



MORTALITY IN LOS ANGELES COUNTY 2010

Leading Causes of Death and Premature Death with Trends for 2001-2010

A PUBLICATION OF THE LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH



What's Inside

Message from the Director	1
Data highlights for 2010	2
Trend data highlights for 2001-2010	3
Background	4
User's guide to cause of death and premature death figures	8

MORTALITY 2010

Figure 1. Ten leading causes of death and premature death	9	Figure 10. Leading causes of death and premature death, by service planning area of residence	21
Figure 2. Ten leading causes of death and premature death, by gender	10	Figure 11. Comparison of the leading causes of death and premature death, by service planning area of residence	23
Figure 3. Ten leading causes of death and premature death, by race/ethnicity	11	Figure 12. Comparison of the leading causes of premature death, by service planning area of residence and gender	25
Figure 4. Comparison of the leading causes of death and premature death, by race/ethnicity	13	Figure 13. Death rates for selected causes of death, by service planning area of residence	27
Figure 5. Comparison of the leading causes of death and premature death for males, by race/ethnicity	14	Figure 14. Comparison of the leading causes of death, by health district of residence	29
Figure 6. Comparison of the leading causes of death and premature death for females, by race/ethnicity	15	Figure 15. Comparison of the leading causes of premature death, by health district of residence	31
Figure 7. Comparison of the leading causes of death, by age group	16	Figure 16. Death rates for selected causes of death, by health district of residence	33
Figure 8. Leading causes of death for males, by age group and race/ethnicity	17		
Figure 9. Leading causes of death for females, by age group and race/ethnicity	19		

MORTALITY TRENDS 2001-2010

Figure T1. Comparison of the leading causes of death, by year	35
Figure T2. Comparison of the leading causes of premature death, by year	36

*At a glance***ALZHEIMER'S DISEASE**

Figure T3. Trends in Alzheimer's disease mortality	37
----------------------------------------------------	----

BREAST CANCER

Figure T4. Trends in breast cancer (female) mortality	39
-------------------------------------------------------	----

COLORECTAL CANCER

Figure T5. Trends in colorectal cancer mortality	41
--------------------------------------------------	----

CORONARY HEART DISEASE

Figure T6. Trends in coronary heart disease mortality	43
-------------------------------------------------------	----

DIABETES

Figure T7. Trends in diabetes mortality	45
-----------------------------------------	----

DRUG OVERDOSE

Figure T8. Trends in drug overdose mortality	47
----------------------------------------------	----

EMPHYSEMA/COPD

Figure T9. Trends in emphysema/COPD mortality	49
-----------------------------------------------	----

HOMICIDE

Figure T10. Trends in homicide mortality	51
------------------------------------------	----

HIV (HUMAN IMMUNODEFICIENCY VIRUS)

Figure T11. Trends in HIV mortality	53
-------------------------------------	----

LIVER DISEASE

Figure T12. Trends in liver disease mortality	55
-----------------------------------------------	----

LUNG CANCER

Figure T13. Trends in lung cancer mortality	57
---------------------------------------------	----

MOTOR VEHICLE CRASH

Figure T14. Trends in motor vehicle crash mortality	59
-----------------------------------------------------	----

PNEUMONIA/INFLUENZA

Figure T15. Trends in pneumonia/influenza mortality	61
-----------------------------------------------------	----

STROKE

Figure T16. Trends in stroke mortality	63
----------------------------------------	----

SUICIDE

Figure T17. Trends in suicide mortality	65
-----------------------------------------	----

ALL CAUSES OF DEATH

Figure T18. Trends in mortality from all causes of death	67
----------------------------------------------------------	----

TREND GRAPH

Figure T19. Trends in death rates of leading causes of death	68
--------------------------------------------------------------	----

Appendix 1. Sample California Certificate of Death	69
----------------------------------------------------	----

Appendix 2. Los Angeles County population estimates and United States standard population	70
-------------------------------------------------------------------------------------------	----

Appendix 3. Map of Los Angeles County: Service planning area (SPA) boundaries	71
-------------------------------------------------------------------------------	----

Appendix 4. Incorporated cities in Los Angeles County, by service planning area	72
---------------------------------------------------------------------------------	----

Message from the Director



I am pleased to report that the number of deaths among residents of Los Angeles County continues to decline. During the 10-year period from 2001 through 2010, the death rate in the County decreased 19%. During the same time period, the United States death rate decreased only 13%. The reductions in Los Angeles County reflect the important work of the Department and our partners in educating the community about how to reduce their risk of certain conditions

and to adopt healthier lifestyles, ensuring access to quality medical screenings and treatment, and creating communities that promote health.

In 2010, the age-adjusted death rate in Los Angeles County was 615 deaths per 100,000 population, which was substantially below the United States rate of 747 deaths per 100,000 population. Notable declines in the death rate from many of the leading causes of death contributed to the overall decline. For example, from 2001 through 2010, there was a 37% decrease in the death rate from coronary heart disease, a 35% decrease in the death rate from stroke, and a 22% decrease in the death rate from lung cancer. Death rates in the County were at or below national goals established by Healthy People 2010 for female breast cancer, coronary heart disease, lung cancer, motor vehicle crash, and stroke.

Although there have been improvements, we face challenges in making certain that all Angelenos benefit equally. The lowest overall death rate (354 deaths per 100,000 population) was among Asian/Pacific Islander women while the highest overall death rate (1,087 deaths per 100,000 population) was among black men. Geographically, the lowest death rate, 497 deaths

per 100,000 population, was in the West Service Planning Area while the highest death rate, 799 deaths per 100,000, was in the Antelope Valley Service Planning Area. Some residents are at higher risk of death than others because of their health behaviors, the environment in which they live, their education and employment opportunities, and their access to medical care. We continue to work with our partners to close this gap. While some death rates decreased, the death rate from Alzheimer's disease continued to increase, and there has been little improvement in recent years in the death rates from preventable injuries such as drug overdoses and suicide. Violence, particularly gun violence, is a leading cause of premature mortality (especially for black and Hispanic men), and disproportionately affects communities of lower socioeconomic status. Violence prevention initiatives for communities and individuals can help to increase life expectancy in those communities.

Measures of mortality are important indicators for monitoring the health of a community. In Los Angeles County, we continuously review and analyze the information collected from death certificates for residents of the County.

This report, *Mortality in Los Angeles County 2010: Leading Causes of Death and Premature Death with Trends for 2001-2010*, is a comprehensive analysis and summary of the most recent year's finalized data. This resource can be used to help identify priorities for action and guide our efforts to improve the public's health. We hope the information in this report will help us work collaboratively to formulate local and state policies, and implement programs to improve and enrich the lives of all Angelenos.

Jonathan E. Fielding

Jonathan E. Fielding, MD, MPH
DIRECTOR AND HEALTH OFFICER

Data Highlights for 2010

Unless otherwise noted, rates are age-adjusted

- In 2010, there were 56,538 deaths—a 1.9% decrease from 2009. The death rate was 615 deaths per 100,000 population compared with 747 deaths per 100,000 in the U.S. (**See Note on Page 6 for information about the 2010 County population and the impact on death rates in 2010.**)
- The number of deaths among men and women was nearly equal—28,772 men and 27,766 women—but overall, men died at a younger age than women. The median age at death for men was 73 years compared with 82 years for women.
- Overall, whites and Asians/Pacific Islanders lived longer than blacks and Hispanics. The median age at death was 81 years for whites, 80 years for Asians/Pacific Islanders, and 70 years for both blacks and Hispanics.
- The highest overall death rate, 1,087 deaths per 100,000 population, was among black men. This was more than three times higher than the rate among Asian/Pacific Islander women, who had the lowest death rate at 354 deaths per 100,000 population.
- On an average day in Los Angeles County, 155 people died, including 35 from coronary heart disease, 9 from injuries (homicide, suicide, and unintentional), and 9 from stroke. Five of the deaths were among children or young adults less than 25 years of age.
- Twenty-two percent of the deaths in 2010 were caused by coronary heart disease (12,635 deaths), which was the leading cause of death and premature death.
- Of the deaths caused by cancer, lung cancer was the most common (2,941 deaths), followed by colorectal cancer (1,285 deaths) and breast cancer (1,116 deaths). There were 13,860 deaths from all types of cancer combined.
- Diabetes (1,894 deaths) remained an important cause of death and premature death for both men and women, and for all race/ethnic groups. The death rates were highest for blacks and Hispanics, and higher for men than for women.
- Accidents (also called unintentional injuries)—primarily motor vehicle crashes and drug overdoses—were the leading cause of death among people aged 1 to 44 years (739 deaths). In this age group, all types of injuries combined caused 42% of the deaths (739 unintentional injuries, 534 homicides, and 364 suicides).
- Homicide was the leading cause of death for 15- to 24-year-olds, the second-leading cause of death for 25- to 44-year-olds, and the leading cause of premature death for Hispanic and black men.
- Firearms caused 796 deaths: 77% of the 651 homicides and 35% of the 792 suicides.
- Alzheimer's disease was the third-leading cause of death for women (1,491 deaths), but it was the ninth-leading cause of death for men (751 deaths).
- HIV remained an important cause of premature death for black men and in the Central Health District.
- Death rates were higher for men than for women for every leading cause of death and premature death, except for Alzheimer's disease and breast cancer.
- For most of the leading causes of death and premature death, the highest death rate was among black men, and the lowest rate was among Asian/Pacific Islander or Hispanic women.
- Death rates in the Antelope Valley and South Service Planning Areas were generally higher than in other areas of the County.
- Overall, 44% of the deaths were among persons less than 75 years of age. These 24,640 deaths contributed more than 430,000 years of life lost before age 75.

Trend Data Highlights for 2001-2010

Unless otherwise noted, rates are age-adjusted

- During the last 10 years, the overall death rate in the County decreased 19%, from 756 to 615 deaths per 100,000 population. The U.S. death rate decreased 13%, to 747 deaths per 100,000 population, during the same time period.
- There was a notable decrease (37%) in the death rate from coronary heart disease—the leading cause of death and premature death—from 220 deaths per 100,000 in 2001 to 138 in 2010. The death rates from coronary heart disease among residents of the Antelope Valley and South Service Planning Areas were consistently higher than other areas.
- Coronary heart disease was the leading cause of death and premature death every year for the last 10 years.
- Death rates from stroke, the second-leading cause of death, decreased 35% overall during the last 10 years. The largest decrease (41%) was among white women. While the rate for blacks decreased 34% from 82 to 54 deaths per 100,000 population, the 2010 rate still exceeded the Healthy People 2010 goal.
- Stroke was the second-leading cause of death every year for the last 10 years.
- Since 2001, the overall death rate from lung cancer declined by 22%. The largest decrease (30%) was among black men, but in 2010, their death rate of 66 deaths per 100,000 population still exceeded the Healthy People 2010 goal.
- From 2001 through 2010, the overall death rate from diabetes decreased 13% but, among women, the decrease was 21%. Throughout the 10-year time period, black men consistently had the highest death rate.
- For the last 10 years, the four leading causes of death have remained unchanged: coronary heart disease, stroke, lung cancer, and emphysema.
- Coronary heart disease and homicide were the two leading causes of premature death during the last 10 years. In 2010, suicide replaced motor vehicle crash as the third-leading cause of premature death.
- Since 2001, the number of deaths from Alzheimer's disease has more than doubled from 905 in 2001 to 2,242 in 2010.
- The number of homicides peaked at 1,148 in 2002, and began declining in 2007 after several years of little change. In 2010, there were 651 homicides. The overall homicide rate decreased to 6 deaths per 100,000 population in 2010, but the homicide rate among black men remained very high—45 deaths per 100,000 population.
- Drug overdose has been one of the leading causes of premature death every year for the past 10 years. In recent years, the death rate has remained unchanged.
- The suicide rate has changed little during the past 10 years. Since 2009, the number of suicides exceeded the number of homicides. The number of suicides peaked in 2008. The suicide rate was consistently highest for white men.
- HIV has not been among the overall leading causes of death or premature death since 2004; in 2010 it remained an important cause of death for some groups.

Background

When a death occurs in California, state law requires that a certificate of death be filed within eight days of death and before a decedent is buried or cremated. The certificate of death is a legal document that serves as a permanent record of the death of an individual. To complete a certificate of death, the funeral director or medical facility collects identifying and demographic information about the decedent from family members and medical records. The decedent's physician or the coroner provides information about the medical conditions or events that precipitated the death.

When the death certificate is complete, it is filed with the local registrar using the Electronic Death Registration System.¹ Then, the local registrar submits the document to the State Registrar of Vital Records, and state records are aggregated by the National Center for Health Statistics to create an annual national mortality database. There is a delay of about two years before the annual national mortality database is available for use, although the use of electronic death registration systems are helping to shorten this timeframe. Errors, omissions, and inaccuracies can occur when the death certificate is completed, and later when it is processed. Some of these errors are detected and corrected; others are not.

This report summarizes information obtained from death certificates (Appendix 1) for all Los Angeles County residents who died in 2010, and mortality trends for 2001 through 2010. While it cannot provide information about every cause of death, it lays the groundwork for future efforts and provides valuable information for public health and medical research, evaluation of prevention and intervention programs, community needs assessments, policy development, and program planning. Death certificate data represent an important endpoint in the spectrum of disease and help us to better understand the burden of disease in our community. Because death certificates are required by state law, they provide a readily available, and a consistently and continuously collected source of information on a wide range of health conditions.

PREMATURE DEATH: WHAT IS IT?

We expect most people to live a long life, but many do not. In 2010, almost half (44%) of the people who died were less than 75 years old. To quantify the impact of early, or premature, death we must consider how long a person was expected to live. For this report, we set our expected lifespan at 75 years of age, a standard cut-off used in public health. Ideally, most people will live longer than 75 years.

¹ The Electronic Death Registration System (EDRS) is an Internet system for death certificate origination and registration that enables coroners, funeral directors, doctors, and hospitals to submit death certificates for registration 24 hours per day. This results in improved efficiency, faster registration, and improved data quality. EDRS was first implemented in Los Angeles County in October 2007.

MEASURES

This report provides the number of deaths, death rates, and years of life lost before age 75 for the leading causes of death and premature death for 2010 and the 10-year period, 2001 through 2010, for Los Angeles County residents. The variables included in the analysis were age at death, gender, race/ethnicity, service planning area and health district of residence, and underlying cause of death. To protect the identity of decedents, the exact number of deaths was not provided if there were fewer than five deaths in a particular group.

If we expect everyone to live to at least 75 years of age, then people who die younger are considered to have died prematurely. For example, a person who died at 63 years of age lost 12 years of expected life, while a person who died at 80 exceeded the expectation and did not lose any years of expected life. For everyone who died during the year, we calculated the years of expected life that were lost if they died before 75. Then, by adding up the total years of life lost for each cause of death, we identified those causes of death responsible for the greatest amount of premature death. Calculations of years of life lost were limited to persons who were at least 1 year of age at the time of death. Infants less than 1 year of age were excluded because prevention of infant mortality differs from prevention of other causes of early mortality.

A standardized coding system, the International Classification of Diseases (ICD), was used to classify causes of death and to group similar causes of death into categories for analysis.² The cause of death groups were based on categories developed by the National Center for Health

Statistics.³ To identify the leading causes of death, the cause of death groups were ranked by the number of deaths in each group. If two groups had the same number of deaths, then the cause of death that resulted in the most years of life lost was ranked first. To identify the leading causes of premature death, the groups were ranked by the years of life lost in each group. If two causes of death resulted in the same number of years of life lost, then the group that resulted in the greatest number of deaths was ranked first. The ICD tenth revision was used for classifying deaths that occurred in 1999 or later. From 1979 through 1998, the ICD ninth revision was in use. To facilitate comparisons with earlier years, ninth and tenth revision codes are provided for each of the leading causes of death and premature death.

When a person dies, it is likely that several factors or conditions contributed to the death. For this report, we analyzed the underlying cause of death, which is the condition that most directly caused the death. By using a single cause of death rather than considering all the conditions present at the time of death, the number of deaths and rates in this report do not reflect the full impact of certain diseases and conditions.⁴

Healthy People is a set of national health objectives for improving the health of all Americans, which are updated every 10 years. First released for 1990, Healthy People objectives were updated for 2000, 2010, and 2020. Some figures in this report include national goals established by Healthy People 2010.⁵

2 International statistical classification of diseases and related health problems, tenth revision. Geneva: World Health Organization, 1992.

3 Instruction manual, Part 9. ICD-10 cause-of-death lists for tabulating mortality statistics (updated October 2007 to include WHO updates to ICD-10 for data year 2007). www.cdc.gov/nchs/data/dvs/Part9InstructionManual2007.pdf.

4 Redelings MD, Sorvillo F, Simon P. A comparison of underlying cause and multiple causes of death: U.S. vital statistics, 2000-2001. *Epidemiology*. 2006 Jan;17(1):100-3.

5 Healthy People, Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. www.healthypeople.gov.

DEFINITIONS AND TECHNICAL NOTES

- **Age-adjusted death rate:** There are age-related differences in the rates at which most health conditions occur. Some conditions are more common among young people, while others are more common among older people.

Age adjustment is a technique for removing the effects of age from crude rates so they can be compared. Age adjustment is used to compare two or more populations at one point in time or one population at two or more points in time. To control for differences in the age distribution of the populations being compared, the death rates for each population group are applied to a standard population in order to create a comparable summary measure of mortality. In this report, age-adjusted death rates were calculated using the 2000 standard population published by the National Center for Health Statistics (Appendix 2).⁶ All rates were rounded to the nearest whole number; therefore, rates that appear to be the same may differ by a fractional amount. Rate change percentages were calculated before rates were rounded and may differ slightly from rate change percentages calculated from rates rounded to the nearest whole number.

- **Age-specific death rate:** The number of deaths in a specific age group divided by the population at risk in that age group.
- **Death rate:** The number of deaths divided by the population at risk. Death rates make comparisons between different population groups more meaningful than frequencies alone. This type of rate is also called the crude death rate.
- **Health District:** Using census tract boundaries, the County is divided into 26 health districts that are responsible for planning and providing public health services according to the health needs of the local communities (Appendix 3).

- **Median:** The midpoint of a set of values; the point at which, when the values are put in numerical order, half of the values fall above and half fall below. The median of 25, 27, 28, 36, and 41 is 28.

- **Service Planning Area (SPA):** Health districts are aggregated to form service planning areas. The County is divided into eight service planning areas (Appendices 3 and 4).

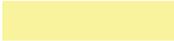
Note: From 2001–2009, the population of the County was estimated to increase each year, but the 2010 Census enumeration resulted in a 5.7% *reduction* in the County population compared with the estimate for 2009. The population for prior years (2001–2008) was likely overestimated as well. Because the 2009 population was overestimated, the death rates shown for 2009 underestimate the true rates. The rates for prior years may also underestimate the true rates but likely to a lesser degree. Changes in death rates from 2009 to 2010 should be interpreted with caution. Most apparent increases in rates from 2009 to 2010 are likely to be artifactual.

The decennial census is the basis for annual estimates of the total population of Los Angeles County, the population groups used in this report, and the standard population used for age adjustment. The decennial census may not accurately count every resident of the County, and some groups may experience less accurate enumeration than others. Following the decennial census, statistical methods are used to estimate the population for the years between the censuses. This may also result in inaccuracies that ultimately affect the crude and adjusted death rates.

⁶ Hoyert DL, Heron MP, Murphy SL, Kung H. Deaths: Final Data for 2003. National vital statistics reports; vol 54 no 13. Hyattsville, MD: National Center for Health Statistics. 2006.

USER'S GUIDE TO COLOR

To make the figures easier to understand and interpret, color codes have been used throughout the report. To make it easier to see the overall impact of cancer, the same color is used for all cancers regardless of the type. All unintentional injuries (accidents), such as drug overdoses or motor vehicle crashes, also have the same color code.

	Coronary heart disease
	Stroke
	Cancer
	Emphysema/chronic obstructive pulmonary disease (COPD)
	Pneumonia/influenza
	Diabetes
	Alzheimer's disease
	Homicide
	Unintentional injury (accident)
	Self-inflicted injury (suicide)
	Liver disease
	Human immunodeficiency virus (HIV)
	Birth defect
	Perinatal period condition
	Other conditions

HOW TO GET MORE INFORMATION

L.A. HealthDataNow! is an online query system to facilitate access to County mortality data. Users can query the system to obtain mortality statistics by cause of death, demographic group, and geographic area within the County. The system is accessible at <http://dqs.publichealth.lacounty.gov/>.

User's Guide

The following series of figures compares the 10 leading causes of death with the 10 leading causes of premature death (death before age 75) for the County overall and selected population groups. These figures are designed to facilitate comparisons within population groups. Other figures are designed to facilitate comparisons between population groups.

A The 10 leading causes of death are shown from highest (top) to lowest (bottom) based on the number of deaths from each cause.

B The 10 leading causes of premature death are shown from highest (top) to lowest (bottom) based on the number of years of life lost before age 75 from each cause.

- 1 The cause of death group coded by color (see Page 7).
- 2 The number of deaths due to the specific cause; e.g., there were 12,635 deaths from coronary heart disease and 2,622 deaths from emphysema/COPD.
- 3 The premature death rank for this cause of death; e.g., liver disease was the ninth-ranked cause of death (1,171 deaths), but was the fifth-ranked cause of premature death (19,425 years of life lost before age 75).
- 4 The cause of premature death group coded by color (see Page 7).
- 5 The total years of life lost before age 75 for the specific cause of death.
- 6 The death rank for this cause of premature death; e.g., stroke was the eighth-ranked cause of premature death, resulting in 14,709 years of life lost before age 75, but was the second-ranked cause of death (3,278 deaths).

A				B			
Leading causes of death				Leading causes of premature death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost	Death rank
1	Coronary heart disease	12,635	1.	1	Coronary heart disease	57,607	1.
2	Stroke	3,278	8.	2	Homicide	28,442	17.
3	Lung cancer	2,941	7.	3	Suicide	22,390	14.
4	Emphysema/COPD	2,622	15.	4	Motor vehicle crash	19,750	18.
5	Alzheimer's disease	2,242	45.	5	Liver disease	19,425	9.
6	Pneumonia/influenza	1,964	21.	6	Drug overdose	18,652	19.
7	Diabetes	1,894	10.	7	Lung cancer	18,100	3.
8	Colorectal cancer	1,285	11.	8	Stroke	14,709	2.
9	Liver disease	1,171	5.	9	Breast cancer	12,999	10.
10	Breast cancer	1,116	9.	10	Diabetes	12,221	7.

