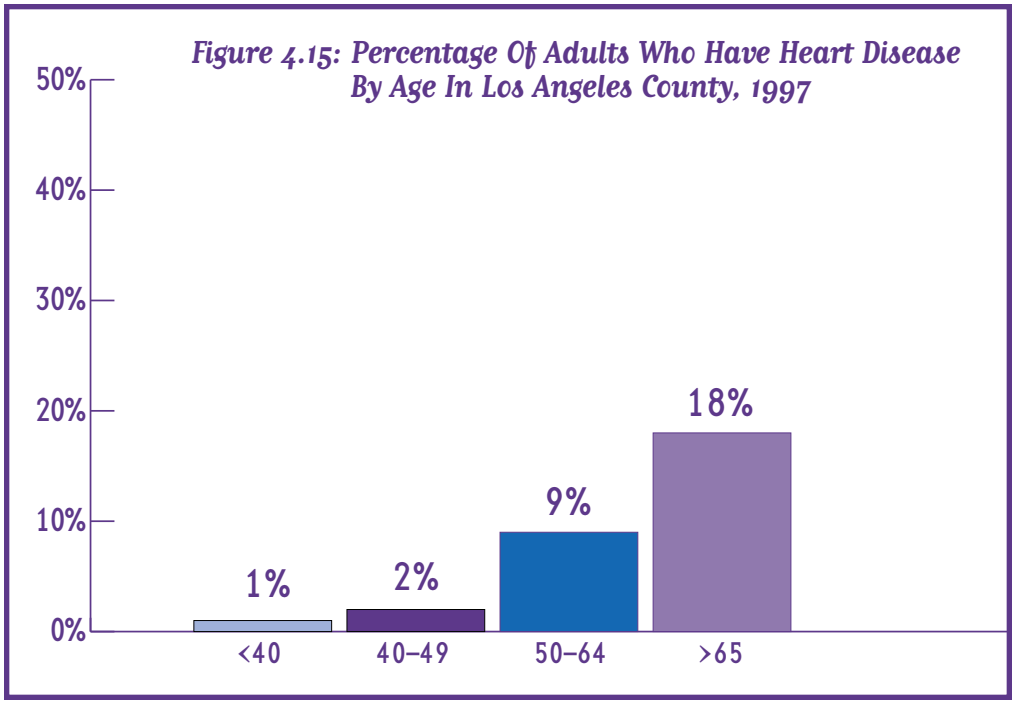


Figure 4.15: Percentage Of Adults Who Have Heart Disease By Age In Los Angeles County, 1997

Source: 1997 LACHS, Los Angeles County Department of Health Services.

- An estimated 5% of the county adult population report having heart disease.
- The percentage that reports heart disease increases with age, from 1% among those under 40 to 18% among those 65 and older (see Figure 4.15).
- Of those who report having heart disease, 77% report currently being treated by a physician for this condition (1997 LACHS).

Diabetes

Diabetes was the seventh leading cause of death in the United States in 1995. In addition, diabetes is the leading cause of kidney failure and blindness among adults in the United States, and an important cause of heart disease, neurologic disease (e.g., loss of sensation and weakness), and peripheral vascular disease (e.g., stroke, poor circulation, and loss of limbs).

- An estimated 6% of the county adult population (18 and older) report having diabetes (1997). Similarly, 6% of the California population report having been diagnosed with diabetes (see Table 4.2). The estimated prevalence of diabetes nationally is 4.8%.[9] *The Healthy People 2000* goal is to reduce the prevalence of diabetes nationally to 2.5%.[10]

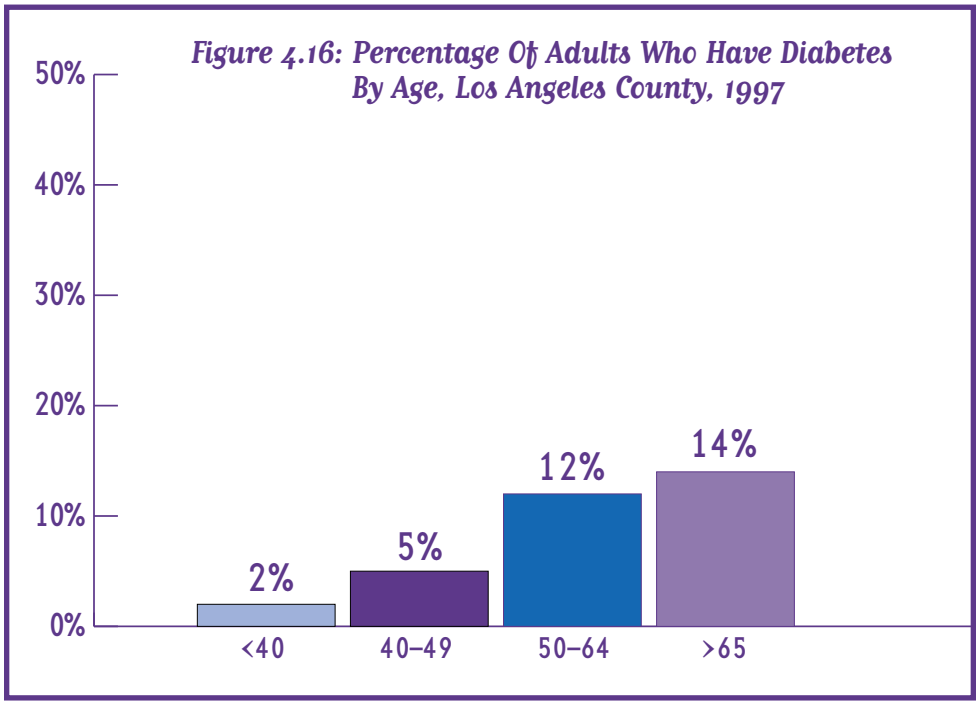


Figure 4.16: Percentage Of Adults Who Have Diabetes By Age, Los Angeles County, 1997

Source: 1997 LACHS, Los Angeles County Department of Health Services.

- The percentage of people who report diabetes increases with age, from 2% among those 40 years old to 14% among those 65 years and older (see Figure 4.16).
- Of those who report having diabetes, 86% report currently being treated by a physician for this condition (1997 LACHS).

Hypertension

During 1988-94, hypertension, or high blood pressure, affected nearly 25% of adults 20 years and older in the United States.[11] *The Healthy People 2000* goal is for 50% of persons with hypertension (40% of hypertensive men) to be successfully controlling their hypertension.[12] Hypertension is a leading cause of heart disease and stroke. Early diagnosis and treatment of hypertension is critically important in preventing these complications.

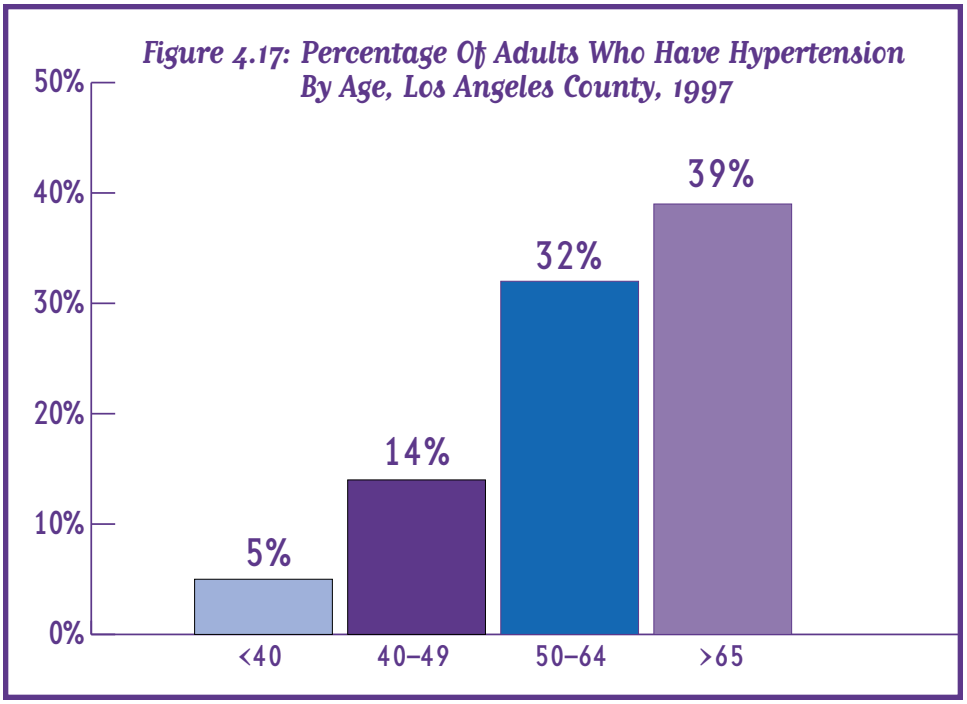
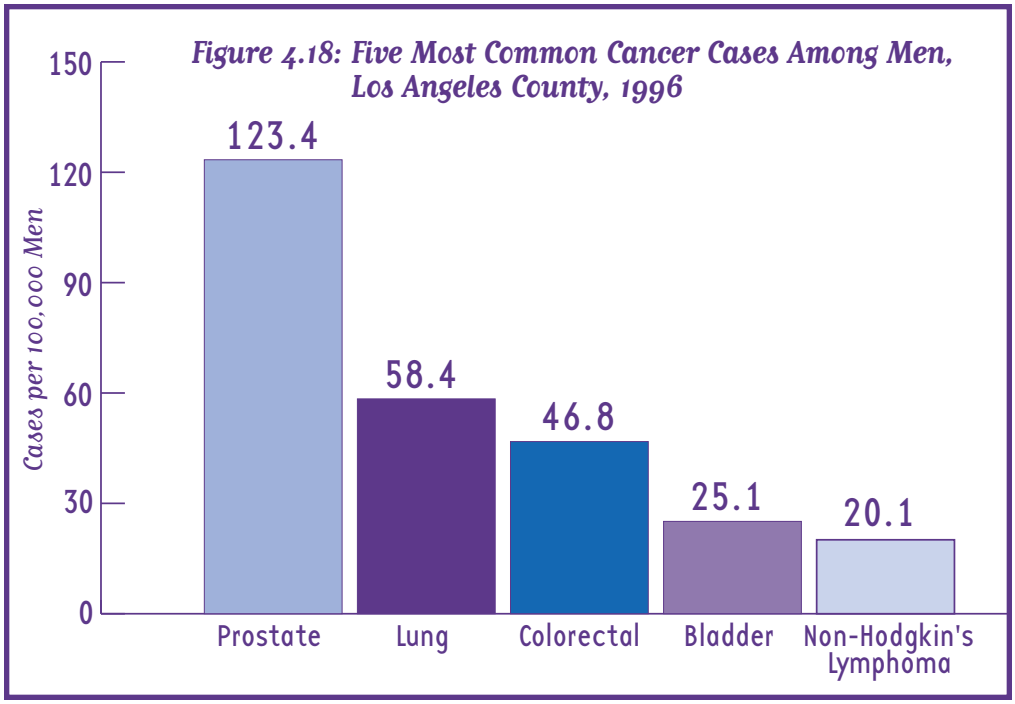


Figure 4.17: Percentage Of Adults Who Have Hypertension By Age, Los Angeles County, 1997

Source: 1997 LACHS, Los Angeles County Department of Health Services.

- ➜ An estimated 16% of the county adult population report having hypertension or high blood pressure compared to 21% of the population in California (see Table 4.2).
- ➜ In Los Angeles County, the percentage that reports hypertension or high blood pressure is 28% among African-Americans, 17% among whites, 14% among Asians, and 12% among Latinos (see Table 4.2).
- ➜ The percentage that reports hypertension or high blood pressure increases with age, from 5% among those younger than 40 to 39% among those 65 and older (see Figure 4.17).
- ➜ Of those who report having hypertension, 75% report currently being treated by a physician for this condition. However, the data do not indicate whether this treatment has been effective in controlling their hypertension (1997 LACHS).

The prevalence estimates reported for the chronic conditions listed above are limited in the following ways. First, participants in the 1997 LACHS were asked if they had any of these conditions, but were not asked if they had ever been diagnosed with the condition by a health care provider. As a result, some reports may reflect symptoms or self-perceived health problems that are caused by other unrelated diseases or other factors. Second, some chronic conditions such as diabetes and hypertension may be underreported because they remain unrecognized for long periods of time, especially in persons who do not utilize or have access to health care services.



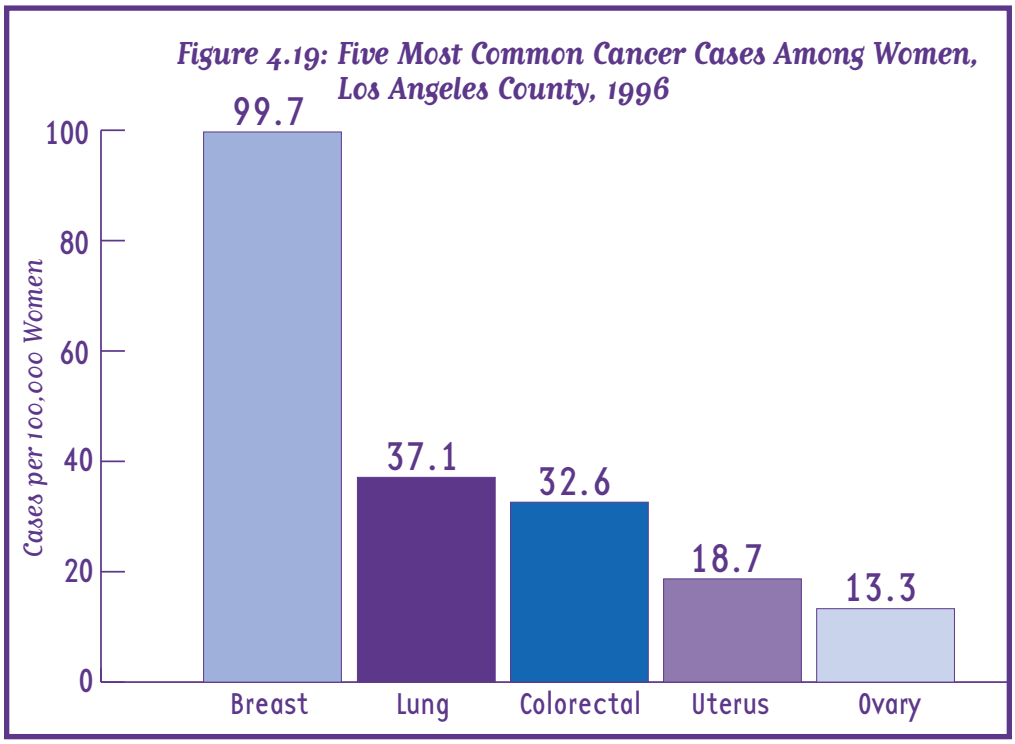
Source: 1996 data obtained from Cancer in Los Angeles County: Incidence and Morality by Race/Ethnicity 1988–1996, Los Angeles County Cancer Surveillance Program, University of Southern California, 1999, and from Cancer in California: 1988–1996, California Department of Health Services, Cancer Surveillance Sect., March 1999. All incidence rates were age-adjusted and standardized to the 1970 Census population.

Cancer

Cancer is the second leading cause of death in the United States, accounting for 23% of all deaths in 1994. Many of these cancer deaths are preventable. For example, eliminating cigarette smoking could prevent an estimated 85% of all lung cancer deaths. Many other cancer deaths could be prevented through more widespread use of screening procedures, such as mammography and pap smears, that facilitate early diagnosis and treatment.

The Cancer Surveillance Program, University of Southern California School of Medicine, reports these key findings:

➜ The most frequently diagnosed cancer in Los Angeles County men in 1996 was prostate cancer (123 per 100,000 men), followed by lung cancer (58 per 100,000), colorectal cancer (47 per 100,000), bladder cancer (25 per 100,000), and non-Hodgkin's lymphoma (20 per 100,000) (see Figure 4.18).



Source: 1996 data obtained from Cancer in Los Angeles County: Incidence and Morality by Race/Ethnicity 1988–1996, Los Angeles County Cancer Surveillance Program, University of Southern California, 1999, and from Cancer in California: 1988–1996, California Department of Health Services, Cancer Surveillance Sect., March 1999. All incidence rates were age-adjusted and standardized to the 1970 Census population.

➜ The most frequently diagnosed cancer in Los Angeles County women in 1996 was breast cancer (100 per 100,000 women), followed by lung cancer (37 per 100,000), colorectal cancer (33 per 100,000), uterine cancer (19 per 100,000), and ovarian cancer (13 per 100,000) (see Figure 4.19).

➜ The prostate and lung cancer incidence rates among African-American men were higher compared to rates among men in other racial/ethnic groups (see Table 4.2b).

Table 4.2b: Incidence Of Cancer

	L.A. County	California
Male (cases per 100,000 men)		
Prostate	123.4	122.7
White	131.2	120.6
African-American	198.5	199.9
Latino	87.5	93.6
Asian/Pacific Islander	57.8	64.4
Lung	58.4	62.1
White	65.3	67.3
African-American	107.2	100.5
Latino	29.1	32.2
Asian/Pacific Islander	43.7	48.2
Female (cases per 100,000 women)		
Breast	99.7	107.8
White	123.3	121.6
African-American	99.6	99.0
Latino	63.6	68.5
Asian/Pacific Islander	73.6	72.7
Lung	37.1	41.2
White	48.1	48.6
African-American	44.0	45.6
Latino	16.5	18.1
Asian/Pacific Islander	20.9	20.9

Source: 1996 data obtained from Cancer in Los Angeles County: Incidence and Morality by Race/Ethnicity 1988-1996, Los Angeles County Cancer Surveillance Program, University of Southern California, 1999, and from Cancer in California: 1988-1996, California Department of Health Services, Cancer Surveillance Sect., March 1999. All incidence rates were age-adjusted and standardized to the 1970 Census population.

➜ The breast and lung cancer incidence rates among white women were higher compared to rates among women in other racial/ethnic groups (see Table 4.2b).

Chronic Disease—Data Sources

1. Los Angeles County Department of Health Services—Public Health
   Office of Health Assessment and Epidemiology
   1997 Los Angeles County Health Survey

2. Los Angeles County Cancer Surveillance Program
   University of Southern California
   Department of Preventive Medicine

3. California Department of Health Services
   Cancer Surveillance Section
   CATI Unit
   California Behavioral Risk Factor Survey

4. California Department of Health Services
   Cancer Surveillance Section
   Cancer Control Branch
   Division of Chronic Disease and Injury Control

See Appendix for complete references on these and other data resources.
See page 83 for endnotes.

Communicable Disease

Health care providers, laboratories, and others are required by state law to report to local health officials data on communicable diseases in Los Angeles. Over 80 such diseases and conditions are reported to health officials. These data form the basis for case investigation, outbreak control, and intervention activities targeted to individuals and populations at greatest risk. However the value of the data is limited by the underreporting of cases, incomplete information, and reporting lag time (difference between identification of disease or onset of disease and report date), which tend to lower the overall reported rates. Certain facilities, such as public STD clinics, may be more likely to report communicable diseases; thus, the populations served there may be overrepresented compared to populations served elsewhere.

