

# MORTALITY IN LOS ANGELES COUNTY 2009

Leading Causes of Death and Premature Death with Trends for 2000-2009

A PUBLICATION OF THE LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH



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### Message from the Director



I am pleased to report that the number of deaths and the death rate among residents of Los Angeles County continue to decline. During the 15-year period from 1995 through 2009, the death rate in the county decreased an impressive 31%. During the same time period, the United States death rate decreased only 19% and the California death rate decreased 24%. 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 2009, the age-adjusted death rate in Los Angeles County was 583 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 2000 through 2009, there was a 42% decrease in the death rate from coronary heart disease, a 41% decrease in the death rate from stroke, and a 23% 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 (344 deaths per 100,000 population) was among Asian/Pacific Islander women while the highest overall rate was among black men (1,083 deaths per 100,000 population). 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 are decreasing, 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 2009: Leading Causes of Death and Premature Death with Trends for 2000-2009*, 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 2009 (unless otherwise noted, rates are age-adjusted)

- In 2009, there were 57,620 deaths—a 0.7% decrease from 2008. The death rate was 583 deaths per 100,000 population—a 3% decrease from 2008.
- The number of deaths among men and women was nearly equal—29,342 men and 28,278 women—but overall, men died at a younger age than women. The median age at death for men was 73 years compared with 81 years for women.
- Overall, whites and Asian/Pacific Islanders lived longer than blacks and Hispanics. The median age at death was 81 years for whites, 79 years for Asian/Pacific Islanders, 69 years for blacks, and 69 years for Hispanics.
- The highest overall death rate was among black males—1,083 deaths per 100,000 population—which was more than three times higher than the rate among Asian/Pacific Islander women who had the lowest death rate—344 deaths per 100,000 population.
- On an average day in Los Angeles County, 158 people died, including 38 from cancer, 35 from coronary heart disease, 10 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 were caused by coronary heart disease (12,725 deaths), which was the leading cause of death and premature death.
- Twenty-four percent of the deaths were caused by cancer (13,909 deaths). Among those who died of cancer, lung cancer was most common (2,958 deaths), followed by colorectal cancer (1,388 deaths) and breast cancer (1,173 deaths).
- Diabetes 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 women.
- Accidents (also called unintentional injuries), primarily motor vehicle crashes and drug overdoses, were the leading cause of death for persons age 1 to 44 years (832 deaths). In this age group, all types of injuries combined caused 41% of the deaths: accidents (832 deaths), homicide (573 deaths), and suicide (303 deaths).
- Homicide was the leading cause of death for 15- to 24-year-olds and 25- to 44-year-olds, and the leading cause of premature death for Hispanics.
- Firearms caused 833 deaths: 74% of the 723 homicides and 37% of the 775 suicides.
- Alzheimer's disease was the fourth-leading cause of death for women (1,431 deaths), but it was the 10th-leading cause of death for men (694 deaths).
- HIV remained an important cause of premature death for blacks, and in the South Health District and Metro Service Planning Area.
- Death rates were higher for men than women for every leading cause of death and premature death, except for Alzheimer's disease and breast cancer.
- Death rates were at or below the Healthy People 2010 objectives for female breast cancer, coronary heart disease, lung cancer, motor vehicle crash, and stroke.
- For most leading causes of death and premature death, the highest death rate was among black men, and the lowest rate was among Asian/Pacific Islander and Hispanic women.
- Death rates in the Antelope Valley and South Service Planning Areas were generally higher than other areas of the county.
- The H1N1 influenza pandemic had a dramatic impact on deaths from influenza among younger adults.

## Data highlights for 2000-2009 (unless otherwise noted, rates are age-adjusted)

- Forty-five percent of the deaths were among persons less than 75 years of age. These 25,747 deaths contributed more than 455,000 years of life lost before age 75.
- During the last 10 years, the overall death rate decreased 22%, from 749 to 583 deaths per 100,000 population.
- There was a notable decrease (42%) in the death rate from coronary heart disease—the leading cause of death and premature death—from 220 to 129 deaths per 100,000 population in 2000 and 2009, respectively. The rate among women decreased 45% while among men it dropped by 39%. The rates among residents of the Antelope Valley and South Service Planning Areas were consistently higher than other areas.
- Death rates from stroke, the second leading cause of death, decreased 41% during the last 10 years. The rates and decreases were similar for men and women overall.
- Since 2000, the overall death rate from lung cancer declined by 23%. During that time period, the death rate among black men peaked in 2001 at 94 deaths per 100,000 population. By 2009, the death rate among black men decreased 27% to 69 deaths per 100,000 population, which still exceeded the Healthy People 2010 goal.
- The death rate from diabetes decreased from a high of 26 deaths per 100,000 population in 2002 through 2005, to 20 deaths per 100,000 in 2009. The highest death rates were among black men which peaked at 55 deaths per 100,000 population in 2005, and decreased 20% to 44 deaths per 100,000 population in 2009.
- 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, homicide, and motor vehicle crashes have been the three leading causes of premature death for the last 10 years.
- Since 2000, the number of deaths from Alzheimer's disease has more than doubled from 820 in 2000 to 2,125 in 2009, although from 2008 to 2009, the number of deaths was virtually unchanged.
- The number of homicides peaked at 1,148 in 2002, and began declining in 2007 after several years of little change. In 2009, there were 723 homicides. The overall homicide rate decreased to 7 deaths per 100,000 population in 2009, but the homicide rate among black men remained very high—44 deaths per 100,000 population.
- The suicide rate has changed little during the past 10 years, but 2009 was the first year in which the number of suicides exceeded the number of homicides.
- HIV has not been among the overall leading causes of death or premature death since 2004, but in 2009, 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.<sup>1</sup> 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 2009, and mortality trends for 2000 through 2009. 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 2009, almost half (45%) 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.