Figure 1. Ten leading causes of death and premature death

Los Angeles County
56,538 total deaths
430,926 years of life lost*

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	12,635	1.	1.	Coronary heart disease	57,607	1.
2.	Stroke	3,278	8.	2.	Homicide	28,442	17.
3.	Lung cancer	2,941	7.	3.	Suicide	22,390	14.
4.	Emphysema/COPD	2,622	15.	4.	Motor vehicle crash	19,750	18.
5.	Alzheimer's disease	2,242	45.	5.	Liver disease	19,425	9.
6.	Pneumonia/influenza	1,964	21.	6.	Drug overdose	18,652	19.
7.	Diabetes	1,894	10.	7.	Lung cancer	18,100	3.
8.	Colorectal cancer	1,285	11.	8.	Stroke	14,709	2.
9.	Liver disease	1,171	5.	9.	Breast cancer	12,999	10.
10.	Breast cancer	1,116	9.	10.	Diabetes	12,221	7.

*Excludes infants less than 1 year of age and persons of unknown age.

**Death before age 75 years.

- There were almost four times more deaths from coronary heart disease (12,635 deaths) than there were from stroke (3,278 deaths), the second-leading cause of death.
- Together, cancer and coronary heart disease caused nearly half (47%) of all the deaths. All cancers combined (13,860 deaths) caused more deaths than coronary heart disease (12,635 deaths).
- Injuries (accidents [1,910 deaths], suicide [792 deaths], and homicide [651 deaths]) caused 23% of the years of life lost, but only 6% of the deaths, highlighting the dramatic impact of injuries, which are largely preventable, on premature death.
- Alzheimer's disease was an increasingly important cause of death, although it had limited impact on premature death.

Figure 2. Ten leading causes of death and premature death, by gender

Males				Females			
28,772 total deaths				27,766 total deaths			
278,268 years of life lost*				152,658 years of life lost*			
Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	6,651	1.	1.	Coronary heart disease	42,703	1.
2.	Lung cancer	1,602	7.	2.	Homicide	24,589	12.
3.	Stroke	1,405	8.	3.	Suicide	17,674	11.
4.	Emphysema/COPD	1,246	14.	4.	Motor vehicle crash	14,538	17.
5.	Diabetes	993	9.	5.	Liver disease	13,806	7.
6.	Pneumonia/influenza	910	21.	6.	Drug overdose	13,668	16.
7.	Liver disease	787	5.	7.	Lung cancer	10,545	2.
8.	Prostate cancer	766	25.	8.	Stroke	8,238	3.
9.	Alzheimer's disease	751	44.	9.	Diabetes	7,451	5.
10.	Colorectal cancer	663	11.	10.	HIV	6,137	24.

Males				Females			
28,772 total deaths				27,766 total deaths			
278,268 years of life lost*				152,658 years of life lost*			
Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	5,984	1.	1.	Coronary heart disease	14,904	1.
2.	Stroke	1,873	4.	2.	Breast cancer	12,955	6.
3.	Alzheimer's disease	1,491	41.	3.	Lung cancer	7,555	5.
4.	Emphysema/COPD	1,376	15.	4.	Stroke	6,471	2.
5.	Lung cancer	1,339	3.	5.	Liver disease	5,619	14.
6.	Breast cancer	1,109	2.	6.	Motor vehicle crash	5,212	21.
7.	Pneumonia/influenza	1,054	22.	7.	Drug overdose	4,984	22.
8.	Diabetes	901	8.	8.	Diabetes	4,770	8.
9.	Colorectal cancer	622	10.	9.	Suicide	4,716	26.
10.	Hypertension	547	24.	10.	Colorectal cancer	4,208	9.

*Excludes infants less than 1 year of age and persons of unknown age.

**Death before age 75 years.

Figure 3. Ten leading causes of death and premature death, by race/ethnicity

White 28,738 total deaths 148,194 years of life lost*				Hispanic 13,751 total deaths 164,932 years of life lost*			
Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	6,845	1.	1.	Coronary heart disease	24,294	1.
2.	Emphysema/COPD	1,743	8.	2.	Suicide	9,697	12.
3.	Lung cancer	1,655	4.	3.	Drug overdose	9,485	18.
4.	Stroke	1,534	10.	4.	Lung cancer	8,761	3.
5.	Alzheimer's disease	1,509	40.	5.	Liver disease	6,365	13.
6.	Pneumonia/influenza	1,011	20.	6.	Motor vehicle crash	5,160	25.
7.	Diabetes	667	11.	7.	Breast cancer	4,873	9.
8.	Colorectal cancer	619	9.	8.	Emphysema/COPD	3,888	2.
9.	Breast cancer	534	7.	9.	Colorectal cancer	3,766	8.
10.	Pancreatic cancer	487	12.	10.	Stroke	3,737	4.

White 28,738 total deaths 148,194 years of life lost*				Hispanic 13,751 total deaths 164,932 years of life lost*			
Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	2,555	1.	1.	Coronary heart disease	16,145	1.
2.	Stroke	780	7.	2.	Homicide	15,301	9.
3.	Diabetes	690	8.	3.	Motor vehicle crash	10,795	12.
4.	Liver disease	587	4.	4.	Liver disease	10,262	4.
5.	Lung cancer	441	12.	5.	Suicide	7,943	18.
6.	Pneumonia/influenza	399	22.	6.	Drug overdose	6,284	20.
7.	Alzheimer's disease	376	51.	7.	Stroke	5,453	2.
8.	Emphysema/COPD	345	28.	8.	Diabetes	5,225	3.
9.	Homicide	328	2.	9.	Leukemia	3,760	22.
10.	Nephritis	306	18.	10.	Breast cancer	3,568	14.

Black
7,438 total deaths
77,763 years of life lost*

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	1,721	1.	1.	Coronary heart disease	12,080	1.
2.	Stroke	446	4.	2.	Homicide	9,737	7.
3.	Lung cancer	433	3.	3.	Lung cancer	3,389	3.
4.	Diabetes	294	7.	4.	Stroke	3,252	2.
5.	Emphysema/COPD	289	13.	5.	Motor vehicle crash	2,547	19.
6.	Pneumonia/influenza	247	18.	6.	Breast cancer	2,523	9.
7.	Homicide	219	2.	7.	Diabetes	2,509	4.
8.	Colorectal cancer	195	11.	8.	Drug overdose	2,475	16.
9.	Breast cancer	189	6.	9.	HIV	1,980	17.
10.	Alzheimer's disease	186	48.	10.	Suicide	1,920	24.

*Excludes infants less than 1 year of age and persons of unknown age.

**Death before age 75 years.

Asian/Pacific Islander
6,343 total deaths
37,472 years of life lost*

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	1,451	1.	1.	Coronary heart disease	4,734	1.
2.	Stroke	501	4.	2.	Suicide	2,657	15.
3.	Lung cancer	400	3.	3.	Lung cancer	2,415	3.
4.	Pneumonia/influenza	296	19.	4.	Stroke	2,182	2.
5.	Diabetes	237	12.	5.	Breast cancer	1,966	10.
6.	Emphysema/COPD	229	34.	6.	Colorectal cancer	1,538	8.
7.	Liver cancer	187	7.	7.	Liver cancer	1,403	7.
8.	Colorectal cancer	173	6.	8.	Motor vehicle crash	1,196	18.
9.	Alzheimer's disease	167	46.	9.	Homicide	867	32.
10.	Breast cancer	138	5.	10.	Leukemia	833	17.

Figure 4. Comparison of the leading causes of death and premature death, by race/ethnicity

Leading causes of death

Race/ethnicity Number of deaths Age-adjusted death rate	#1 cause Number of deaths Age-adjusted death rate	#2 cause Number of deaths Age-adjusted death rate	#3 cause Number of deaths Age-adjusted death rate	#4 cause Number of deaths Age-adjusted death rate	#5 cause Number of deaths Age-adjusted death rate
White 28,738 667 per 100,000	Coronary heart disease 6,845 151 per 100,000	Emphysema/COPD 1,743 40 per 100,000	Lung cancer 1,655 40 per 100,000	Stroke 1,534 34 per 100,000	Alzheimer's disease 1,509 31 per 100,000
Hispanic 13,751 529 per 100,000	Coronary heart disease 2,555 111 per 100,000	Stroke 780 34 per 100,000	Diabetes 690 29 per 100,000	Liver disease 587 18 per 100,000	Lung cancer 441 18 per 100,000
Black 7,438 891 per 100,000	Coronary heart disease 1,721 208 per 100,000	Stroke 446 54 per 100,000	Lung cancer 433 51 per 100,000	Diabetes 294 35 per 100,000	Emphysema/COPD 289 35 per 100,000
Asian/Pacific Islander 6,343 429 per 100,000	Coronary heart disease 1,451 98 per 100,000	Stroke 501 34 per 100,000	Lung cancer 400 27 per 100,000	Pneumonia/influenza 296 21 per 100,000	Diabetes 237 16 per 100,000
Los Angeles County Total 56,538 615 per 100,000	Coronary heart disease 12,635 138 per 100,000	Stroke 3,278 36 per 100,000	Lung cancer 2,941 33 per 100,000	Emphysema/COPD 2,622 30 per 100,000	Alzheimer's disease 2,242 25 per 100,000

Leading causes of premature death (before age 75 years)

Race/ethnicity	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause
White	Coronary heart disease	Suicide	Drug overdose	Lung cancer	Liver disease
Hispanic	Coronary heart disease	Homicide	Motor vehicle crash	Liver disease	Suicide
Black	Coronary heart disease	Homicide	Lung cancer	Stroke	Motor vehicle crash
Asian/Pacific Islander	Coronary heart disease	Suicide	Lung cancer	Stroke	Breast cancer
Los Angeles County Total	Coronary heart disease	Homicide	Suicide	Motor vehicle crash	Liver disease

Notes: Los Angeles County Total includes persons of other or unknown race/ethnicity.

Figure 5. Comparison of the leading causes of death and premature death for males, by race/ethnicity

Males: Leading causes of death

Race/ethnicity Number of deaths Age-adjusted death rate	#1 cause Number of deaths Age-adjusted death rate	#2 cause Number of deaths Age-adjusted death rate	#3 cause Number of deaths Age-adjusted death rate	#4 cause Number of deaths Age-adjusted death rate	#5 cause Number of deaths Age-adjusted death rate
White 14,184 783 per 100,000	Coronary heart disease 3,566 192 per 100,000	Lung cancer 855 47 per 100,000	Emphysema/COPD 762 42 per 100,000	Stroke 629 35 per 100,000	Alzheimer's disease 510 28 per 100,000
Hispanic 7,448 644 per 100,000	Coronary heart disease 1,372 138 per 100,000	Liver disease 423 29 per 100,000	Diabetes 356 34 per 100,000	Stroke 346 35 per 100,000	Homicide 288 11 per 100,000
Black 3,704 1,087 per 100,000	Coronary heart disease 898 273 per 100,000	Lung cancer 228 66 per 100,000	Homicide 186 45 per 100,000	Stroke 179 56 per 100,000	Emphysema/COPD 161 50 per 100,000
Asian/Pacific Islander 3,277 532 per 100,000	Coronary heart disease 776 128 per 100,000	Lung cancer 249 39 per 100,000	Stroke 243 40 per 100,000	Pneumonia/influenza 155 27 per 100,000	Emphysema/COPD 138 24 per 100,000
All males 28,772 739 per 100,000	Coronary heart disease 6,651 175 per 100,000	Lung cancer 1,602 41 per 100,000	Stroke 1,405 38 per 100,000	Emphysema/COPD 1,246 35 per 100,000	Diabetes 993 26 per 100,000

Males: Leading causes of premature death (before age 75 years)

Race/ethnicity	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause
White	Coronary heart disease	Suicide	Drug overdose	Lung cancer	Liver disease
Hispanic	Homicide	Coronary heart disease	Motor vehicle crash	Liver disease	Suicide
Black	Homicide	Coronary heart disease	Motor vehicle crash	Lung cancer	HIV
Asian/Pacific Islander	Coronary heart disease	Suicide	Lung cancer	Stroke	Liver cancer
All males	Coronary heart disease	Homicide	Suicide	Motor vehicle crash	Liver disease

Notes: All males includes persons of other or unknown race/ethnicity.

Figure 6. Comparison of the leading causes of death and premature death for females, by race/ethnicity

Females: Leading causes of death

Race/ethnicity Number of deaths Age-adjusted death rate	#1 cause Number of deaths Age-adjusted death rate	#2 cause Number of deaths Age-adjusted death rate	#3 cause Number of deaths Age-adjusted death rate	#4 cause Number of deaths Age-adjusted death rate	#5 cause Number of deaths Age-adjusted death rate
White 14,554 568 per 100,000	Coronary heart disease 3,279 116 per 100,000	Alzheimer's disease 999 32 per 100,000	Emphysema/COPD 981 38 per 100,000	Stroke 905 32 per 100,000	Lung cancer 800 35 per 100,000
Hispanic 6,303 440 per 100,000	Coronary heart disease 1,183 90 per 100,000	Stroke 434 32 per 100,000	Diabetes 334 24 per 100,000	Breast cancer 247 15 per 100,000	Alzheimer's disease 243 20 per 100,000
Black 3,734 748 per 100,000	Coronary heart disease 823 163 per 100,000	Stroke 267 53 per 100,000	Lung cancer 205 41 per 100,000	Breast cancer 187 36 per 100,000	Pneumonia/influenza 156 31 per 100,000
Asian/Pacific Islander 3,066 354 per 100,000	Coronary heart disease 675 77 per 100,000	Stroke 258 30 per 100,000	Lung cancer 151 18 per 100,000	Pneumonia/influenza 141 16 per 100,000	Breast cancer 137 15 per 100,000
All females 27,766 517 per 100,000	Coronary heart disease 5,984 108 per 100,000	Stroke 1,873 34 per 100,000	Alzheimer's disease 1,491 26 per 100,000	Emphysema/COPD 1,376 26 per 100,000	Lung cancer 1,339 26 per 100,000

Females: Leading causes of premature death (before age 75 years)

Race/ethnicity	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause
White	Coronary heart disease	Breast cancer	Lung cancer	Drug overdose	Suicide
Hispanic	Coronary heart disease	Breast cancer	Motor vehicle crash	Liver disease	Stroke
Black	Coronary heart disease	Breast cancer	Stroke	Lung cancer	Homicide
Asian/Pacific Islander	Breast cancer	Coronary heart disease	Stroke	Lung cancer	Suicide
All females	Coronary heart disease	Breast cancer	Lung cancer	Stroke	Liver disease

Notes: All females includes persons of other or unknown race/ethnicity.

Figure 7. Comparison of the leading causes of death, by age group

Leading causes of death

Age group Number of deaths Age-specific death rate	#1 cause Number of deaths Age-specific death rate	#2 cause Number of deaths Age-specific death rate	#3 cause Number of deaths Age-specific death rate	#4 cause Number of deaths Age-specific death rate	#5 cause Number of deaths Age-specific death rate
<1 year old 617 480 per 100,000	Low birthweight/prematurity 103 80 per 100,000	SIDS* 60 47 per 100,000	Heart defect 34 26 per 100,000	Pregnancy complication 33 26 per 100,000	Delivery complication 24 19 per 100,000
1-4 years old 106 20 per 100,000	Birth defect 24 5 per 100,000	Drowning 10 --	Homicide 10 --	Motor vehicle crash 7 --	Falls 6 --
5-14 years old 160 12 per 100,000	Leukemia 20 2 per 100,000	Motor vehicle crash 19 --	Birth defect 16 --	Homicide 14 --	Brain/CNS† cancer 12 --
15-24 years old 780 52 per 100,000	Homicide 241 16 per 100,000	Motor vehicle crash 116 8 per 100,000	Suicide 89 6 per 100,000	Drug overdose 57 4 per 100,000	Leukemia 24 2 per 100,000
25-44 years old 2,806 96 per 100,000	Suicide 272 9 per 100,000	Homicide 269 9 per 100,000	Drug overdose 217 7 per 100,000	Coronary heart disease 192 7 per 100,000	Motor vehicle crash 180 6 per 100,000
45-64 years old 11,406 478 per 100,000	Coronary heart disease 2,249 94 per 100,000	Lung cancer 700 29 per 100,000	Liver disease 655 27 per 100,000	Breast cancer 490 21 per 100,000	Stroke 478 20 per 100,000
65-74 years old 8,765 1,541 per 100,000	Coronary heart disease 1,844 324 per 100,000	Lung cancer 812 143 per 100,000	Emphysema/COPD 492 87 per 100,000	Stroke 443 78 per 100,000	Diabetes 404 71 per 100,000
75+ years old 31,889 6,411 per 100,000	Coronary heart disease 8,345 1,678 per 100,000	Stroke 2,262 455 per 100,000	Alzheimer's disease 2,132 429 per 100,000	Emphysema/COPD 1,883 379 per 100,000	Pneumonia/influenza 1,557 313 per 100,000
Los Angeles County Total 56,538 615 per 100,000**	Coronary heart disease 12,635 138 per 100,000	Stroke 3,278 36 per 100,000	Lung cancer 2,941 33 per 100,000	Emphysema/COPD 2,622 30 per 100,000	Alzheimer's disease 2,242 25 per 100,000

Notes: Los Angeles County Total includes persons of unknown age.

*Sudden Infant Death Syndrome.

†Central Nervous System.

**Age-adjusted rate.

--Number of deaths is too small to calculate a reliable rate.

Figure 8. Leading causes of death for males, by age group and race/ethnicity

		Race/ethnicity Deaths from all causes	#1 Cause Number of deaths	#2 Cause Number of deaths	#3 Cause Number of deaths
Males	0-14 years 506 deaths	White 77	Perinatal period condition 31	Birth defect 15	Brain/CNS* cancer <5
		Hispanic 310	Perinatal period condition 110	Birth defect 63	Leukemia 12
		Black 82	Perinatal period condition 34	Birth defect 7	Homicide <5
		Asian/Pacific Islander 35	Perinatal period condition 15	Birth defect 5	Leukemia <5
	15-24 years 607 deaths	White 105	Drug overdose 29	Motor vehicle crash 17	Suicide 9
		Hispanic 346	Homicide 130	Motor vehicle crash 56	Suicide 44
		Black 121	Homicide 77	Motor vehicle crash 13	Suicide 9
		Asian/Pacific Islander 32	Homicide 6	Suicide 6	Motor vehicle crash <5
	25-44 years 1,923 deaths	White 518	Suicide 89	Drug overdose 71	Coronary heart disease 42
		Hispanic 969	Homicide 117	Suicide 90	Motor vehicle crash 80
		Black 297	Homicide 79	Coronary heart disease 29	Motor vehicle crash 22
		Asian/Pacific Islander 128	Suicide 22	Coronary heart disease 15	Motor vehicle crash 8
	45-64 years 7,021 deaths	White 3,010	Coronary heart disease 797	Lung cancer 218	Liver disease 167
		Hispanic 2,106	Coronary heart disease 431	Liver disease 233	Diabetes 111
		Black 1,208	Coronary heart disease 302	Lung cancer 72	Stroke 51
		Asian/Pacific Islander 647	Coronary heart disease 131	Lung cancer 63	Liver cancer 50

65-74 years 4,936 deaths	White 2,348	Coronary heart disease 554	Lung cancer 236	Emphysema/COPD 168
	Hispanic 1,209	Coronary heart disease 273	Diabetes 92	Liver disease 76
	Black 750	Coronary heart disease 202	Lung cancer 83	Emphysema/COPD 48
	Asian/Pacific Islander 593	Coronary heart disease 130	Lung cancer 76	Stroke 40
75+ years 13,775 deaths	White 8,125	Coronary heart disease 2,172	Emphysema/COPD 505	Alzheimer's disease 473
	Hispanic 2,508	Coronary heart disease 604	Stroke 162	Diabetes 134
	Black 1,246	Coronary heart disease 364	Prostate cancer 80	Stroke 77
	Asian/Pacific Islander 1,842	Coronary heart disease 500	Stroke 150	Pneumonia/influenza 126

Notes: In each age group, the number of deaths from all causes includes persons of other or unknown race/ethnicity.

*Central Nervous System

Figure 9. Leading causes of death for females, by age group and race/ethnicity

	Race/ethnicity Deaths from all causes	#1 Cause	#2 Cause	#3 Cause	
		Number of deaths	Number of deaths	Number of deaths	
Females	0-14 years 377 deaths	White 60	Perinatal period condition 23	Birth defect 11	Motor vehicle crash 5
		Hispanic 228	Perinatal period condition 84	Birth defect 48	Motor vehicle crash 7
		Black 60	Perinatal period condition 26	Homicide 8	Birth defect 5
		Asian/Pacific Islander 27	Birth defect 7	Perinatal period condition 7	Pneumonia/influenza <5
	15-24 years 173 deaths	White 42	Drug overdose 8	Motor vehicle crash 7	Suicide 6
		Hispanic 85	Motor vehicle crash 14	Homicide 11	Leukemia 8
		Black 27	Homicide 8	Suicide <5	Motor vehicle crash <5
		Asian/Pacific Islander 17	Suicide <5	Motor vehicle crash <5	Lymphoma <5
	25-44 years 883 deaths	White 253	Suicide 32	Drug overdose 26	Breast cancer 19
		Hispanic 352	Motor vehicle crash 23	Breast cancer 22	Homicide 19
		Black 176	Coronary heart disease 18	Breast cancer 15	Drug overdose 11
		Asian/Pacific Islander 96	Breast cancer 11	Suicide 9	Stroke 8
	45-64 years 4,385 deaths	White 1,715	Coronary heart disease 203	Breast cancer 195	Lung cancer 138
		Hispanic 1,256	Coronary heart disease 165	Breast cancer 126	Liver disease 80
		Black 945	Coronary heart disease 167	Breast cancer 91	Lung cancer 69
		Asian/Pacific Islander 449	Breast cancer 73	Coronary heart disease 41	Ovarian cancer 29

65-74 years 3,829 deaths	White 1,719	Coronary heart disease 302	Lung cancer 203	Emphysema/COPD 155
	Hispanic 1,006	Coronary heart disease 164	Diabetes 84	Stroke 54
	Black 662	Coronary heart disease 132	Lung cancer 61	Stroke 45
	Asian/Pacific Islander 418	Coronary heart disease 70	Lung cancer 35	Stroke 34
75+ years 18,114 deaths	White 10,763	Coronary heart disease 2,765	Alzheimer's disease 967	Stroke 772
	Hispanic 3,376	Coronary heart disease 843	Stroke 298	Alzheimer's disease 233
	Black 1,864	Coronary heart disease 506	Stroke 145	Alzheimer's disease 123
	Asian/Pacific Islander 2,059	Coronary heart disease 559	Stroke 191	Pneumonia/influenza 127

Notes: In each age group, the number of deaths from all causes includes persons of other or unknown race/ethnicity.

Figure 10. Leading causes of death and premature death, by service planning area (SPA) of residence

Antelope Valley (SPA 1) 2,214 deaths 22,132 years of life lost				San Fernando (SPA 2) 12,032 deaths 79,668 years of life lost			
Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	499	1.	1.	Coronary heart disease	3,291	1.
2.	Emphysema/COPD	172	11.	2.	Suicide	1,456	8.
3.	Lung cancer	123	6.	3.	Motor vehicle crash	1,347	14.
4.	Stroke	114	9.	4.	Drug overdose	1,144	12.
5.	Alzheimer's disease	86	48.	5.	Homicide	950	20.