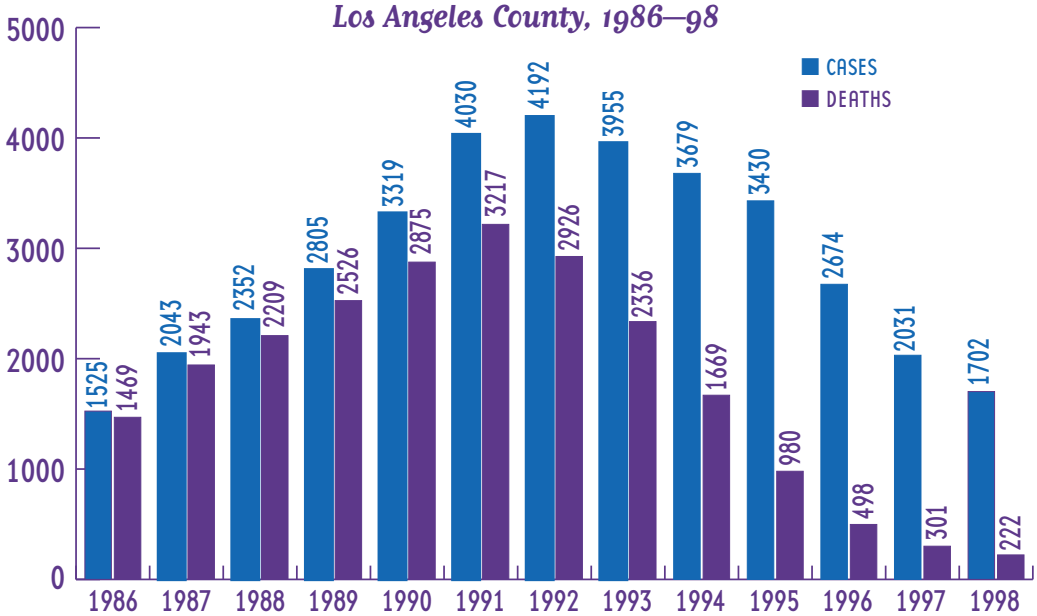
Overall, the rates of many communicable diseases have decreased in the past 50 to 75 years due to improvements in sanitation, housing, and food handling. Such improvements include more stringent infection control practices, widespread immunization of the population, use of antibiotics, and other disease control activities.

HIV/AIDS

Recent advances in the medical treatment of HIV infection and AIDS resulted in more than a 50% drop in AIDS-related deaths in Los Angeles County from 1996 to 1997. Furthermore, there were 31% fewer new AIDS cases reported between 1996 and 1997 in Los Angeles County. The availability of more effective treatment has made it increasingly important that HIV-infected persons be diagnosed and linked to medical care and other support services as soon as possible after infection (see Figure 4.20).

Since the AIDS epidemic was first recognized in 1981, more than 38,000 Los Angeles County residents have developed AIDS, and, of these, more than 24,000 have died. Los Angeles County accounts for 35% of AIDS cases reported in California and nearly 6% of all cases reported nationally. The number of persons who become infected

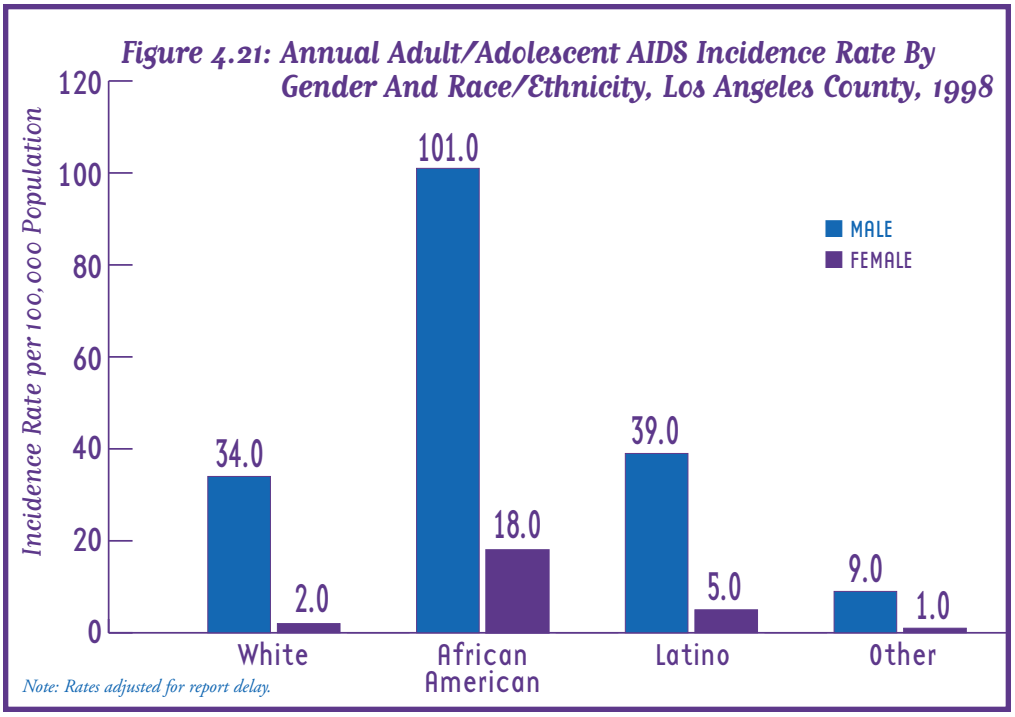
Figure 4.20: Cases of AIDS And Deaths By Year Of Diagnosis, Los Angeles County, 1986—98



Note: Deaths are reported by the year of AIDS diagnosis reported by June 30, 1999.

Source: Los Angeles County Department of Health Services, HIV Epidemiology Program.

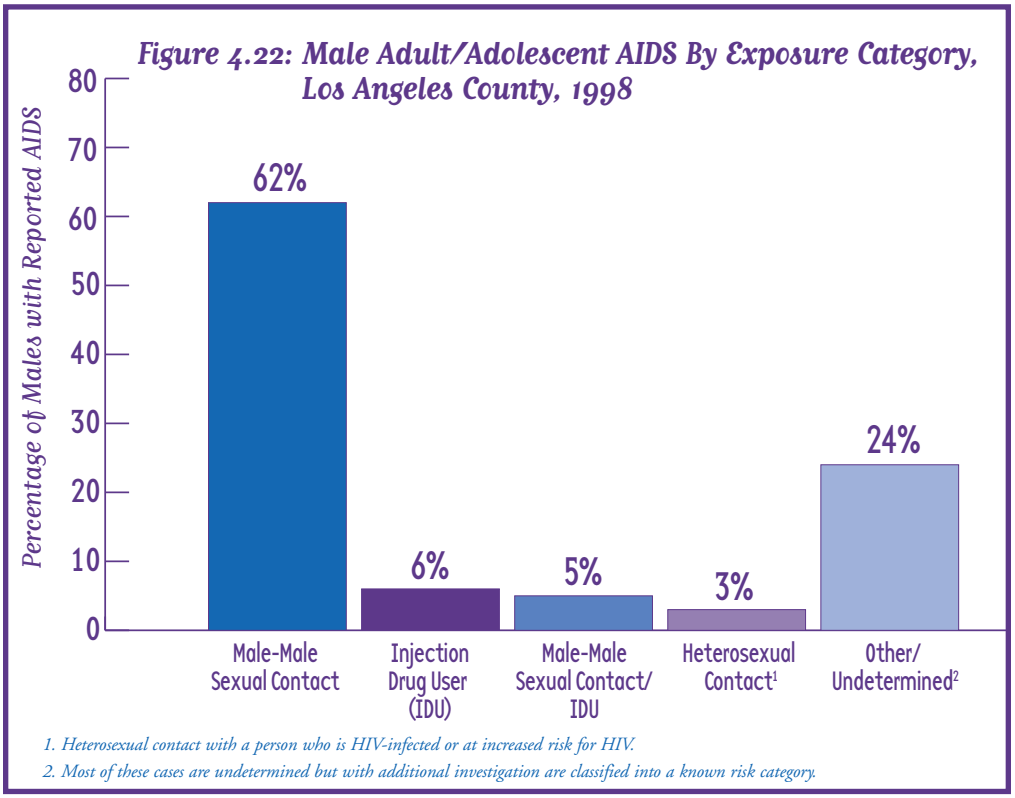
each year is unknown. Despite widespread HIV prevention efforts, there is evidence that HIV is continuing to spread at alarmingly high rates in some communities in the county.



Source: Los Angeles County Department of Health Services, HIV Epidemiology Program, Advanced HIV Disease (AIDS) Quarterly Surveillance Summary, Issued January 15, 2000.

➜ Among all racial/ethnic and gender groups, AIDS rates were the highest among African-Americans in 1998. The rate among African-American men (101.0 per 100,000) was almost three times that among white (34.0 per 100,000) and Latino men (39.0 per 100,000) in 1998. The rate among African-American women (18.0 per 100,000) was more than three times the rate among Latinas (5.0 per 100,000) and nine times the rate among white women (2.0 per 100,000) (see Figure 4.21).

➜ Male-male sexual contact was the most commonly reported (62%) HIV exposure category among men infected with AIDS in 1998 (see Figure 4.22).



Source: Los Angeles County Department of Health Services, HIV Epidemiology Program Advanced HIV Disease (AIDS) Quarterly Surveillance Summary, Issued January 15, 2000.

Table 4.3: Communicable Diseases, 1997

	L.A. County	California	HP 2000
AIDS Incidence Rate (cases per 100,000 persons)[1]	21.0	16.1	43.0
Males	36.9	28.3	*
Females	5.3	3.9	13.0
White	20.3	13.3	*
Latino	18.4	15.2	76.0
African-American	59.1	50.5	136.0
Other	4.6	4.0	*
Maternal HIV infection rate, 1994 (per 10,000 live births)[2]	9.0	7.3	10.0
Gonorrhea (cases per 100,000)[3]	64.4	54.7	100.0
White	25.1	14.7	*
Latino	31.5	27.1	*
African-American	452.5	253.4	650.0
Asian/Pacific Islander	6.1	6.1	*
15–19	249.2	207.7	375.0
20–24	236.9	203.3	*
25–29	146.3	120.5	*
30–34	98.1	79.8	*
Chlamydia (cases per 100,000)[3]	254.3	208.5	*
White	74.9	44.7	*
Latino	331.1	205.9	*
African-American	808.6	411.5	*
Asian/Pacific Islander	58.8	51.7	*
15–19	1351.2	1113.7	*
20–24	1328.2	1027.5	*
25–29	543.0	410.1	*
30–34	233.8	174.0	*
Primary & Secondary Syphilis (per 100,000)[3]	1.2	1.2	4.0
White	0.3	0.4	*
Latino	0.9	1.5	*
African-American	7.4	6.8	*
Asian/Pacific Islander	0.0	0.2	*
15–19	1.2	1.2	*
20–24	1.3	1.9	*
25–29	3.1	2.8	*
30–34	2.0	2.1	*
Congenital Syphilis (per 100,000 live births)[3]	48.1	32.3	40.0
White	6.9	8.1	*
Latino	44.2	37.5	50.0
African-American	241.8	138.4	175.0
Asian/Pacific Islander	0	17.6	*
Tuberculosis (cases per 100,000)[3]	14.9	11.8	3.5
White	4.4	2.9	*
Latino	14.8	13.7	5.0
African-American	22.7	17.8	10.0
Asian/Pacific Islander	37.2	45.1	15.0
Males	19.3	14.4	*
Females	10.8	9.1	*

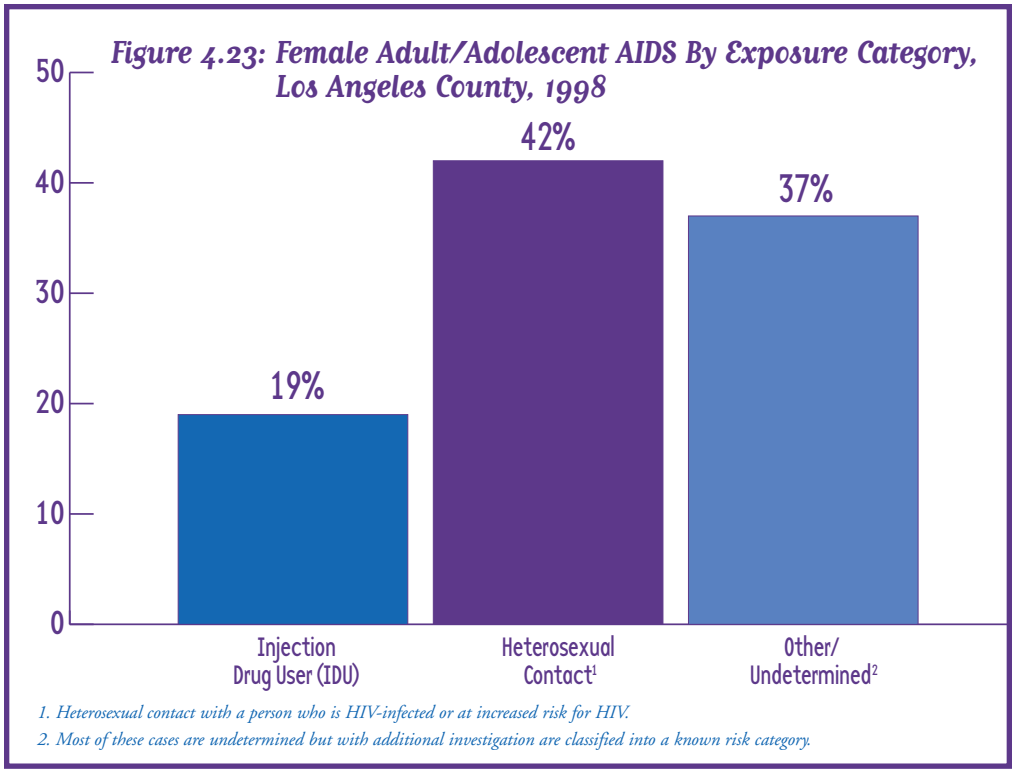
1. AIDS cases reported in Los Angeles County for the first 9 months of 1997 as of Sept. 30, 1998.

2. As estimated through the CDC Anonymous Survey in Childbearing Women (SCW) using leftover heel-stick blood taken from newborn infants in participating states.

3. Estimates of race-, gender-, and age-specific rates have been adjusted to account for the proportions of cases with missing data assuming that each subcategory's proportions of the known and unknown cases are equivalent.

Source: California HIV/AIDS Update, Office of AIDS, April 1992. HIV Seroprevalence in California Childbearing Women, 1994. Los Angeles County Department of Health Services, STD Program, TB Control Program, HIV Epidemiology Program. Advanced HIV Disease (AIDS) Quarterly Surveillance Summary, Issued January 15, 1998. California Department of Health Services, Office of AIDS, STD Control Branch, Division of Communicable Disease Control.

➜ Heterosexual contact was the most commonly reported (42%) HIV exposure category among women infected with AIDS in 1998 (see Figure 4.23).



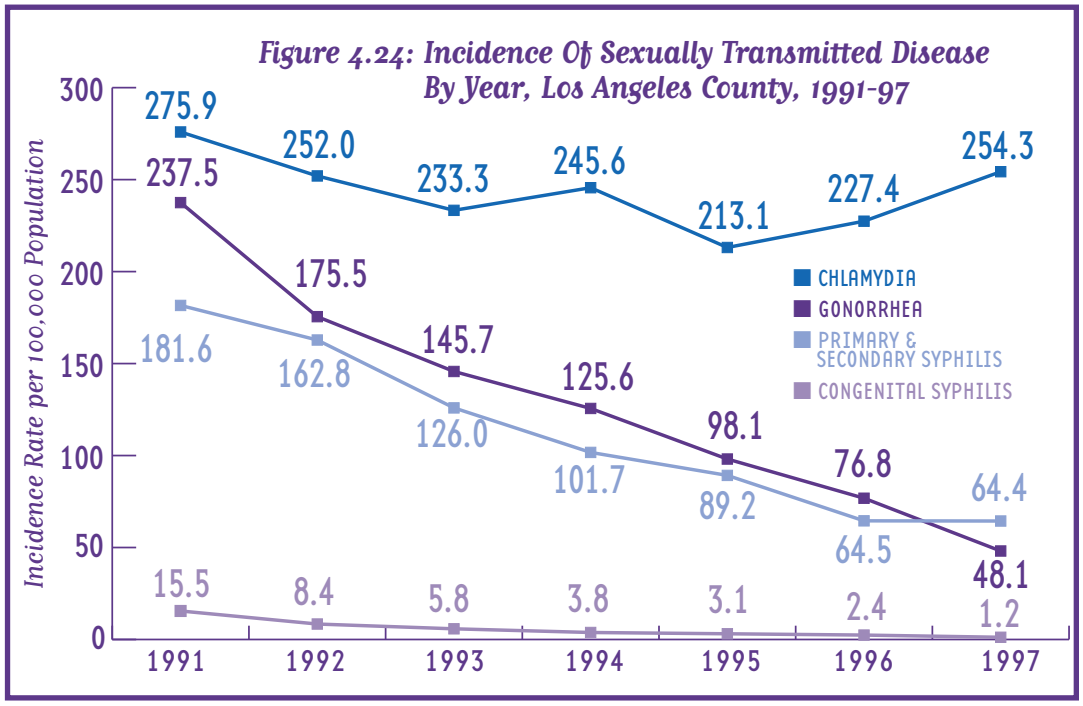
Source: Los Angeles County Department of Health Services, HIV Epidemiology Program Advanced HIV Disease (AIDS) Quarterly Surveillance Summary, Issued January 15, 2000.

Other Sexually Transmitted Diseases

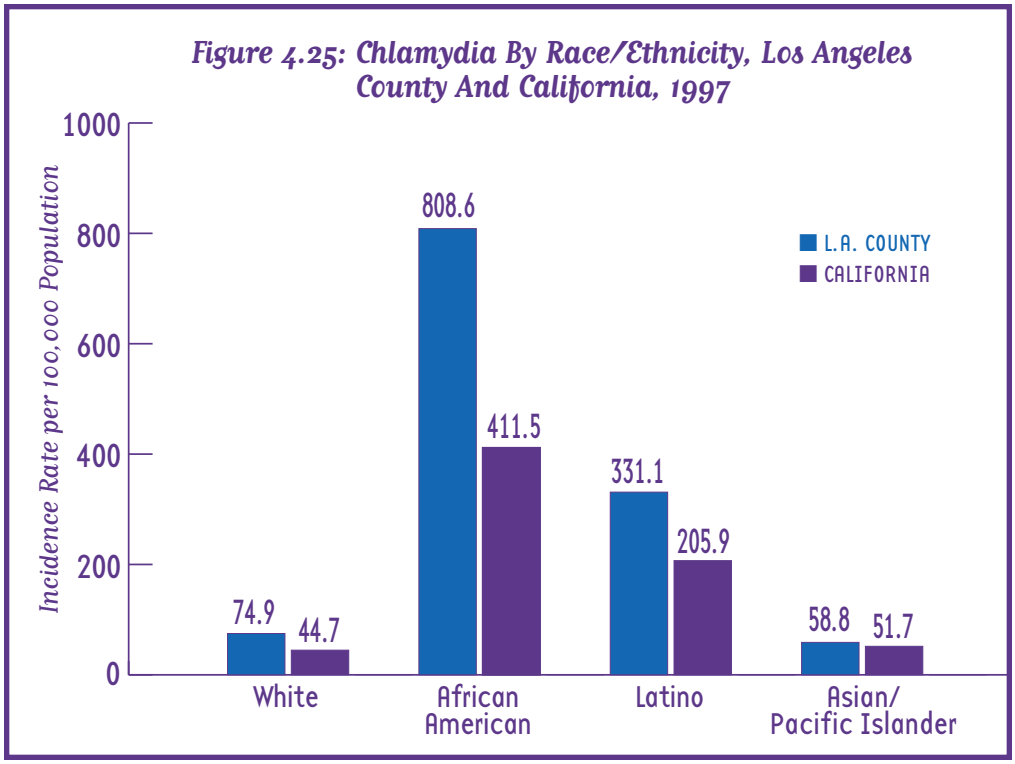
Sexually transmitted diseases (STDs) are among the most commonly reported infections in Los Angeles County and can result in serious health consequences for those infected. The incidence of most STDs is highest among 15 to 24 year olds. Chlamydia is the most frequently reported infection in Los Angeles County and can cause pelvic inflammatory disease (PID), infertility, and tubal pregnancy in women and sterility in men. Over the past decade, chlamydia rates in Los Angeles County have remained relatively constant at high levels, while gonorrhea and syphilis rates have declined significantly.