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<sup>1</sup> 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 and there has been a gradual transition from paper to paperless processing of death certificates.



## 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 2009 and the 10-year period, 2000 through 2009, 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.<sup>2</sup> The cause of death groups were based on categories developed by the National Center for Health

Statistics.<sup>3</sup> 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 1988, 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.<sup>4</sup>

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, the goals that were applicable in 2009.<sup>5</sup>

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](http://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: US 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](http://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).<sup>6</sup> 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, which may result in minor differences in rate change percentages that were calculated from rates that had been 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 mid-point of a set of values; the point at which, when the values are put in 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).

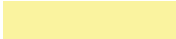














Note: The decennial census is the basis for annual estimates of the total population of Los Angeles County, the population groups used in this report, and the standard population used for age adjustment. The decennial census may not accurately count every resident of the County, and some groups may experience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

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<sup>6</sup> 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  |
|  | HIV  |
|  | Perinatal period condition                             |
|  | Birth defect   |
|  | Other conditions                                       |

### HOW TO GET MORE INFORMATION

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. L.A. HealthDataNow! is accessible at <http://dqs.hasten.ladhs.org/>

## 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.
- 2 The number of deaths due to the specific cause, e.g., there were 12,725 deaths from coronary heart disease and 2,904 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 (1,246 deaths), but the fourth-ranked cause of premature death (21,515 years of life lost).
- 4 The cause of premature death group coded by color.
- 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 15,554 years of life lost before age 75, but was the second-ranked cause of death (3,301 deaths).

| A<br>Leading causes of death |                        |               |                      | B<br>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 | 12,725        | 1.                   | 1.                                       | Coronary heart disease | 59,440              | 1.         |
| 2.                           | Stroke                 | 3,301         | 8.                   | 2.                                       | Homicide               | 31,270              | 16.        |
| 3.                           | Lung cancer            | 2,958         | 7.                   | 3.                                       | Motor vehicle crash    | 22,017              | 19.        |
| 4.                           | Emphysema/COPD         | 2,904         | 14.                  | 4.                                       | Liver disease          | 21,515              | 9.         |
| 5.                           | Alzheimer's disease    | 2,125         | 48.                  | 5.                                       | Suicide                | 20,835              | 14.        |
| 6.                           | Pneumonia/influenza    | 2,097         | 12.                  | 6.                                       | Drug overdose          | 20,484              | 18.        |
| 7.                           | Diabetes               | 1,964         | 9.                   | 7.                                       | Lung cancer            | 17,295              | 3.         |
| 8.                           | Colorectal cancer      | 1,388         | 11.                  | 8.                                       | Stroke                 | 15,554              | 2.         |
| 9.                           | Liver disease          | 1,246         | 4.                   | 9.                                       | Diabetes               | 14,697              | 7.         |
| 10.                          | Breast cancer          | 1,173         | 10.                  | 10.                                      | Breast cancer          | 13,466              | 10.        |

**Figure 1.** Ten leading causes of death and premature death

**Los Angeles County**  
57,620 total deaths  
455,513 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 | 12,725        | 1.                   | 1.                                  | Coronary heart disease | 59,440              | 1.         |
| 2.                      | Stroke                 | 3,301         | 8.                   | 2.                                  | Homicide               | 31,270              | 16.        |
| 3.                      | Lung cancer            | 2,958         | 7.                   | 3.                                  | Motor vehicle crash    | 22,017              | 19.        |
| 4.                      | Emphysema/COPD         | 2,904         | 14.                  | 4.                                  | Liver disease          | 21,515              | 9.         |
| 5.                      | Alzheimer's disease    | 2,125         | 48.                  | 5.                                  | Suicide                | 20,835              | 14.        |
| 6.                      | Pneumonia/influenza    | 2,097         | 12.                  | 6.                                  | Drug overdose          | 20,484              | 18.        |
| 7.                      | Diabetes               | 1,964         | 9.                   | 7.                                  | Lung cancer            | 17,295              | 3.         |
| 8.                      | Colorectal cancer      | 1,388         | 11.                  | 8.                                  | Stroke                 | 15,554              | 2.         |
| 9.                      | Liver disease          | 1,246         | 4.                   | 9.                                  | Diabetes               | 14,697              | 7.         |
| 10.                     | Breast cancer          | 1,173         | 10.                  | 10.                                 | Breast cancer          | 13,466              | 10.        |

\*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 (12,725 deaths) than there were from stroke (3,301 deaths), the second leading cause of death.
- All cancers combined (13,909 deaths) caused more deaths than coronary heart disease (12,725 deaths). Together, cancer and coronary heart disease caused nearly half (46%) of all the deaths.
- Injuries (accidents [2,097 deaths], suicide [775 deaths], and homicide [723 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 became 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

| <b>Males</b><br>29,342 total deaths<br>291,301 years of life lost* |                        |               |                      | <b>Females</b><br>28,278 total deaths<br>164,212 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 | 6,638         | 1.                   | 1.   | Coronary heart disease | 44,122              | 1.         |
| 2.   | Lung cancer            | 1,650         | 7.                   | 2.   | Homicide               | 27,239              | 11.        |
| 3.   | Emphysema/COPD         | 1,420         | 14.                  | 3.   | Motor vehicle crash    | 15,840              | 14.        |
| 4.   | Stroke                 | 1,399         | 8.                   | 4.   | Liver disease          | 15,810              | 7.         |
| 5.   | Diabetes               | 1,024         | 9.                   | 5.   | Suicide                | 15,317              | 12.        |
| 6.   | Pneumonia/influenza    | 1,016         | 12.                  | 6.   | Drug overdose          | 14,322              | 15.        |
| 7.   | Liver disease          | 837           | 4.                   | 7.   | Lung cancer            | 10,145              | 2.         |
| 8.   | Prostate cancer        | 764           | 27.                  | 8.   | Stroke                 | 8,857               | 4.         |
| 9.   | Colorectal cancer      | 710           | 11.                  | 9.   | Diabetes               | 8,756               | 5.         |
| 10.  | Alzheimer's disease    | 694           | 48.                  | 10.  | HIV                    | 6,775               | 24.        |