San Gabriel (SPA 3) 10,457 deaths 67,643 years of life lost				Metro (SPA 4) 5,982 deaths 48,027 years of life lost			
Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	2,270	1.	1.	Coronary heart disease	8,467	1.
2.	Stroke	650	8.	2.	Suicide	3,730	15.
3.	Lung cancer	566	3.	3.	Lung cancer	3,214	3.
4.	Emphysema/COPD	534	14.	4.	Motor vehicle crash	3,108	21.
5.	Alzheimer's disease	422	49.	5.	Homicide	3,041	25.

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	2,852	1.	1.	Coronary heart disease	11,344	1.
2.	Stroke	661	9.	2.	Suicide	4,580	14.
3.	Lung cancer	625	5.	3.	Drug overdose	3,881	20.
4.	Alzheimer's disease	606	40.	4.	Motor vehicle crash	3,806	19.
5.	Emphysema/COPD	539	17.	5.	Lung cancer	3,713	3.

West (SPA 5)

3,943 deaths
19,395 years of life lost

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	817	1.	1.	Coronary heart disease	2,527	1.
2.	Stroke	253	10.	2.	Drug overdose	1,419	18.
3.	Lung cancer	226	3.	3.	Lung cancer	1,322	3.
4.	Alzheimer's disease	210	41.	4.	Suicide	1,260	13.
5.	Pneumonia/influenza	158	23.	5.	Breast cancer	751	10.

South (SPA 6)

5,234 deaths
58,699 years of life lost

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	1,112	2.	1.	Homicide	8,603	6.
2.	Stroke	307	5.	2.	Coronary heart disease	7,027	1.
3.	Lung cancer	268	6.	3.	Motor vehicle crash	2,754	17.
4.	Diabetes	218	7.	4.	Liver disease	2,559	8.
5.	Emphysema/COPD	202	15.	5.	Stroke	2,178	2.

East (SPA 7)

6,914 deaths
55,750 years of life lost

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	1,463	1.	1.	Coronary heart disease	6,661	1.
2.	Stroke	426	6.	2.	Homicide	3,978	16.
3.	Emphysema/COPD	339	17.	3.	Liver disease	3,417	8.
4.	Diabetes	302	8.	4.	Motor vehicle crash	3,019	16.
5.	Lung cancer	299	7.	5.	Suicide	2,210	19.

South Bay (SPA 8)

9,402 deaths
73,230 years of life lost

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	2,064	1.	1.	Coronary heart disease	10,637	1.
2.	Stroke	551	7.	2.	Homicide	5,249	15.
3.	Lung cancer	529	6.	3.	Suicide	3,820	13.
4.	Emphysema/COPD	496	12.	4.	Drug overdose	3,179	18.
5.	Alzheimer's disease	339	42.	5.	Liver disease	3,152	9.

*Excludes infants less than 1 year of age and persons of unknown age.

**Death before age 75 years.

Figure 11. Comparison of the leading causes of death and premature death, by service planning area (SPA) of residence

Leading causes of death

Service Planning Area Number of deaths Age-adjusted death rate	#1 cause Number of deaths Age-adjusted death rate	#2 cause Number of deaths Age-adjusted death rate	#3 cause Number of deaths Age-adjusted death rate	#4 cause Number of deaths Age-adjusted death rate	#5 cause Number of deaths Age-adjusted death rate
SPA 1: Antelope Valley 2,214 799 per 100,000	Coronary heart disease 499 188 per 100,000	Emphysema/COPD 172 70 per 100,000	Lung cancer 123 44 per 100,000	Stroke 114 45 per 100,000	Alzheimer's disease 86 39 per 100,000
SPA 2: San Fernando 12,032 577 per 100,000	Coronary heart disease 2,852 137 per 100,000	Stroke 661 32 per 100,000	Lung cancer 625 31 per 100,000	Alzheimer's disease 606 29 per 100,000	Emphysema/COPD 539 27 per 100,000
SPA 3: San Gabriel 10,457 580 per 100,000	Coronary heart disease 2,270 124 per 100,000	Stroke 650 36 per 100,000	Lung cancer 566 32 per 100,000	Emphysema/COPD 534 30 per 100,000	Alzheimer's disease 422 23 per 100,000
SPA 4: Metro 5,982 585 per 100,000	Coronary heart disease 1,495 148 per 100,000	Stroke 311 31 per 100,000	Lung cancer 302 31 per 100,000	Diabetes 230 23 per 100,000	Pneumonia/influenza 229 23 per 100,000
SPA 5: West 3,943 497 per 100,000	Coronary heart disease 817 98 per 100,000	Stroke 253 30 per 100,000	Lung cancer 226 31 per 100,000	Alzheimer's disease 210 24 per 100,000	Pneumonia/influenza 158 19 per 100,000
SPA 6: South 5,234 762 per 100,000	Coronary heart disease 1,112 173 per 100,000	Stroke 307 48 per 100,000	Lung cancer 268 41 per 100,000	Diabetes 218 33 per 100,000	Emphysema/COPD 202 33 per 100,000
SPA 7: East 6,914 622 per 100,000	Coronary heart disease 1,463 134 per 100,000	Stroke 426 39 per 100,000	Emphysema/COPD 339 32 per 100,000	Diabetes 302 28 per 100,000	Lung cancer 299 28 per 100,000
SPA 8: South Bay 9,402 655 per 100,000	Coronary heart disease 2,064 144 per 100,000	Stroke 551 39 per 100,000	Lung cancer 529 38 per 100,000	Emphysema/COPD 496 36 per 100,000	Alzheimer's disease 339 24 per 100,000
Los Angeles County Total 56,538 615 per 100,000	Coronary heart disease 12,635 138 per 100,000	Stroke 3,278 36 per 100,000	Lung cancer 2,941 33 per 100,000	Emphysema/COPD 2,622 30 per 100,000	Alzheimer's disease 2,242 25 per 100,000

Notes: Los Angeles County Total includes persons of unknown residence.

Leading causes of premature death (before age 75 years)

Service Planning Area	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause
SPA 1: Antelope Valley	Coronary heart disease	Suicide	Motor vehicle crash	Drug overdose	Homicide
SPA 2: San Fernando	Coronary heart disease	Suicide	Drug overdose	Motor vehicle crash	Lung cancer
SPA 3: San Gabriel	Coronary heart disease	Suicide	Lung cancer	Motor vehicle crash	Homicide
SPA 4: Metro	Coronary heart disease	Suicide	Homicide	Liver disease	Drug overdose
SPA 5: West	Coronary heart disease	Drug overdose	Lung cancer	Suicide	Breast cancer
SPA 6: South	Homicide	Coronary heart disease	Motor vehicle crash	Liver disease	Stroke
SPA 7: East	Coronary heart disease	Homicide	Liver disease	Motor vehicle crash	Suicide
SPA 8: South Bay	Coronary heart disease	Homicide	Suicide	Drug overdose	Liver disease
Los Angeles County Total	Coronary heart disease	Homicide	Suicide	Motor vehicle crash	Liver disease

Notes: Los Angeles County Total includes persons of unknown residence.

Figure 12. Comparison of the leading causes of premature death, by service planning area (SPA) of residence and gender

Males: Leading causes of premature death (before age 75 years)

Service Planning Area	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause
SPA 1: Antelope Valley	Coronary heart disease	Motor vehicle crash	Suicide	Drug overdose	Liver disease
SPA 2: San Fernando	Coronary heart disease	Suicide	Drug overdose	Motor vehicle crash	Homicide
SPA 3: San Gabriel	Coronary heart disease	Suicide	Homicide	Motor vehicle crash	Lung cancer
SPA 4: Metro	Coronary heart disease	Homicide	Suicide	Drug overdose	Liver disease
SPA 5: West	Coronary heart disease	Drug overdose	Suicide	Lung cancer	Liver disease
SPA 6: South	Homicide	Coronary heart disease	Motor vehicle crash	Liver disease	Suicide
SPA 7: East	Coronary heart disease	Homicide	Liver disease	Motor vehicle crash	Suicide
SPA 8: South Bay	Coronary heart disease	Homicide	Suicide	Drug overdose	Liver disease
All males	Coronary heart disease	Homicide	Suicide	Motor vehicle crash	Liver disease

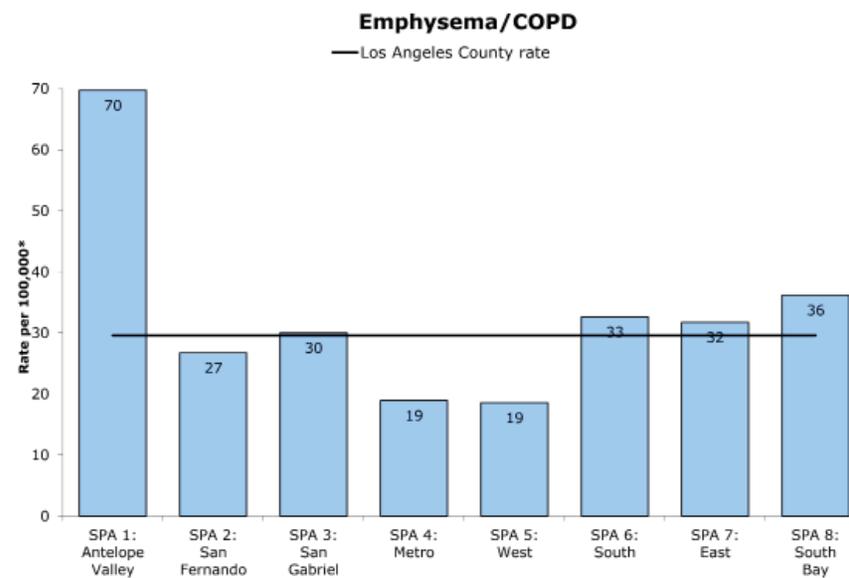
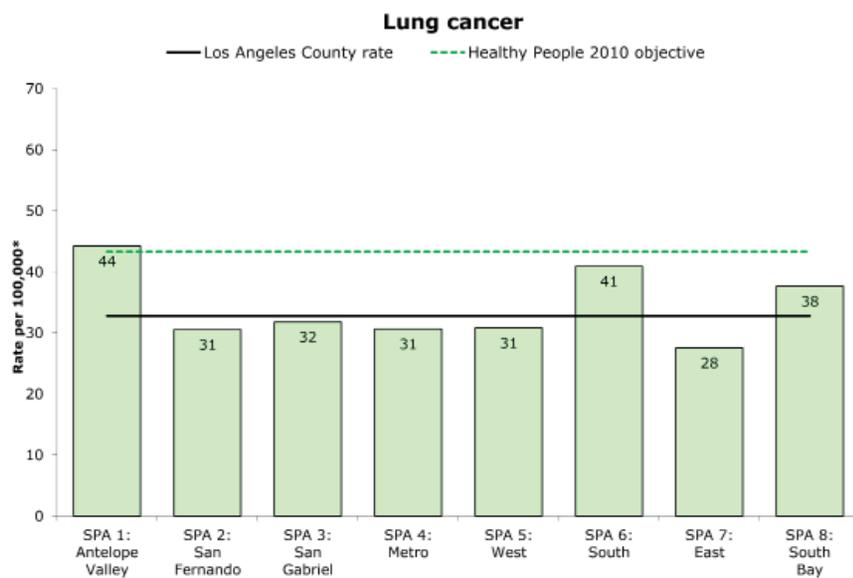
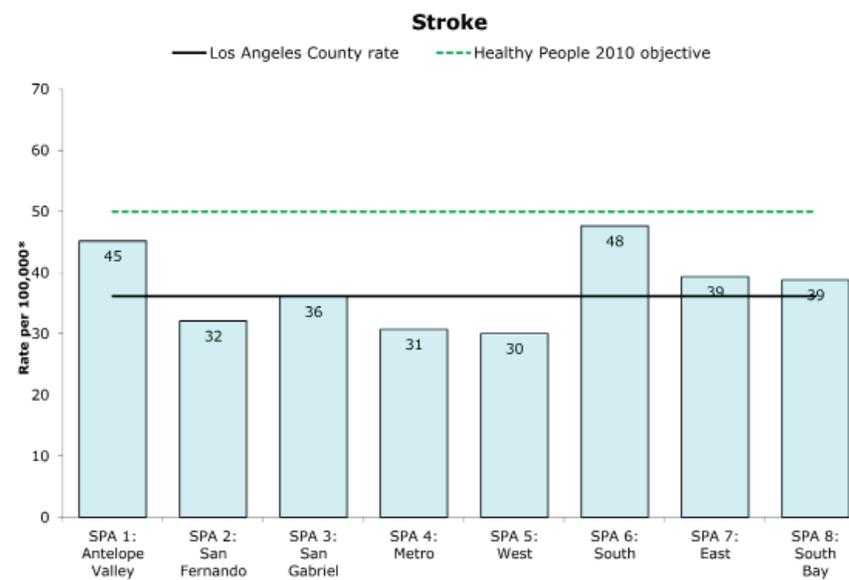
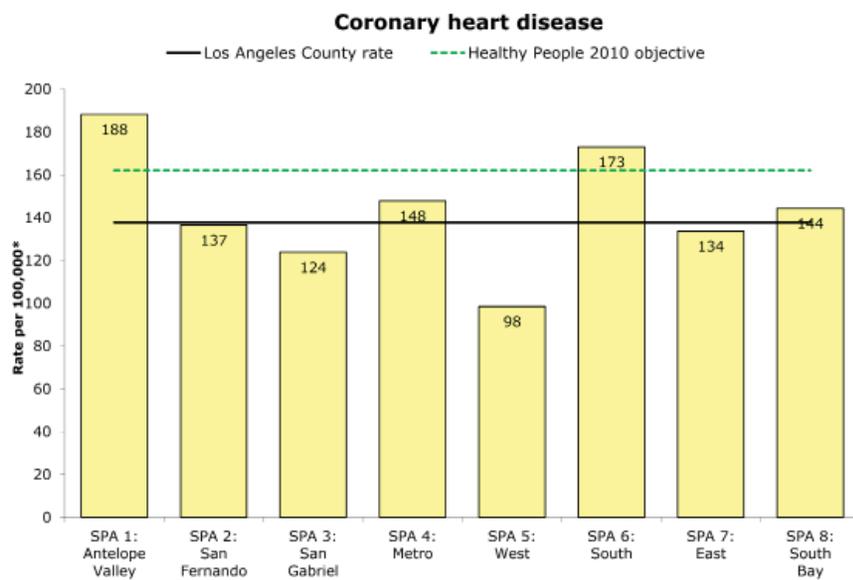
Notes: All males includes persons of unknown residence.

Females: Leading causes of premature death (before age 75 years)

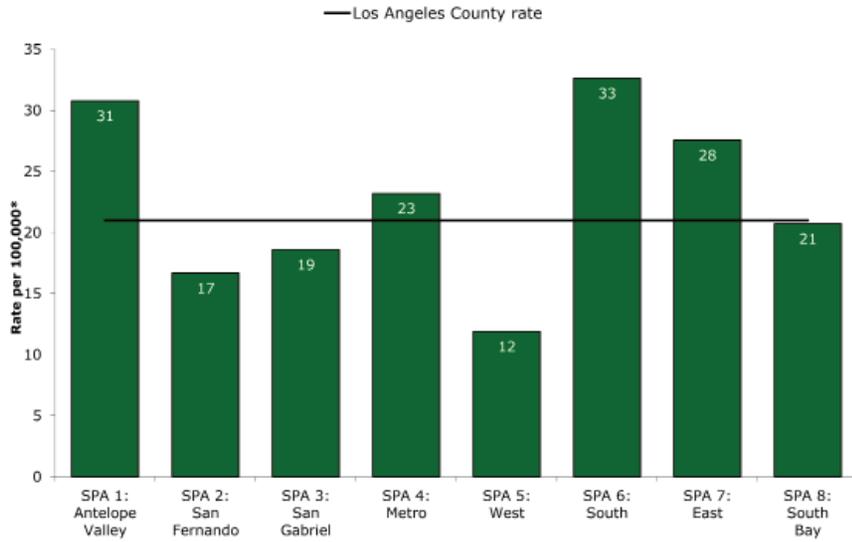
Service Planning Area	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause
SPA 1: Antelope Valley	Coronary heart disease	Breast cancer	Suicide	Drug overdose	Lung cancer
SPA 2: San Fernando	Breast cancer	Coronary heart disease	Lung cancer	Liver disease	Motor vehicle crash
SPA 3: San Gabriel	Breast cancer	Coronary heart disease	Lung cancer	Suicide	Stroke
SPA 4: Metro	Coronary heart disease	Motor vehicle crash	Breast cancer	Stroke	Lung cancer
SPA 5: West	Breast cancer	Coronary heart disease	Lung cancer	Suicide	Drug overdose
SPA 6: South	Coronary heart disease	Breast cancer	Stroke	Lung cancer	Homicide
SPA 7: East	Coronary heart disease	Breast cancer	Liver disease	Stroke	Lung cancer
SPA 8: South Bay	Coronary heart disease	Breast cancer	Lung cancer	Stroke	Drug overdose
All females	Coronary heart disease	Breast cancer	Lung cancer	Stroke	Liver disease

Notes: All females includes persons of unknown residence.

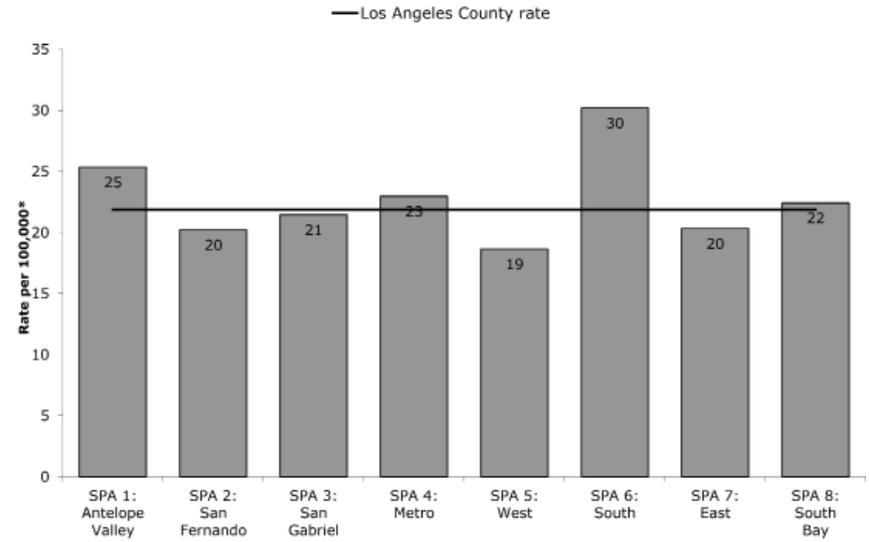
Figure 13. Death rates for selected causes of death, by service planning area (SPA) of residence



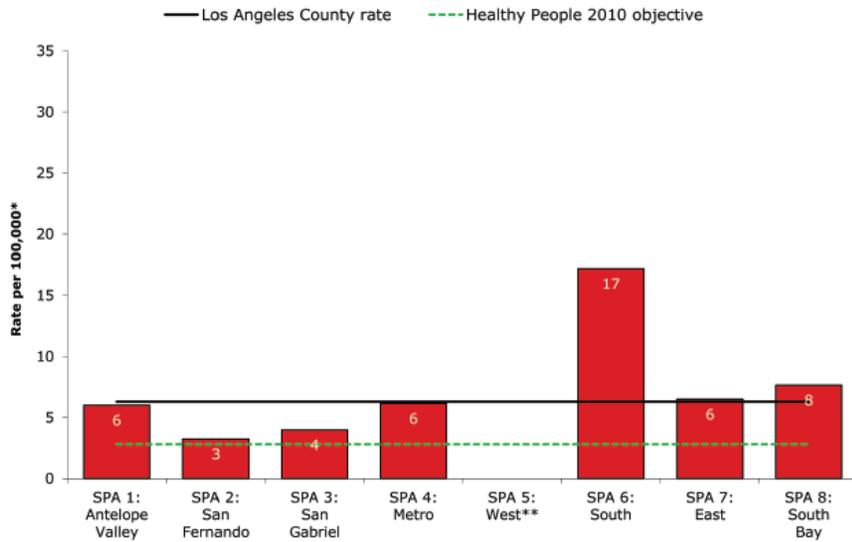
Diabetes



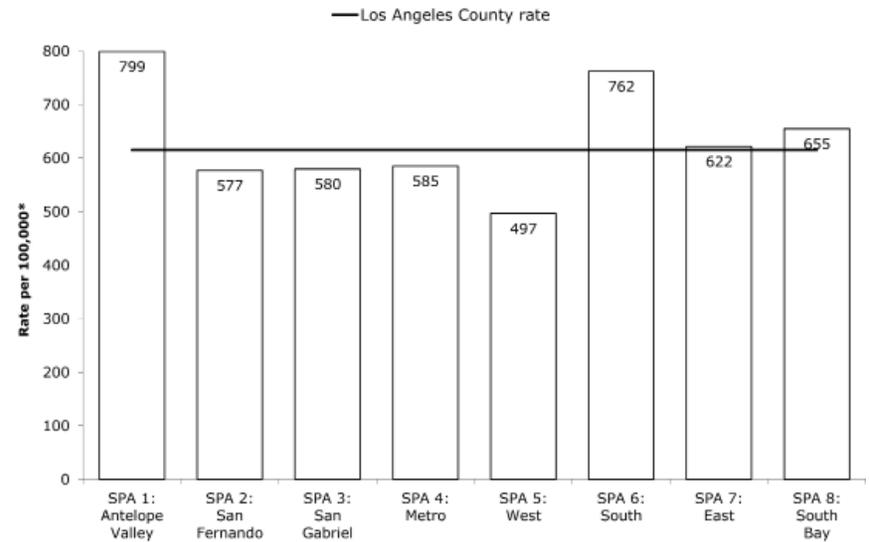
Pneumonia/influenza



Homicide



All causes of death



*Age-adjusted.