However, a recent outbreak of syphilis among men who have sex with men in Los Angeles County (April 2000) illustrates the ongoing importance of monitoring sexually transmitted diseases in the population. The increase in syphilis cases among this group is also an alert about the persistent risk for the spread of HIV infection due to unsafe sexual practices.

Genital herpes and human papillomavirus (HPV) infections are extremely common but are not reportable to the health department. Recent national studies indicate that approximately 20% of the total adolescent and adult population is infected with the virus that causes genital herpes. At least 5.5



Source: Los Angeles County Department of Health Services, STD Program.

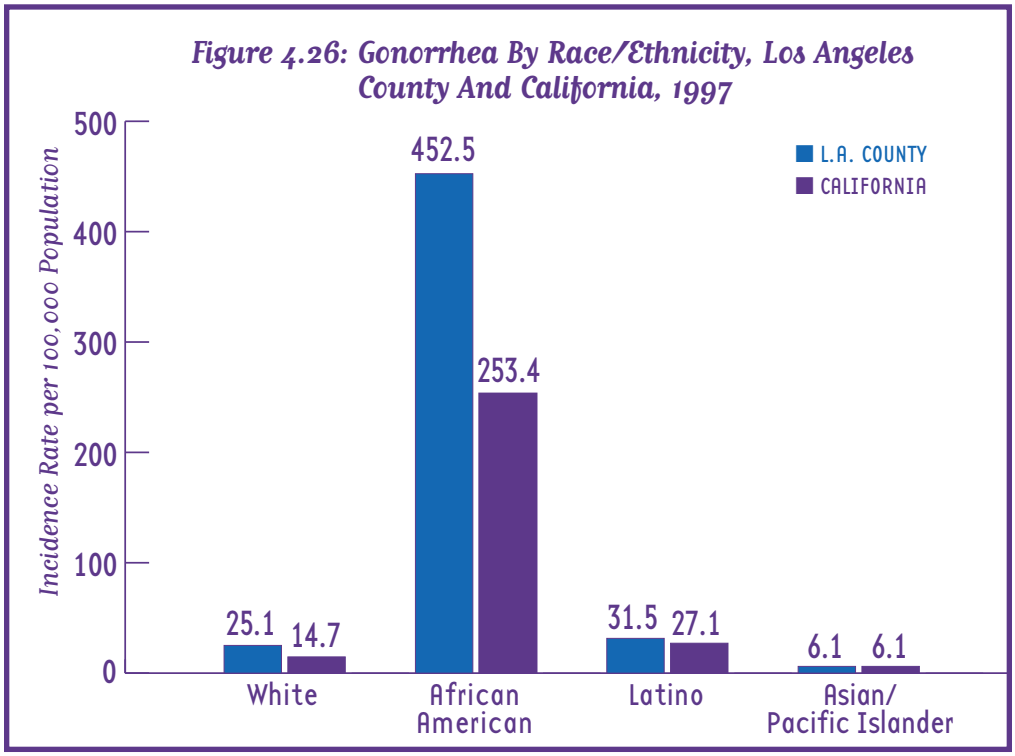


Source: Los Angeles County Department of Health Services, STD Program. California Department of Health Services, STD Control Branch.

million people in the United States become infected annually with HPV, which can cause genital warts and cervical cancer. The importance of STD prevention, detection, and treatment efforts is further underscored by recent evidence indicating that having an STD increases the risk of acquiring or transmitting HIV infection.

The data presented on sexually transmitted diseases, like most reportable communicable disease data, is subject to biases of reporting. For example, public clinics tend to have more complete STD reporting, thus populations that use these clinics may be over-represented in the findings. Please use caution when interpreting the results.

➜ Since the early 1990s, the reported incidence of gonorrhea, syphilis, and congenital syphilis has been on a steady decline. Since 1995, the incidence rate of chlamydia has been steadily increasing (see Figure 4.24).



Source: Los Angeles County Department of Health Services, STD Program. California Department of Health Services, STD Control Branch.

➜ The reported incidence of chlamydia, gonorrhea, syphilis and congenital syphilis is highest among African-Americans (see Figures 4.25 and 4.26).

➜ The reported incidence of all STDs is highest in 15 to 24 year olds (see Figures 4.27 and 4.28).

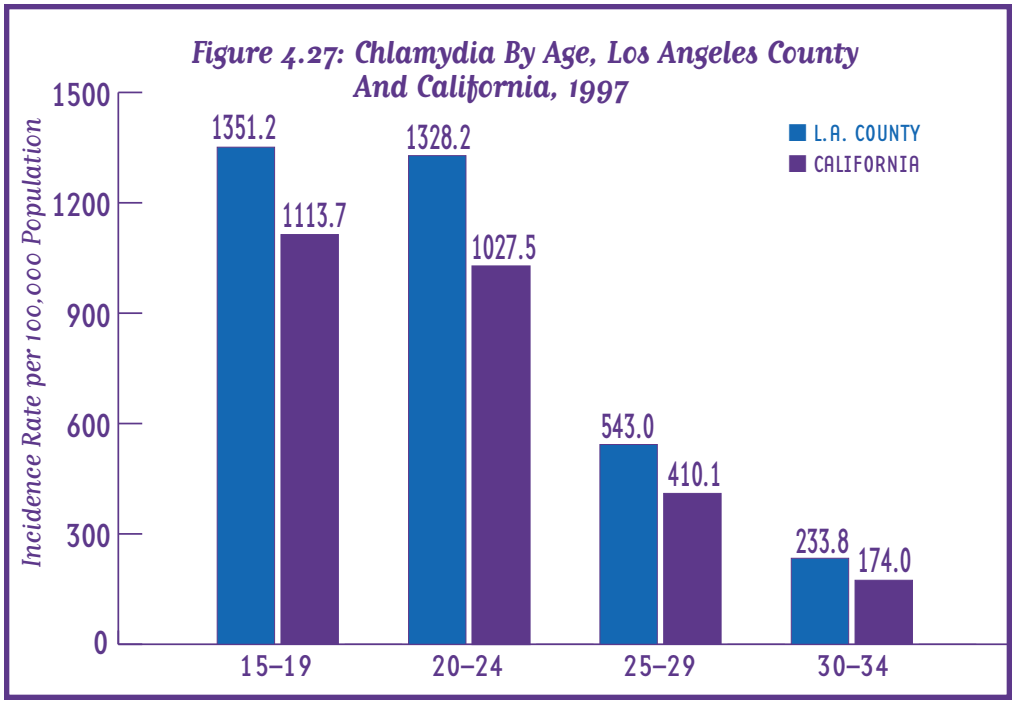


Figure 4.27: Chlamydia By Age, Los Angeles County And California, 1997

Source: Los Angeles County Department of Health Services, STD Program. California Department of Health Services, STD Control Branch.

Tuberculosis

Once all but eradicated in the United States, Tuberculosis (TB) today poses a renewed threat due to the emergence of new drug-resistant strains. Public health interventions to control TB in the United States are very effective. However, a combination of factors led to an increase in cases in the late 1980s and early 1990s. The AIDS epidemic has led to an increase in the number of immuno-compromised individuals at increased risk for infections in general. In addition, decreased attention to the disease, decreasing funding for control and intervention activities, and homelessness have contributed to the rise in the incidence. Drug-resistant strains of TB have developed due to incomplete, interrupted, or inappropriately managed treatment of the disease. The increase in cases reported during 1989 through 1992 has now reversed, and for the five years between 1993 and 1998, the number of cases has decreased.

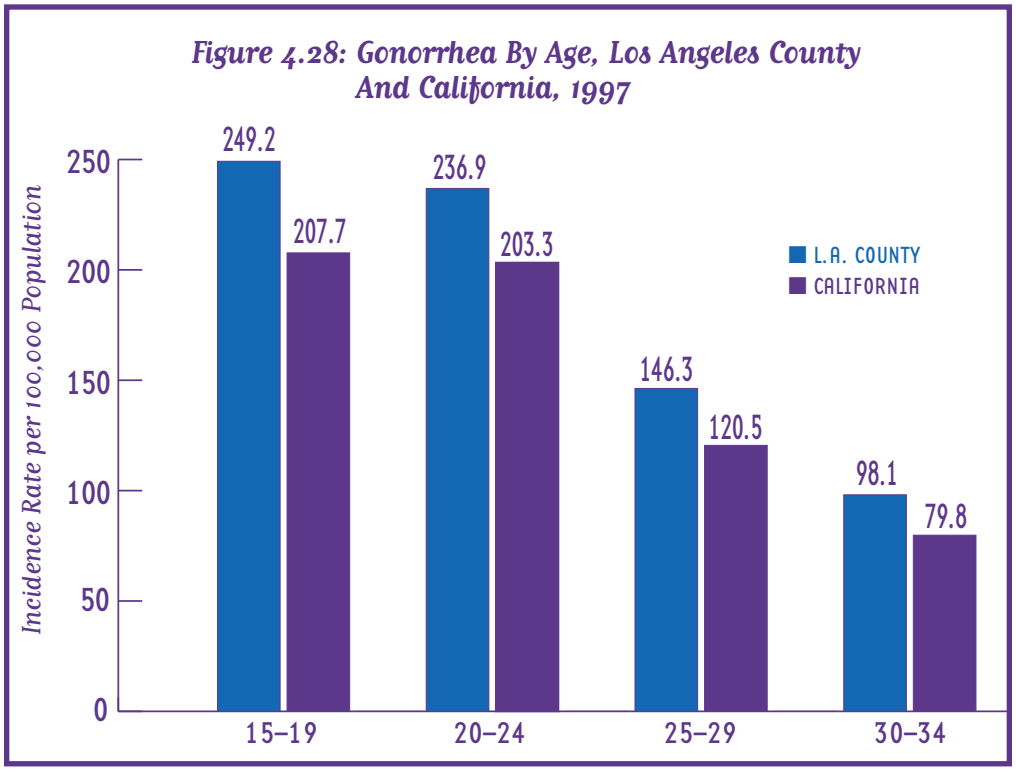
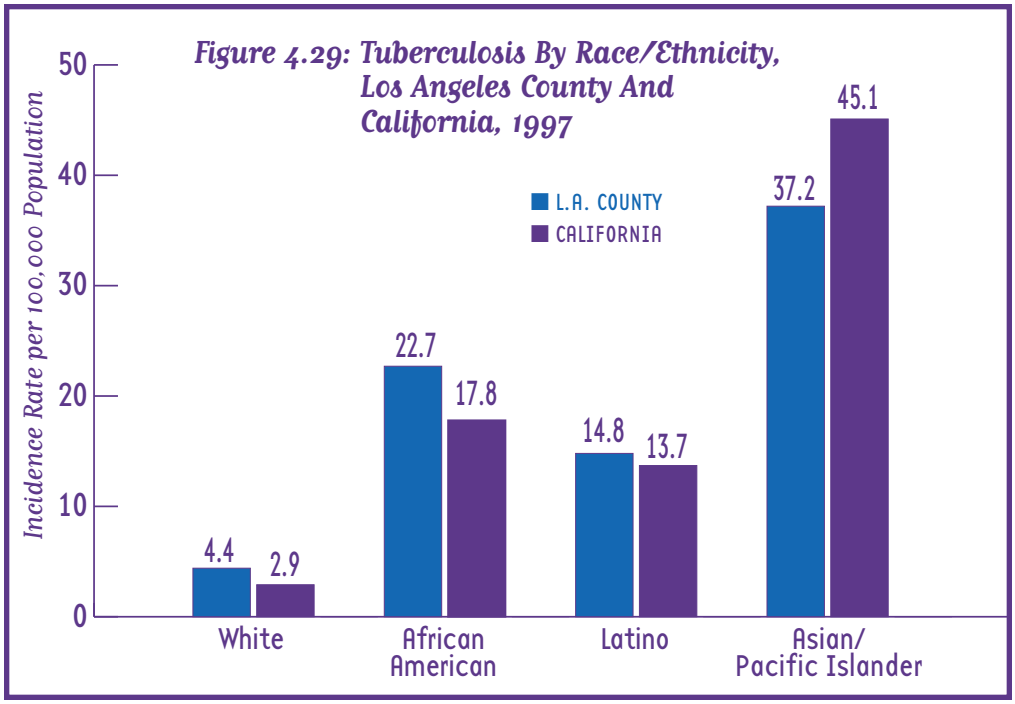


Figure 4.28: Gonorrhea By Age, Los Angeles County And California, 1997

Source: Los Angeles County Department of Health Services, STD Program. California Department of Health Services, STD Control Branch.



Source: Los Angeles Department of Health Services, TB Control Program. California Department of Health Services, Division of Communicable Disease Control.

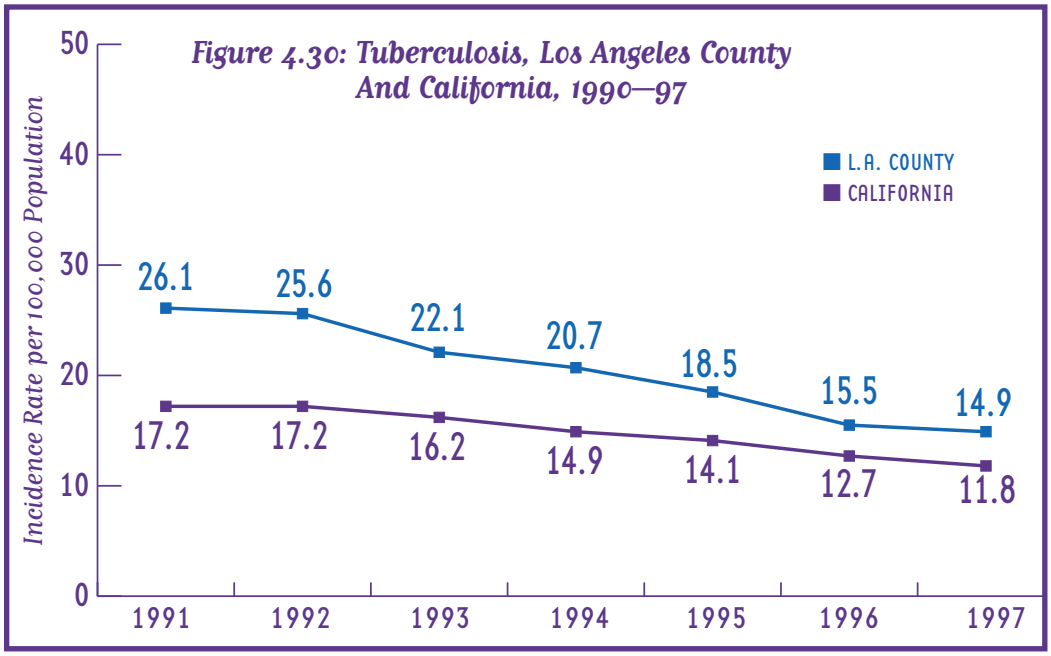
➜ The 1997 incidence rates of TB in Los Angeles County were highest in Asian (37.2 per 100,000) and African-American (22.7 per 100,000) populations (see Figure 4.29). Of the total cases, 66% were male and 34% were female.

Rates of TB are highest in foreign-born, homeless, and HIV-infected populations in Los Angeles County and throughout the United States. Two-thirds of all Los Angeles County cases reported in 1997 were born outside the United States. The largest proportion of foreign-born cases was among individuals born in Mexico (38%) followed by the Philippines (16%).

➜ Approximately 9% of all TB cases reported in 1997 were homeless individuals.

➜ The number of cases decreased by 4% between 1996 and 1997 in Los Angeles County (see Figure 4.30).

➜ In 1997, Los Angeles County accounted for 32% of all TB cases in California and for 6.4% of all cases in the United States.

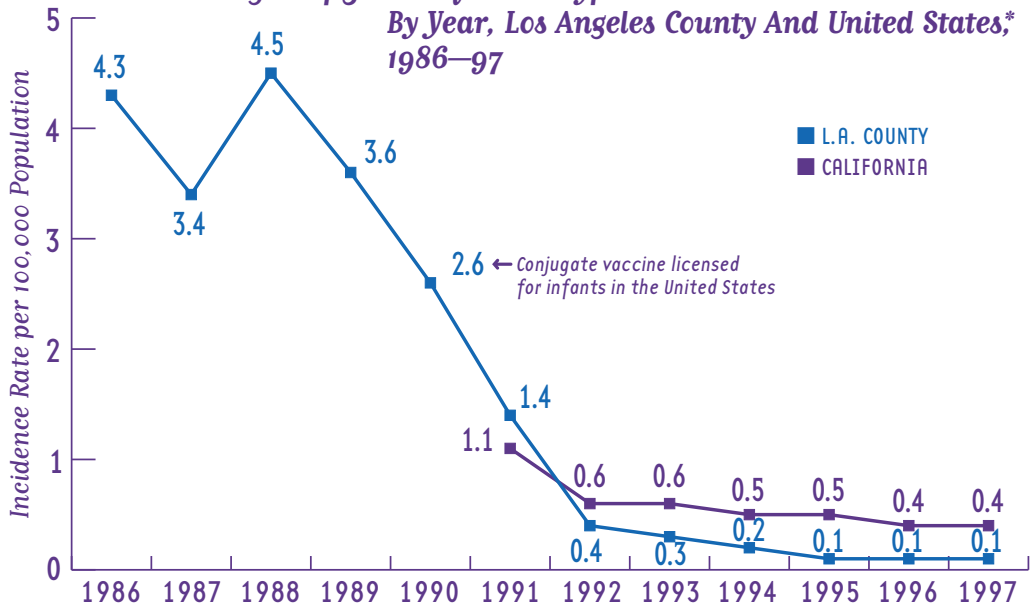


Source: Los Angeles Department of Health Services, TB Control Program. California Department of Health Services, Division of Communicable Disease Control.