| 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 | 6,087         | 1.                   | 1.                                  | Coronary heart disease | 15,318              | 1.         |
| 2.                      | Stroke                 | 1,902         | 4.                   | 2.                                  | Breast cancer          | 13,391              | 6.         |
| 3.                      | Emphysema/COPD         | 1,484         | 14.                  | 3.                                  | Lung cancer            | 7,150               | 5.         |
| 4.                      | Alzheimer's disease    | 1,431         | 37.                  | 4.                                  | Stroke                 | 6,697               | 2.         |
| 5.                      | Lung cancer            | 1,308         | 3.                   | 5.                                  | Motor vehicle crash    | 6,177               | 23.        |
| 6.                      | Breast cancer          | 1,166         | 2.                   | 6.                                  | Drug overdose          | 6,162               | 20.        |
| 7.                      | Pneumonia/influenza    | 1,081         | 11.                  | 7.                                  | Diabetes               | 5,941               | 8.         |
| 8.                      | Diabetes               | 940           | 7.                   | 8.                                  | Liver disease          | 5,705               | 14.        |
| 9.                      | Colorectal cancer      | 678           | 10.                  | 9.                                  | Suicide                | 5,518               | 21.        |
| 10.                     | Hypertension           | 540           | 27.                  | 10.                                 | Colorectal cancer      | 4,314               | 9.         |

- Almost half (47%) of the men who died from coronary heart disease (6,638 deaths) were less than 75 years of age.
- Lung cancer (1,650 deaths) was the second-leading cause of death for men but was the third-leading cause of death in the county overall.
- Homicide (618 deaths), motor vehicle crash (484 deaths), suicide (580 deaths) and drug overdose (471 deaths) caused 25% of the years of life lost among men, but only 7% of the deaths.

- Fewer than one-fourth (22%) of the women who died from coronary heart disease (6,087 deaths) were less than 75 years of age.
- Lung cancer (1,308 deaths) was the fifth-leading cause of death for women but was the third-leading cause of death in the county overall.
- The median age at death for women was 81 years compared with 73 years for men.

\*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

| <b>White</b><br>29,622 total deaths<br>156,357 years of life lost* |                        |               |                                     | <b>Hispanic</b><br>13,671 total deaths<br>170,221 years of life lost* |                        |                         |            |      |                                     |               |                      |      |                        |                     |            |
|--|------------------------|---------------|-------------------------------------|---|------------------------|-------------------------|------------|------|-------------------------------------|---------------|----------------------|------|------------------------|---------------------|------------|
| Leading causes of death  |                        |               | Leading causes of premature** death |   |                        | 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 | Rank | Cause of death                      | No. of deaths | Premature death rank | Rank | Cause of death         | Years of life lost* | Death rank |
| 1.   | Coronary heart disease | 6,980         | 1.                                  | 1.  | Coronary heart disease | 24,090                  | 1.         | 1.   | Homicide                            | 397           | 1.                   | 1.   | Homicide               | 17,997              | 7.         |
| 2.   | Emphysema/COPD         | 1,895         | 8.                                  | 2.  | Drug overdose          | 10,462                  | 16.        | 2.   | Coronary heart disease              | 2,428         | 2.                   | 2.   | Coronary heart disease | 15,088              | 1.         |
| 3.   | Lung cancer            | 1,702         | 4.                                  | 3.  | Suicide                | 10,070                  | 12.        | 3.   | Diabetes                            | 694           | 6.                   | 3.   | Motor vehicle crash    | 12,083              | 10.        |
| 4.   | Stroke                 | 1,623         | 9.                                  | 4.  | Lung cancer            | 8,370                   | 3.         | 4.   | Liver disease                       | 645           | 4.                   | 4.   | Liver disease          | 11,799              | 4.         |
| 5.   | Alzheimer's disease    | 1,480         | 40.                                 | 5.  | Liver disease          | 6,716                   | 13.        | 5.   | Pneumonia/influenza                 | 492           | 9.                   | 5.   | Drug overdose          | 7,048               | 16.        |
| 6.   | Pneumonia/influenza    | 1,076         | 13.                                 | 6.  | Motor vehicle crash    | 5,850                   | 21.        | 6.   | Lung cancer                         | 408           | 13.                  | 6.   | Diabetes               | 6,398               | 3.         |
| 7.   | Colorectal cancer      | 696           | 10.                                 | 7.  | Breast cancer          | 5,845                   | 9.         | 7.   | Homicide                            | 397           | 1.                   | 7.   | Suicide                | 6,365               | 20.        |
| 8.   | Diabetes               | 672           | 11.                                 | 8.  | Emphysema/COPD         | 5,097                   | 2.         | 8.   | Emphysema/COPD                      | 392           | 29.                  | 8.   | Stroke                 | 5,973               | 2.         |
| 9.   | Breast cancer          | 598           | 7.                                  | 9.  | Stroke                 | 4,249                   | 4.         | 9.   | Alzheimer's disease                 | 349           | 51.                  | 9.   | Pneumonia/influenza    | 4,183               | 5.         |
| 10.  | Hypertension           | 468           | 22.                                 | 10.   | Colorectal cancer      | 4,109                   | 7.         | 10.  | Motor vehicle crash                 | 312           | 3.                   | 10.  | Leukemia               | 4,073               | 23.        |

- Drug overdose (356 deaths) was the second-leading cause of premature death among whites compared with sixth-leading cause in the county overall.
- Emphysema (1,895 deaths) was the eighth-leading cause of premature death among whites compared with the 14th-leading cause in the county overall.