**Number of deaths is too small to calculate a reliable rate.

Figure 14. Comparison of the leading causes of death, by health district of residence

Leading causes of death

Health District Number of deaths Age-adjusted death rate	#1 cause Number of deaths	#2 cause Number of deaths	#3 cause Number of deaths	#4 cause Number of deaths	#5 cause Number of deaths
Alhambra 2,271 509 per 100,000	Coronary heart disease 471	Stroke 173	Lung cancer 130	Pneumonia/influenza 107	Emphysema/COPD 103
Antelope Valley 2,214 799 per 100,000	Coronary heart disease 499	Emphysema/COPD 172	Lung cancer 123	Stroke 114	Alzheimer's disease 86
Bellflower 2,046 637 per 100,000	Coronary heart disease 418	Emphysema/COPD 138	Stroke 124	Lung cancer 113	Alzheimer's disease 100
Central 1,721 572 per 100,000	Coronary heart disease 463	Stroke 97	Emphysema/COPD 74	Lung cancer 69	Diabetes 65
Compton 1,312 745 per 100,000	Coronary heart disease 245	Stroke 77	Lung cancer 69	Diabetes 57	Emphysema/COPD 57
East LA 1,115 617 per 100,000	Coronary heart disease 260	Stroke 72	Diabetes 60	Alzheimer's disease 56	Pneumonia/influenza 51
East Valley 2,295 614 per 100,000	Coronary heart disease 537	Stroke 121	Alzheimer's disease 105	Lung cancer 98	Emphysema/COPD 98
El Monte 2,088 584 per 100,000	Coronary heart disease 408	Stroke 131	Lung cancer 116	Emphysema/COPD 97	Diabetes 90
Foothill 1,987 601 per 100,000	Coronary heart disease 462	Emphysema/COPD 123	Lung cancer 113	Stroke 111	Alzheimer's disease 94
Glendale 2,361 570 per 100,000	Coronary heart disease 547	Stroke 150	Alzheimer's disease 134	Lung cancer 120	Emphysema/COPD 114
Harbor 1,317 581 per 100,000	Coronary heart disease 280	Stroke 91	Lung cancer 73	Alzheimer's disease 54	Emphysema/COPD 52
Hollywood-Wilshire 2,666 577 per 100,000	Coronary heart disease 688	Lung cancer 153	Stroke 130	Pneumonia/influenza 118	Alzheimer's disease 89
Inglewood 2,313 710 per 100,000	Coronary heart disease 518	Stroke 139	Lung cancer 128	Emphysema/COPD 99	Pneumonia/influenza 90

Long Beach 2,838 725 per 100,000	Coronary heart disease 663	Emphysema/COPD 178	Stroke 166	Lung cancer 151	Alzheimer's disease 105
Northeast 1,595 612 per 100,000	Coronary heart disease 344	Diabetes 87	Stroke 84	Lung cancer 80	Pneumonia/influenza 63
Pasadena 923 564 per 100,000	Coronary heart disease 235	Stroke 51	Emphysema/COPD 45	Alzheimer's disease 40	Pneumonia/influenza 38
Pomona 3,188 625 per 100,000	Coronary heart disease 694	Stroke 184	Lung cancer 174	Emphysema/COPD 166	Alzheimer's disease 147
San Antonio 1,744 617 per 100,000	Coronary heart disease 380	Stroke 109	Diabetes 92	Emphysema/COPD 71	Lung cancer 60
San Fernando 2,376 576 per 100,000	Coronary heart disease 546	Lung cancer 134	Stroke 131	Alzheimer's disease 126	Emphysema/COPD 95
South 917 861 per 100,000	Coronary heart disease 188	Lung cancer 50	Homicide 50	Stroke 49	Diabetes 35
Southeast 543 668 per 100,000	Coronary heart disease 99	Stroke 39	Homicide 29	Lung cancer 26	Liver disease 21
Southwest 2,462 764 per 100,000	Coronary heart disease 580	Stroke 142	Lung cancer 123	Diabetes 112	Emphysema/COPD 98
Torrance 2,934 595 per 100,000	Coronary heart disease 603	Lung cancer 177	Emphysema/COPD 167	Stroke 155	Alzheimer's disease 125
West 3,943 497 per 100,000	Coronary heart disease 817	Stroke 253	Lung cancer 226	Alzheimer's disease 210	Pneumonia/influenza 158
West Valley 5,000 565 per 100,000	Coronary heart disease 1,222	Lung cancer 273	Stroke 259	Alzheimer's disease 241	Emphysema/COPD 232
Whittier 2,009 613 per 100,000	Coronary heart disease 405	Stroke 121	Emphysema/COPD 100	Lung cancer 99	Alzheimer's disease 87
Los Angeles County Total 56,538 615 per 100,000	Coronary heart disease 12,635	Stroke 3,278	Lung cancer 2,941	Emphysema/COPD 2,622	Alzheimer's disease 2,242

Notes: Los Angeles County Total includes persons of unknown residence.

Figure 15. Comparison of the leading causes of premature death, by health district of residence

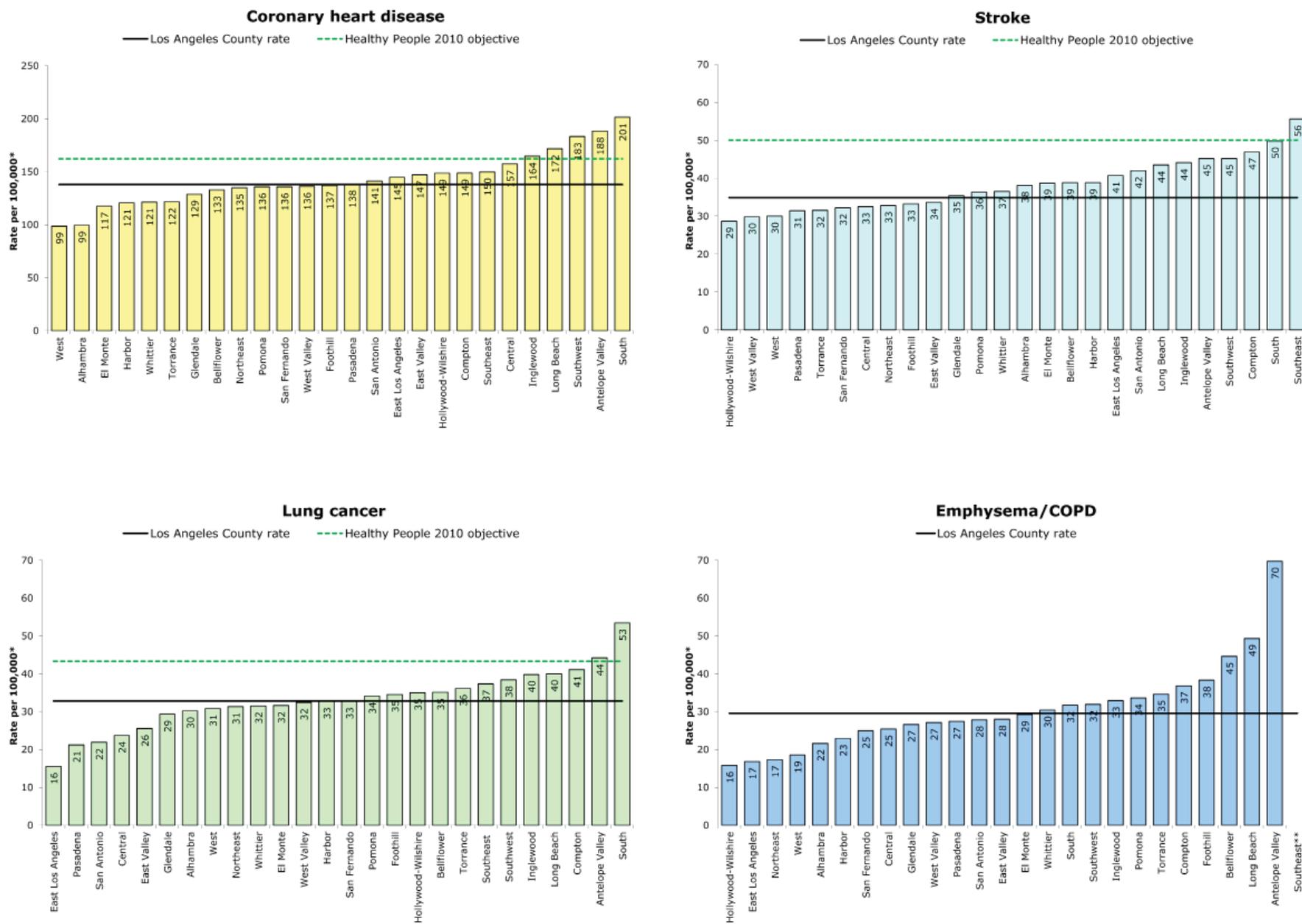
Leading causes of premature death (before age 75 years)

Health District	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause
Alhambra	Coronary heart disease	Suicide	Lung cancer	Colorectal cancer	Liver disease
Antelope Valley	Coronary heart disease	Suicide	Motor vehicle crash	Drug overdose	Homicide
Bellflower	Coronary heart disease	Liver disease	Stroke	Homicide	Drug overdose
Central	Coronary heart disease	Homicide	Drug overdose	Suicide	HIV
Compton	Homicide	Coronary heart disease	Motor vehicle crash	Liver disease	Stroke
East Los Angeles	Coronary heart disease	Homicide	Liver disease	Diabetes	Suicide
East Valley	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Drug overdose
El Monte	Coronary heart disease	Motor vehicle crash	Homicide	Suicide	Lung cancer
Foothill	Coronary heart disease	Suicide	Lung cancer	Liver disease	Breast cancer
Glendale	Coronary heart disease	Lung cancer	Liver disease	Breast cancer	Drug overdose
Harbor	Coronary heart disease	Drug overdose	Homicide	Suicide	Breast cancer
Hollywood/Wilshire	Coronary heart disease	Suicide	Drug overdose	Liver disease	Lung cancer
Inglewood	Coronary heart disease	Homicide	Lung cancer	Stroke	Liver disease

Long Beach	Coronary heart disease	Suicide	Homicide	Liver disease	Motor vehicle crash
Northeast	Coronary heart disease	Homicide	Liver disease	Motor vehicle crash	Drug overdose
Pasadena	Coronary heart disease	Motor vehicle crash	Suicide	Breast cancer	Drug overdose
Pomona	Coronary heart disease	Homicide	Lung cancer	Suicide	Motor vehicle crash
San Antonio	Coronary heart disease	Homicide	Motor vehicle crash	Liver disease	Suicide
San Fernando	Coronary heart disease	Motor vehicle crash	Drug overdose	Suicide	Lung cancer
South	Homicide	Coronary heart disease	Liver disease	Motor vehicle crash	Stroke
Southeast	Homicide	Coronary heart disease	Motor vehicle crash	Suicide	Stroke
Southwest	Coronary heart disease	Homicide	Diabetes	Liver disease	Lung cancer
Torrance	Coronary heart disease	Suicide	Liver disease	Drug overdose	Homicide
West	Coronary heart disease	Drug overdose	Lung cancer	Suicide	Breast cancer
West Valley	Coronary heart disease	Suicide	Lung cancer	Drug overdose	Motor vehicle crash
Whittier	Coronary heart disease	Motor vehicle crash	Liver disease	Homicide	Lung cancer
Los Angeles County Total	Coronary heart disease	Homicide	Suicide	Motor vehicle crash	Liver disease

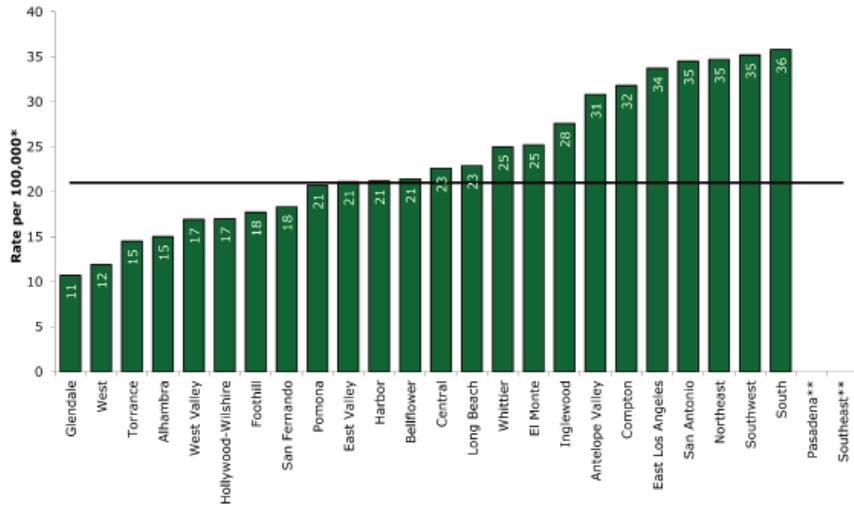
Notes: Los Angeles County Total includes persons of unknown residence.

Figure 16. Death rates for selected causes of death, by health district of residence



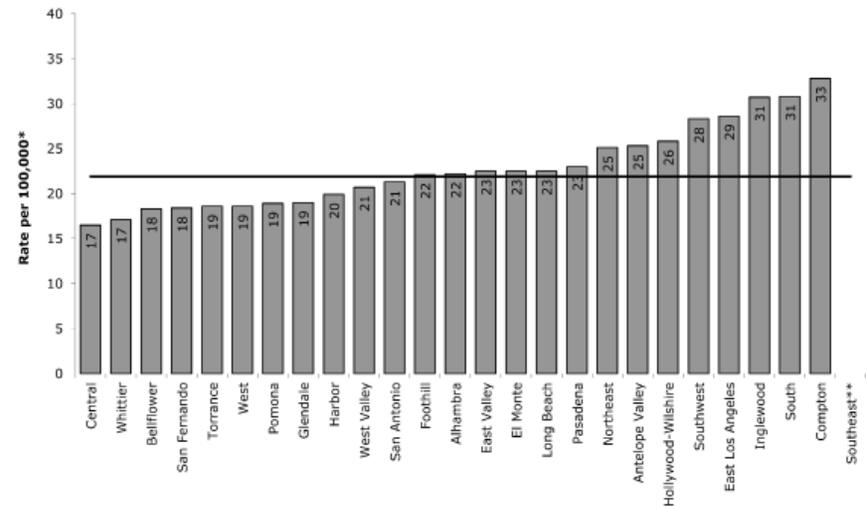
Diabetes

— Los Angeles County rate



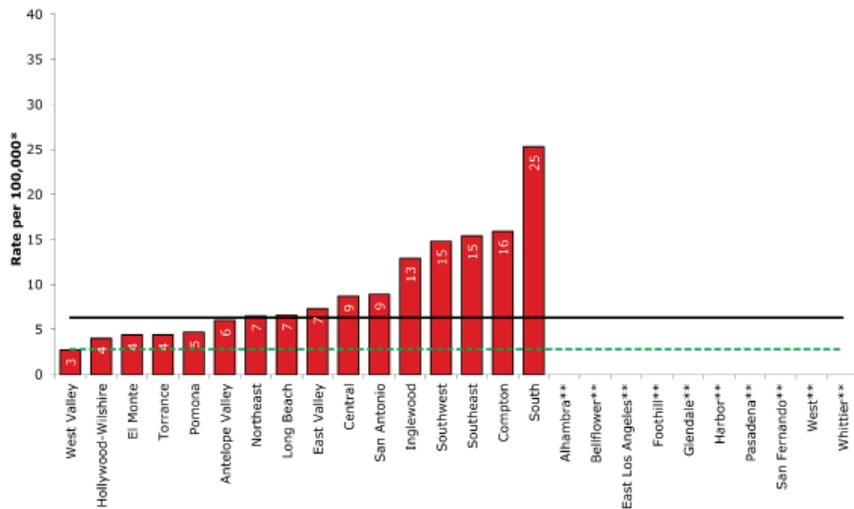
Pneumonia/influenza

— Los Angeles County rate



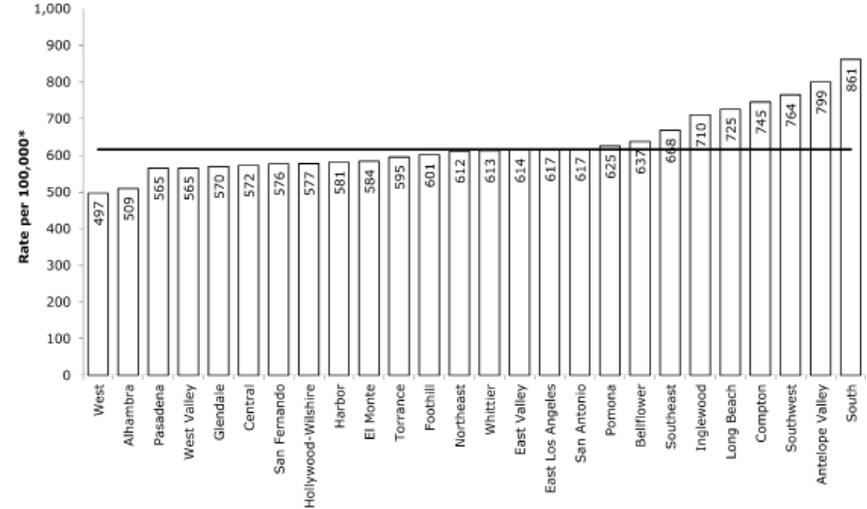
Homicide

— Los Angeles County rate - - - Healthy People 2010 objective



All causes of death

— Los Angeles County rate



*Age-adjusted.

**Number of deaths is too small to calculate a reliable rate.

Figure T1. Comparison of the leading causes of death, by year

Leading causes of death

Year	#1 cause No. of deaths	#2 cause No. of deaths	#3 cause No. of deaths	#4 cause No. of deaths	#5 cause No. of deaths	#6 cause No. of deaths	#7 cause No. of deaths	#8 cause No. of deaths	#9 cause No. of deaths	#10 cause No. of deaths
2010	Coronary heart disease 12,635	Stroke 3,278	Lung cancer 2,941	Emphysema/COPD 2,622	Alzheimer's disease 2,242	Pneumonia/ influenza 1,964	Diabetes 1,894	Colorectal cancer 1,285	Liver disease 1,171	Breast cancer 1,116
2009	Coronary heart disease 12,725	Stroke 3,301	Lung cancer 2,958	Emphysema/COPD 2,904	Alzheimer's disease 2,125	Pneumonia/ influenza 2,097	Diabetes 1,964	Colorectal cancer 1,388	Liver disease 1,246	Breast cancer 1,173
2008	Coronary heart disease 13,428	Stroke 3,280	Lung cancer 2,910	Emphysema/COPD 2,889	Diabetes 2,190	Pneumonia/ influenza 2,171	Alzheimer's disease 2,121	Colorectal cancer 1,365	Liver disease 1,134	Breast cancer 1,079
2007	Coronary heart disease 13,890	Stroke 3,323	Lung cancer 2,950	Emphysema/COPD 2,625	Pneumonia/ influenza 2,184	Diabetes 2,127	Alzheimer's disease 1,780	Colorectal cancer 1,323	Breast cancer 1,139	Liver disease 1,133
2006	Coronary heart disease 14,842	Stroke 3,662	Lung cancer 3,021	Emphysema/COPD 2,665	Pneumonia/ influenza 2,283	Diabetes 2,188	Alzheimer's disease 1,551	Colorectal cancer 1,362	Liver disease 1,102	Breast cancer 1,071
2005	Coronary heart disease 15,154	Stroke 3,775	Lung cancer 3,036	Emphysema/COPD 2,770	Pneumonia/ influenza 2,333	Diabetes 2,305	Alzheimer's disease 1,546	Colorectal cancer 1,409	Breast cancer 1,174	Homicide 1,066
2004	Coronary heart disease 15,296	Stroke 4,121	Lung cancer 3,034	Emphysema/COPD 2,641	Pneumonia/ influenza 2,272	Diabetes 2,201	Colorectal cancer 1,414	Alzheimer's disease 1,340	Breast cancer 1,166	Homicide 1,069
2003	Coronary heart disease 16,320	Stroke 4,249	Lung cancer 3,150	Emphysema/COPD 2,796	Pneumonia/ influenza 2,419	Diabetes 2,178	Colorectal cancer 1,450	Alzheimer's disease 1,285	Breast cancer 1,084	Homicide 1,066
2002	Coronary heart disease 16,293	Stroke 4,169	Lung cancer 3,081	Emphysema/COPD 2,604	Pneumonia/ influenza 2,494	Diabetes 2,122	Colorectal cancer 1,315	Homicide 1,148	Liver disease 1,085	Breast cancer 1,064
2001	Coronary heart disease 16,828	Stroke 4,259	Lung cancer 3,232	Emphysema/COPD 2,723	Pneumonia/ influenza 2,421	Diabetes 1,890	Colorectal cancer 1,423	Homicide 1,099	Breast cancer 1,096	Liver disease 1,010

Figure T2. Comparison of the leading causes of premature death, by year

Leading causes of premature death (before age 75 years)

Year	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause	#6 cause	#7 cause	#8 cause	#9 cause	#10 cause
2010	Coronary heart disease	Homicide	Suicide	Motor vehicle crash	Liver disease	Drug overdose	Lung cancer	Stroke	Breast cancer	Diabetes
2009	Coronary heart disease	Homicide	Motor vehicle crash	Liver disease	Suicide	Drug overdose	Lung cancer	Stroke	Diabetes	Breast cancer
2008	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Liver disease	Drug overdose	Lung cancer	Diabetes	Stroke	Breast cancer
2007	Coronary heart disease	Homicide	Motor vehicle crash	Drug overdose	Liver disease	Suicide	Lung cancer	Stroke	Diabetes	Breast cancer
2006	Coronary heart disease	Homicide	Motor vehicle crash	Liver disease	Suicide	Lung cancer	Stroke	Drug overdose	Diabetes	Breast cancer
2005	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Lung cancer	Liver disease	Diabetes	Stroke	Drug overdose	Breast cancer
2004	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Lung cancer	Liver disease	Drug overdose	Stroke	Diabetes	HIV
2003	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Lung cancer	Drug overdose	Liver disease	Stroke	Diabetes	HIV
2002	Coronary heart disease	Homicide	Motor vehicle crash	Lung cancer	Suicide	Liver disease	Drug overdose	Stroke	HIV	Diabetes
2001	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Lung cancer	Liver disease	HIV	Stroke	Drug overdose	Diabetes

Alzheimer's Disease

45th cause of premature death
5th cause of death

ALZHEIMER'S DISEASE has been the fifth-leading cause of death since 2009, moving up from the seventh-leading cause of death in 2008. In 2010, it was the third-leading cause of death for women, while it was the ninth-leading cause of death for men. The highest death rate, 32 deaths per 100,000 population, was among white women. Overall, the death rate from Alzheimer's disease increased 105% in the past 10 years, reflecting the aging of the population and increased awareness of the disease.

In simple terms . . .

Alzheimer's disease is an irreversible, progressive brain disease that slowly destroys memory and thinking skills and, eventually, the ability to carry out the simplest tasks of daily living.

In most people with Alzheimer's disease, symptoms first appear after age 60. Alzheimer's disease is the most common cause of dementia in older people. There are medications that may temporarily lessen some of the symptoms, but there is no cure. Scientists are exploring possible connections between Alzheimer's disease and high cholesterol, high blood pressure, physical inactivity, and serious head injury.