Other Communicable Diseases

The availability of safe and effective vaccines has led to the rapid decline in the incidence of many common diseases of childhood in recent decades. Vaccines to protect children from hepatitis B, diphtheria, tetanus, pertussis, measles, mumps, rubella, H. influenzae type b (Hib), polio, and varicella are recommended for all children by 18 months of age.

Figure 4.31: H. Influenza Type B Disease Incidence Rates By Year, Los Angeles County And United States, 1986—97*



* Not notifiable until 1991.

Source: Los Angeles County Department of Health Services, Immunization Program

- The incidence of vaccine-preventable diseases is at record low levels in the United States and Los Angeles County. However, vaccine-preventable diseases persist both in the United States and other parts of the world. For example, an epidemic of measles occurred in the United States during 1989 to 1991, when almost 6,500 cases (50.5 per 100,000) of measles and 37 measles-related deaths were reported in Los Angeles County. By comparison, only four cases (0.4 per 100,000) were reported in the county in 1997.
- The incidence rate of pertussis in Los Angeles County has declined 18-fold from seven cases per 100,000 population in 1960 to 0.4 cases per 100,000 in 1997.
- Hib was the leading cause of bacterial meningitis among children under five years of age before the introduction of an effective vaccine in 1990. In 1997, the incidence rate of Hib disease was 0.1 cases per 100,000 compared with 2.6 cases per 100,000 in 1990 (see Figure 4.31). The widespread use of conjugate Hib vaccines has dramatically reduced invasive disease caused by this organism.
- The Los Angeles County hepatitis A incidence rate was 16.4 cases per 100,000 in 1997, a 10% increase from 1996. Hepatitis A vaccine was introduced in 1995 and has recently been recommended for all children in high prevalence areas including the state of California.
- There was an increase in hepatitis A transmission among men who have sex with men (MSWM) in 1997 in Los Angeles County. An indirect indicator of hepatitis A activity among MSWM is the rate among white males aged 25 to 44 in the Hollywood-Wilshire Health district, where a large gay male population resides. In this subgroup the 1997 rate of 323 per 100,000 population is twice the 1996 rate of 151 per 100,000 population. MSWM represent a high-risk group for whom the hepatitis A vaccine has been strongly recommended.
- The hepatitis B incidence rate in 1997 (1.2 per 100,000 population) decreased by 57% from 1996 (2.8 per 100,000). Hepatitis B has been declining since the

late 1980s due to an increased emphasis on HIV/AIDS prevention efforts including reduction of high-risk behaviors such as needle sharing and unprotected sex, prophylaxis (preventive treatment) of the newborns of chronic carrier mothers, and use of hepatitis B vaccine. In addition, universal precautions in occupational settings have contributed to a decline in the transmission of hepatitis B as well as other blood-borne pathogens.

- ➜ Hepatitis C is a disease predominantly transmitted by blood-to-blood contact. It is often mild in its acute stage, but chronic liver disease occurs in the majority of infections. The epidemiology of hepatitis C virus is still being determined. The two primary risk groups for hepatitis C are injection drug users and people who received blood transfusions prior to 1992. Risk of hepatitis C infection from blood transfusions is currently very low because of routine screening of blood donors for hepatitis C. Liver failure due to chronic hepatitis C infection is the most frequent reasons for liver transplantation among adults in the United States.
- ➜ The prevalence of hepatitis C infection in Los Angeles County is not known. Nationally, an estimated 3.9 million persons (1.8%) have been infected with hepatitis C.

Enteric Disease

Enteric diseases by definition affect the gastrointestinal system and typically cause stomach upset, diarrhea, and/or vomiting. Transmission most commonly occurs through contaminated food and poor hygiene. In recent years, there has been an increased emphasis on improvement of surveillance and education regarding food-handling practices. The rates of selected enteric diseases are reported below. These rates are minimum estimates for the population because many cases of enteric disease go unreported.

- ➜ The rate of Campylobacter infection in Los Angeles County was 16.8 per 100,000 population in 1997.
- ➜ The rate of Giardia infection was 8.5 per 100,000 in 1997.
- ➜ The rate of Shigella infection was 9.4 per 100,000 in 1997.
- ➜ The rate of Salmonella infection was 18.5 per 100,000 in 1997.

Communicable Diseases—Data Sources

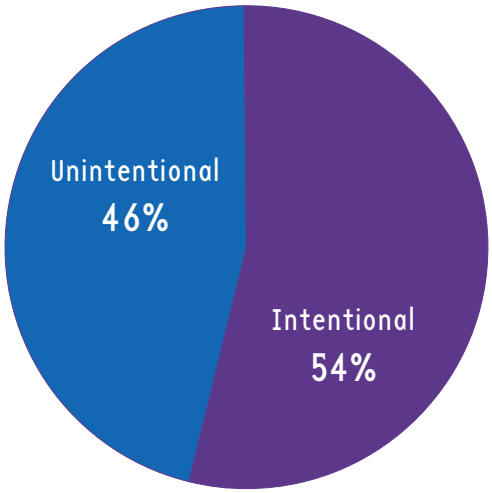
1. Los Angeles County Department of Health Services, HIV Epidemiology Program
2. Los Angeles County Department of Health Services—Public Health
   Sexually Transmitted Disease Program
3. Los Angeles County Department of Health Services—Public Health
   Acute Communicable Disease Control Unit
4. Los Angeles County Department of Health Services—Public Health
   Tuberculosis Control Program
5. California Department of Health Services, Office of AIDS, Case Registry
6. California Department of Health Services
   Sexually Transmitted Disease Control Branch
7. California Department of Health Services
   Division of Communicable Disease Control
   Tuberculosis Control Branch

See Appendix for complete references on these and other data resources.
See page 83 for endnotes.

Injury and Violence

Unintentional and intentional injuries combined are important contributors to overall mortality and diminished quality of life. Injuries are also a financial burden to society in the form of lost productivity and the costs of medical services.[13] Statistics show that injuries in Los Angeles County are the leading cause of death among people under 45 years of age (see Leading Causes of Mortality), and they are the primary reason for high hospitalization rates among children and youth less than 25 years of age.[14] Therefore, injuries are a very important indicator of the health status of the population, and an important factor in determining the burden of disease or illness in Los Angeles County. For the purposes of developing public health strategies, the size and diversity of the Los Angeles County population offer an opportunity to study injury patterns within specific population groups.

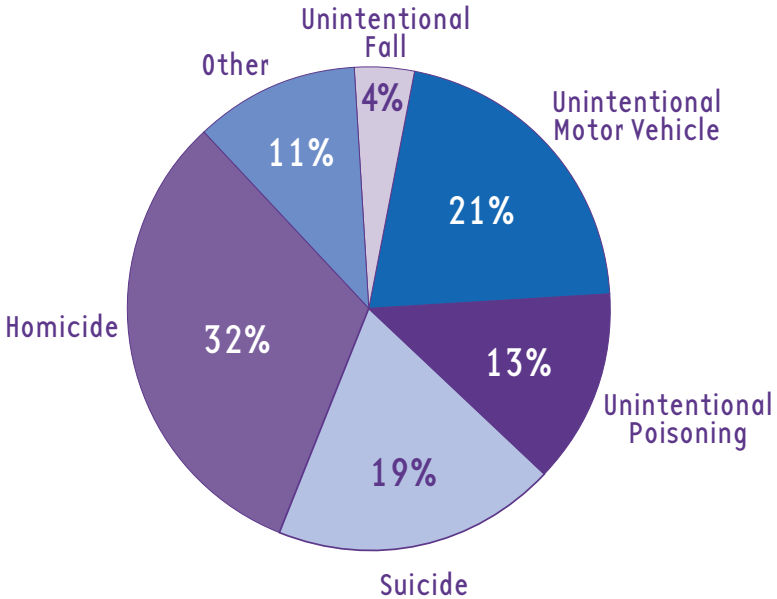
Figure 4.32: Overall Injury Mortality, Los Angeles County, 1996



Source: 1996 PHIS File, Data Collection and Analysis, Los Angeles County Department of Health Services.

- ➜ As shown in Figure 4.32, intentional injuries account for over-half (54%) of all injury deaths to Los Angeles County residents, and the remaining 46% of injury deaths are due to unintentional injuries.
- ➜ Together, homicide and suicide make up 51% of all injury mortality in Los Angeles County (see Figure 4.33). In 1996, homicide contributed 32% to all injury deaths for a total of 1,439 deaths. Unintentional motor-vehicle-related crashes accounted for 21% of all injury deaths.
- ➜ According to 1997 mortality statistics, injuries in Los Angeles County account for 6.7% of all mortality. In 1996, the risk for death was three times higher in men (71.0 deaths per 100,000 men) than women (22.6 deaths per 100,000 women) (see Figure 4.34).
- ➜ In Los Angeles county, the rate of death from injury is highest among African-Americans (91.0 deaths per 100,000), followed by whites (49.5) and Latinos (40.4) (see Figure 4.34).

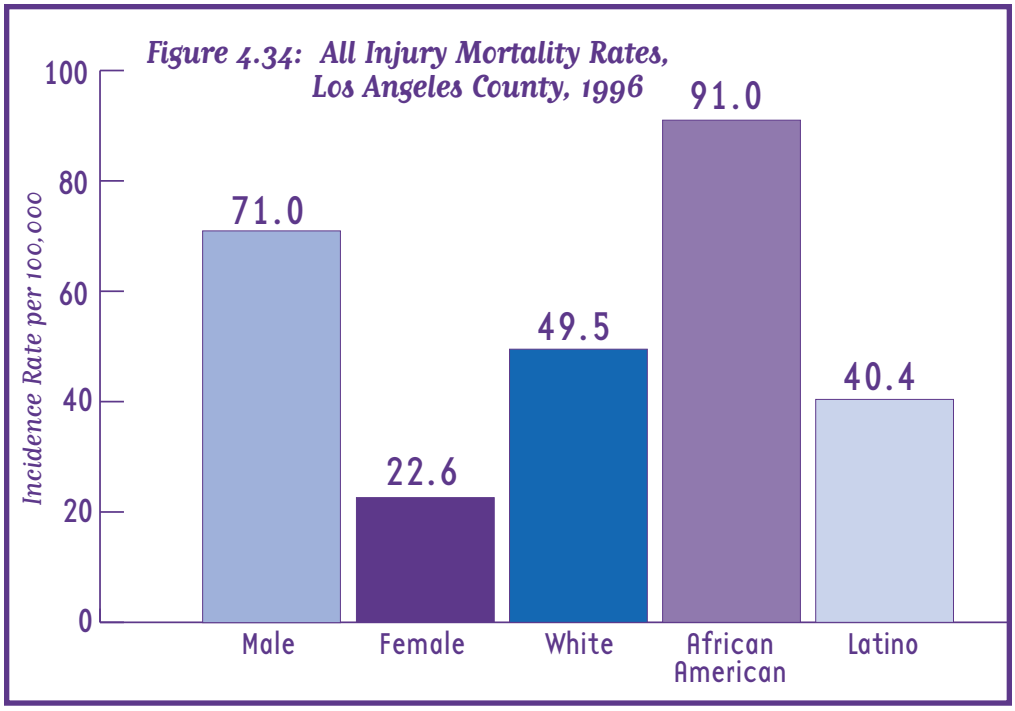
Figure 4.33: Overall Injury Mortality By Cause, Los Angeles County, 1996



Source: 1996 California Department of Health Services, Death Statistical Master File compiled by the Injury Surveillance and Epidemiology Section, EPIC, in Injury Tables, California, 1996: Deaths and Nonfatal Hospitalizations.

Unintentional Injuries

Unintentional injuries are fatal or nonfatal bodily injuries that occur, by definition, without intent. Unintentional injuries have been reduced through prevention efforts which have made products and systems safer, for example, leg-



Source: 1996 PHIS File, Data Collection and Analysis, Los Angeles County Department of Health Services.

islation requiring the use of seat belts in all vehicles, and the installation of driver-side air bags have reduced the incidence of death and injury due to motor vehicle crashes. Further, by assessing risk and measuring outcomes in affected populations, it is possible to develop new strategies for preventing specific injuries. Some summary statistics on unintentional injuries in Los Angeles County follow.

➜ Mortality due to unintentional injury in Los Angeles County is lower than in California.

Table 4.4: Unintentional Injury Rates Per 100,000 Population

		L.A. County[1]	California[2]	HP 2000 [4]
Unintentional injury mortality				
	Total	21.7	29.7	29.3
	Male	30.4	40.9	*
	Female	13.1	18.4	*
Hospitalizations among children and youth(ages 0-24) due to unintentional injuries				
	Total	353.0[3]	277.8[3]	754.0
Motor vehicle-related injury mortality				
	Total	9.9	13.4	14.2
	Male	13.5	18.2	*
	Female	6.3	8.6	*
Fall-related injury mortality				
	Total	2.4	3.4	2.3
	65+ years	11.1	22.7	*

1. 1996 Los Angeles County data obtained from Vital Record, Public Health Information Services, unless otherwise noted.
2. 1996 state data obtained from Death Statistical Master Files 1989-1996, Center for Health Statistics, California Department of Health Services, unless otherwise noted.
3. 1995 data from Perinatal Indicators, MCAH Program, Los Angeles County, 1996.
4. Age-adjusted rate per 100,000 to the 1940 census population.

* Data not available.

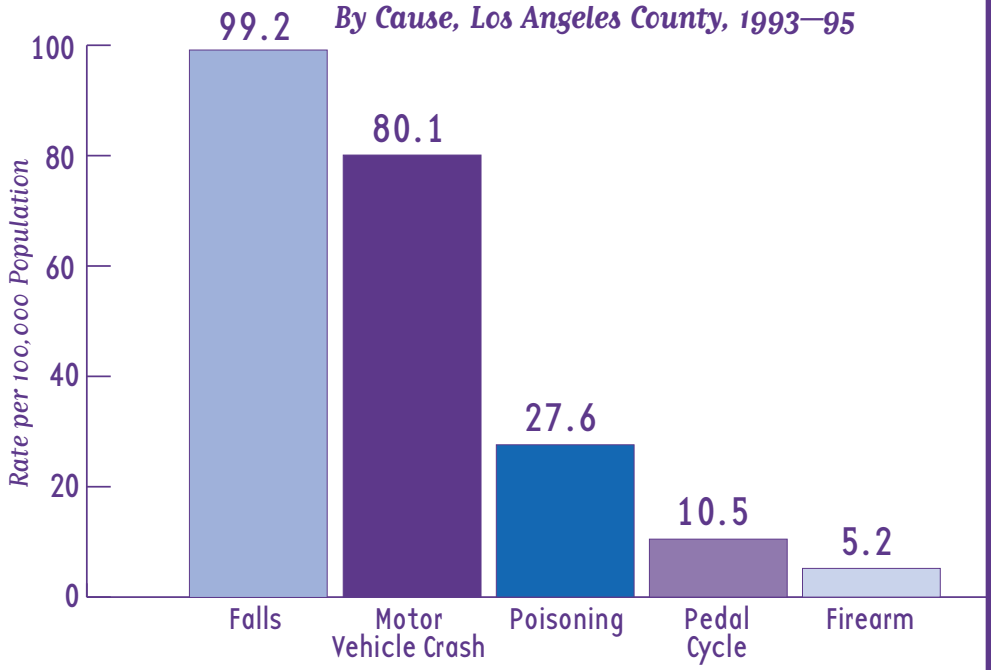
➜ In 1996, elderly populations (age 65 and older) experienced higher rates of fall-related injury mortality (11.1 deaths per 100,000) than any other age group (see Table 4.4).

➜ Men in Los Angeles County experience higher rates of mortality due to unintentional injury (30.4 deaths per 100,000) compared to women (13.1) (Table 4.4).

➜ In Los Angeles County, the highest rates of unintentional injury hospitalizations among children and youth (under age 20) are falls (99.2 hospitalizations per 100,000) and motor vehicle crashes (80.1 hospitalizations per 100,000) (see Figure 4.35).

➜ Rates of hospitalization due to unintentional injuries are higher among African-American (147.6 hospitalizations per 100,000) and Latino (136.5 hospitalizations per 100,000) youth than youth in other ethnic groups (see Figure 4.36).

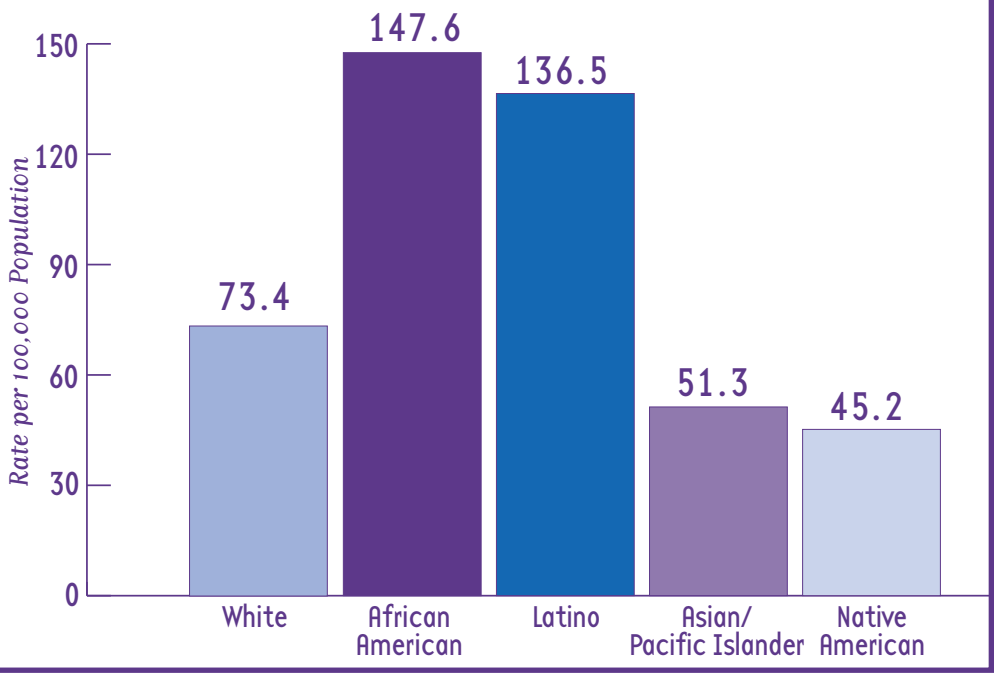
Figure 4.35: Hospitalizations Among Children And Youth (Ages 0—19) Due To Unintentional Injuries By Cause, Los Angeles County, 1993—95



Note: Rates presented here are a three-year average.