- Hispanics comprised the only race/ethnic group for which homicide (397 deaths) exceeded coronary heart disease (2,428 deaths) as the leading cause of premature death.
- Hispanics comprised the only race/ethnic group for which motor vehicle crash (312 deaths) was among the 10 leading causes of death. For the county overall, motor vehicle crash was the 19th-leading cause of death.

**Black**  
7,825 total deaths  
85,299 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 | 1,878         | 1.                   | 1.                                  | Coronary heart disease | 14,341              | 1.         |
| 2.                      | Stroke                 | 433           | 6.                   | 2.                                  | Homicide               | 9,990               | 6.         |
| 3.                      | Lung cancer            | 432           | 4.                   | 3.                                  | Diabetes               | 3,654               | 4.         |
| 4.                      | Diabetes               | 340           | 3.                   | 4.                                  | Lung cancer            | 3,294               | 3.         |
| 5.                      | Emphysema/COPD         | 337           | 11.                  | 5.                                  | HIV                    | 3,042               | 16.        |
| 6.                      | Homicide               | 227           | 2.                   | 6.                                  | Stroke                 | 2,972               | 2.         |
| 7.                      | Pneumonia/influenza    | 223           | 14.                  | 7.                                  | Motor vehicle crash    | 2,539               | 19.        |
| 8.                      | Colorectal cancer      | 209           | 12.                  | 8.                                  | Breast cancer          | 2,429               | 9.         |
| 9.                      | Breast cancer          | 187           | 8.                   | 9.                                  | Drug overdose          | 2,396               | 17.        |
| 10.                     | Alzheimer's disease    | 184           | 55.                  | 10.                                 | Liver disease          | 2,030               | 15.        |

- Among blacks, diabetes (340 deaths) was the fourth-leading cause of death and the median age at death was 69 years. In the county overall, diabetes (1,964 deaths) was the seventh-leading cause of death and the median age at death was 75 years.
- Blacks lost an average of 44 years of potential life from each homicide (227 deaths).

**Asian/Pacific Islander**  
6,267 total deaths  
41,110 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 | 1,387         | 1.                   | 1.                                  | Coronary heart disease | 5,533               | 1.         |
| 2.                      | Stroke                 | 504           | 4.                   | 2.                                  | Lung cancer            | 2,635               | 3.         |
| 3.                      | Lung cancer            | 412           | 2.                   | 3.                                  | Suicide                | 2,568               | 15.        |
| 4.                      | Pneumonia/influenza    | 290           | 15.                  | 4.                                  | Stroke                 | 2,317               | 2.         |
| 5.                      | Emphysema/COPD         | 267           | 22.                  | 5.                                  | Colorectal cancer      | 1,533               | 7.         |
| 6.                      | Diabetes               | 248           | 10.                  | 6.                                  | Breast cancer          | 1,533               | 10.        |
| 7.                      | Colorectal cancer      | 195           | 5.                   | 7.                                  | Motor vehicle crash    | 1,492               | 17.        |
| 8.                      | Liver cancer           | 178           | 8.                   | 8.                                  | Liver cancer           | 1,475               | 8.         |
| 9.                      | Nephritis              | 143           | 18.                  | 9.                                  | Homicide               | 1,177               | 27.        |
| 10.                     | Breast cancer          | 120           | 5.                   | 10.                                 | Diabetes               | 977                 | 6.         |

- Alzheimer's disease, the fifth-leading cause of death in the county overall, was the 13th-leading cause of death for Asian/Pacific Islanders (108 deaths).
- Liver cancer (178 deaths) was an important cause of death and premature death for Asian/Pacific Islanders.

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

\*\*Death before age 75 years.



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

### Leading causes of death

| Race/ethnicity<br>Number of deaths<br>Age-adjusted death rate | #1 cause<br>Number of deaths<br>Age-adjusted death rate    | #2 cause<br>Number of deaths<br>Age-adjusted death rate | #3 cause<br>Number of deaths<br>Age-adjusted death rate | #4 cause<br>Number of deaths<br>Age-adjusted death rate | #5 cause<br>Number of deaths<br>Age-adjusted death rate |
|---|--|---|---|---|---|
| <b>White</b><br>29,622<br>621 per 100,000                     | <b>Coronary heart disease</b><br>6,980<br>138 per 100,000  | <b>Emphysema/COPD</b><br>1,895<br>39 per 100,000        | <b>Lung cancer</b><br>1,702<br>38 per 100,000           | <b>Stroke</b><br>1,623<br>32 per 100,000                | <b>Alzheimer's disease</b><br>1,480<br>26 per 100,000   |
| <b>Hispanic</b><br>13,671<br>493 per 100,000                  | <b>Coronary heart disease</b><br>2,428<br>99 per 100,000   | <b>Stroke</b><br>733<br>29 per 100,000                  | <b>Diabetes</b><br>694<br>27 per 100,000                | <b>Liver disease</b><br>645<br>20 per 100,000           | <b>Pneumonia/influenza</b><br>492<br>20 per 100,000     |
| <b>Black</b><br>7,825<br>874 per 100,000                      | <b>Coronary heart disease</b><br>1,878<br>211 per 100,000  | <b>Stroke</b><br>433<br>50 per 100,000                  | <b>Lung cancer</b><br>432<br>48 per 100,000             | <b>Diabetes</b><br>340<br>38 per 100,000                | <b>Emphysema/COPD</b><br>337<br>39 per 100,000          |
| <b>Asian/Pacific Islander</b><br>6,267<br>419 per 100,000     | <b>Coronary heart disease</b><br>1,387<br>92 per 100,000   | <b>Stroke</b><br>504<br>34 per 100,000                  | <b>Lung cancer</b><br>412<br>27 per 100,000             | <b>Pneumonia/influenza</b><br>290<br>20 per 100,000     | <b>Emphysema/COPD</b><br>267<br>18 per 100,000          |
| <b>Los Angeles County Total</b><br>57,620<br>583 per 100,000  | <b>Coronary heart disease</b><br>12,725<br>129 per 100,000 | <b>Stroke</b><br>3,301<br>34 per 100,000                | <b>Lung cancer</b><br>2,958<br>31 per 100,000           | <b>Emphysema/COPD</b><br>2,904<br>30 per 100,000        | <b>Alzheimer's disease</b><br>2,125<br>21 per 100,000   |