Risk factors

Age, family history, genetics

Community opportunities for intervention

- Promote awareness and educate the public about what is normal aging
- Develop community support networks for caregivers
- Assist persons with early Alzheimer's disease to plan for their future financial and medical needs

Individual opportunities for prevention

- Work with your health care provider to maintain healthy blood pressure, cholesterol, and blood sugar levels
- Stay socially active by engaging in community groups, joining classes, or volunteering
- Eat a healthy diet that is rich in fruits, vegetables, and whole grains
- Make time to be physically active every day
- Learn new things and keep your mind active by reading, doing puzzles, or dancing (which requires anticipating and memorizing dance steps)
- Visit your doctor early if you are experiencing symptoms of memory loss or a decline in thinking ability

LOS ANGELES COUNTY

Deaths 2,242
Death Rate 25 deaths per 100,000 population

Healthy People 2010 Objective None

ICD-9 codes (1979-1998) 331.0

ICD-10 codes (1999-2010) G30

References **Alzheimer's Association**
www.alz.org
"Alzheimer's Disease: An Emerging Public Health Concern"
http://publichealth.lacounty.gov/ha/reports/LAHealthBrief_2007/Alzheimer's_Disease.pdf

Alzheimer's Disease Education and Referral Center
www.nia.nih.gov/alzheimers

Referral **Alzheimer's Association Helpline**
1-800-272-3900

Figure T3. Trends in Alzheimer's disease mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	905	12	973	12	1,285	16	1,340	16	1,546	18	1,551	18	1,780	19	2,121	22	2,125	21	2,242	25
Males	309	11	318	11	405	14	399	13	450	14	477	15	586	17	676	19	694	19	751	22
Females	596	12	655	13	880	17	941	17	1,096	20	1,074	19	1,194	20	1,445	23	1,431	22	1,491	26
White	719	15	755	15	957	19	975	19	1,132	22	1,105	22	1,297	25	1,487	27	1,480	26	1,509	31
Hispanic	73	6	93	7	161	11	143	9	168	10	217	12	239	12	310	15	349	16	376	20
Black	90	14	97	14	119	17	155	21	176	24	151	21	159	21	204	25	184	22	186	25
Asian/Pacific Islander	22	3	25	3	42	4	65	6	69	6	76	6	80	6	116	8	108	7	167	12
Males																				
White	238	14	246	14	295	16	289	16	319	17	336	19	417	22	478	24	497	24	510	28
Hispanic	30	7	37	7	46	9	46	8	53	8	71	11	71	10	91	12	108	14	133	19
Black	34	14	28	12	37	15	40	17	55	22	45	19	63	24	58	21	51	19	55	22
Asian/Pacific Islander	7	--	6	--	23	6	24	5	23	5	25	5	33	6	47	8	36	6	52	9
Females																				
White	481	16	509	16	662	21	686	21	813	25	769	24	880	27	1,009	29	983	28	999	32
Hispanic	43	5	56	6	115	12	97	10	115	10	146	12	168	13	219	16	241	17	243	20
Black	56	13	69	15	82	17	115	24	121	24	106	21	96	19	146	27	133	24	131	26
Asian/Pacific Islander	15	--	19	--	19	--	41	6	46	7	51	7	47	6	69	8	72	8	115	13
SPA 1: Antelope Valley	26	15	39	21	43	24	43	24	60	31	50	25	70	32	74	32	72	31	86	39
SPA 2: San Fernando	206	12	255	15	325	18	343	19	409	22	407	22	490	25	595	28	568	26	606	29
SPA 3: San Gabriel	177	12	210	14	273	17	268	16	307	18	313	18	384	21	381	20	399	20	422	23
SPA 4: Metro	101	10	102	10	119	11	120	11	137	12	142	13	131	11	189	15	169	13	190	19
SPA 5: West	75	10	77	10	115	15	133	16	161	20	116	15	167	21	198	23	216	24	210	24
SPA 6: South	63	12	60	11	75	13	108	18	101	16	99	16	89	14	128	19	128	18	96	17
SPA 7: East	93	10	93	10	135	13	144	13	148	13	194	17	170	14	240	20	262	21	293	27
SPA 8: South Bay	158	14	132	11	196	16	175	14	222	17	221	17	272	19	309	21	311	20	339	24

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

--Number of deaths is too small to calculate a reliable rate.

Breast Cancer (Female)

2nd cause of premature death (females)
6th cause of death (females)

***BREAST CANCER** was the leading cause of premature death for Asian/Pacific Islander women, and the second-leading cause of premature death for white, black, and Hispanic women. The median age at death was 60 years for Hispanic women, 61 for Asians/Pacific Islanders, 62 for blacks, and 69 for whites. The death rate among black women, 36 deaths per 100,000 females, was substantially higher than the overall County rate.*

In simple terms . . .

Cancer is a term for diseases in which cells in your body grow out of control. Cancer cells can invade nearby tissue and spread to other parts of the body through the blood and lymph systems. Breast cancer starts in the cells of the breast. Men can get breast cancer, but it is uncommon.

Risk factors (for women)

Age, family or personal history of breast cancer, having a BRCA 1/2 gene mutation, history of radiation treatment to the chest area, early menstruation (before age 12), late menopause (after age 55), never giving birth, excessive alcohol consumption, long-term use of combined hormone replacement therapy, being overweight, lack of physical activity

Community opportunities for prevention

- Promote the availability of breast cancer screening and follow-up
- Provide education on the importance of receiving breast cancer screening on-schedule
- Promote physical activity by providing access to safe places like parks and schools to walk, play, and exercise

Individual opportunities for prevention

- Follow recommended guidelines for breast cancer screening* and follow-up.
- Know your family history of breast cancer
- Limit alcohol consumption
- Maintain a healthy weight
- Eat a healthy diet that is rich in fruits, vegetables, and whole grains
- Make time to be physically active every day with your children, partner, pet, friends, or on your own
- Talk to your doctor about the risks and benefits of hormone replacement therapy

*Available at <http://www.uspreventiveservicestaskforce.org/uspstf/uspbrca.htm>

LOS ANGELES COUNTY

Deaths 1,109
Death Rate 21.1 deaths per 100,000 females

Healthy People 2010 Objective 3-3 21.3 deaths per 100,000 females

ICD-9 codes (1979-1998) 174-175

ICD-10 codes (1999-2010) C50

- References
- American Cancer Society**
www.cancer.org
 - National Cancer Institute, Surveillance, Epidemiology and End Results (SEER) Program**
www.seer.cancer.gov/registries/los_angeles.html
 - Centers for Disease Control and Prevention**
www.cdc.gov/cancer/breast
 - Guide to Community Preventive Services**
www.thecommunityguide.org

- Referral
- CA Department of Public Health, Cancer Detection Programs Every Woman Counts**
1-800-511-2300
 - Los Angeles County Department of Public Health, Office of Women's Health Hotline**
1-800-793-8090

Figure T4. Trends in breast cancer (female) mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	1,088	24	1,052	23	1,074	22	1,157	24	1,168	23	1,063	21	1,127	22	1,071	20	1,166	21	1,109	21
Females																				
White	621	28	612	27	570	25	613	27	631	27	557	25	571	24	560	23	593	25	532	24
Hispanic	213	17	176	14	242	17	222	15	223	15	237	15	249	15	221	14	262	16	247	15
Black	159	34	150	31	158	32	199	40	181	36	164	32	194	37	180	34	187	35	187	36
Asian/Pacific Islander	91	14	112	16	102	14	120	16	132	17	101	12	112	13	108	12	120	14	137	15
SPA 1: Antelope Valley	30	25	36	29	41	30	30	23	51	36	40	27	39	26	38	25	34	22	42	26
SPA 2: San Fernando	253	26	242	24	238	23	241	22	261	24	264	23	249	22	240	20	235	19	251	21
SPA 3: San Gabriel	213	24	203	22	185	20	209	22	204	21	192	19	202	20	187	18	233	22	230	22
SPA 4: Metro	97	19	117	22	104	19	130	22	117	20	104	17	120	19	108	17	92	15	86	15
SPA 5: West	79	22	101	27	88	23	97	26	99	25	85	22	84	20	98	23	96	22	83	20
SPA 6: South	83	23	89	24	97	26	113	28	113	29	110	27	100	24	104	25	121	28	120	29
SPA 7: East	132	24	105	18	144	24	130	21	130	21	122	19	142	22	117	17	153	23	118	18
SPA 8: South Bay	193	27	159	22	171	23	201	26	192	24	143	18	185	22	176	21	202	23	178	21

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

Colorectal Cancer

11th cause of premature death
8th cause of death

COLORECTAL CANCER has been the eighth-leading cause of death overall since 2005. In 2010, it was the 11th-leading cause of premature death overall, but it was the sixth-leading cause of premature death for Asians/Pacific Islanders. The overall colorectal cancer death rate was 14 deaths per 100,000 population. The highest death rate, 28 deaths per 100,000 population, was among black men.

In simple terms . . .

Cancer is a term for diseases in which cells in your body grow out of control. Cancer cells can invade nearby tissue and spread to other parts of the body through the blood and lymph systems. Colorectal cancer starts in the cells of the colon or rectum.

Risk factors

Age, family history of colorectal cancer or colorectal polyps, inflammatory bowel disease (e.g., ulcerative colitis or Crohn's disease), inherited genetic syndromes related to colorectal cancer, (e.g., familial adenomatous polyposis (FAP) or hereditary non-polyposis colorectal cancer (Lynch syndrome)), excessive alcohol consumption, tobacco use, being overweight, lack of physical activity

Community opportunities for prevention

- Promote the availability of colorectal cancer screening and follow-up
- Provide education on the importance of receiving colorectal cancer screening on-schedule
- Promote physical activity by providing access to safe places like parks and schools to walk, play, and exercise

Individual opportunities for prevention

- Follow recommended guidelines for colorectal cancer screening* that can detect colon cancer early, and remove precancerous colorectal polyps and early cancer growths
- Know your family history of colorectal cancer
- Limit alcohol consumption
- Maintain a healthy weight
- Eat a healthy diet that is rich in fruits, vegetables, and whole grains
- Make time to be physically active every day with your children, partner, pet, friends, or on your own

*Available at www.uspreventiveservicestaskforce.org/uspstf/uspscolo.htm

LOS ANGELES COUNTY

Deaths 1,285
Death Rate 14.0 deaths per 100,000 population

Healthy People 2010 Objective 3-5 13.7 deaths per 100,000 population

ICD-9 codes (1979-1998) 153-154

ICD-10 codes (1999-2010) C18-C21

References **American Cancer Society**
www.cancer.org
National Cancer Institute
www.cancer.gov
National Cancer Institute, Surveillance, Epidemiology and End Results (SEER) Program
www.seer.cancer.gov/registries/los_angeles.html
Guide to Community Preventive Services
www.thecommunityguide.org

Referral **American Cancer Society Helpline**
1-800-227-2345

Figure T5. Trends in colorectal cancer mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	1,423	18	1,315	16	1,450	17	1,414	17	1,409	16	1,362	15	1,323	14	1,365	14	1,388	14	1,285	14
Males	722	22	655	19	710	20	674	19	708	19	686	18	686	18	703	17	710	17	663	17
Females	701	15	660	14	740	15	740	15	701	14	676	13	637	12	662	12	678	12	622	12
White	812	19	763	18	824	19	767	18	737	17	689	16	689	15	660	14	696	15	619	15
Hispanic	217	12	206	11	241	12	230	11	270	12	275	12	264	11	306	12	286	11	296	11
Black	227	30	192	25	211	26	237	29	213	26	223	27	181	22	196	22	209	24	195	23
Asian/Pacific Islander	164	16	148	13	170	14	177	15	184	14	171	13	184	13	197	13	195	13	173	11
Males																				
White	409	23	368	20	401	22	358	20	365	20	350	19	352	19	325	17	345	17	317	17
Hispanic	116	16	111	14	127	14	116	15	154	17	134	14	146	14	167	15	169	16	157	14
Black	107	37	94	30	90	28	111	34	102	29	110	33	88	27	96	27	95	26	97	28
Asian/Pacific Islander	88	19	79	17	90	17	87	16	82	14	89	15	98	16	111	17	101	15	91	14
Females																				
White	403	16	395	15	423	16	409	16	372	14	339	13	337	13	335	13	351	13	302	13
Hispanic	101	10	95	9	114	10	114	9	116	9	141	10	118	8	139	9	117	8	139	9
Black	120	27	98	21	121	25	126	26	111	23	113	23	93	18	100	19	114	22	98	20
Asian/Pacific Islander	76	13	69	11	80	12	90	13	102	14	82	11	86	11	86	10	94	11	82	9
SPA 1: Antelope Valley	45	22	43	21	60	27	59	26	56	24	30	13	35	14	36	14	52	20	49	17
SPA 2: San Fernando	304	18	286	16	292	16	322	17	327	17	306	16	306	16	301	14	294	13	281	14
SPA 3: San Gabriel	266	18	255	16	278	17	248	15	286	17	267	15	239	13	251	13	263	14	250	14
SPA 4: Metro	176	19	149	15	163	16	146	14	148	14	151	14	149	13	154	13	149	13	133	13
SPA 5: West	115	17	95	14	110	16	89	13	103	14	89	12	108	15	98	13	102	13	92	12
SPA 6: South	133	23	133	22	137	22	149	23	134	20	143	21	112	16	128	18	140	20	117	17
SPA 7: East	157	16	149	15	159	15	159	15	148	13	161	14	160	14	163	14	152	13	149	13
SPA 8: South Bay	219	18	202	16	241	19	230	17	204	15	213	15	208	14	229	15	235	15	213	15

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

Coronary Heart Disease

1st cause of premature death
1st cause of death

***DURING THE LAST 10 YEARS**, though the death rate from coronary heart disease decreased 37%, it remained the overall leading cause of death and premature death. In 2010, the highest death rate, 273 deaths per 100,000 population, was among black men, while the lowest death rate, 77 deaths per 100,000 population, was among Asian/Pacific Islander women. The overall death rate from coronary heart disease has been below the Healthy People 2010 goal since 2007.*

In simple terms . . .

Coronary heart disease is a condition where a substance called plaque builds up in the arteries that supply blood to the heart (called coronary arteries). This plaque, which is made up of cholesterol deposits, can build up and cause arteries to narrow over time.

This artery narrowing can cause chest pain or discomfort (angina) when the heart muscle doesn't get enough blood, or can result in a heart attack, which occurs when plaque completely blocks an artery carrying blood to the heart. This can happen when a plaque deposit breaks off and clogs a coronary artery.

Risk factors

Age, male gender, family history of early heart disease, previous heart attack or angina, tobacco use, high cholesterol, high blood pressure, excessive alcohol consumption, diabetes, being overweight, lack of physical activity

Community opportunities for prevention

- Promote physical activity by providing access to safe places like parks and schools to walk, play, and exercise
- Restrict smoking in public places and worksites
- Provide access to smoking cessation programs

Individual opportunities for prevention

- Know your family history of heart disease
- If you smoke, get help to quit (1-800-NO-BUTTS)
- Work with your health care provider to maintain good control of diabetes, cholesterol, blood pressure, and vitamin D level
- Maintain a healthy weight
- Eat a healthy diet that is rich in fruits, vegetables, whole grains, nuts, fiber, and omega-3
- Make time to be physically active every day with your children, partner, pet, friends, or on your own

LOS ANGELES COUNTY

Deaths 12,635
Death Rate 138 deaths per 100,000 population

Healthy People 2010 Objective 12-1 162 deaths per 100,000 population

ICD-9 codes (1979-1998) 402, 410-414, 429.2

ICD-10 codes (1999-2010) I11, I20-I25

- References **American Heart Association**
www.americanheart.org
- Centers for Disease Control and Prevention**
www.cdc.gov/heartdisease
- The Million Hearts Initiative**
www.millionhearts.hhs.gov
- Referral **Los Angeles County Division of the American Heart Association**
213-291-7000

Figure T6. Trends in coronary heart disease mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	16,828	220	16,293	204	16,320	197	15,296	180	15,154	174	14,842	168	13,890	150	13,428	139	12,725	129	12,635	138
Males	8,343	272	8,029	250	8,131	243	7,662	222	7,613	215	7,541	210	7,082	188	7,001	178	6,638	163	6,651	175
Females	8,485	179	8,264	168	8,189	161	7,634	146	7,541	141	7,301	135	6,808	120	6,427	109	6,087	101	5,984	108
White	10,592	238	10,016	219	10,003	216	9,236	197	8,953	190	8,653	185	7,994	167	7,596	154	6,980	138	6,845	151
Hispanic	2,571	170	2,600	160	2,632	151	2,626	141	2,766	139	2,675	129	2,475	109	2,536	108	2,428	99	2,555	111
Black	2,308	316	2,262	301	2,269	292	2,085	264	2,045	254	2,053	255	1,936	231	1,804	209	1,878	211	1,721	208
Asian/Pacific Islander	1,319	141	1,365	136	1,352	125	1,292	113	1,344	111	1,409	112	1,452	106	1,437	99	1,387	92	1,451	98
Males																				
White	5,162	298	4,878	273	4,880	267	4,505	243	4,362	234	4,299	232	4,030	212	3,905	197	3,598	177	3,566	192
Hispanic	1,338	214	1,323	195	1,382	188	1,415	180	1,465	176	1,414	162	1,319	136	1,349	135	1,333	128	1,372	138
Black	1,124	395	1,084	368	1,093	355	1,012	325	1,044	324	1,053	333	950	284	940	274	957	266	898	273
Asian/Pacific Islander	701	172	714	162	739	156	696	141	717	138	748	138	761	131	770	126	718	113	776	128
Females																				
White	5,430	189	5,138	175	5,123	173	4,731	158	4,591	153	4,354	146	3,964	131	3,691	118	3,382	106	3,279	116
Hispanic	1,233	139	1,277	134	1,250	123	1,211	112	1,301	113	1,261	104	1,156	88	1,187	87	1,095	78	1,183	90
Black	1,184	262	1,178	254	1,176	244	1,073	220	1,001	202	1,000	200	986	192	864	163	921	169	823	163
Asian/Pacific Islander	618	118	651	114	613	101	596	92	627	91	661	91	691	86	667	78	669	75	675	77
SPA 1: Antelope Valley	471	245	500	246	496	237	488	232	467	215	463	205	468	193	459	177	476	183	499	188
SPA 2: San Fernando	3,577	213	3,550	204	3,520	196	3,419	187	3,377	180	3,262	172	3,071	155	3,081	147	2,828	130	2,852	137
SPA 3: San Gabriel	3,175	213	2,972	191	2,949	181	2,704	161	2,781	162	2,666	153	2,541	138	2,486	130	2,304	118	2,270	124
SPA 4: Metro	1,890	202	1,855	189	1,826	180	1,662	160	1,724	161	1,673	153	1,478	130	1,469	124	1,414	119	1,495	148
SPA 5: West	1,135	131	1,056	145	1,089	147	1,036	137	980	128	1,004	133	912	118	882	108	854	101	817	98
SPA 6: South	1,644	289	1,606	271	1,562	257	1,443	230	1,404	218	1,422	218	1,295	191	1,222	176	1,271	178	1,112	173
SPA 7: East	2,053	222	1,976	203	1,949	189	1,847	172	1,854	169	1,836	164	1,660	142	1,588	133	1,488	122	1,463	134
SPA 8: South Bay	2,754	233	2,704	221	2,758	217	2,529	193	2,493	185	2,360	173	2,332	162	2,143	143	2,029	131	2,064	144

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

Diabetes

10th cause of premature death
7th cause of death

***DIABETES** was the seventh-leading cause of death overall, but it was the third-leading cause of death for Hispanics and the fourth-leading cause of death for blacks. The highest death rate, 43 deaths per 100,000 population, was among black men, while the lowest death rate, 13 deaths per 100,000 population, was among white and Asian/Pacific Islander women. The diabetes death rates were higher in the South and Antelope Valley Service Planning Areas than in other areas of the County.*

In simple terms . . .

Diabetes is a disease in which the body does not produce, properly use, or is partially resistant to the effects of insulin.

Insulin is a hormone that moves sugar from the blood into the cells, where the sugar can be stored or converted into energy.

Uncontrolled diabetes leads to high levels of sugar in the blood, which can damage the eyes, kidneys, nerves, heart, and blood vessels, and reduce the body's ability to fight infections.

Risk factors

Being overweight, lack of physical activity, age, race/ethnicity, family history of diabetes, history of gestational diabetes

Community opportunities for prevention

- Educate the public about diabetes and pre-diabetes through community health education campaigns
- Promote community self-care management programs to prevent diabetes complications
- Promote physical activity by providing access to safe places like parks and schools to walk, play, and exercise

- Offer incentives for employers to provide, and employees to participate in, workplace wellness programs
- Improve access to nutritious foods, and make it easier for the public to find and choose healthier foods

Individual opportunities for prevention

- Follow recommended screening and treatment guidelines*, and work with your health care provider to maintain good diabetes control
- Maintain a healthy weight
- Follow a healthy meal plan that includes fruits, vegetables, lean cuts of meat, and whole grains
- Make time to be physically active every day with your children, partner, pet, friends, or on your own
- Work with your health care provider to control blood pressure, and manage cholesterol and depression
- If you smoke, get help to quit (1-800-NO-BUTTS)
- For new mothers, exclusive breastfeeding for at least 3 months can help promote weight loss and may reduce the risk of diabetes

LOS ANGELES COUNTY

Deaths 1,894
Death Rate 21 deaths per 100,000 population

Healthy People 2010 Objective 5-5 Not comparable

ICD-9 codes (1979-1998) 250

ICD-10 codes (1999-2010) E10-E14

References **American Diabetes Association**
www.diabetes.org
National Diabetes Education Program
www.ndep.nih.gov
"Trends in Diabetes: Time for Action"
www.publichealth.lacounty.gov/ha/reports/LAHealthBrief_2011/Diabetes/Diabetes_2012_FinalS.pdf

Referral **American Diabetes Association Information Line**
1-800-DIABETES

*Available at www.uspreventiveservicestaskforce.org/uspstf/uspdiab.htm

Figure T7. Trends in diabetes mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	1,890	24	2,122	26	2,178	26	2,201	26	2,305	26	2,188	25	2,127	23	2,190	23	1,964	20	1,894	21
Males	886	27	996	29	1,053	30	1,063	30	1,140	31	1,099	29	1,040	27	1,084	27	1,024	25	993	26
Females	1,004	22	1,126	24	1,125	23	1,138	23	1,165	23	1,089	21	1,087	20	1,106	20	940	17	901	17
White	775	19	840	20	835	19	863	20	897	20	806	19	751	17	801	17	672	14	667	16
Hispanic	639	38	678	38	719	37	741	36	773	36	774	34	754	31	764	30	694	27	690	29
Black	308	41	374	48	378	48	339	42	389	47	367	44	357	42	359	41	340	38	294	35
Asian/Pacific Islander	164	16	212	20	233	21	251	22	236	19	230	18	257	19	257	18	248	17	237	16
Males																				
White	380	21	400	22	424	23	446	24	455	25	412	22	385	21	429	22	364	18	365	20
Hispanic	279	39	319	42	339	42	347	40	390	42	371	39	378	35	371	34	361	33	356	34
Black	144	45	164	52	158	49	158	48	181	55	178	54	147	43	157	44	161	44	144	43
Asian/Pacific Islander	83	18	107	23	124	25	109	22	109	20	132	23	127	22	126	20	131	21	124	20
Females																				
White	395	16	440	17	411	16	417	16	442	18	394	16	366	14	372	14	308	11	302	13
Hispanic	360	36	359	34	380	33	394	34	383	31	403	31	376	27	393	27	333	22	334	24
Black	164	37	210	45	220	46	181	37	208	42	189	38	210	41	202	39	179	33	150	30
Asian/Pacific Islander	81	14	105	17	109	18	142	21	127	18	98	13	130	16	131	15	117	13	113	13
SPA 1: Antelope Valley	54	26	71	33	69	29	73	35	78	32	106	44	81	31	106	39	113	41	85	31
SPA 2: San Fernando	330	19	335	19	395	22	396	22	411	22	377	20	349	18	408	20	337	16	343	17
SPA 3: San Gabriel	306	20	395	25	361	22	423	25	438	26	389	22	387	22	405	22	375	20	330	19
SPA 4: Metro	269	29	276	29	271	27	257	25	277	26	245	23	281	26	241	21	212	18	230	23
SPA 5: West	76	11	101	15	113	16	115	16	103	14	91	13	95	13	100	13	75	9	90	12
SPA 6: South	237	40	286	47	289	46	258	40	294	45	256	38	275	40	262	37	247	34	218	33
SPA 7: East	337	35	350	35	336	32	356	33	381	35	366	33	310	27	352	30	323	27	302	28
SPA 8: South Bay	274	22	303	24	337	26	310	23	320	23	343	25	339	23	309	21	282	18	293	21

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

Drug Overdose (Unintentional)

6th cause of premature death
19th cause of death

***DRUG OVERDOSE** has been one of the 10 leading causes of premature death for each of the past 10 years. In 2010, it was the sixth-leading cause of premature death overall, but the third-leading cause of premature death among whites. The highest death rate, 13 deaths per 100,000 population, was among white and black men. Drug overdose was the leading cause of death for 15- to 24-year-old white men.*

In simple terms . . .