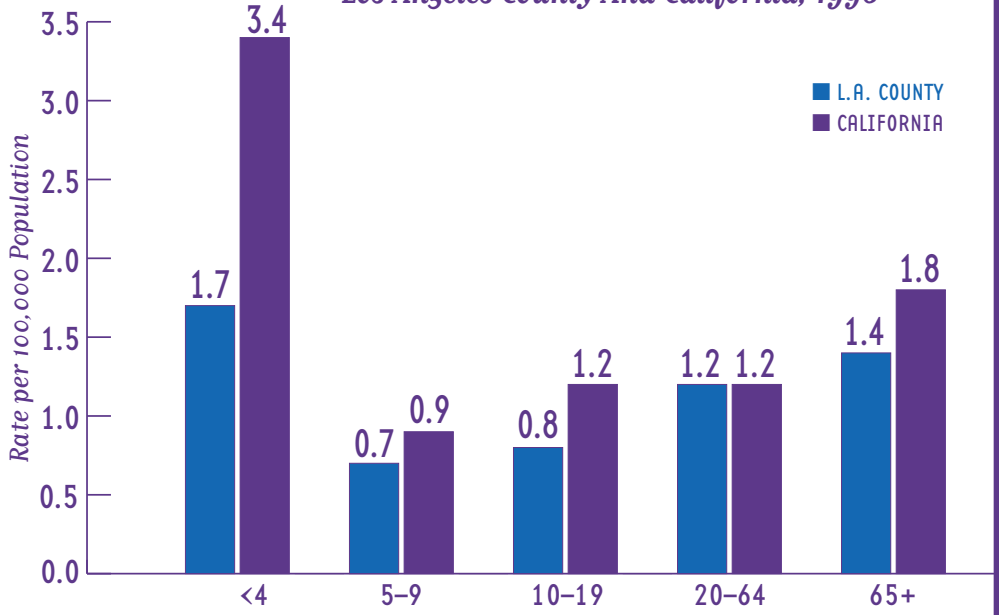
Source: Los Angeles County Department of Health Services, MCAH Program, Perinatal Indicators, 1996.

Figure 4.36: Hospitalizations Among Children And Youth (Ages 0—19) Due To Unintentional Injuries By Race/Ethnicity, Los Angeles County, 1996



Source: Los Angeles County Department of Health Services, MCAH Program, Perinatal Indicators, 1996.

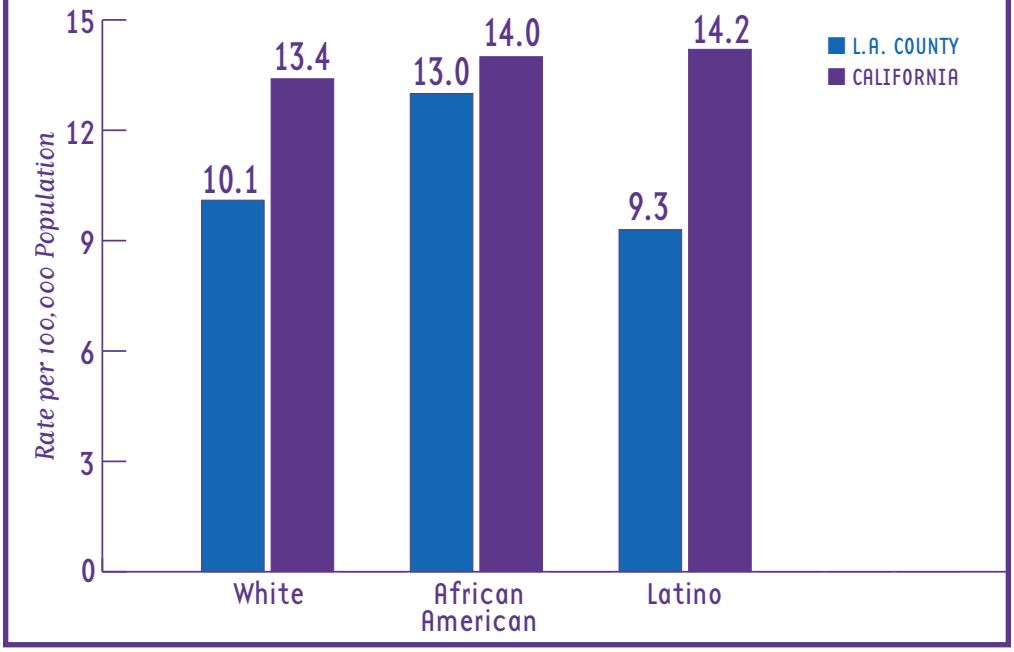
Figure 4.37: Injury Mortality Due To Drowning By Age, Los Angeles County And California, 1996



Source: 1996 PHIS File, Data Collection and Analysis, Los Angeles County Department of Health Services and 1996 Death Statistical Master File, Center of Health Statistics, Department of Health Services, California.

- Children under four years of age have the highest rate of mortality due to unintentional drowning (1.7 deaths per 100,000 children in Los Angeles and 3.4 deaths per 100,000 in all of California) (see Figure 4.37).
- Motor vehicle-related injury mortality rates are lower in Los Angeles County for all major ethnic groups compared to the overall population in California (see Figure 4.38).
- Between 1995 and 1997, all racial/ethnic groups showed a decline in mortality rates for motor vehicle-related deaths (see Figure 4.39).

Figure 4.38: Motor Vehicle-Related Injury Mortality By Race/ Ethnicity, Los Angeles County And California, 1996

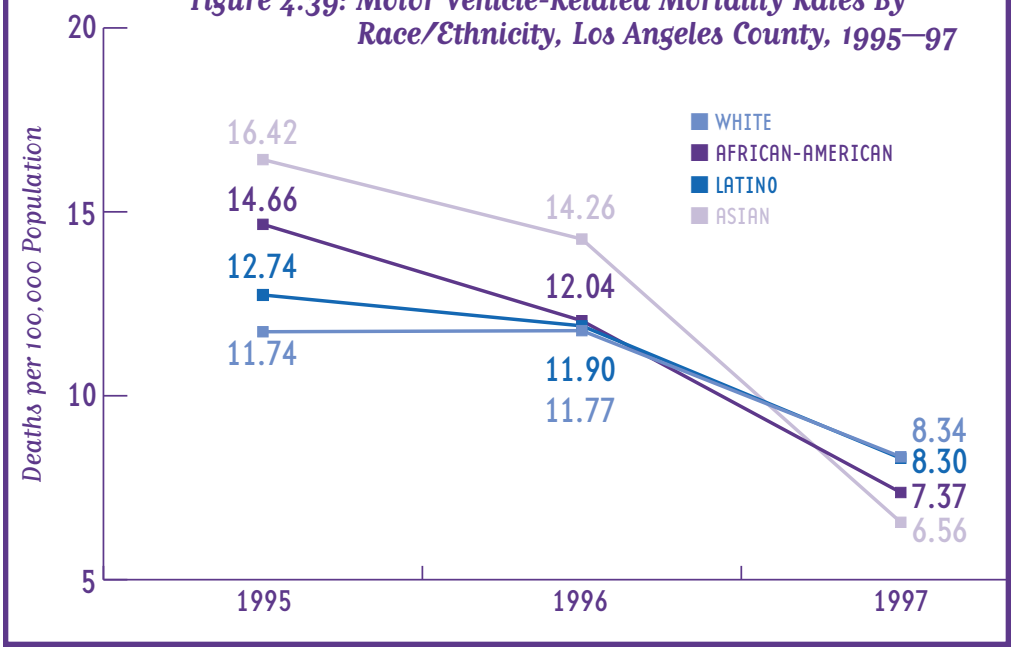


Source: 1996 PHIS File, Data Collection and Analysis, Los Angeles County Department of Health Services, and 1996 Death Statistical Master File, Center of Health Statistics, Department of Health Services, California.

Intentional Injuries

Intentional injuries are classified as such based on the intent to cause harm to another person or to oneself. Intentional injuries stem from youth violence, family and intimate violence, acts of crime, mental illness, and the availability of weapons. In Los Angeles County, homicide is the leading cause of injury death (see Figure 4.33). Violence-related death and injury is a public health problem that affects the health and well being of all Angelenos. Patterns of death and injury can focus violence and

Figure 4.39: Motor Vehicle-Related Mortality Rates By Race/Ethnicity, Los Angeles County, 1995–97



Source: Injury and Violence Prevention Program, Los Angeles County Department of Health Services. Rates adjusted to the 1940 population.

Table 4.5: Intentional Injury

		L.A. County[1]	California[2]	HP 2000[4]
Homicide	Total	16.5	10.2	7.2
(Age-adjusted rate	Male	27.4	16.7	*
per 100,000)[4]	Female	4.8	3.2	*
Assault arrests[6]	Total	387.5	364.5	*
(Rate per 100,000)	Male	659.1	615.9	*
	Female	116.0	112.1	*
Forcible rape arrests[6] (Rate per 100,000)	Total	20.2	19.7	–
Nonfatal hospitalized injuries due to firearms[5] (Rate per 100,000)	Total	31.0	17.4	*
Child abuse cases investigated, 1994[6]	Total	12,103.0	*	*
Child abuse deaths, 1993[6]	Total	41.0	*	*
Suicide	Total	9.4	9.8	10.5
(Age-adjusted rate	Male	14.8	15.5	*
per 100,000)[4]	Female	4.3	4.3	*
Deaths due to suicide among children and youth, ages 0–24 (Rate per 100,000)	Total	3.8[3]	4.1[3]	*
Deaths due to suicide among children and youth, ages 15–19 (Rate per 100,000)	Total	8.1[3]	*	8.2

1. 1996 Los Angeles County data obtained from Vital Record, Public Health Information Services, unless otherwise noted.

2. 1996 Vital Statistics of California, Center of Health Statistics, California Department of Health Services.

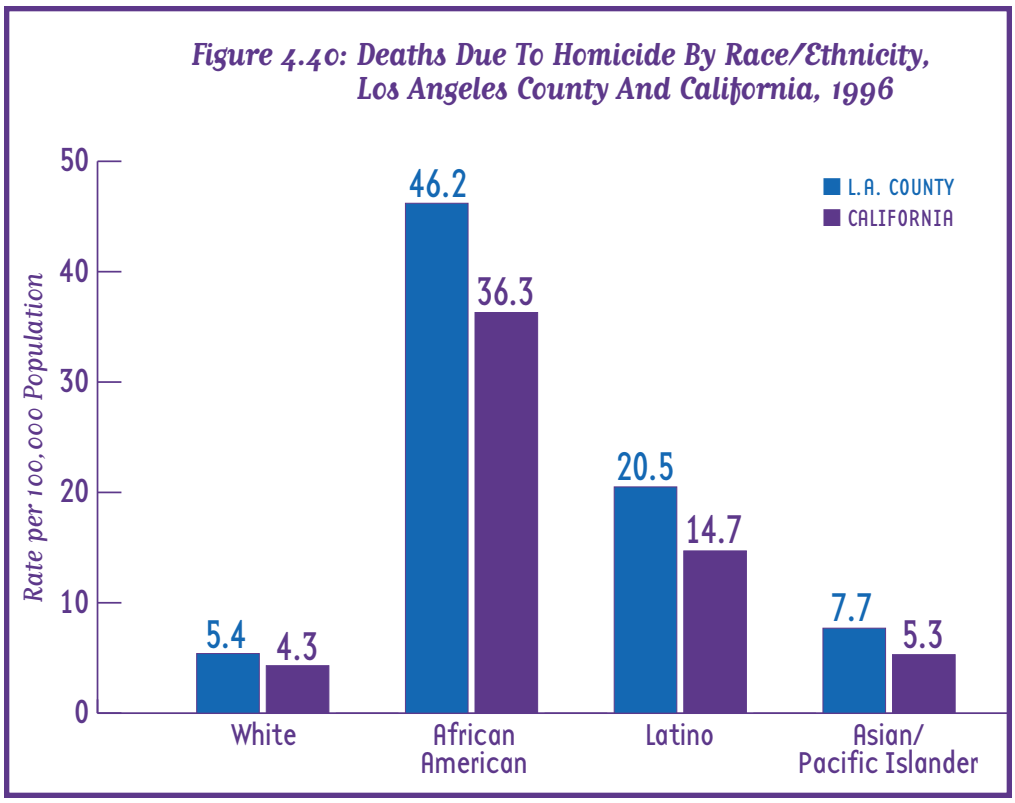
3. Three-year average, 1994–1996, from Perinatal Indicators, MCAH Program, Los Angeles County, 1996.

4. Age-adjusted rate per 100,000 to the 1940 census population.

5. 1996 California Office of Statewide Health Planning and Development (OSHPD) Hospital Discharge Data compiled by Injury Surveillance and Epidemiology Section, EPIC, in Injury Tables, California, 1996: Deaths and Nonfatal Hospitalizations. Note: Nonfatal hospitalizations due to firearms include only unintentional, self-inflicted, and assault injuries; does not include firearm injuries from police action.

6. State of California, Department of Justice, Criminal Justice Statistics Center, 1996.

** Data not available*



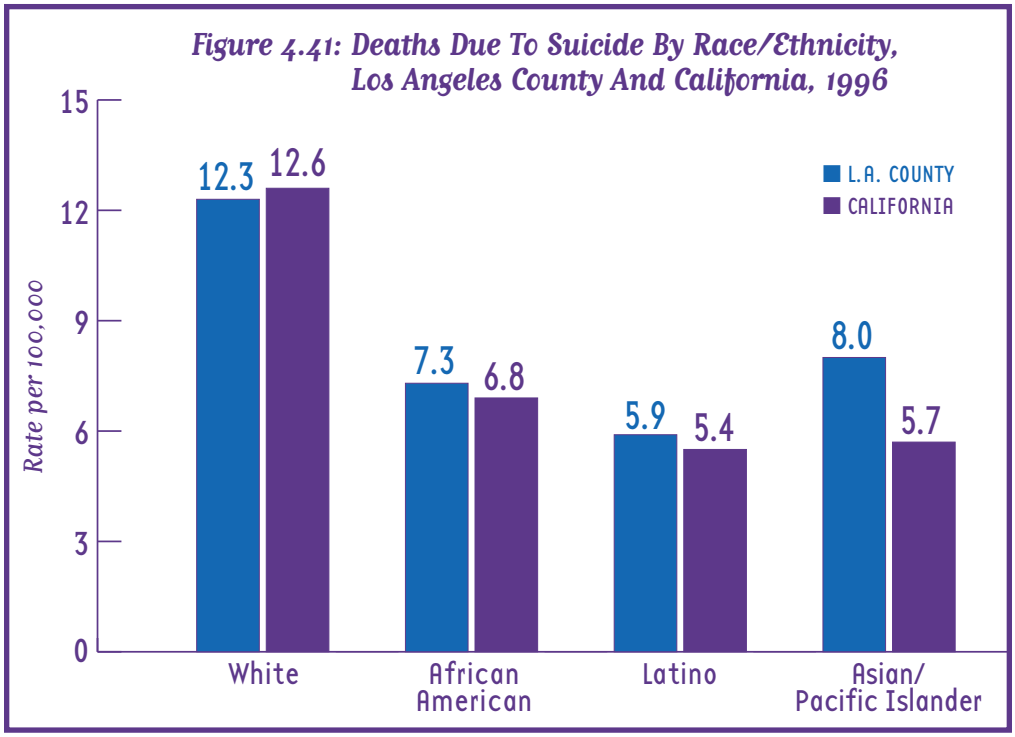
Source: 1996 PHIS File, Data Collection and Analysis, Los Angeles County Department of Health Services and 1996 Vital Statistics of California, Center of Health Statistics, California Department of Health Services.

injury prevention programs by highlighting those populations at risk. Some summary statistics on intentional injuries in Los Angeles County follow.

➜ Men in Los Angeles County experience higher rates of homicide (27.4 deaths per 100,000), and suicide (14.8) compared to women (4.8) and (4.3), respectively (see Table 4.5).

➜ The rates for nonfatal injuries requiring hospitalization from firearms in Los Angeles County (31.0 injuries per 100,000) are almost twice the rate of California's (17.4) (see Table 4.7). Firearms are used in 89% of all intentional injuries.[15]

➜ According to 1996 data, the age-adjusted homicide rate in Los Angeles County (16.5 deaths per 100,000) is over one and a half times higher than that of California (10.2 deaths per 100,000) and twice as high as the Healthy People 2000 goal of 7.2 homicide deaths per 100,000 (see Table 4.6).



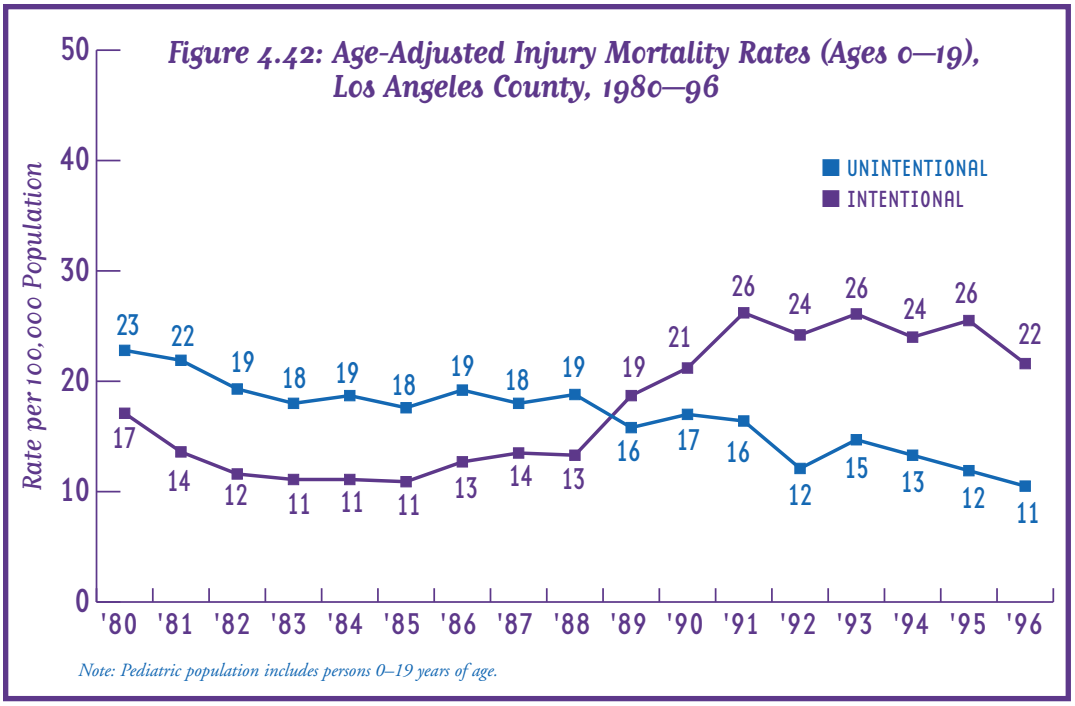
Source: 1996 PHIS File, Data Collection and Analysis, Los Angeles County Department of Health Services and 1996 Vital Statistics of California, Center of Health Statistics, California Department of Health Services.

➜ In 1997, homicide accounted for 31% of all injury deaths in Los Angeles County. For persons, age 15 to 24, homicide accounted for 48% of all causes of death. For people older than 45, mortality rates due to suicide are higher than homicide (see Table 4.9).

➜ In 1996, the Los Angeles Police Department recorded 49,009 domestic violence calls, with 8,484 arrests and 22 homicides.[16]

➜ In 1996, the African-American population had a higher homicide rate than other ethnic and racial groups in Los Angeles (46.2 deaths per 100,000) and California (36.3 deaths per 100,000) (see Figure 4.40).