### Leading causes of premature death (before age 75 years)

| Race/ethnicity                  | #1 cause                      | #2 cause                      | #3 cause                   | #4 cause             | #5 cause                 |
|---------------------------------|-------------------------------|-------------------------------|----------------------------|----------------------|--------------------------|
| <b>White</b>                    | <b>Coronary heart disease</b> | <b>Drug overdose</b>          | <b>Suicide</b>             | <b>Lung cancer</b>   | <b>Liver disease</b>     |
| <b>Hispanic</b>                 | <b>Homicide</b>               | <b>Coronary heart disease</b> | <b>Motor vehicle crash</b> | <b>Liver disease</b> | <b>Drug overdose</b>     |
| <b>Black</b>                    | <b>Coronary heart disease</b> | <b>Homicide</b>               | <b>Diabetes</b>            | <b>Lung cancer</b>   | <b>HIV</b>               |
| <b>Asian/Pacific Islander</b>   | <b>Coronary heart disease</b> | <b>Lung cancer</b>            | <b>Suicide</b>             | <b>Stroke</b>        | <b>Colorectal cancer</b> |
| <b>Los Angeles County Total</b> | <b>Coronary heart disease</b> | <b>Homicide</b>               | <b>Motor vehicle crash</b> | <b>Liver disease</b> | <b>Suicide</b>           |

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<br>Number of deaths<br>Age-adjusted death rate | #1 cause<br>Number of deaths<br>Age-adjusted death rate   | #2 cause<br>Number of deaths<br>Age-adjusted death rate | #3 cause<br>Number of deaths<br>Age-adjusted death rate | #4 cause<br>Number of deaths<br>Age-adjusted death rate | #5 cause<br>Number of deaths<br>Age-adjusted death rate |
|---|---|---|---|---|---|
| <b>White</b><br>14,553<br>735 per 100,000                     | <b>Coronary heart disease</b><br>3,598<br>177 per 100,000 | <b>Lung cancer</b><br>892<br>45 per 100,000             | <b>Emphysema/COPD</b><br>887<br>45 per 100,000          | <b>Stroke</b><br>668<br>33 per 100,000                  | <b>Pneumonia/influenza</b><br>528<br>26 per 100,000     |
| <b>Hispanic</b><br>7,433<br>604 per 100,000                   | <b>Coronary heart disease</b><br>1,333<br>128 per 100,000 | <b>Liver disease</b><br>448<br>28 per 100,000           | <b>Diabetes</b><br>361<br>33 per 100,000                | <b>Homicide</b><br>344<br>13 per 100,000                | <b>Stroke</b><br>325<br>29 per 100,000                  |
| <b>Black</b><br>3,961<br>1,083 per 100,000                    | <b>Coronary heart disease</b><br>957<br>266 per 100,000   | <b>Lung cancer</b><br>247<br>69 per 100,000             | <b>Homicide</b><br>207<br>44 per 100,000                | <b>Emphysema/COPD</b><br>176<br>54 per 100,000          | <b>Stroke</b><br>170<br>49 per 100,000                  |
| <b>Asian/Pacific Islander</b><br>3,276<br>518 per 100,000     | <b>Coronary heart disease</b><br>718<br>113 per 100,000   | <b>Lung cancer</b><br>266<br>42 per 100,000             | <b>Stroke</b><br>235<br>38 per 100,000                  | <b>Emphysema/COPD</b><br>158<br>27 per 100,000          | <b>Pneumonia/influenza</b><br>148<br>25 per 100,000     |
| <b>All Males</b><br>29,342<br>703 per 100,000                 | <b>Coronary heart disease</b><br>6,638<br>163 per 100,000 | <b>Lung cancer</b><br>1,650<br>41 per 100,000           | <b>Emphysema/COPD</b><br>1,420<br>37 per 100,000        | <b>Stroke</b><br>1,399<br>35 per 100,000                | <b>Diabetes</b><br>1,024<br>25 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                   |
|-------------------------------|-------------------------------|-------------------------------|----------------------------|----------------------------|----------------------------|
| <b>White</b>                  | <b>Coronary heart disease</b> | <b>Suicide</b>                | <b>Drug overdose</b>       | <b>Lung cancer</b>         | <b>Motor vehicle crash</b> |
| <b>Hispanic</b>               | <b>Homicide</b>               | <b>Coronary heart disease</b> | <b>Liver disease</b>       | <b>Motor vehicle crash</b> | <b>Drug overdose</b>       |
| <b>Black</b>                  | <b>Coronary heart disease</b> | <b>Homicide</b>               | <b>HIV</b>                 | <b>Diabetes</b>            | <b>Lung cancer</b>         |
| <b>Asian/Pacific Islander</b> | <b>Coronary heart disease</b> | <b>Lung cancer</b>            | <b>Suicide</b>             | <b>Stroke</b>              | <b>Liver cancer</b>        |
| <b>All males</b>              | <b>Coronary heart disease</b> | <b>Homicide</b>               | <b>Motor vehicle crash</b> | <b>Liver disease</b>       | <b>Suicide</b>             |