In this report, drug overdose refers to any death from an unintentional overdose of illegal drugs, prescription or over-the-counter (OTC) medications, or alcohol.

Drug overdose does not include any drug, medicine, or alcohol taken with homicidal or suicidal intent.

Risk factors

Easy access to alcohol and other drugs (AOD); having a parent/caregiver who abuses substances, suffers from mental illness, or engages in criminal behavior; lack of a significant relationship with a caring adult; gang involvement; self-medication for psychological or physical conditions; drug dependence from prolonged use for chronic pain

Community opportunities for prevention

- Increase enforcement of laws/policies to reduce AOD availability and consumption (e.g., retailer education)
- Educate youth in school and community settings about AOD to raise awareness and develop refusal skills
- Promote access to mental health and substance abuse services

- Promote community activities that encourage positive choices to reduce acceptance and change norms around AOD use
- Use social media and work with local experts to raise awareness and perception of harm of AOD use including medication misuse

Individual opportunities for prevention

- Keep track of prescription and OTC medications at home, and dispose of all medications properly
- Spend time to talk to your children about drugs and to teach them how to refuse drugs
- Seek help for substance abuse (drug or alcohol) from a healthcare provider, or call the Substance Abuse Prevention and Control Helpline: 1-800-564-6600

LOS ANGELES COUNTY

Deaths 611
Death Rate 6 deaths per 100,000 population

Healthy People 2010 Objective 26-03 Not comparable

ICD-9 codes (1979-1998) E850-E858, E860

ICD-10 codes (1999-2010) X40-X45

References **National Institute on Drug Abuse**
www.drugabuse.gov
Center for Substance Abuse Prevention
www.samhsa.gov/prevention
"Prescription Drug Abuse in Los Angeles County"
<http://publichealth.lacounty.gov/sapc/resources/PrescriptionWEB3.pdf>

Referral **Los Angeles County Department of Public Health, Substance Abuse Prevention and Control Helpline**
1-800-564-6600

Figure T8. Trends in drug overdose mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	484	5	611	6	620	6	556	6	528	5	557	5	691	7	625	6	685	6	611	6
Males	353	8	444	9	437	9	388	8	377	7	372	7	501	10	431	8	471	9	435	9
Females	131	3	167	3	183	4	168	3	151	3	185	4	190	4	194	4	214	4	176	3
White	243	7	301	9	326	10	308	9	266	8	288	9	351	10	326	10	356	10	314	10
Hispanic	141	4	170	5	178	5	155	4	137	3	172	4	232	5	195	4	219	5	194	4
Black	96	11	131	14	102	11	80	8	113	12	81	8	92	9	87	9	93	9	90	10
Asian/Pacific Islander	4	--	8	--	11	--	6	--	5	--	10	--	13	--	13	--	13	--	9	--
Males																				
White	168	10	199	12	206	12	204	12	180	11	181	11	229	13	204	12	229	13	209	13
Hispanic	118	7	146	8	151	8	128	6	114	5	134	6	200	9	164	8	181	8	163	8
Black	63	16	93	22	70	17	47	11	73	17	46	10	61	14	53	12	53	12	56	13
Asian/Pacific Islander	4	--	5	--	7	--	4	--	5	--	6	--	9	--	7	--	6	--	3	--
Females																				
White	75	4	102	6	120	7	104	6	86	5	107	6	122	7	122	7	127	7	105	7
Hispanic	23	1	24	1	27	1	27	1	23	1	38	2	32	2	31	1	38	2	31	1
Black	33	7	38	7	32	6	33	6	40	8	35	7	31	6	34	6	40	8	34	7
Asian/Pacific Islander	0	--	3	--	4	--	2	--	0	0	4	--	4	--	6	--	7	--	6	--
SPA 1: Antelope Valley	17	--	27	8	30	9	31	10	19	--	31	9	33	9	24	7	27	8	38	10
SPA 2: San Fernando	80	4	126	6	97	4	101	5	114	5	104	5	113	5	133	6	146	6	122	5
SPA 3: San Gabriel	64	4	75	4	63	4	65	4	64	4	75	4	89	5	70	4	91	5	70	4
SPA 4: Metro	66	6	75	6	107	9	84	7	67	5	73	6	97	7	91	7	89	7	89	7
SPA 5: West	32	5	49	7	54	8	41	6	29	4	33	5	47	7	46	6	41	6	42	6
SPA 6: South	43	6	68	9	56	7	45	5	68	8	49	6	70	8	63	7	69	8	57	6
SPA 7: East	70	6	55	5	68	6	60	5	51	4	75	6	77	6	62	5	70	5	56	5
SPA 8: South Bay	76	5	100	7	101	6	90	6	79	5	81	5	105	6	110	7	108	7	102	6

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

--Number of deaths is too small to calculate a reliable rate.

Emphysema/COPD

15th cause of premature death
4th cause of death

***EMPHYSEMA/COPD** has been the fourth-leading cause of death for each of the last 10 years. In 2010, the median age at death from emphysema was 81 years. The highest death rate, 50 deaths per 100,000 population, was among black men. The death rate in the Antelope Valley Service Planning Area, 70 deaths per 100,000 population, was more than double the rate in the County overall.*

In simple terms . . .

Chronic obstructive pulmonary disease (COPD) refers to conditions that interfere with the flow of air in and out of the lungs, making it difficult to breathe. Emphysema is the most common type of COPD and is a condition where the air sacs (alveoli) in the lungs have been destroyed and cannot completely deflate, making them unable to take in oxygen from fresh air.

Risk factors

Tobacco smoking, breathing in the smoke of others (secondhand smoke), asthma, exposure to certain air pollutants

Community opportunities for prevention

- Restrict smoking in public places and worksites to decrease exposure to indoor and outdoor secondhand smoke
- Provide access to smoking cessation programs
- Reduce youth access to tobacco products through policies and their enforcement
- Increase the tobacco tax

Individual opportunities for prevention

- If you smoke, get help to quit (1-800-NO-BUTTS)
- If you don't smoke, don't start
- Avoid being near people who are smoking

LOS ANGELES COUNTY

Deaths 2,622
Death Rate 29.6 deaths per 100,000 population
75.7 deaths per 100,000 adults aged 45 years and over

Healthy People 2010 Objective 24-10 62.3 deaths per 100,000 adults aged 45 years and over.
The Healthy People 2010 objective includes some causes of chronic bronchitis not included in this report which would increase the number of deaths in Los Angeles by 1%.

ICD-9 codes (1979-1998) 492, 496

ICD-10 codes (1999-2010) J43-J44

References **American Lung Association** www.lungusa.org
National Heart, Lung, and Blood Institute www.nhlbi.nih.gov
It's Quitting Time L.A. www.laquits.com

"Adult Smoking on the Decline, but Disparities Remain"
www.publichealth.lacounty.gov/ha/reports/LAHealthBrief_2011/Smoking/Smoking2012_finalS.pdf

Referral **American Lung Association Helpline** 1-800-LUNG-USA1
California Smokers' Helpline 1-800-NO-BUTTS

Figure T9. Trends in emphysema/COPD mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	2,723	36	2,604	33	2,796	34	2,641	32	2,770	33	2,665	31	2,625	29	2,889	31	2,904	30	2,622	30
Males	1,301	43	1,246	40	1,377	43	1,278	39	1,348	39	1,275	37	1,286	36	1,398	37	1,420	37	1,246	35
Females	1,422	31	1,358	29	1,419	29	1,363	27	1,422	28	1,390	27	1,339	25	1,491	27	1,484	26	1,376	26
White	1,992	46	1,887	43	1,989	45	1,835	41	1,840	41	1,771	39	1,801	39	1,955	41	1,895	39	1,743	40
Hispanic	261	18	249	16	311	19	305	18	344	18	346	18	299	14	343	15	392	18	345	17
Black	281	38	293	40	287	38	297	39	331	52	329	41	265	32	318	37	337	39	289	35
Asian/Pacific Islander	184	20	164	17	198	19	192	18	238	20	213	17	247	19	258	18	267	18	229	16
Males																				
White	887	51	855	48	896	49	830	45	823	45	793	44	823	44	894	46	887	45	762	42
Hispanic	125	24	126	22	175	28	162	25	177	25	167	23	155	19	175	20	194	23	172	21
Black	153	54	149	55	169	58	154	52	184	60	170	56	144	46	157	48	176	54	161	50
Asian/Pacific Islander	133	35	111	27	131	30	125	28	154	32	141	28	155	29	162	28	158	27	138	24
Females																				
White	1,105	43	1,032	39	1,093	41	1,005	38	1,017	37	978	37	978	36	1,061	38	1,008	35	981	38
Hispanic	136	15	123	13	136	14	143	13	167	15	179	15	144	11	168	12	198	15	173	14
Black	128	28	144	31	118	25	143	31	147	30	159	33	121	24	161	31	161	30	128	26
Asian/Pacific Islander	51	10	53	9	67	11	67	10	84	12	72	10	92	11	96	11	109	12	91	10
SPA 1: Antelope Valley	138	70	125	63	140	69	120	58	159	74	150	67	148	63	184	75	202	79	172	70
SPA 2: San Fernando	529	32	519	30	575	33	513	29	563	31	578	32	562	30	527	26	572	27	539	27
SPA 3: San Gabriel	484	33	494	32	529	33	515	31	537	32	536	31	504	28	614	33	631	33	534	30
SPA 4: Metro	259	28	236	24	246	24	234	23	270	26	247	23	236	21	260	22	251	21	189	19
SPA 5: West	179	26	191	27	178	25	166	22	158	22	139	19	140	18	195	24	182	22	146	19
SPA 6: South	201	35	212	36	195	32	205	34	219	34	197	30	185	28	214	31	216	31	202	33
SPA 7: East	356	38	335	35	402	39	372	35	316	29	330	30	366	32	381	33	359	31	339	32
SPA 8: South Bay	558	48	489	40	521	42	497	38	542	41	479	36	475	34	501	35	488	32	496	36

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

Homicide

2nd cause of premature death
17th cause of death

***HOMICIDE** has been the second-leading cause of premature death every year for the past 10 years. In 2010, it was the leading cause of premature death in Compton, South, and Southeast Health Districts. It was the leading cause of death for black and Hispanic men aged 15 to 44. The homicide rate for black men, 45 deaths per 100,000 population, was more than seven times higher than for the County overall. Among men, 82% of homicides were committed with a firearm.*

In simple terms . . .

Homicide is the killing of one person by another, including acts of terrorism. The majority of homicides do not involve self-defense. Homicide may be committed with a weapon such as a gun or knife, or may result from means including strangulation, drowning, poisoning, burning, pushing the victim from a high place, neglect, abandonment, or abuse. Deaths from injuries caused by law enforcement officers or military in the line of duty are not included in this category.

Risk factors

Intimate partner violence, poor access to quality education, lack of employment opportunities, youth with excessive unstructured free time, gang affiliation, alcohol and substance abuse, witnessing and experiencing violence and child abuse, access to firearms

Community opportunities for prevention

- Provide educational and recreational opportunities for children and adolescents such as after-school programs
- Support nurse home-visitation programs for teenage parents

- Participate in community-based youth violence prevention approaches such as Striving To Reduce Youth Violence Everywhere (STRYVE) and Urban Networks to Increase Thriving Youth (UNITY) (see References for links)

- Support community policing
- Build communities that discourage street violence with well-lit streets and plenty of pedestrian traffic

Individual opportunities for prevention

- Teach children how to handle tough social situations and how to resolve problems without using violence
- Participate in youth mentoring programs that pair an adult with a young person. The adult serves as a positive role model and helps guide the young person's behavior
- Seek help for substance abuse (drug or alcohol)
- Recognize that easy access to firearms is a risk for homicide
- Unload and lock firearms in the home with the ammunition stored and locked separately

LOS ANGELES COUNTY

Deaths 651
Death Rate 6.3 deaths per 100,000 population

Healthy People 2010 Objective 15-32 2.8 deaths per 100,000 population

ICD-9 codes (1979-1998) E960-E969
ICD-10 codes (1999-2010) *U01-*U02, X85-Y09, Y87.1

References **VETO Violence**
<http://vetoviolence.cdc.gov>
<http://vetoviolence.cdc.gov/stryve>
Prevention Institute UNITY
<http://preventioninstitute.org/unity>
CDC National Center for Injury Prevention and Control
www.cdc.gov/ncipc/dvp/dvp.htm

Referral **Violence Prevention Coalition of Greater Los Angeles**
213-346-3265
Los Angeles County Department of Public Health, Substance Abuse Prevention and Control Helpline
1-800-564-6600

Figure T10. Trends in homicide mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	1,099	11	1,148	11	1,066	10	1,069	10	1,066	10	1,043	10	869	8	838	8	723	7	651	6
Males	937	18	990	19	931	18	940	18	940	18	916	17	751	14	710	13	618	11	545	10
Females	162	3	158	3	135	3	129	3	126	2	127	2	118	2	128	2	105	2	106	2
White	142	5	133	4	119	4	105	4	101	3	97	3	92	3	83	3	64	2	76	2
Hispanic	527	11	567	11	520	10	531	10	570	11	545	10	474	9	458	8	397	7	328	6
Black	361	38	393	41	369	38	388	41	362	38	344	36	272	28	250	26	227	23	219	25
Asian/Pacific Islander	47	4	51	4	57	4	42	3	33	2	50	4	30	2	43	3	32	2	24	2
Males																				
White	97	6	98	6	93	6	77	5	69	4	76	5	71	5	62	4	43	3	51	3
Hispanic	473	19	501	19	471	18	481	17	528	19	491	18	420	15	407	14	344	13	288	11
Black	315	70	352	78	324	72	348	78	320	72	298	67	240	53	214	47	207	44	186	45
Asian/Pacific Islander	37	6	36	6	42	6	33	5	23	3	46	7	20	3	24	4	23	3	18	--
Females																				
White	45	3	35	2	26	1	28	2	32	2	21	1	21	1	21	1	21	1	25	2
Hispanic	54	2	66	3	49	2	50	2	42	2	54	2	54	2	51	2	53	2	40	2
Black	46	9	41	8	45	9	40	8	42	8	46	9	32	6	36	7	20	4	33	7
Asian/Pacific Islander	10	--	15	--	15	--	9	--	10	--	4	--	10	--	19	--	9	--	6	--
SPA 1: Antelope Valley	21	7	27	8	36	11	33	10	37	11	46	13	37	10	26	6	31	8	23	6
SPA 2: San Fernando	142	7	139	7	120	6	101	5	104	5	98	5	81	4	91	4	79	4	71	3
SPA 3: San Gabriel	114	6	111	6	106	6	131	7	103	5	116	6	106	5	108	6	69	4	71	4
SPA 4: Metro	140	11	145	12	126	10	115	9	118	9	112	9	110	9	102	8	82	6	73	6
SPA 5: West	43	6	38	6	24	4	24	4	26	4	25	5	14	--	18	--	14	--	12	--
SPA 6: South	337	32	355	34	315	29	356	32	372	34	310	28	245	22	233	21	194	17	189	17
SPA 7: East	107	8	129	9	117	8	108	7	130	9	126	9	108	7	99	7	101	7	88	6
SPA 8: South Bay	175	11	190	12	192	12	177	11	161	10	179	11	145	9	140	9	144	9	120	8

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

--Number of deaths is too small to calculate a reliable rate.

HIV

 (Human Immunodeficiency Virus)

12th cause of premature death
35th cause of death

HIV remained an important cause of death and premature death among some groups even though it has not been one of the overall leading causes of death or premature death since 2004. In 2010, it was the fifth-leading cause of premature death for black men and among residents of the Central Health District. The death rate among black men, 15 deaths per 100,000 population, was five times higher than the overall County rate.

In simple terms . . .

HIV (human immunodeficiency virus) affects the body's ability to fight infections and certain cancers by damaging the immune system. HIV is spread by sexual contact through blood or mucous membrane exposure to infected blood, semen, vaginal secretions, or rectal mucus; by sharing needles and/or syringes with someone who is infected, or, less commonly—and extremely rarely in the U.S.—through transfusions of infected blood, blood clotting factors, or organ/tissue donation. Babies born to HIV-infected women may become infected before or during birth, or through breastfeeding after birth. There is no scientific evidence that HIV can be transmitted in any other ways.

Risk factors

Having unprotected sex and/or sharing drug needles and syringes with an HIV-infected person or a person whose HIV status is unknown

Community opportunities for prevention

- Educate the community about how HIV is transmitted and how to avoid getting infected
- Provide HIV counseling and testing
- Provide access to drug treatment programs, and sexually transmitted disease testing and treatment
- Screen pregnant women for HIV infection and use drug therapies to reduce the transmission of HIV from mother to baby

Individual opportunities for prevention

- Use latex condoms consistently and correctly with HIV-infected sexual partners or those whose HIV status is unknown
- Do not share drug needles and syringes
- Learn your HIV status by getting tested for antibodies to HIV. Nearly 60,000 persons are estimated to be living with HIV/AIDS in Los Angeles County, one-fifth of whom are believed to be unaware of their infection

LOS ANGELES COUNTY

Deaths 274
Death Rate 2.8 deaths per 100,000 population

Healthy People
2010 Objective 13-14 0.7 deaths per 100,000 population

ICD-9 codes
(1979-1998) 042-044

ICD-10 codes
(1999-2010) B20-B24

References **National Institute of Allergy and Infectious Diseases**
www.niaid.nih.gov/topics/hiv/aids
CDC HIV/AIDS Prevention
www.cdc.gov/hiv

"Los Angeles County Five-Year Comprehensive HIV Plan"
www.publichealth.lacounty.gov/dhsp/PPC/LAC_FiveYear_ComprehensiveHIVPlan2013-2017.pdf

Referral **Erase Doubt**
1-800-367-AIDS or
www.erasedoubt.org

HIV L.A. Directory
866-772-2365 or
www.hivla.org

Figure T11. Trends in HIV mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	558	6	502	5	497	5	498	5	438	4	414	4	391	4	371	4	313	3	274	3
Males	485	11	428	9	438	9	436	9	378	8	355	7	338	7	310	6	256	5	232	5
Females	73	1	74	2	59	1	62	1	60	1	59	1	53	1	61	1	57	1	42	1
White	195	6	151	4	167	5	174	5	139	4	155	4	119	3	96	3	84	2	74	2
Hispanic	182	5	187	5	170	5	177	5	158	4	139	3	132	3	137	3	108	3	114	3
Black	170	18	148	16	145	15	136	14	131	14	108	12	125	13	113	12	109	11	80	9
Asian/Pacific Islander	9	--	14	--	10	--	7	--	6	--	8	--	11	--	21	1	11	--	5	--
Males																				
White	180	10	140	8	161	9	159	9	126	7	139	8	112	6	86	5	74	4	65	4
Hispanic	156	9	165	9	143	8	159	8	140	7	121	6	119	6	114	6	91	5	98	5
Black	138	33	109	26	121	28	109	25	102	24	87	21	94	22	90	21	79	18	64	15
Asian/Pacific Islander	9	--	12	--	9	--	6	--	6	--	6	--	10	--	16	--	11	--	4	--
Females																				
White	15	--	11	--	6	--	15	--	13	--	16	--	7	--	10	--	10	--	9	--
Hispanic	26	1	22	1	27	1	18	--	18	--	18	--	13	--	23	1	17	--	16	--
Black	32	6	39	8	24	5	27	5	29	6	21	4	31	6	23	4	30	6	16	--
Asian/Pacific Islander	0	0	2	--	1	--	1	--	0	--	2	--	1	--	5	--	0	--	1	--
SPA 1: Antelope Valley	19	--	11	--	10	--	4	--	9	--	6	--	11	--	5	--	10	--	10	--
SPA 2: San Fernando	74	4	68	3	53	3	67	3	68	3	53	2	51	2	45	2	34	1	37	2
SPA 3: San Gabriel	47	3	51	3	39	2	49	3	30	2	47	3	30	2	30	2	32	2	30	2
SPA 4: Metro	155	14	133	12	167	14	133	11	129	10	132	10	112	9	93	7	81	6	71	6
SPA 5: West	19	--	16	--	20	3	23	3	14	--	17	--	10	--	11	--	11	--	7	--
SPA 6: South	90	11	87	10	96	12	106	13	76	9	57	7	76	9	85	10	63	7	41	5
SPA 7: East	42	4	42	3	38	3	35	3	35	3	31	2	28	2	27	2	23	2	34	3
SPA 8: South Bay	97	6	85	5	67	4	71	5	69	4	65	4	70	4	72	4	56	3	41	3

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

--Number of deaths is too small to calculate a reliable rate.