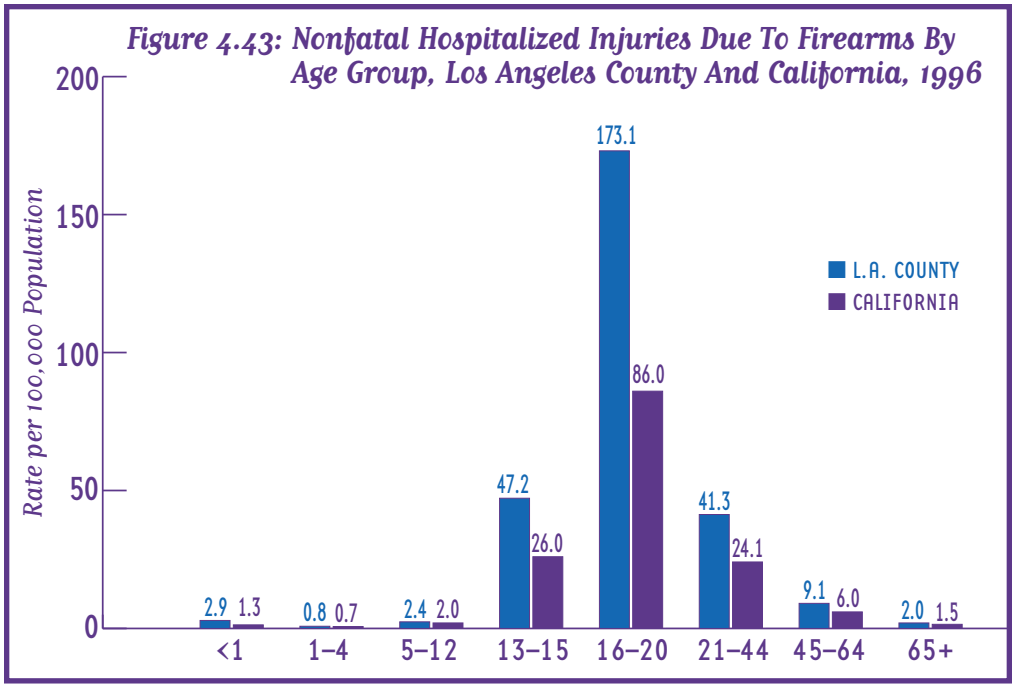
➜ In Los Angeles County, suicide rates are higher in white populations (12.3 deaths per 100,000) than in other racial and ethnic groups. In contrast, the Latino population had the lowest mortality due to suicide (5.9) (see Figure 4.41).



Source: Injury and Violence Prevention Program, Los Angeles County Department of Health Services.

➜ In Los Angeles County, unintentional injury death rates among children and youth (age 0 to 19) have decreased while intentional injuries in this age group have increased. Between 1980 and 1996, unintentional injury deaths decreased 54% from 22.8 to 10.5 per 100,000. In contrast, intentional injury deaths increased 26% from 17.1 to 21.6 per 100,000 during the same time period. The decrease in unintentional injury mortality is due to a decline in unintentional motor vehicle-related injuries, while the increase in intentional injury deaths is attributed to an increase in homicide rates (see Figure 4.42).

➜ In 1996, youth ages 16 to 20 had the highest rate of nonfatal hospitalized injuries due to firearms in both Los Angeles County (173.1 deaths per 100,000) and California (86.0) (see Figure 4.43).



Source: 1996 California Office of Statewide Health Planning and Development (OSHPD) Hospital Discharge Dataset. Note: Nonfatal hospitalizations due to firearms include only unintentional, self-inflicted, and assault injuries.

Injury and Violence Data Sources

1. Injury and Violence Prevention Program, Los Angeles County DHS—Public Health

2. MCAH Assessment and Planning Unit (MAP), Los Angeles County DHS—Public Health

3. Injury Surveillance and Epidemiology Section
   Epidemiology and Prevention for Injury Control Branch
   California Department of Health Services

4. Data Collection and Analysis Unit
   Los Angeles County DHS—Public Health

5. Office of Health Information and Research
   Center for Health Statistics
   California Department of Health Services

See Appendix for complete references on these and other data resources.

See page 83 for endnotes.

Leading Causes of Mortality

Table 4.6: Mortality

Age-Adjusted Mortality Rates, 1997	L.A. County (n)[1,2,3]	California[2,4]	HP 2000[2]
All causes	402.3 (60,070)	424.0	*
Heart disease	114.4 (19,852)	111.9	100.0
Cancer	102.3 (13,504)	111.3	130.0
All other causes	60.0 (8,819)	*	*
Cerebrovascular disease	23.0 (4,166)	25.6	20.0
Influenza and pneumonia	15.5 (3,346)	16.8	*
Chronic obstructive pulmonary disease	17.4 (2,863)	20.9	25.0
Unintentional injury	19.1 (2,030)	23.8	29.3
Diabetes	12.9 (1,746)	11.6	34.0
Homicide	14.4 (1,247)	9.3	7.2
Chronic liver disease	9.4 (1,041)	9.2	6.0
Suicide	7.5 (776)	9.6	10.5
AIDS/HIV related	6.4 (680)	5.2	*

** Data not available.*

1. Includes Long Beach and Pasadena.

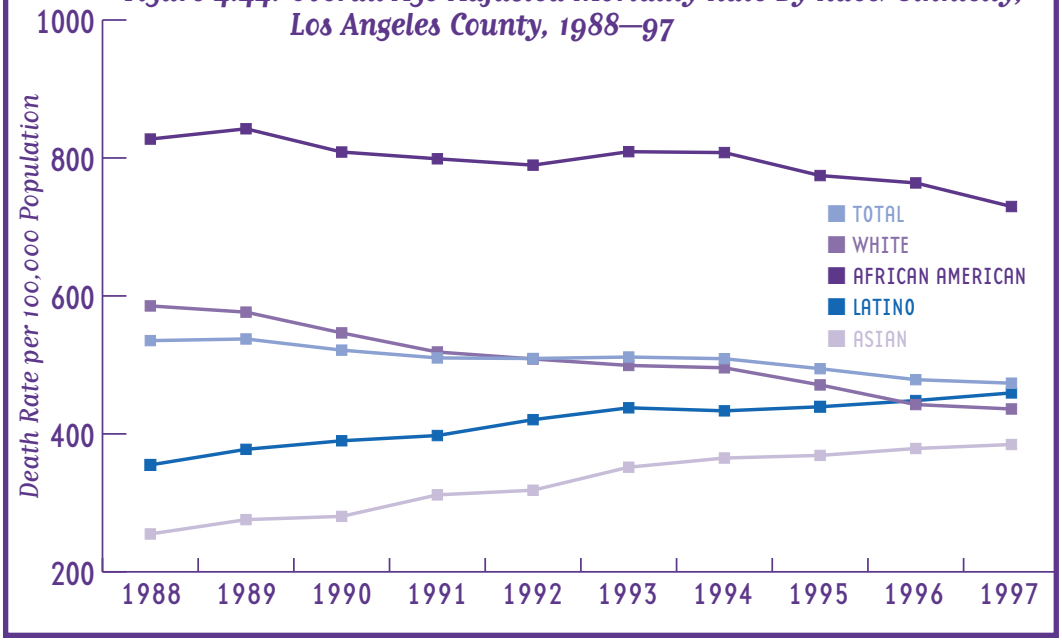
2. Age-adjusted rate per 100,000 to the 1940 census population.

3. 1997 PHIS File, Data Collection and Analysis Unit, Los Angeles County Department of Health Services.

4. 1996 California Death Statistical Master File, Center of Health Statistics, Department of Health Services, California.

Over the last half century the United States has observed a decline in mortality rates. In the early 1900s, the major causes of mortality in this country were attributed to communicable diseases such as measles, polio, and tuberculosis. In this century, the picture has changed dramatically; chronic diseases such as heart disease and cancer are now inarguably the leading causes of death. This transition is related not only to advances in medicine and technology, but also to significant improvements in the social and physical environments, including sanitation, and general hygiene practices. In addition, behavioral practices, for example, tobacco use, diet and activity patterns are recognized as important contributors to the leading causes of mortality in the United States (see Table 4.6).[17]

Figure 4.44: Overall Age-Adjusted Mortality Rate By Race/Ethnicity, Los Angeles County, 1988—97

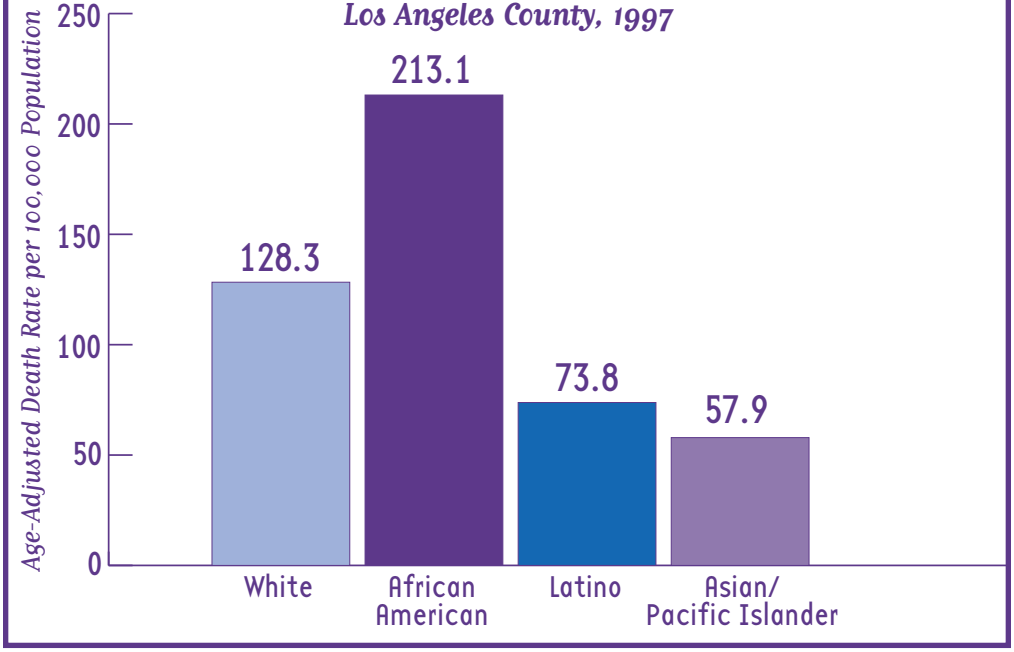


Source: Los Angeles County Department of Health Services, Data Collection and Analysis Unit. Rates are standardized to the 1940 U.S. population.

Traditionally, mortality has been used as the principal measure of health status in populations. In particular, public health has used mortality data to identify problem areas and to assess longevity among various population groups. Mortality statistics are especially useful for identifying groups that bear a disproportionate burden of death or disease. Despite the overall decline in mortality rates, disparities between certain population groups persist. For example, diabetes-related deaths are highest among African-American populations,[18] and homicide mortality is highest in young adults, ages 15 to 24.[19]

- From 1988 through 1995, the overall mortality rate declined in Los Angeles County. The mortality rate was highest among African-Americans throughout this period (see Figure 4.44).
- Heart disease is the leading cause of death among

Figure 4.45: Heart Disease Mortality Rate By Race/Ethnicity, Los Angeles County, 1997



Source: PHIS Data File, Data Collection and Analysis Unit, Los Angeles County Department of Health Services.

Table 4.7: Cancer Mortality

Age-Adjusted Mortality Rates, 1996		L.A. County[1]	California[2]	HP 2000[3]
All cancer deaths (Deaths per 100,000 persons)		144.4	147.2	*
Lung cancer deaths (Deaths per 100,000 persons)		37.0	40.4	42.0
Breast cancer deaths (Deaths per 100,000 women)		22.2	23.1	20.6
Cervical cancer deaths (Deaths per 100,000 women)		3.1	2.5	1.3
	African-American	4.2	4.2	3.0
	Latino	3.8	2.9	2.0
Prostate cancer deaths (Deaths per 100,000 men)		21.1	21.2	*
Colorectal cancer deaths (Deaths per 100,000 persons)		14.0	14.3	13.2

**HP 2000 objectives not estimated.*

1. 1996 data obtained from Cancer in Los Angeles County: Incidence and Morality by Race/Ethnicity 1988—1996, Los Angeles County Cancer Surveillance Program, University of Southern California, 1999. All incidence rates were age-adjusted and standardized to the 1970 Census population.

2. 1996 data obtained from Cancer in California: 1988–1996, California Department of Health Services, Cancer Surveillance Section, April, 1999. All incidence rates were age-adjusted and standardized to the 1970 Census population.

3. HP 2000 death rates shown are age-adjusted to the 1940 U.S. population.

all Los Angeles County residents. African-Americans experience the highest rate of mortality from heart disease in Los Angeles County, 218.1 deaths per 100,000 (see Figure 4.45).

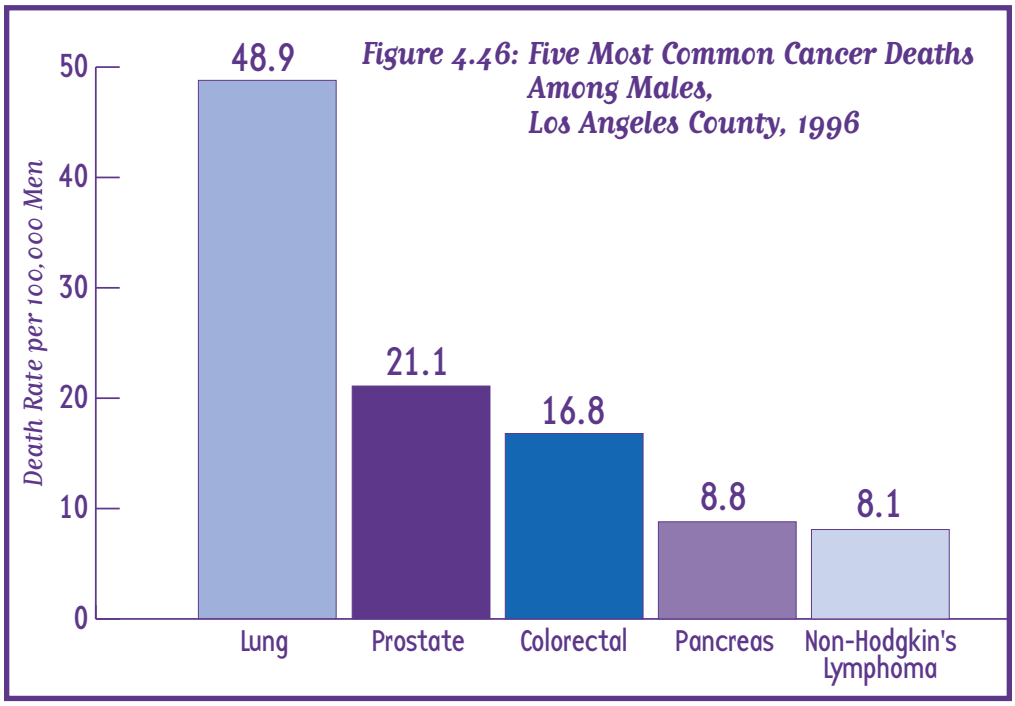


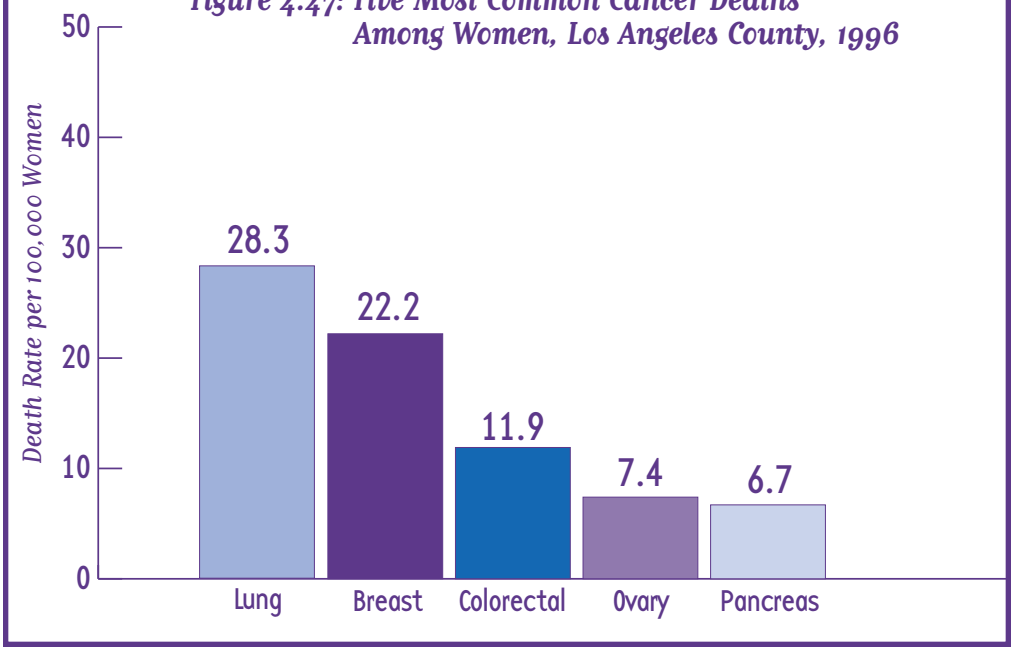
Figure 4.46: Five Most Common Cancer Deaths Among Males, Los Angeles County, 1996

Source: 1996 data obtained from Cancer in Los Angeles County: Incidence and Mortality by Race/Ethnicity 1988—1996, Los Angeles County Cancer Surveillance Program, University of Southern California, 1999. All incidence rates were age-adjusted and standardized to the 1970 Census population.

➜ Overall, cancer is the second leading cause of death in both California and Los Angeles County (see Table 4.7). However, it is important to examine type-specific since different types of cancer have multiple etiologies and because they affect gender and racial/ethnic groups differently. According to 1996 data, the most common form of cancer mortality for both men and women was lung cancer, 48.9 and 28.3 deaths per 100,000 men and women, respectively (see Figures 4.46 and 4.47).

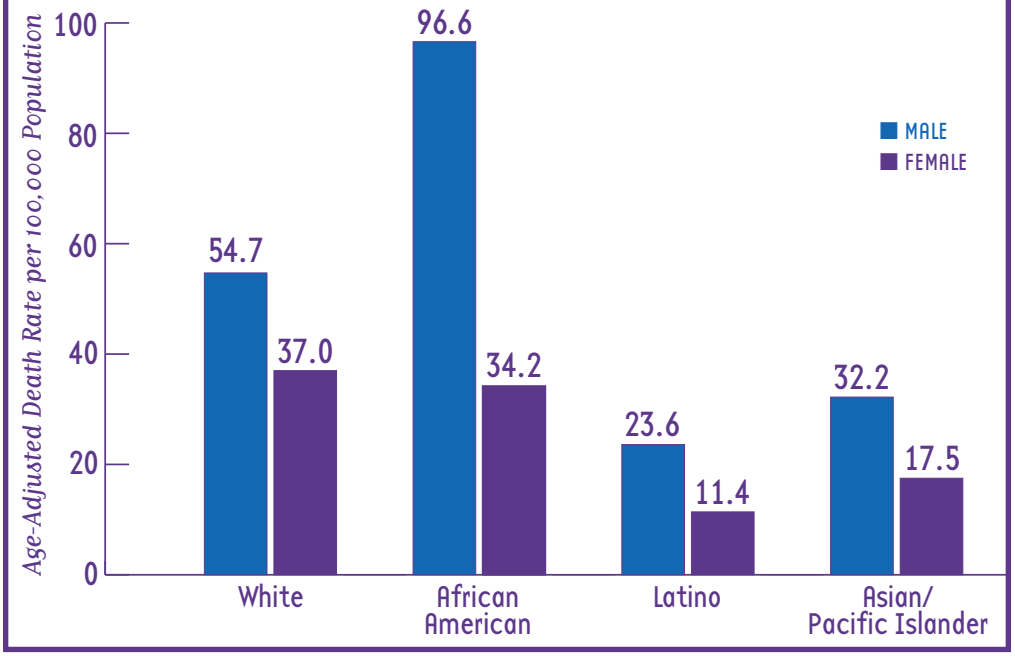
➜ Men in Los Angeles County have higher rates of death from lung cancer than women. Lung cancer death rates are highest among African-American men (see Figure 4.48).