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<br>Number of deaths<br>Age-adjusted death rate | #1 cause<br>Number of deaths<br>Age-adjusted death rate   | #2 cause<br>Number of deaths<br>Age-adjusted death rate | #3 cause<br>Number of deaths<br>Age-adjusted death rate | #4 cause<br>Number of deaths<br>Age-adjusted death rate | #5 cause<br>Number of deaths<br>Age-adjusted death rate |
|---|---|---|---|---|---|
| <b>White</b><br>15,069<br>526 per 100,000                     | <b>Coronary heart disease</b><br>3,382<br>106 per 100,000 | <b>Emphysema/COPD</b><br>1,008<br>35 per 100,000        | <b>Alzheimer's disease</b><br>983<br>28 per 100,000     | <b>Stroke</b><br>955<br>31 per 100,000                  | <b>Lung cancer</b><br>810<br>32 per 100,000             |
| <b>Hispanic</b><br>6,238<br>408 per 100,000                   | <b>Coronary heart disease</b><br>1,095<br>78 per 100,000  | <b>Stroke</b><br>408<br>28 per 100,000                  | <b>Diabetes</b><br>333<br>22 per 100,000                | <b>Breast cancer</b><br>262<br>16 per 100,000           | <b>Pneumonia/influenza</b><br>260<br>18 per 100,000     |
| <b>Black</b><br>3,864<br>721 per 100,000                      | <b>Coronary heart disease</b><br>921<br>169 per 100,000   | <b>Stroke</b><br>263<br>49 per 100,000                  | <b>Breast cancer</b><br>187<br>35 per 100,000           | <b>Lung cancer</b><br>185<br>35 per 100,000             | <b>Diabetes</b><br>179<br>33 per 100,000                |
| <b>Asian/Pacific Islander</b><br>2,991<br>344 per 100,000     | <b>Coronary heart disease</b><br>669<br>75 per 100,000    | <b>Stroke</b><br>269<br>31 per 100,000                  | <b>Lung cancer</b><br>146<br>17 per 100,000             | <b>Pneumonia/influenza</b><br>142<br>16 per 100,000     | <b>Breast cancer</b><br>120<br>14 per 100,000           |
| <b>All Females</b><br>28,278<br>488 per 100,000               | <b>Coronary heart disease</b><br>6,087<br>101 per 100,000 | <b>Stroke</b><br>1,902<br>32 per 100,000                | <b>Emphysema/COPD</b><br>1,484<br>26 per 100,000        | <b>Alzheimer's disease</b><br>1,431<br>22 per 100,000   | <b>Lung cancer</b><br>1,308<br>24 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                   |
|-------------------------------|-------------------------------|-------------------------------|----------------------------|----------------------|----------------------------|
| <b>White</b>                  | <b>Breast cancer</b>          | <b>Coronary heart disease</b> | <b>Lung cancer</b>         | <b>Drug overdose</b> | <b>Suicide</b>             |
| <b>Hispanic</b>               | <b>Coronary heart disease</b> | <b>Breast cancer</b>          | <b>Motor vehicle crash</b> | <b>Diabetes</b>      | <b>Liver disease</b>       |
| <b>Black</b>                  | <b>Coronary heart disease</b> | <b>Breast cancer</b>          | <b>Diabetes</b>            | <b>Stroke</b>        | <b>Lung cancer</b>         |
| <b>Asian/Pacific Islander</b> | <b>Breast cancer</b>          | <b>Coronary heart disease</b> | <b>Stroke</b>              | <b>Lung cancer</b>   | <b>Suicide</b>             |
| <b>All females</b>            | <b>Coronary heart disease</b> | <b>Breast cancer</b>          | <b>Lung cancer</b>         | <b>Stroke</b>        | <b>Motor vehicle crash</b> |