Liver Disease

5th cause of premature death
9th cause of death

***LIVER DISEASE** has been a leading cause of premature death every year for the past 10 years. In 2010, it was the ninth-leading cause of death overall, but it was the second-leading cause of death among Hispanic men. Death rates from liver disease have been consistently higher for men than for women, with Hispanic men having the highest rates. The death rate for Hispanic men, 29 deaths per 100,000 population, was more than double the overall County rate, which far exceeded the Healthy People 2010 goal.*

In simple terms . . .

The liver stores vitamins and nutrients from food. It also breaks down toxic substances from the blood and removes waste products from the body. When normal liver cells are damaged, they are replaced by scar tissue. The scar tissue interferes with the flow of blood through the liver and prevents the liver from carrying out its normal functions. Damage from scarring of the liver (cirrhosis) cannot be reversed. Sustained heavy alcohol consumption is the leading cause of cirrhosis. Chronic hepatitis, a prolonged inflammation of the liver, also causes liver damage and can cause cirrhosis. Liver disease can also be caused by viral infections such as hepatitis B and hepatitis C, as well as non-viral causes such as autoimmune disease, and exposure to certain drugs and environmental toxins.

Risk factors

Excessive alcohol consumption, prolonged exposure to certain chemicals and medications, hepatitis B or hepatitis C infection

Community opportunities for prevention

- Provide access to alcohol treatment programs

- Promote hepatitis B vaccination for groups at high risk
- Provide hepatitis B and hepatitis C screening for high-risk populations which, for hepatitis C, includes adults born between 1945 and 1965
- Regulate alcohol outlet density, maintain limits on hours and days of sale, and enhance enforcement of laws prohibiting sales to minors

Individual opportunities for prevention

- Limit alcohol intake
- Follow manufacturer's instructions when using household and industrial chemicals
- Follow doctor's instructions when taking prescription and over-the-counter drugs
- Avoid behaviors that promote transmission of hepatitis B and hepatitis C, such as injection drug use and unprotected sex
- Talk to your doctor about screening for the hepatitis B and hepatitis C viruses, and treatment for alcohol abuse

LOS ANGELES COUNTY

Deaths 1,171
Death Rate 12.0 deaths per 100,000 population

Healthy People 2010 Objective 26-2 3.2 deaths per 100,000 population

ICD-9 codes (1979-1998) 571
ICD-10 codes (1999-2010) K70, K73-K74

References **American Liver Foundation**
www.liverfoundation.org
National Digestive Diseases Information Clearinghouse
www.digestive.niddk.nih.gov
"Disparities and Deaths from Chronic Liver Disease and Cirrhosis, Los Angeles County, 2000-2008"
http://publichealth.lacounty.gov/epi/docs/CLD_mortality_final_web.pdf

Referral **Greater Los Angeles Chapter of the American Liver Foundation**
310-670-4624

Figure T12. Trends in liver disease mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	1,010	12	1,085	12	1,053	12	1,035	11	1,061	11	1,102	11	1,133	12	1,134	11	1,246	12	1,171	12
Males	695	18	741	18	727	17	698	16	759	17	758	17	792	17	773	16	837	17	787	17
Females	315	7	344	7	326	7	337	7	302	6	344	7	341	7	361	7	409	8	384	7
White	416	11	432	11	403	10	428	11	397	10	386	10	396	10	398	10	419	10	416	11
Hispanic	458	19	504	19	498	19	458	17	501	17	554	18	586	19	594	18	645	20	587	18
Black	97	11	100	11	92	10	98	11	102	11	98	11	86	9	69	7	112	11	97	10
Asian/Pacific Islander	32	3	39	3	42	3	46	4	48	4	49	4	55	4	59	4	58	4	55	4
Males																				
White	265	15	277	15	253	14	295	16	267	14	263	14	260	13	268	13	272	13	262	14
Hispanic	343	31	381	31	377	30	308	23	383	29	397	27	439	30	413	27	448	28	423	29
Black	63	17	51	13	62	16	62	16	68	18	59	14	51	12	45	10	75	17	54	12
Asian/Pacific Islander	19	--	25	5	26	4	29	5	31	5	29	5	35	5	39	6	37	5	38	5
Females																				
White	151	8	155	8	150	7	133	6	130	6	123	6	136	7	130	6	147	7	154	8
Hispanic	115	10	123	9	121	10	150	11	118	8	157	11	147	9	181	11	197	12	164	10
Black	34	7	49	10	30	6	36	7	34	6	39	8	35	7	24	4	37	7	43	8
Asian/Pacific Islander	13	--	14	--	16	--	17	--	17	--	20	3	20	3	20	2	21	2	17	--
SPA 1: Antelope Valley	40	16	35	13	48	17	40	13	39	13	43	14	50	16	45	14	53	17	47	13
SPA 2: San Fernando	144	8	168	9	180	9	190	9	199	10	200	9	189	9	207	9	200	9	192	9
SPA 3: San Gabriel	187	12	178	11	177	10	173	10	197	11	207	11	179	10	194	10	217	11	191	11
SPA 4: Metro	136	14	159	16	134	13	131	12	127	11	136	12	144	12	147	12	163	13	151	14
SPA 5: West	45	7	55	8	55	8	40	6	41	6	41	6	44	6	40	5	55	7	45	6
SPA 6: South	110	17	119	17	106	15	118	17	102	14	120	16	122	16	112	14	130	17	141	18
SPA 7: East	161	15	185	17	177	16	173	15	176	15	163	14	199	17	198	16	226	18	210	18
SPA 8: South Bay	154	11	162	12	155	11	139	10	159	11	156	10	184	12	174	11	176	11	181	12

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

--Number of deaths is too small to calculate a reliable rate.

Lung Cancer

7th cause of premature death
3rd cause of death

LUNG CANCER has been the third-leading cause of death each year for the past 10 years. In 2010, lung cancer was the third-leading cause of premature death for blacks and Asians/Pacific Islanders, the fourth-leading cause of premature death for whites, and the 12th-leading cause of premature death for Hispanics. The highest death rate, 66 deaths per 100,000 population, was among black men.

In simple terms . . .

Cancer is a term for diseases in which cells in your body grow out of control. Cancer cells can invade nearby tissue and spread to other parts of the body through the blood and lymph systems. Lung cancer starts in the cells of the lung or bronchus.

Risk factors

Tobacco smoking and breathing in the smoke of others; exposure to cancer-causing substances including radon, asbestos, uranium, and arsenic

Community opportunities for prevention

- Restrict smoking in public places and worksites to decrease exposure to indoor and outdoor secondhand smoke
- Provide access to smoking cessation programs
- Reduce youth access to tobacco products through policies and their enforcement
- Increase the tobacco tax

Individual opportunities for prevention

- If you smoke, get help to quit (1-800-NO-BUTTS)
- If you don't smoke, don't start
- Avoid being near people who are smoking
- Reduce exposure to cancer-causing substances

LOS ANGELES COUNTY

Deaths 2,941
Death Rate 32.8 deaths per 100,000 population

Healthy People 2010 Objective3-2 43.3 deaths per 100,000 population

ICD-9 codes (1979-1998) 162

ICD-10 codes (1999-2010) C33-C34

References **American Cancer Society**
www.cancer.org
Guide to Community Preventive Services
www.thecommunityguide.org
National Cancer Institute, Surveillance, Epidemiology and End Results (SEER) Program
www.seer.cancer.gov/registries/los_angeles.html
It's Quitting Time L.A.
www.laquits.com

Referral **American Cancer Society Helpline**
1-800-227-2345
California Smokers' Helpline
1-800-NO-BUTTS

Figure T13. Trends in lung cancer mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	3,232	42	3,081	39	3,150	38	3,034	36	3,036	35	3,021	35	2,950	33	2,910	31	2,958	31	2,941	33
Males	1,797	55	1,702	50	1,713	49	1,710	48	1,608	44	1,719	47	1,568	41	1,568	40	1,650	41	1,602	41
Females	1,435	32	1,379	30	1,437	31	1,324	27	1,428	29	1,302	26	1,382	27	1,342	25	1,308	24	1,339	26
White	2,039	50	1,950	47	1,942	46	1,825	43	1,830	43	1,788	42	1,700	39	1,687	38	1,702	38	1,655	40
Hispanic	348	20	363	21	381	20	366	19	370	17	384	18	398	17	433	18	408	16	441	18
Black	482	63	455	58	451	56	452	55	457	56	480	58	464	54	377	43	432	48	433	51
Asian/Pacific Islander	356	34	306	28	367	31	379	31	368	29	359	27	378	27	406	28	412	27	400	27
Males																				
White	1,056	60	1,034	57	989	54	974	53	921	50	941	51	860	45	850	44	892	45	855	47
Hispanic	219	32	217	31	237	29	231	29	210	23	236	27	233	25	253	26	243	23	260	26
Black	289	94	258	81	267	82	263	78	243	73	286	85	245	70	200	58	247	69	228	66
Asian/Pacific Islander	229	51	188	39	215	42	235	44	228	42	250	43	224	38	261	42	266	42	249	39
Females																				
White	983	43	916	39	953	40	851	36	909	38	847	35	840	35	837	33	810	32	800	35
Hispanic	129	12	146	14	144	13	135	12	160	13	148	12	165	12	180	13	165	11	181	13
Black	193	43	197	42	184	39	189	39	214	43	194	39	219	43	177	34	185	35	205	41
Asian/Pacific Islander	127	21	118	19	152	23	144	21	140	19	109	14	154	19	145	17	146	17	151	18
SPA 1: Antelope Valley	117	55	109	49	120	53	114	50	122	53	123	51	134	52	128	48	118	43	123	44
SPA 2: San Fernando	710	42	665	38	695	39	643	35	683	37	675	36	637	33	620	30	664	32	625	31
SPA 3: San Gabriel	597	40	544	35	563	35	531	32	596	35	562	32	550	31	564	31	573	31	566	32
SPA 4: Metro	318	35	294	31	313	32	290	29	285	28	267	26	274	25	294	27	265	24	302	31
SPA 5: West	236	36	255	38	216	32	222	32	220	31	217	31	204	29	212	28	216	28	226	31
SPA 6: South	310	53	300	50	286	46	297	47	293	45	271	42	280	42	242	36	275	40	268	41
SPA 7: East	360	37	339	34	356	35	366	35	332	31	325	30	341	30	346	30	300	26	299	28
SPA 8: South Bay	569	46	567	45	580	44	544	41	496	36	564	41	520	36	494	34	541	36	529	38

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

Motor Vehicle Crash

4th cause of premature death
18th cause of death

MOTOR VEHICLE CRASHES were the 18th-leading cause of death overall, but were the second-leading cause of death for 5- to 14-year-olds and 15- to 24-year-olds, and the second-leading cause of premature death among men in the Antelope Valley Service Planning Area. The median age at death from motor vehicle crash was 34 years for Hispanics, 37 for blacks, 50 for whites, and 64 for Asians/Pacific Islanders. Most of the deaths were pedestrians (210 deaths) followed by the occupants of a car, van, or truck (197 deaths).

In simple terms . . .

Motor vehicle crashes can occur on any public roadway, including streets, alleys, or highways. They can also occur in non-public areas such as parking lots or driveways.

Any type of vehicle can be involved in a motor vehicle crash, including a car, truck, bus, or motorcycle. The person injured may be the driver or passenger of the vehicle that caused the crash, or of the vehicle that was hit, or a pedestrian or bicyclist.

Risk factors

Risk factors for crashing: driving under the influence of alcohol or drugs (illicit, prescription, or over-the-counter), driving recklessly, distracted driving, disobeying traffic laws, lack of driving experience, younger or older age, hazardous road conditions, neglecting routine car maintenance

Risk factors for injury after a crash: not using seat belts or other passenger safety restraints such as child safety seats, unsafe car design, not wearing a helmet when riding a motorcycle or bicycle

Community opportunities for prevention

- Actively enforce all traffic laws, including those addressing distracted driving, seat belt use, child passenger safety, speeding, and driving under the influence

- Use media and educational campaigns to reduce alcohol-impaired driving, and to improve child passenger and teen driving safety
- Use the built environment to reduce motor vehicle injuries and fatalities by adding sidewalks, bike lanes, traffic calming measures, and signal timing
- Support national efforts for safe car design features such as antilock brakes and electronic stability control systems

Individual opportunities for prevention

- Do not drive while impaired by alcohol or drugs
- Do not text while driving
- Always wear seat belts, even for short trips
- Place children under age 12 in an age-appropriate, properly installed child safety seat or booster seat in the back seat of the car
- Wear helmets when using bikes, scooters, skates, and skateboards
- When walking near traffic, supervise young children and hold their hand
- Keep your vehicle in good working order

LOS ANGELES COUNTY

Deaths 625
Death Rate 6.3 deaths per 100,000 population

Healthy People 2010 Objective15-15 8.0 deaths per 100,000 population (rate for traffic-related deaths only)

ICD-9 codes (1979-1998) E810-E825

ICD-10 codes (1999-2010) V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2

References **Guide to Community Preventive Services**
www.thecommunityguide.org
The National Highway Traffic Safety Administration
www.nhtsa.dot.gov

Referral **California Highway Patrol (non-emergency)**
1-800-TELL-CHP

Figure T14. Trends in motor vehicle crash mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	890	9	851	9	967	10	947	10	925	9	965	10	908	9	822	8	677	7	625	6
Males	598	13	578	12	697	15	647	14	650	13	681	14	669	13	623	12	484	10	428	9
Females	292	6	273	6	270	5	300	6	275	5	284	6	239	5	199	4	193	4	197	4
White	304	9	292	9	343	10	340	10	287	9	312	10	272	8	253	8	220	6	200	6
Hispanic	359	10	373	9	418	10	374	9	428	10	425	10	436	10	367	8	312	7	290	7
Black	129	14	108	12	107	12	120	13	106	11	115	12	110	12	107	11	74	8	71	8
Asian/Pacific Islander	95	8	75	6	95	7	107	8	95	7	110	8	86	6	92	7	69	5	62	4
Males																				
White	216	13	190	12	246	15	218	14	201	13	220	14	191	12	198	12	169	10	136	8
Hispanic	242	14	270	13	317	15	270	13	304	14	321	15	334	15	290	13	223	10	213	10
Black	82	19	77	20	71	17	85	20	83	20	82	20	84	20	77	18	52	12	54	13
Asian/Pacific Islander	56	10	40	7	60	10	71	12	58	10	55	8	57	9	56	9	39	6	25	4
Females																				
White	88	5	102	6	97	6	122	7	86	5	92	5	81	4	55	3	51	3	64	4
Hispanic	117	7	103	5	101	5	104	5	124	6	104	5	102	5	77	4	89	4	77	4
Black	47	9	31	6	36	7	35	7	23	5	33	7	26	5	30	6	22	4	17	--
Asian/Pacific Islander	39	6	35	5	35	5	36	5	37	5	55	7	29	4	36	5	30	4	37	4
SPA 1: Antelope Valley	64	22	69	22	71	22	83	28	80	25	73	22	51	15	44	12	45	13	35	10
SPA 2: San Fernando	196	10	172	8	203	10	180	9	197	9	197	9	156	7	167	8	142	6	127	6
SPA 3: San Gabriel	140	8	140	8	138	8	153	8	179	10	147	8	153	8	124	6	109	6	100	6
SPA 4: Metro	98	9	78	7	99	8	84	7	91	8	82	7	87	7	76	6	65	5	75	7
SPA 5: West	32	5	35	5	40	6	37	6	35	6	41	6	39	6	32	5	31	4	30	5
SPA 6: South	121	13	110	12	106	12	106	11	99	10	118	13	119	13	112	12	94	10	70	7
SPA 7: East	91	8	114	9	110	9	105	8	106	8	110	8	124	9	111	8	85	6	88	7
SPA 8: South Bay	123	8	114	8	114	8	112	7	117	7	137	9	113	7	113	7	89	6	83	5

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

Pneumonia/Influenza

21st cause of premature death
6th cause of death

***PNEUMONIA/INFLUENZA** has been the fifth- or sixth-leading cause of death each year for the past 10 years, but it contributed little to premature death. In 2010, the median age at death from pneumonia/influenza was 84 years. The overall death rate from pneumonia/influenza was 22 deaths per 100,000 population, but for seniors older than 84, the rate was 642 deaths per 100,000 population.*

In simple terms . . .

Pneumonia is an inflammation of the lungs caused by an infection or, less commonly, by a chemical or physical irritant that can result in difficulty breathing. Pneumonia is a common illness that is often mild but can be quite severe, even fatal. The severity of the infection depends on the cause and the person's age and health. Lung infections can be caused by bacteria, viruses, or fungi. Influenza, often called "the flu," is one of many viruses that cause mild to severe respiratory illness, including pneumonia, which can result in death. Influenza and some forms of bacterial pneumonia are spread from person to person. Influenza and some kinds of pneumonia are vaccine preventable.

Risk factors (for complications)

Age (young and old), underlying chronic medical conditions such as diabetes and heart disease, being morbidly obese, weakened immune system, chronic lung disease, tobacco smoking and breathing in the smoke of others

Community opportunities for prevention

- Educate the community about the recommendations for influenza and pneumococcal vaccination
- Provide information about the availability of no-cost vaccinations

Individual opportunities for prevention

- Follow recommended guidelines for influenza and pneumococcal vaccination
- Wash your hands frequently with soap and water
- If you smoke, get help to quit (1-800-NO-BUTTS)
- Stay away from people who are sick and avoid spreading illness to others by staying home if you have a fever, cough and runny nose
- Avoid touching your eyes, nose, or mouth

LOS ANGELES COUNTY

Deaths 1,964
Death Rate 22 deaths per 100,000 population

Healthy People 2010 Objective None

ICD-9 codes (1979-1998) 480-487

ICD-10 codes (1999-2010) J09-J18

- References **American Lung Association**
www.lungusa.org
- Centers for Disease Control and Prevention**
www.cdc.gov/flu
- U.S. Department of Health and Human Services**
www.flu.gov
- California Department of Public Health**
[www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza\(Flu\).aspx](http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza(Flu).aspx)

Referral **Los Angeles County Info Line for free or low-cost immunization clinics**
2-1-1, or 1-800-427-8700

Figure T15. Trends in pneumonia/influenza mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	2,421	32	2,494	31	2,419	29	2,272	27	2,333	27	2,283	26	2,184	24	2,171	23	2,097	21	1,964	22
Males	1,065	38	1,155	39	1,121	36	1,013	32	1,055	32	1,083	32	1,018	29	990	27	1,016	26	910	26
Females	1,356	28	1,339	27	1,298	25	1,259	24	1,278	24	1,200	22	1,166	20	1,181	20	1,081	18	1,054	19
White	1,488	32	1,595	64	1,475	31	1,330	27	1,338	27	1,314	27	1,198	24	1,203	23	1,076	21	1,011	22
Hispanic	398	28	383	26	411	25	408	24	448	24	429	22	418	20	430	19	492	20	399	19
Black	270	39	269	37	271	37	257	34	238	31	246	32	259	32	232	28	223	26	247	31
Asian/Pacific Islander	259	30	236	25	250	25	265	24	300	26	284	23	305	23	297	21	290	20	296	21
Males																				
White	622	37	723	41	659	36	613	33	580	32	612	34	532	28	541	28	528	26	480	26
Hispanic	180	34	182	33	189	29	174	26	208	29	198	26	197	24	192	22	232	23	179	21
Black	120	51	124	46	139	51	100	37	103	36	117	42	134	45	119	38	100	31	91	30
Asian/Pacific Islander	140	40	120	31	130	31	118	26	161	34	152	30	154	29	135	24	148	25	155	27
Females																				
White	866	29	872	29	816	27	717	24	758	25	702	23	666	22	662	20	548	18	531	19
Hispanic	218	25	201	22	222	22	234	22	240	21	231	19	221	17	238	18	260	18	220	17
Black	150	33	145	31	132	28	157	32	135	27	129	26	125	25	113	22	123	23	156	31
Asian/Pacific Islander	119	23	116	21	120	20	147	23	139	20	132	18	151	19	162	19	142	16	141	16
SPA 1: Antelope Valley	61	33	69	35	72	37	50	25	68	35	70	32	51	22	51	21	59	23	61	25
SPA 2: San Fernando	496	30	529	31	521	29	500	28	472	25	454	24	407	21	415	20	414	19	415	20
SPA 3: San Gabriel	529	36	483	31	467	29	488	29	477	28	409	24	454	25	449	24	404	21	390	21
SPA 4: Metro	335	35	344	34	350	34	293	28	319	29	302	28	294	25	255	21	256	21	229	23
SPA 5: West	206	29	230	31	212	28	184	24	188	24	188	24	184	23	218	26	162	19	158	19
SPA 6: South	204	37	192	33	183	30	183	29	181	28	202	31	195	29	188	27	178	25	181	30
SPA 7: East	259	29	262	27	253	25	262	25	2,586	23	284	26	239	20	248	21	263	22	216	20
SPA 8: South Bay	316	28	375	31	350	28	298	23	360	27	366	28	354	25	343	23	360	24	311	22

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

Stroke

8th cause of premature death
2nd cause of death

STROKE has been the second-leading cause of death for each of the past 10 years, and it has been the seventh- to ninth-leading cause of premature death. The death rates for blacks were consistently higher than for other race/ethnic groups. Among blacks, the median age at death from stroke was 74 years, compared with 78 for Hispanics, 81 for Asians/Pacific Islanders, and 85 for whites.

In simple terms . . .

A stroke occurs when the blood supply to part of the brain is suddenly interrupted or when a blood vessel in the brain bursts, spilling blood into the soft tissue and the spaces containing or surrounding brain cells.

When that happens, part of the brain cannot get the blood and oxygen it needs. Without oxygen, nerve cells in the affected part of the brain usually die within minutes and the soft tissue can develop scarring, resulting in the loss of functions controlled by that part of the brain.