Figure 4.47: Five Most Common Cancer Deaths Among Women, Los Angeles County, 1996

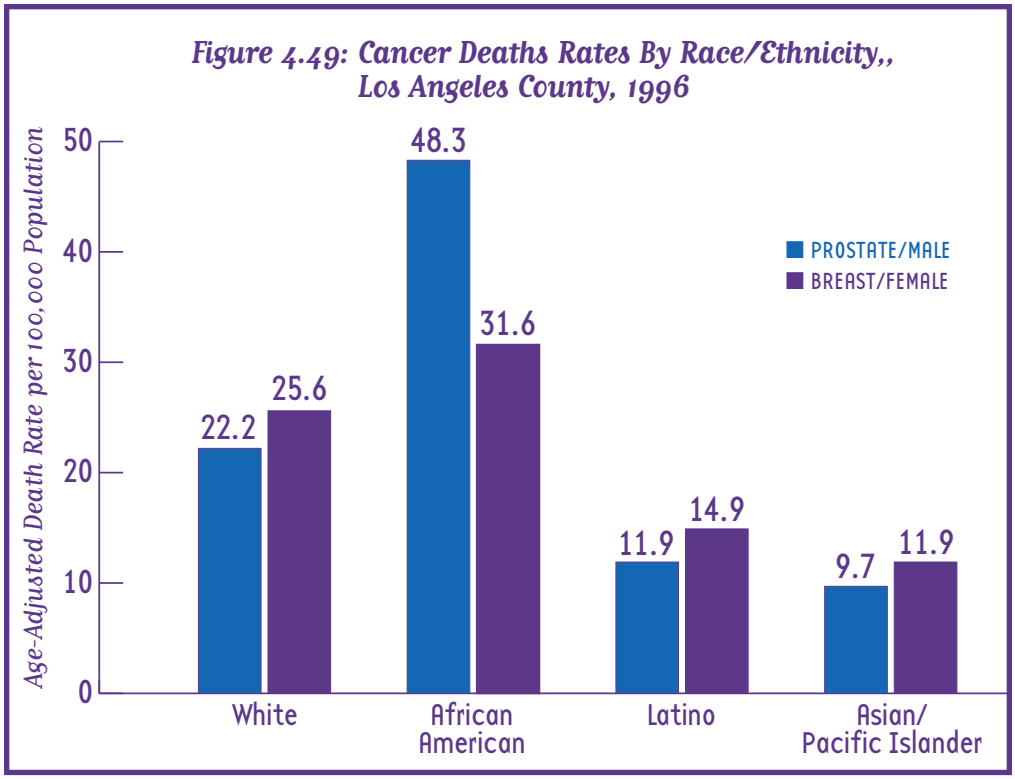


Source: 1996 data obtained from Cancer in Los Angeles County: Incidence and Mortality by Race/Ethnicity 1988–1996, Los Angeles County Cancer Surveillance Program, University of Southern California, 1999. All incidence rates were age-adjusted and standardized to the 1970 Census population.

Figure 4.48: Lung Cancer Deaths By Race/Ethnicity And Gender, Los Angeles County, 1996

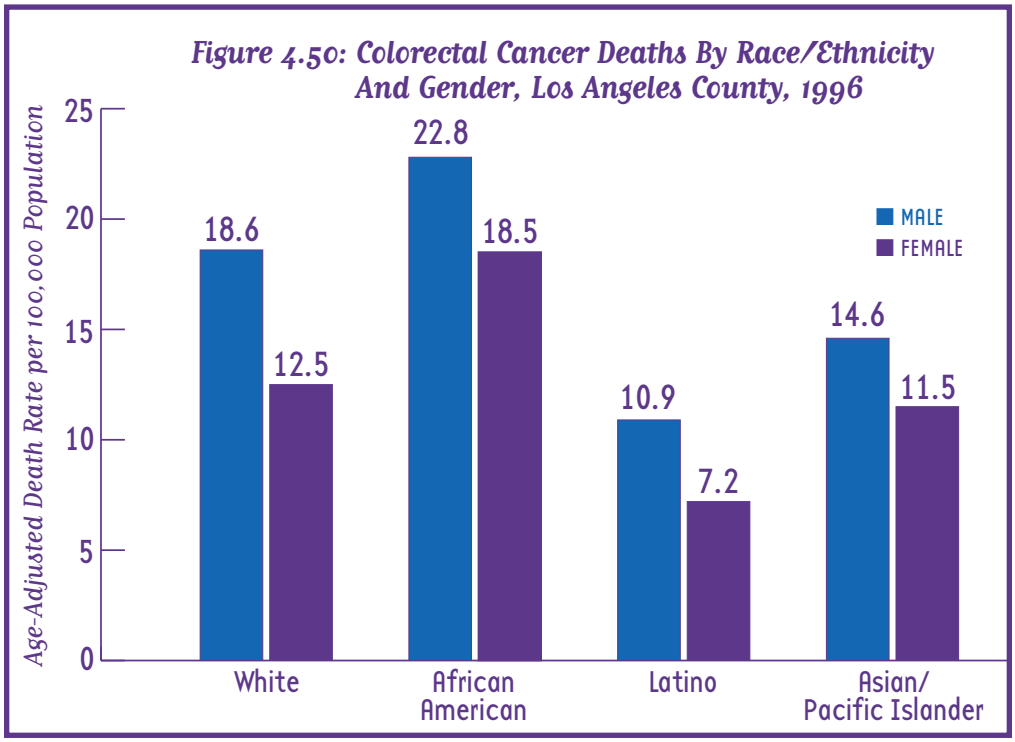


Source: 1996 data obtained from Cancer in Los Angeles County: Incidence and Mortality by Race/Ethnicity 1988–1996, Los Angeles County Cancer Surveillance Program, University of Southern California, 1999.



Source: 1996 data obtained from Cancer in Los Angeles County: Incidence and Mortality by Race/Ethnicity 1988–1996, Los Angeles County Cancer Surveillance Program, University of Southern California, 1999. All incidence rates were age-adjusted and standardized to the 1970 Census population.

- In Los Angeles County, African-American women had higher death rates than any other racial or ethnic group from breast cancer. African-American men had the highest rate of prostate cancer (see Figure 4.49).
- Rates of death from colorectal cancer are lower in women than in men (see Figure 4.50).



Source: 1996 data obtained from Cancer in Los Angeles County: Incidence and Mortality by Race/Ethnicity 1988–1996, Los Angeles County Cancer Surveillance Program, University of Southern California, 1999. All incidence rates were age-adjusted and standardized to the 1970 Census population.

Table 4.8: Age-Adjusted Mortality Rates (per 100,000) By Gender And Race/Ethnicity, Los Angeles County, 1997

All Causes	402.3	Chronic Obstructive Pulmonary Disease*	17.4	Homicide	14.4
Males	500.3	Males	20.2	Males	25.0
Females	317.2	Females	15.3	Females	3.2
Whites	438.2	Whites	23.0	Whites	5.8
African-American	727.2	African-American	25.0	African-American	48.1
Latino	290.4	Latino	6.4	Latino	15.3
Asian/Pacific Islander	227.7	Asian/Pacific Islander	9.2	Asian/Pacific Islander	4.1
Heart Disease	114.4	Influenza/Pneumonia	15.5	Unintentional Injury	19.1
Males	150.0	Males	18.7	Males	27.3
Females	84.8	Females	13.2	Females	11.0
Whites	128.3	Whites	16.8	Whites	21.9
African-American	213.1	African-American	21.1	African-American	27.0
Latino	73.8	Latino	11.5	Latino	16.9
Asian/Pacific Islander	57.9	Asian/Pacific Islander	10.3	Asian/Pacific Islander	11.4
Cerebrovascular Stroke	23.0	Diabetes Disease	12.9	All Other Causes	60.0
Males	24.5	Males	14.0	Males	67.3
Females	21.7	Females	12.0	Females	53.8
Whites	21.7	Whites	9.8	Whites	64.1
African-American	43.8	African-American	27.2	African-American	112.2
Latino	17.4	Latino	16.4	Latino	46.9
Asian/Pacific Islander	20.0	Asian/Pacific Islander	8.7	Asian/Pacific Islander	31.7
Cancer	102.3	AIDS	6.4		
Males	116.5	Males	11.2		
Females	92.1	Females	1.6		
Whites	119.7	Whites	6.7		
African-American	175.1	African-American	19.2		
Latino	63.8	Latino	5.1		
Asian/Pacific Islander	65.5	Asian/Pacific Islander	0.8		
Liver Disease	9.4	Suicide	7.5		
Males	13.7	Males	12.0		
Females	5.4	Females	3.1		
Whites	9.4	Whites	11.5		
African-American	8.9	African-American	6.4		
Latino	12.8	Latino	4.1		
Asian/Pacific Islander	2.7	Asian/Pacific Islander	5.4		

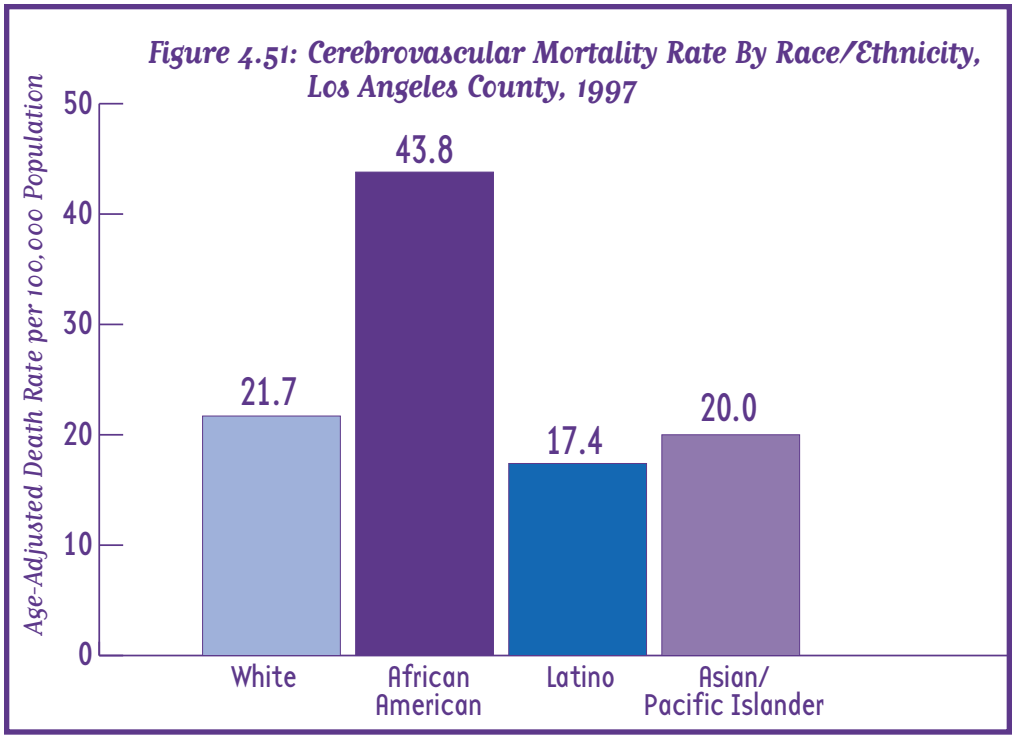
Note: Age-adjusted rate per 100,000 to the 1940 population. Heart disease (390-398, 402, 404-429), stroke (430-438), cancer (140-208), COPD (490-496), influenza/pneumonia (480-487), chronic liver disease (571), diabetes (250), unintentional injury (E800-E949), suicide (E950-E959), homicide (E960-E978), AIDS (040-044), and all other causes (remaining codes).

**COPD*

Source: Department of Health Services, Los Angeles County, Data Collection and Analysis Unit.

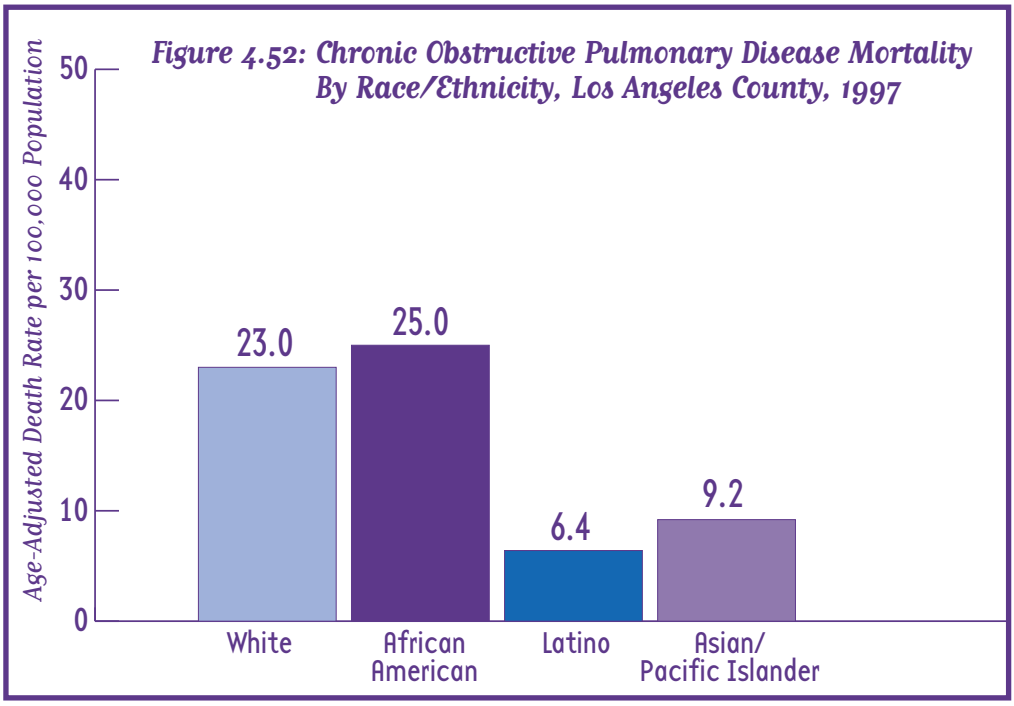
➜ Mortality due to influenza and pneumonia was highest among African-American (21.1 deaths per 100,000) and white (16.8) population groups in 1997 (see Table 4.8).

➜ In Los Angeles County, death due to chronic liver disease was highest among Latinos (12.8 deaths per 100,000). Also, women have a lower mortality rate due to chronic liver disease than do men (5.4 vs. 13.7 per 100,000) (see Table 4.8).

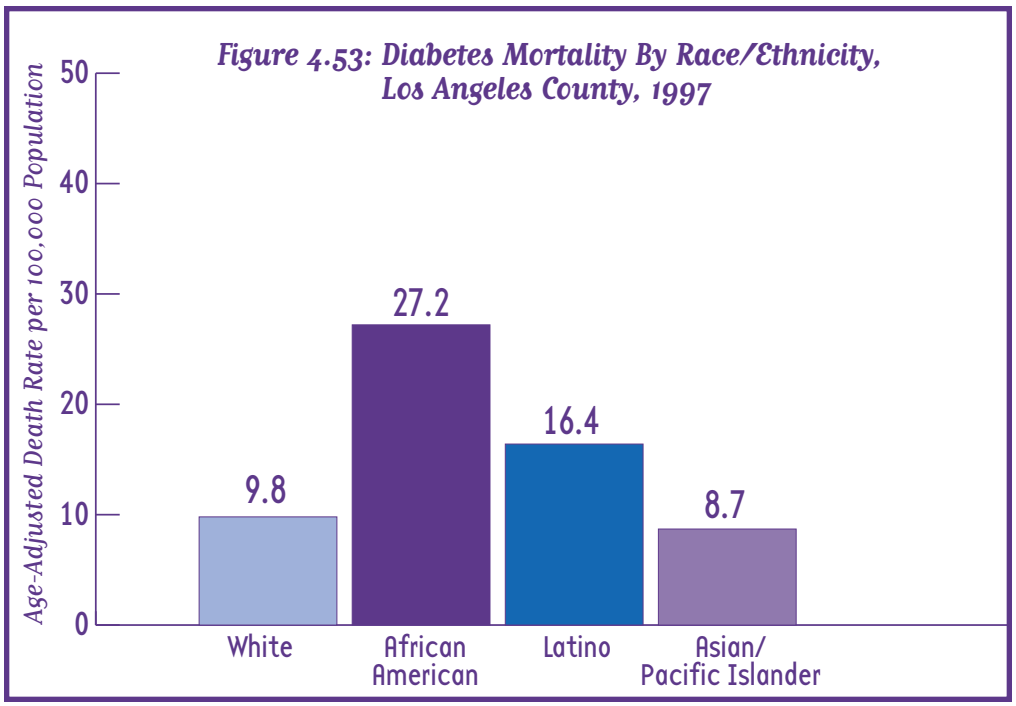


Source: Department of Health Services, Los Angeles County, Data Collection and Analysis Unit, PHIS Data File.

- In 1997, the African-American population in Los Angeles County had a significantly higher mortality rate (43.8 deaths per 100,000 people) from cerebrovascular disease (stroke) than did other ethnic groups (see Figure 4.51).
- In 1997, African-Americans (25.0 deaths per 100,000) and whites (23.0) had higher mortality rates from chronic obstructive pulmonary disease (COPD) than did other ethnic groups (see Figure 4.52).