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<br>Number of deaths<br>Age-specific death rate                     | #1 cause<br>Number of deaths<br>Age-specific death rate                  | #2 cause<br>Number of deaths<br>Age-specific death rate | #3 cause<br>Number of deaths<br>Age-specific death rate     | #4 cause<br>Number of deaths<br>Age-specific death rate        | #5 cause<br>Number of deaths<br>Age-specific death rate             |
|--|--|---|---|--|---|
| <1 year old<br>703<br>480 per 100,000  | Low birthweight/prematurity<br>114<br>78 per 100,000                     | SIDS*<br>61<br>42 per 100,000                           | Congenital heart defect<br>55<br>38 per 100,000             | Circulatory system diseases<br>23<br>16 per 100,000            | Respiratory distress<br>21<br>14 per 100,000                        |
| 1-4 years old<br>119<br>20 per 100,000                                       | Birth defect<br>19<br>--   | Homicide<br>11<br>--                                    | Motor vehicle crash<br>10<br>--                             | Drowning<br>9<br>--  | Leukemia<br>9<br>--   |
| 5-14 years old<br>156<br>11 per 100,000                                      | Motor vehicle crash<br>21<br>1 per 100,000                               | Birth defect<br>15<br>--                                | Leukemia<br>13<br>--  | Homicide<br>13<br>--   | Brain/CNS cancer<br>10<br>--  |
| 15-24 years old<br>821<br>52 per 100,000                                     | Homicide<br>285<br>18 per 100,000  | Motor vehicle crash<br>133<br>8 per 100,000             | Suicide<br>69<br>4 per 100,000                              | Drug overdose<br>43<br>3 per 100,000                           | Leukemia<br>24<br>2 per 100,000                                     |
| 25-44 years old<br>3,083<br>102 per 100,000                                  | Homicide<br>264<br>9 per 100,000   | Drug overdose<br>257<br>8 per 100,000                   | Suicide<br>229<br>8 per 100,000                             | Motor vehicle crash<br>213<br>7 per 100,000                    | Coronary heart disease<br>198<br>7 per 100,000                      |
| 45-64 years old<br>11,796<br>477 per 100,000                                 | Coronary heart disease<br>2,293<br>93 per 100,000                        | Liver disease<br>697<br>28 per 100,000                  | Lung cancer<br>679<br>27 per 100,000                        | Diabetes<br>479<br>19 per 100,000                              | Stroke<br>478<br>19 per 100,000                                     |
| 65-74 years old<br>9,069<br>1,558 per 100,000                                | Coronary heart disease<br>1,956<br>336 per 100,000                       | Lung cancer<br>835<br>143 per 100,000                   | Emphysema/COPD<br>530<br>91 per 100,000                     | Stroke<br>475<br>82 per 100,000                                | Diabetes<br>399<br>69 per 100,000                                   |
| 75+ years old<br>31,869<br>5,819 per 100,000                                 | Coronary heart disease<br>8,275<br>1,511 per 100,000                     | Stroke<br>2,242<br>409 per 100,000                      | Emphysema/COPD<br>2,046<br>374 per 100,000                  | Alzheimer's disease<br>2,019<br>369 per 100,000                | Pneumonia/influenza<br>1,558<br>285 per 100,000                     |
| <b>Los Angeles County Total</b><br><b>57,620</b><br><b>583 per 100,000**</b> | <b>Coronary heart disease</b><br><b>12,725</b><br><b>129 per 100,000</b> | <b>Stroke</b><br><b>3,301</b><br><b>34 per 100,000</b>  | <b>Lung cancer</b><br><b>2,958</b><br><b>31 per 100,000</b> | <b>Emphysema/COPD</b><br><b>2,904</b><br><b>30 per 100,000</b> | <b>Alzheimer's disease</b><br><b>2,125</b><br><b>21 per 100,000</b> |

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

- Accidents (unintentional injuries including motor vehicle crash, drug overdose, and drowning) were the leading cause of death for persons aged 1 to 44 years. All injuries (accidents, homicide, and suicide) caused 41% of the deaths in this age group.
- Nearly half (45%) of all deaths were among persons less than 75 years of age and resulted in more than 455,000 years of potential life lost.
- 4,450 deaths from coronary heart disease were among persons less than 75 years of age. These deaths were 8% of all deaths but contributed almost 60,000 years of potential life lost -- 13% of the years of life lost overall.

\*Sudden Infant Death Syndrome.

\*\*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<br>Deaths from all causes | #1 Cause<br>Number of deaths      | #2 Cause<br>Number of deaths | #3 Cause<br>Number of deaths |
|-------|-----------------------------|--|-----------------------------------|------------------------------|------------------------------|
| Males | 0-14 years<br>574 deaths    | White<br>84                              | Perinatal period condition<br>44  | Birth defect<br>16           | Kidney cancer<br><5          |
|       |                             | Hispanic<br>338                          | Perinatal period condition<br>122 | Birth defect<br>68           | Motor vehicle crash<br>15    |
|       |                             | Black<br>100                             | Perinatal period condition<br>39  | Birth defect<br>14           | Homicide<br>11               |
|       |                             | Asian/Pacific Islander<br>48             | Perinatal period condition<br>15  | Birth defect<br>9            | Leukemia<br><5               |
|       | 15-24 years<br>622 deaths   | White<br>97                              | Motor vehicle crash<br>23         | Drug overdose<br>18          | Suicide<br>12                |
|       |                             | Hispanic<br>364                          | Homicide<br>158                   | Motor vehicle crash<br>56    | Suicide<br>31                |
|       |                             | Black<br>126                             | Homicide<br>83                    | Motor vehicle crash<br>8     | Birth defect<br><5           |
|       |                             | Asian/Pacific Islander<br>35             | Motor vehicle crash<br>7          | Homicide<br>5                | Suicide<br><5                |
|       | 25-44 years<br>2,049 deaths | White<br>550                             | Drug overdose<br>89               | Suicide<br>70                | Motor vehicle crash<br>53    |
|       |                             | Hispanic<br>993                          | Homicide<br>133                   | Liver disease<br>88          | Motor vehicle crash<br>86    |
|       |                             | Black<br>342                             | Homicide<br>74                    | Coronary heart disease<br>42 | HIV<br>30                    |
|       |                             | Asian/Pacific Islander<br>155            | Suicide<br>18                     | Coronary heart disease<br>18 | Homicide<br>9                |
|       | 45-64 years<br>7,285 deaths | White<br>3,076                           | Coronary heart disease<br>763     | Lung cancer<br>187           | Suicide<br>174               |
|       |                             | Hispanic<br>2,153                        | Coronary heart disease<br>425     | Liver disease<br>260         | Diabetes<br>118              |
|       |                             | Black<br>1,313                           | Coronary heart disease<br>376     | Lung cancer<br>77            | Diabetes<br>58               |
|       |                             | Asian/Pacific Islander<br>693            | Coronary heart disease<br>158     | Lung cancer<br>70            | Stroke<br>40                 |