Risk factors

High blood pressure, tobacco smoking, diabetes, high cholesterol, being overweight, excessive alcohol use, age, family history of stroke, prior stroke or heart attack

Community opportunities for prevention

- Promote access to blood pressure screening and treatment for high blood pressure
- Promote physical activity by providing access to safe places like parks and schools to walk, play, and exercise
- Restrict smoking in public places and worksites to decrease exposure to indoor and outdoor secondhand smoke
- Provide access to smoking cessation programs

Individual opportunities for prevention

- Work with your health care provider to control blood pressure and manage diabetes
- If you smoke, get help to quit (1-800-NO-BUTTS)
- Maintain a healthy weight
- Make time to be physically active every day with your children, partner, pet, friends, or on your own
- Eat a diet low in fat and salt
- Learn the stroke warning signs

LOS ANGELES COUNTY

Deaths 3,278
Death Rate 36 deaths per 100,000 population

Healthy People 2010 Objective12-7 50 deaths per 100,000 population

ICD-9 codes (1979-1998) 430-434, 436-438

ICD-10 codes (1999-2010) I60-I69

References **American Stroke Association**
www.strokeassociation.org
National Institute of Neurological Disorders and Stroke
www.ninds.nih.gov/disorders/stroke

Referral **Los Angeles County Division of the American Heart Association**
213-291-7000

Figure T16. Trends in stroke mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	4,259	56	4,169	52	4,249	51	4,121	49	3,775	43	3,622	41	3,323	36	3,280	34	3,301	34	3,278	36
Males	1,691	56	1,701	54	1,754	53	1,718	51	1,554	45	1,501	42	1,409	37	1,373	35	1,399	35	1,405	38
Females	2,568	55	2,468	51	2,495	49	2,403	47	2,221	42	2,121	40	1,914	34	1,907	33	1,902	32	1,873	34
White	2,483	55	2,382	51	2,441	52	2,234	47	1,962	41	1,817	39	1,587	33	1,552	31	1,623	32	1,534	34
Hispanic	708	44	711	42	755	41	785	42	782	38	779	36	742	32	749	31	733	29	780	34
Black	591	82	589	79	584	76	572	74	530	66	495	61	516	62	469	55	433	50	446	54
Asian/Pacific Islander	472	49	473	46	462	43	513	44	489	40	522	41	469	34	496	34	504	34	501	34
Males																				
White	923	54	932	53	918	51	881	48	770	42	704	39	645	34	603	31	668	33	629	35
Hispanic	322	48	326	48	342	44	364	47	360	43	356	38	338	33	343	32	325	29	346	35
Black	232	82	227	77	248	84	208	71	206	67	202	61	209	62	194	57	170	49	179	56
Asian/Pacific Islander	212	51	209	48	242	82	260	53	216	42	235	43	211	35	223	37	235	38	243	40
Females																				
White	1,560	55	1,450	50	1,523	51	1,353	46	1,192	40	1,113	38	942	32	949	30	955	31	905	32
Hispanic	386	41	385	38	413	39	421	38	422	35	423	33	404	30	406	29	408	28	434	32
Black	359	80	362	78	336	69	364	75	324	65	293	59	307	60	275	53	263	49	267	53
Asian/Pacific Islander	260	47	264	44	220	35	253	38	273	39	287	39	258	32	273	32	269	31	258	30
SPA 1: Antelope Valley	110	58	106	52	131	65	125	61	124	60	125	56	110	45	120	48	94	37	114	45
SPA 2: San Fernando	866	52	840	48	898	50	905	50	734	40	758	40	623	32	628	30	690	32	661	32
SPA 3: San Gabriel	749	50	806	52	822	51	756	45	729	43	679	39	608	33	629	33	694	36	650	36
SPA 4: Metro	475	50	462	47	453	44	426	41	374	35	400	37	358	32	367	32	344	29	311	31
SPA 5: West	368	51	379	52	342	45	321	42	332	43	258	34	251	32	262	33	232	28	253	30
SPA 6: South	434	76	403	67	401	65	407	65	376	58	349	52	377	55	355	51	323	46	307	48
SPA 7: East	493	53	513	52	479	46	499	47	460	42	421	38	435	37	378	32	411	34	426	39
SPA 8: South Bay	733	62	651	64	676	64	635	49	638	48	600	44	535	37	519	35	510	33	551	39

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

***SUICIDE** was the third-leading cause of premature death in 2010, its highest ranking in the past 10 years. Between 2001 and 2007, the number of suicide deaths was declining, but there was a sharp increase in 2008. In 2010, most suicides were among men (80%) and, among men, firearms were the most common method of committing suicide. Among women, suffocation/hanging was the most common method. Since 2009, the number of suicides have exceeded the number of homicides.*

In simple terms . . .

Suicide refers to a person intentionally taking his or her own life.

Risk factors

Suicidal behavior is complex. Risk factors for suicidal behavior include mental illness such as depression or bipolar disorder, alcohol or drug abuse, previous suicide attempts, family history of suicide, history of being sexually abused, impulsive or aggressive tendencies, and having a firearm in the home.

Community opportunities for prevention

- Increase public awareness that suicide is preventable
- Educate health care providers and the public to identify and respond to persons at risk for suicide
- Provide access to mental health and substance abuse services
- Use media campaigns to reduce stigma about seeking help for mental health issues and suicide

Individual opportunities for prevention

- Limit access to lethal means of self-harm, including the stockpiling of prescription medications
- Remove firearms from the home
- If firearms are in the home, store them unloaded and locked with the ammunition locked separately
- Seek help for substance abuse (drug or alcohol) from a healthcare provider, or call the Substance Abuse Prevention and Control helpline: 1-800-564-6600
- Seek mental health counseling for suicidal thoughts, or call the National Suicide Prevention Lifeline: 1-800-273-8255
- Respond to threats of self-harm and do not leave a suicidal person alone

LOS ANGELES COUNTY

Deaths 792
Death Rate 8.0 suicides per 100,000 population

Healthy People 2010 Objective18-1 4.8 suicides per 100,000 population

ICD-9 codes (1979-1998) E950-E959

ICD-10 codes (1999-2010) *U03, X60-X84, Y87.0

References **National Institute of Mental Health**
www.nimh.nih.gov
U.S. Department of Health and Human Services
www.mentalhealth.gov

Referral **Didi Hirsch Community Mental Health Center Suicide Prevention Center**
1-877-727-4747
National Suicide Prevention Lifeline
1-800-273-8255

Figure T17. Trends in suicide mortality

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	762	8	727	8	727	8	696	7	695	7	662	7	667	7	802	8	775	7	792	8
Males	608	14	564	13	582	13	537	12	524	11	506	11	529	11	620	13	580	12	635	13
Females	154	3	163	3	145	3	159	3	171	3	156	3	138	3	182	3	195	4	157	3
White	443	13	401	11	442	12	379	11	388	11	367	10	374	10	478	13	449	12	420	13
Hispanic	188	5	171	4	163	4	182	4	172	4	165	4	161	4	160	4	173	4	203	4
Black	51	5	72	8	55	6	42	4	50	5	47	5	48	5	65	7	47	5	56	6
Asian/Pacific Islander	78	6	81	6	65	5	92	7	81	6	82	6	80	6	93	6	101	6	107	7
Males																				
White	350	20	297	17	342	20	284	16	286	16	279	16	297	17	363	20	329	18	324	19
Hispanic	161	9	151	8	148	8	154	8	146	6	133	6	137	7	132	6	142	6	181	8
Black	40	9	55	14	45	11	32	8	37	9	40	10	38	9	52	12	33	8	46	11
Asian/Pacific Islander	56	10	59	10	45	7	67	10	54	8	54	8	54	8	70	10	73	10	81	12
Females																				
White	93	5	104	6	100	6	95	5	102	6	88	5	77	4	115	6	120	7	96	6
Hispanic	27	1	20	1	15	--	28	1	29	1	32	1	24	1	28	1	31	1	22	1
Black	11	--	17	--	10	--	10	--	13	--	7	--	10	--	13	--	14	--	10	--
Asian/Pacific Islander	22	3	22	3	20	3	25	3	27	4	28	4	26	3	23	3	28	3	26	3
SPA 1: Antelope Valley	32	12	37	14	37	13	35	11	34	12	37	11	27	8	48	14	29	9	53	15
SPA 2: San Fernando	177	9	148	7	162	8	159	8	154	7	145	7	168	8	193	9	192	8	169	8
SPA 3: San Gabriel	131	8	125	7	110	6	118	7	122	7	118	6	106	6	101	5	128	7	132	7
SPA 4: Metro	98	8	97	9	97	8	78	7	89	7	81	6	88	7	99	8	101	8	113	10
SPA 5: West	54	8	61	9	65	10	59	8	70	10	56	8	53	7	82	11	79	11	53	8
SPA 6: South	44	5	44	5	41	4	46	5	33	3	46	5	38	4	48	5	33	3	45	4
SPA 7: East	82	7	70	6	80	6	67	5	67	5	57	4	65	5	72	6	93	7	65	5
SPA 8: South Bay	134	9	131	9	114	8	112	7	113	7	105	7	105	7	143	9	109	7	147	10

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

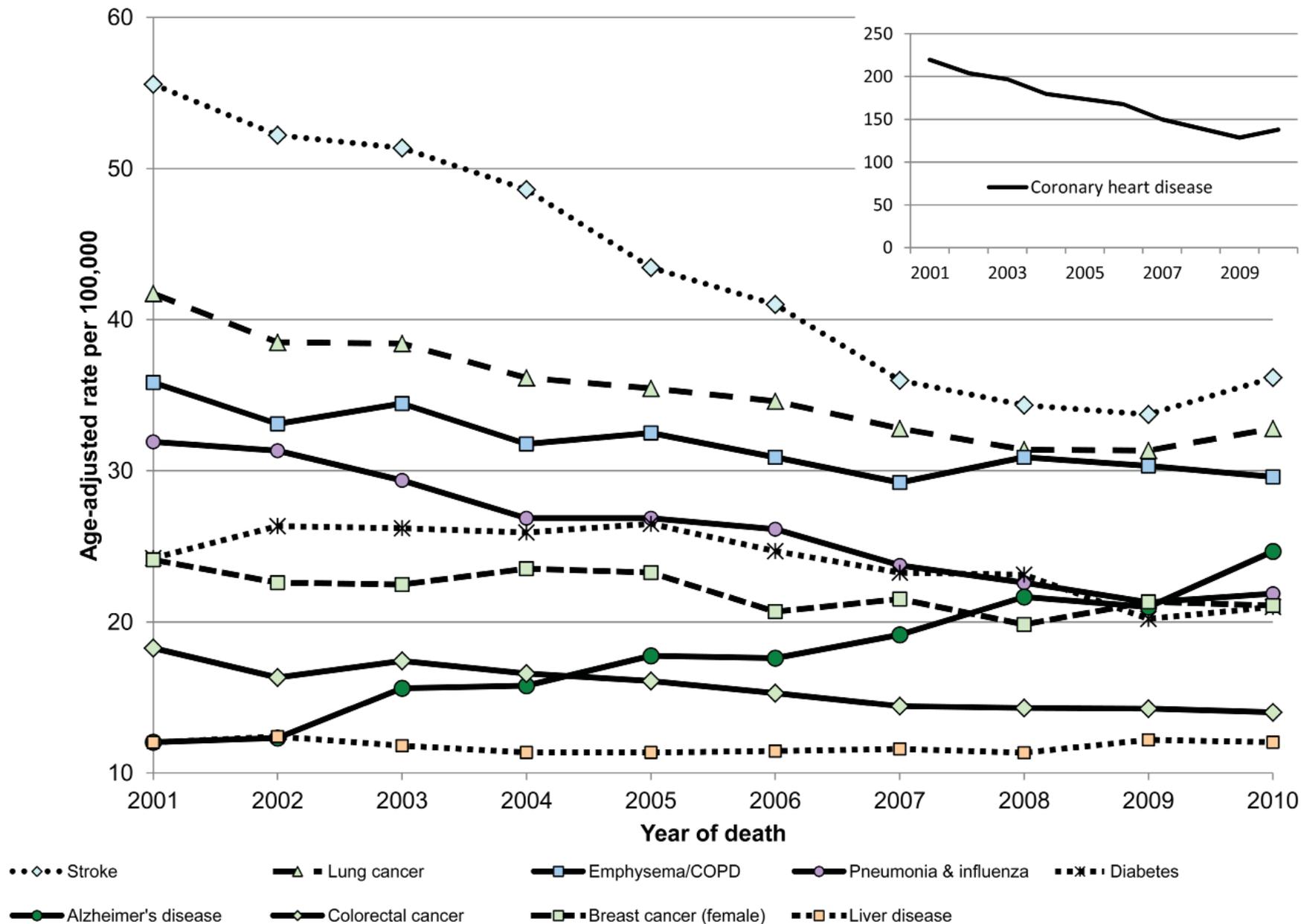
--Number of deaths is too small to calculate a reliable rate.

Figure T18. Trends in mortality from all causes of death

	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	No. of deaths	Death rate*																		
Los Angeles County	59,774	756	59,586	726	61,026	721	59,153	682	60,145	679	59,461	661	58,316	624	58,043	601	57,620	583	56,538	615
Males	29,968	908	29,968	871	30,907	867	29,839	818	30,308	812	30,035	793	29,630	753	29,402	722	29,342	703	28,772	739
Females	29,806	637	29,618	610	30,119	599	29,314	575	29,837	572	29,426	556	28,686	522	28,641	504	28,278	488	27,766	517
White	34,189	801	33,672	773	34,105	772	32,324	727	32,101	716	31,376	705	30,593	673	30,149	643	29,622	621	28,738	667
Hispanic	11,879	622	11,969	588	12,803	594	12,632	561	13,574	573	13,783	556	13,429	506	13,591	500	13,671	493	13,751	529
Black	8,447	1,101	8,482	1,076	8,517	1,059	8,372	1,024	8,413	1,016	8,185	985	8,023	940	7,697	879	7,825	874	7,438	891
Asian/Pacific Islander	5,085	211	5,255	496	5,352	476	5,591	473	5,820	468	5,884	454	6,088	440	6,354	438	6,267	419	6,343	429
Males																				
White	16,360	946	16,171	912	16,454	911	15,615	856	15,336	836	15,182	831	14,872	797	14,768	764	14,553	735	14,184	783
Hispanic	6,446	758	6,596	723	7,100	731	6,950	691	7,517	712	7,440	673	7,370	617	7,316	601	7,433	604	7,448	644
Black	4,356	1,402	4,338	1,345	4,365	1,322	4,224	1,267	4,321	1,274	4,181	1,238	4,078	1,172	3,871	1,087	3,961	1,083	3,704	1,087
Asian/Pacific Islander	2,714	625	2,744	594	2,846	580	2,919	570	3,012	563	3,106	558	3,205	542	3,301	538	3,276	518	3,277	532
Females																				
White	17,829	684	17,501	661	17,651	656	16,709	621	16,765	617	16,194	601	15,721	572	15,381	542	15,069	526	14,554	568
Hispanic	5,433	521	5,373	486	5,703	487	5,682	462	6,057	482	6,343	466	6,059	416	6,275	419	6,238	408	6,303	440
Black	4,091	893	4,144	882	4,152	863	4,148	848	4,092	466	4,004	802	3,945	771	3,826	730	3,864	721	3,734	748
Asian/Pacific Islander	2,371	424	2,511	420	2,506	395	2,672	398	2,808	826	2,778	376	2,883	361	3,053	361	2,991	344	3,066	354
SPA 1: Antelope Valley	1,862	884	1,961	894	2,075	921	1,972	870	2,137	917	2,125	868	2,109	808	2,165	803	2,230	815	2,214	799
SPA 2: San Fernando	12,182	710	12,229	688	12,670	698	12,435	670	12,591	664	12,345	643	12,018	603	12,259	585	12,132	559	12,032	577
SPA 3: San Gabriel	10,828	713	10,827	685	10,895	664	10,582	627	11,074	641	10,736	612	10,569	577	10,616	563	10,636	553	10,457	580
SPA 4: Metro	6,864	713	6,726	671	6,866	665	6,516	618	6,687	618	6,540	593	6,340	554	6,210	527	6,032	505	5,982	585
SPA 5: West	4,192	607	4,287	605	4,290	596	4,098	560	4,132	558	4,039	547	4,026	533	4,112	521	3,967	487	3,943	497
SPA 6: South	6,130	987	6,174	956	6,063	915	6,058	890	6,019	865	5,853	831	5,731	794	5,614	760	5,638	754	5,234	762
SPA 7: East	7,386	763	7,273	719	7,428	701	7,240	662	7,359	658	7,370	647	7,153	605	7,130	593	7,184	590	6,914	622
SPA 8: South Bay	9,786	797	9,759	769	9,992	763	9,453	702	9,796	711	9,739	696	9,629	661	9,415	624	9,455	611	9,402	655

*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

Figure T19. Trends in death rates from the leading causes of death



*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published. The 2009 population was overestimated; therefore, death rates for 2009 were underestimated. Rate changes from 2009 to 2010 should be interpreted with caution. See Note on Page 6 for additional information.

Appendix 2. Los Angeles County population estimates and United States standard population

Los Angeles County population estimates, 2010

	Age Group (years)											
Males	Less than 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	All ages
White	12,690	49,713	127,929	169,626	202,971	203,896	242,797	205,194	117,477	72,620	30,509	1,435,422
Hispanic	41,496	167,855	415,059	437,563	389,102	358,750	268,565	152,452	70,330	34,232	9,929	2,345,333
Black	5,150	20,550	56,186	66,188	51,433	53,178	62,543	43,238	24,533	11,813	3,544	398,356
Asian/Pacific Islander	6,489	26,182	71,287	96,503	102,558	96,999	98,065	79,862	44,598	24,277	8,652	655,472
American Indian/Alaska Native	83	372	974	1,322	1,232	1,417	1,670	1,162	674	303	79	9,288
All races	65,908	264,672	671,435	771,202	747,296	714,240	673,640	481,908	257,612	143,245	52,713	4,843,871
Females	Less than 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	All ages
White	11,820	46,907	120,589	164,751	187,470	186,512	225,539	203,179	129,103	95,661	56,905	1,428,436
Hispanic	39,652	161,066	398,917	409,621	368,263	350,856	277,631	176,177	92,932	52,848	19,014	2,346,977
Black	5,066	19,818	54,209	68,120	58,862	62,440	71,703	52,858	32,969	18,826	8,522	453,393
Asian/Pacific Islander	6,071	24,959	67,661	92,941	113,820	116,079	120,037	98,402	55,414	34,822	14,350	744,556
American Indian/Alaska Native	97	345	963	1,290	1,290	1,428	1,746	1,433	716	363	166	9,837
All races	62,706	253,095	642,339	736,723	729,705	717,315	696,656	532,049	311,134	202,520	98,957	4,983,199
Los Angeles County	Less than 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	All ages
White	24,510	96,620	248,518	334,377	390,441	390,408	468,336	408,373	246,580	168,281	87,414	2,863,858
Hispanic	81,148	328,921	813,976	847,184	757,365	709,606	546,196	328,629	163,262	87,080	28,943	4,692,310
Black	10,216	40,368	110,395	134,308	110,295	115,618	134,246	96,096	57,502	30,639	12,066	851,749
Asian/Pacific Islander	12,560	51,141	138,948	189,444	216,378	213,078	218,102	178,264	100,012	59,099	23,002	1,400,028
American Indian/Alaska Native	180	717	1,937	2,612	2,522	2,845	3,416	2,595	1,390	666	245	19,125
All races	128,614	517,767	1,313,774	1,507,925	1,477,001	1,431,555	1,370,296	1,013,957	568,746	345,765	151,670	9,827,070

Notes: July 1, 2010 population estimates by Walter R. McDonald & Associates, Inc., released September 30, 2012. See Note on Page 6 for additional information about population estimates.

United States standard population, 2000⁶

	Age Group (years)											
United States	Less than 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	All ages
All races	3,794,901	15,191,619	39,976,619	38,076,743	37,233,437	44,659,185	37,030,152	23,961,506	18,135,514	12,314,793	4,259,173	274,633,642

⁶Hoyert DL, Heron MP, Murphy SL, Kung H. Deaths: Final data for 2003. National vital statistics reports; vol 54 no 13. Hyattsville, MD: National Center for Health Statistics. 2006.

Appendix 3. Service Planning Areas (SPA) Boundaries

- SPA-1 Antelope Valley
- SPA-2 San Fernando
- SPA-3 San Gabriel
- SPA-4 Metro
- SPA-5 West
- SPA-6 South
- SPA-7 East
- SPA-8 South Bay (Includes Catalina Island)



Appendix 4. Incorporated cities in Los Angeles County, by service planning area (SPA)

SPA 1 Antelope Valley Pop. 384,843	SPA 2 San Fernando Pop. 2,125,778	SPA 3 San Gabriel Pop. 1,744,887	SPA 4 Metro Pop. 1,117,416	SPA 5 West Pop. 635,529	SPA 6 South Pop. 1,002,270	SPA 7 East Pop. 1,293,134	SPA 8 South Bay Pop. 1,523,213
Lancaster	Agoura Hills	Alhambra	Los Angeles	Beverly Hills	Compton	Artesia	Avalon
Palmdale	Burbank	Arcadia	West Hollywood	Culver City	Los Angeles	Bell	Carson
	Calabasas	Azusa		Los Angeles	Lynwood	Bell Gardens	El Segundo
	Glendale	Baldwin Park		Malibu	Paramount	Bellflower	Gardena
	Hidden Hills	Bradbury		Santa Monica		Cerritos	Hawthorne
	La Canada Flintridge	Claremont				Commerce	Hermosa Beach
	Los Angeles	Covina				Cudahy	Inglewood
	San Fernando	Diamond Bar				Downey	Lawndale
	Santa Clarita	Duarte				Hawaiian Gardens	Lomita
	Westlake Village	El Monte				Huntington Park	Long Beach
		Glendora				La Habra Heights	Los Angeles
		Industry				La Mirada	Manhattan Beach
		Irwindale				Lakewood	Palos Verdes Estates
		La Puente				Maywood	Rancho Palos Verdes
		La Verne				Montebello	Redondo Beach
		Monrovia				Norwalk	Rolling Hills
		Monterey Park				Pico Rivera	Rolling Hills Estates
		Pasadena				Santa Fe Springs	Torrance
		Pomona				Signal Hill	
		Rosemead				South Gate	
		San Dimas				Vernon	
		San Gabriel				Whittier	
		San Marino					
		Sierra Madre					
		South El Monte					
		South Pasadena					
		Temple City					
		Walnut					
		West Covina					

Notes: July 1, 2010 population estimates by Walter R. McDonald & Associates, Inc., released September 30, 2012.

MORTALITY IN LOS ANGELES COUNTY 2010

Leading Causes of Death and Premature Death with Trends for 2001-2010

A PUBLICATION OF THE LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH

Department of Public Health

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

Steven Teutsch, MD, MPH
Chief Science Officer

Office of Health Assessment and Epidemiology

Margaret Shih, MD, PhD
Director

EDITED BY
Loren Lieb, MPH

GRAPHIC DESIGN BY
Alan Albert

We thank Sun Lee, MPH and Louise Rollin, MS for their assistance.

Los Angeles County Board of Supervisors

Gloria Molina, First District

Mark Ridley-Thomas, Second District

Zev Yaroslavsky, Third District

Don Knabe, Fourth District

Michael D. Antonovich, Fifth District

Additional printed copies of this report are available from the Office of Health Assessment and Epidemiology

(213) 240-7785 or from

<http://publichealth.lacounty.gov/dca/dcareportspubs.htm>

Data are available online

<http://dqs.publichealth.lacounty.gov>

Suggested citation: Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology. Mortality in Los Angeles County 2010: Leading causes of death and premature death with trends for 2001-2010. October 2013.



October 2013
Publication no: OHAE/EU-2013-1