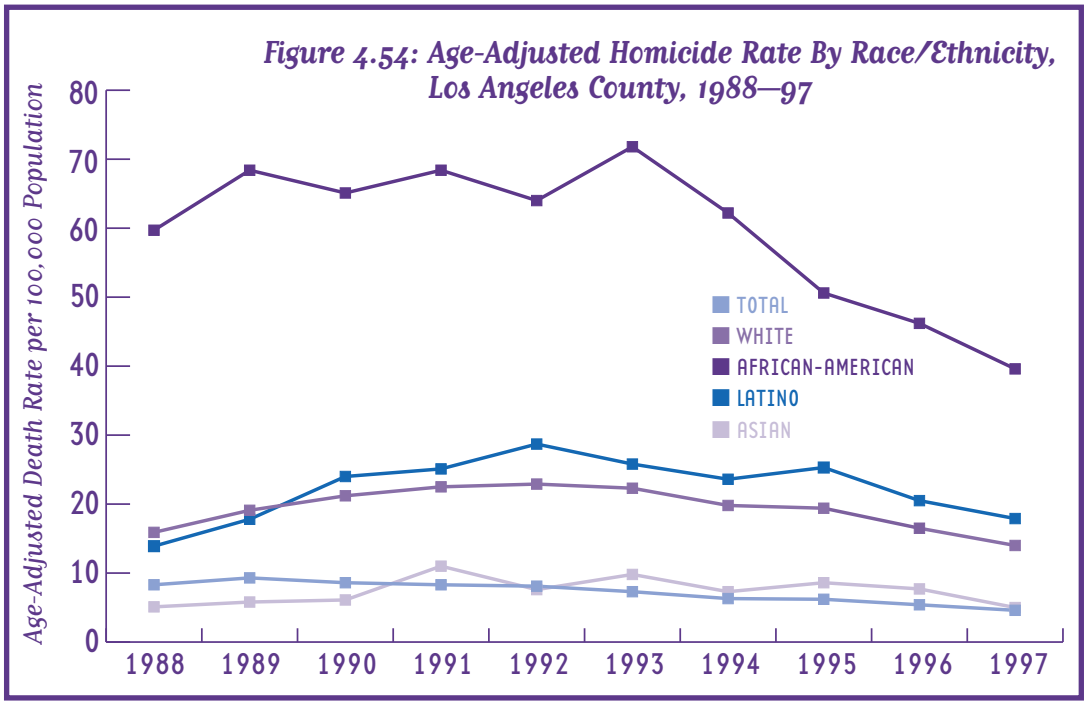


Source: Department of Health Services, Los Angeles County, Data Collection and Analysis Unit, PHIS Data File.

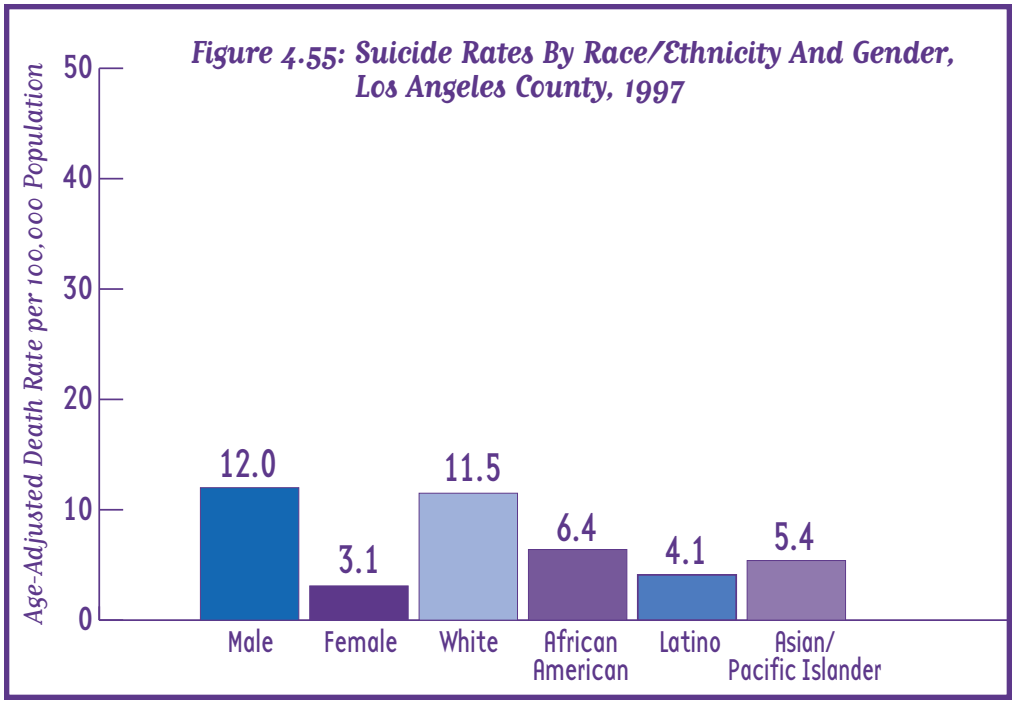


Source: Department of Health Services, Los Angeles County, Data Collection and Analysis Unit, PHIS Data File.

- In 1997, the diabetes mortality rate was highest among African-Americans (27.2 deaths per 100,000), followed by Latinos (16.4 deaths per 100,000) (see Figure 4.53).
- From 1988 through 1997, the homicide rate remained highest among African-Americans although the rate declined by 45% in this population from 1993 to 1997 (see Figure 4.54).



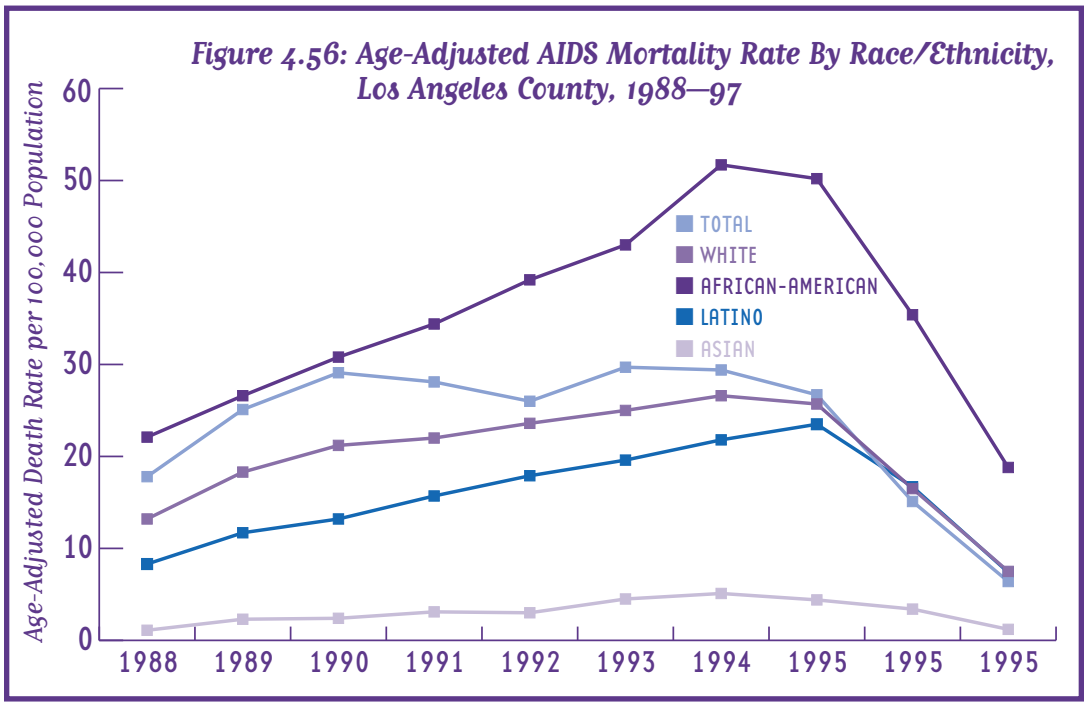
Source: Los Angeles County Department of Health Services, Data Collection and Analysis Unit. Rates are standardized to the 1940 U.S. population.



Source: Department of Health Services, Los Angeles County, Data Collection and Analysis Unit, PHIS Data File.

➜ In 1997, the suicide rate was higher among men (12.0 deaths per 100,000) than women (3.1 deaths per 100,000), and was higher in whites (11.5 deaths per 100,000) then in Asians (5.4), African-Americans (6.4), or Latinos (4.1) (see Figure 4.55).

➜ After years of increasing AIDS mortality rates, trend data show that the death rate from AIDS in Los Angeles County has started to decline. The death rate from AIDS has sharply declined since 1994 (see Figure 4.56). This sharp decline is largely due to improved treatments for HIV, which prolong the life of infected individuals.



Source: Los Angeles County Department of Health Services, Data Collection and Analysis Unit. Rates are standardized to the 1940 U.S. population.

Table 4.9: Cause-Specific Mortality By Age, Los Angeles County, 1997

Age	Cause of Death	Number	Rate
0–4	Unintentional injury	65	8.8
	Homicide	31	4.2
	Heart Disease	26	3.5
	Cancer	26	3.5
	Pneumonia/influenza	17	2.3
	Cerebrovascular disease	5	0.7
	COPD	2	0.3
	AIDS	2	0.3
	Chronic liver disease	1	0.1
	All other causes	978	132.8
	Total	1,153	156.6
5–14	Unintentional Injury	66	5.4
	Cancer	41	3.3
	Homicide	20	1.6
	Heart disease	13	1.1
	Suicide	7	0.6
	COPD	5	0.4
	AIDS	2	0.2
	Cerebrovascular disease	1	0.1
	Pneumonia/influenza	1	0.1
	All other causes	57	4.6
	Total	213	17.3
15–24	Homicide	496	34.3
	Unintentional injury	255	17.6
	Suicide	94	6.5
	Cancer	73	5.1
	Heart disease	29	2.0
	AIDS	10	0.7
	Cerebrovascular disease	7	0.5
	Pneumonia/influenza	6	0.4
	COPD	5	0.4
	Chronic liver disease	2	0.1
	All other causes	124	8.6
	Total	1,106	76.5
25–44	Unintentional injury	749	24.2
	Cancer	673	21.7
	Homicide	540	17.4
	Heart disease	450	14.5
	AIDS	442	14.3
	Suicide	299	9.6
	Liver disease	232	7.5
	Stroke	130	4.2
	Diabetes	84	2.7
	COPD	46	1.5
	Pneumonia/influenza	38	1.2
	All other causes	673	21.7
	Total	4,356	140.5
45–64	Cancer	3,552	238.1
	Heart disease	2,844	190.6
	Stroke	477	32.0
	Liver disease	471	31.6
	Unintentional injury	442	29.6
	Diabetes	409	27.4
	COPD	328	22.0
	Suicide	219	14.7
	AIDS	208	13.9
	Pneumonia/influenza	156	10.5
	Homicide	127	8.5
	All other causes	1,296	86.9
	Total	10,529	705.7
65–74	Cancer	3,730	735.0
	Heart disease	3,678	724.8
	Stroke	706	139.1
	COPD	678	133.6
	Diabetes	502	98.9
	Pneumonia/influenza	438	86.3
	Liver disease	196	38.6
	Unintentional injury	155	30.5
	Suicide	70	13.8
	Homicide	18	3.6
	AIDS	14	2.8
	All other causes	1,261	248.5
	Total	11,446	2,255.6
75+	Heart disease	12,812	3,629.5
	Cancer	5,409	1,532.3
	Stroke	2,840	804.5
	Pneumonia/influenza	2,690	762.0
	COPD	1,799	509.6
	Diabetes	746	211.3
	Unintentional injury	298	84.4
	Liver disease	138	39.1
	Suicide	87	24.6
	Homicide	12	3.4
	AIDS	2	0.6
	All other cause	4,430	1,255.0
	Total	31,263	8,856.4

1. Rate per 100,000 population in specific age group. Deaths where age is not known are not included in the table.

Source: Los Angeles County, Department of Health Services, Data Collection and Analysis Unit.

Age-specific mortality rates are shown in Table 4.9. The following summarizes some of the key findings.

- ➜ In 1997, the major cause of death for children under five years of age was unintentional injury (8.8 deaths per 100,000). Unintentional injuries include falls, burns, poisonings, drownings, and motor vehicle-related injuries.
- ➜ For young adults ages 15 to 24, homicide is the leading cause of death (34.3 deaths per 100,000) in Los Angeles. The rate for homicide is almost twice as high as the mortality rate associated with unintentional injury (17.6) and nearly five times higher than the rate of suicide (6.5).
- ➜ Mortality due to chronic conditions becomes significantly higher after age 45. Among people 45 to 64 years of age, cancer (238.1.9 deaths per 100,000) remains the leading cause of death, followed closely by heart disease (190.6 per 100,000).

Leading Causes of Mortality Data Sources

Data Collection and Analysis Unit, Los Angeles County DHS—Public Health

Injury and Violence Prevention Program, Los Angeles County DHS—Public Health

Los Angeles County Cancer Surveillance Program
Department of Preventive Medicine
University of Southern California

Cancer Surveillance Section, Cancer Control Branch
Division of Chronic Disease and Injury Control
California Department of Health Services

Office of Health Information and Research
Center for Health Statistics, California Department of Health Services

Monthly Vital Statistics Report Series, Division of Vital Statistics
Centers for Disease Control and Prevention
National Center for Health Statistics
United States Department of Health and Human Services

Endnotes

1. Committee on Using Performance Monitoring to Improve Community Health. Improving health in the community: A role for performance monitoring. Institute of Medicine, National Academy Press, 1997.

2. For a family of four, the 1997 federal poverty level was $16,050 per year.

3. Mild to moderate overweight is defined as a Body Mass Index (BMI) of >25.0; severe overweight is defined as a BMI of >30.0.

4. Murray, CJL, Lopez, AD, eds. The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected 2020. Cambridge: Harvard University Press, 1996.

5. Los Angeles County Department of Health Services and the UCLA Center for Health Policy Research. The Burden of Diseases in Los Angeles County: A Study of the Patterns of Morbidity and Mortality in the County Population. January 2000.

6. Bird, ST, Bauman, KE, et al. State-level infant, neonatal and postneonatal mortality: the contribution of selected structural socioeconomic variables. Int J Health Serv 1998; 28(1):13–27.

7. Ventura SJ, Curtin, SC. Recent trends in teen births in the United States. Stat Bull Metrop Insur Co 1999; 80(1):2–12.

8. Knoches, Am, Doyle, LW. Long-term outcome of infants born preterm. Baillieres Clin Obstet Gynaecol 1993; 7(3):633–51.

9. 1997 California Behavioral Risk Factor Surveillance System. Cancer Surveillance Section. California Department of Health Services.

10. National Center for Health Statistics. Healthy People 2000 Review, 1997.

11. Centers for Disease Control and Prevention. 1988–1994 National Health and Nutrition Examination Survey. National Center for Health Statistics.

12. See note 10 above.

13. Rice, DP, and MacKenzie, EJ. Cost of Injury in the United States: Report to Congress. San Francisco, CA: Institute for Health and Aging, University of California and Injury Prevention Center, The Johns Hopkins University, 1989.

14. 1996 California Office of Statewide Health Planning and Development (OSHPD) Hospital Discharge Dataset.

15. See note 14 above.

16. Domestic Violence Survey of Los Angeles County Female Employees, Los Angeles County Commission for Women, 1998.

17. McGinnis, M, Foege, WH. Actual causes of death in the United States. JAMA 1993:270(18):2207-12.

18. Center for Disease Control and Prevention. Diabetes Surveillance, 1997. Atlanta, GA. Department of Health and Human Services, 1997.

19. PHIS Data File, Data Collection and Analysis Unit, Los Angeles County Department of Health Services.

APPENDIX: HEALTH DATA RESOURCES

Acute Communicable Disease Control Unit
Los Angeles County Department of Health Services—Public Health
(213) 240-7941

AIDS Case Registry
Office of AIDS
California Department of Health Services
(916) 322-1065

Alcohol and Drug Program Administration
Los Angeles County Department of Health Services—Public Health
(213) 744-6585

Burden of Disease Unit
Center for Population and Development Studies
Harvard School of Public Health
(617) 495-8498

California Cancer Registry
California Department of Health Services
(916) 779-0300

Cancer Prevention and Nutrition Program
Research Unit
California Department of Health Services
(916) 323-4586

Cancer Surveillance Program, Los Angeles County
Department of Preventive Medicine
University of Southern California
(213) 342-2300

Cancer Surveillance Section
Division of Chronic Disease and Injury Control
California Department of Health Services
(916) 327-4663

CATI Unit
California Behavioral Risk Factor Survey
Cancer Surveillance Section
California Department of Health Services
(916) 327-4643

Centers for Disease Control and Prevention
Epidemiology Program Office
MMWR Series
U.S. Department of Health Services
(800) 311-3435
http://www2.cdc.gov/mmwr/

Centers for Disease Control and Prevention
Lead Poisoning Prevention Program
Division of Environmental Hazards and Health Effects
National Center for Environmental Health
U.S. Department of Health and Human Services
(770) 488-7330
http://www.cdc.gov/nceh/programs/lead/lead.htm

Centers for Disease Control and Prevention
National Center for Health Statistics
Division of Vital Statistics
Monthly Vital Statistics Report Series
U.S. Department of Health Services
(301) 436-8500

Children's Planning Council
Los Angeles County
(213) 893-0421

Criminal Justice Statistics Center
California Department of Justice
(916) 227-3509

Demographic Research Unit
California State Department of Finance
(916) 322-4651

Education, California Department of
(916) 327-0219

Education, Office of
Los Angeles County
(562) 922-6111
http://www.lacoe.edu

Environmental Health
Los Angeles County Department of Health Services
(888) 700-9995
http://www.lapublichealth.org

Family Health Programs/ Maternal & Child Health
Los Angeles County Department of Health Services—Public Health
(213) 639-6400
http://www.lapublichealth.org

Health Assessment and Epidemiology, Office of
Health Assessment, Epidemiology & Data Collection and Analysis Units
Los Angeles County Department of Health Service—Public Health
(213) 240-7785
http://www.lapublichealth.org

Health Insurance Policy Program
Center for Health and Public Policy Studies
University of California, Berkeley
(510) 643-1675

Health Information and Research, Office of
Center for Health Statistics
California Department of Health Services
(916) 445-6355
http://www.dhs.cahwnet.gov

HIV Epidemiology Program, AIDS Case Registry
Los Angeles County Department of Health Services—Public Health
(213) 351-8196
http://www.lapublichealth.org

APPENDIX

Injury Surveillance and Epidemiology Section
Epidemiology and Prevention for Injury Control Branch
California Department of Health Services
(916) 323-3642

Injury and Violence Prevention Program
Los Angeles County Department of Health Services—Public Health
(213) 351-5224

Lead Programs
Epidemiology Information
Los Angeles County Department of Health Services—Public Health
(213) 738-2816

Maternal and Child Health Branch
California Department of Health Services
(916) 657-0324

Mental Health, Department of
Los Angeles County
(800) 854-7771

Nutrition Program
Los Angeles County Department of Health Services—Public Health
(213) 250-8621

Sexually Transmitted Disease Control Branch
California Department of Health Services
(916) 324-3187

Sexually Transmitted Disease Program
Los Angeles County Department of Health Services—Public Health
(213) 744-3070

South Coast Air Quality Management District (SQAQMD)
(909) 396-2000

Statewide Health Planning & Development, Office of
Healthcare Information Division
(916) 322-2814
http://www.oshpd.state.ca.us

Tobacco Control Program
Los Angeles County Department of Health Services
(213) 351-7786

Tobacco Control Section
California Department of Health Services
(916) 324-6099

Tuberculosis Control Branch
Division of Communicable Disease Control
California Department of Health Services
(510) 540-2973

Tuberculosis Control Program
Los Angeles County Department of Health Services—Public Health
(213) 744-6160

UCLA Center for Health Policy Research
(310) 825-5491

UCLA Drug Abuse Research Center
Neuropsychiatric Institute
(310) 445-0874

United Way of Greater Los Angeles
(213) 630-2819

U.S. Census Bureau
United States Department of Commerce
(301) 457-3030