|                                    |  |  |                              |                                   |
|------------------------------------|--|--|------------------------------|-----------------------------------|
| <b>65-74 years</b><br>5,103 deaths | <b>White</b><br>2,448                  | <b>Coronary heart disease</b><br>587   | <b>Lung cancer</b><br>269    | <b>Emphysema/COPD</b><br>179      |
|                                    | <b>Hispanic</b><br>1,164               | <b>Coronary heart disease</b><br>266   | <b>Diabetes</b><br>83        | <b>Lung cancer</b><br>82          |
|                                    | <b>Black</b><br>841                    | <b>Coronary heart disease</b><br>205   | <b>Lung cancer</b><br>86     | <b>Prostate cancer</b><br>53      |
|                                    | <b>Asian/Pacific Islander</b><br>621   | <b>Coronary heart disease</b><br>144   | <b>Lung cancer</b><br>64     | <b>Diabetes</b><br>37             |
| <b>75+ years</b><br>13,707 deaths  | <b>White</b><br>8,297                  | <b>Coronary heart disease</b><br>2,208 | <b>Emphysema/COPD</b><br>596 | <b>Alzheimer's disease</b><br>470 |
|                                    | <b>Hispanic</b><br>2,421               | <b>Coronary heart disease</b><br>589   | <b>Emphysema/COPD</b><br>141 | <b>Diabetes</b><br>135            |
|                                    | <b>Black</b><br>1,239                  | <b>Coronary heart disease</b><br>334   | <b>Emphysema/COPD</b><br>92  | <b>Prostate cancer</b><br>91      |
|                                    | <b>Asian/Pacific Islander</b><br>1,723 | <b>Coronary heart disease</b><br>398   | <b>Stroke</b><br>150         | <b>Lung cancer</b><br>129         |

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

- Nearly all (99.6%) of the 224 male perinatal period condition deaths were infants less than 1 year of age. Prematurity/low birthweight (70 deaths) was the most common cause.
- Among male children aged 0 to 14 years, heart defects (36 deaths) were the most common congenital defect.
- Three-fourths (73%) of all deaths among males aged 15 to 24 years were from homicide (254 deaths), accidents (148 deaths), and suicide (51 deaths).
- Most (80%) homicides were committed with a firearm. Among 15- to 24-year-olds, 91% of the homicides were committed with a firearm. Among men overall, 43% of the suicides were committed with a firearm. Among men older than 74, 73% of the suicides were committed with a firearm.
- Coronary heart disease accounted for about one-fourth of the deaths in each age group for men over the age of 44 years.
- Among men, the median age at death from coronary heart disease was 79 years for whites, 77 years for Asian/Pacific Islanders, 72 years for Hispanics, and 67 years for blacks.

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

|                             | Race/ethnicity<br>Deaths from all causes | #1 Cause                         | #2 Cause                      | #3 Cause                  |
|-----------------------------|--|----------------------------------|-------------------------------|---------------------------|
|                             |  | Number of deaths                 | Number of deaths              | Number of deaths          |
| 0-14 years<br>404 deaths    | White<br>57                              | Perinatal period condition<br>17 | Birth defect<br>16            | Pneumonia/influenza<br><5 |
|                             | Hispanic<br>248                          | Perinatal period condition<br>70 | Birth defect<br>62            | Motor vehicle crash<br>14 |
|                             | Black<br>65                              | Perinatal period condition<br>20 | Birth defect<br>14            | Homicide<br><5            |
|                             | Asian/Pacific Islander<br>30             | Perinatal period condition<br>11 | Birth defect<br>10            | Brain/CNS cancer<br><5    |
| 15-24 years<br>199 deaths   | White<br>39                              | Motor vehicle crash<br>8         | Drug overdose<br>5            | Suicide<br><5             |
|                             | Hispanic<br>99                           | Motor vehicle crash<br>19        | Homicide<br>18                | Leukemia<br>6             |
|                             | Black<br>35                              | Suicide<br>6                     | Motor vehicle crash<br>6      | Homicide<br>6             |
|                             | Asian/Pacific Islander<br>25             | Motor vehicle crash<br>6         | Homicide<br><5                | Suicide<br><5             |
| 25-44 years<br>1,034 deaths | White<br>304                             | Drug overdose<br>38              | Breast cancer<br>31           | Suicide<br>30             |
|                             | Hispanic<br>421                          | Motor vehicle crash<br>28        | Breast cancer<br>28           | Diabetes<br>19            |
|                             | Black<br>206                             | Coronary heart disease<br>19     | Breast cancer<br>18           | Drug overdose<br>16       |
|                             | Asian/Pacific Islander<br>95             | Breast cancer<br>11              | Suicide<br>9                  | Lung cancer<br>7          |
| 45-64 years<br>4,511 deaths | White<br>1,830                           | Breast cancer<br>204             | Coronary heart disease<br>202 | Lung cancer<br>141        |
|                             | Hispanic<br>1,244                        | Coronary heart disease<br>138    | Breast cancer<br>111          | Liver disease<br>85       |
|                             | Black<br>981                             | Coronary heart disease<br>173    | Breast cancer<br>83           | Lung cancer<br>65         |
|                             | Asian/Pacific Islander<br>426            | Breast cancer<br>55              | Coronary heart disease<br>41  | Stroke<br>37              |

Females



|                                    |  |  |                                   |                                   |
|------------------------------------|--|--|-----------------------------------|-----------------------------------|
| <b>65-74 years</b><br>3,966 deaths | <b>White</b><br>1,846                  | <b>Coronary heart disease</b><br>322   | <b>Lung cancer</b><br>210         | <b>Emphysema/COPD</b><br>168      |
|                                    | <b>Hispanic</b><br>996                 | <b>Coronary heart disease</b><br>172   | <b>Diabetes</b><br>64             | <b>Breast cancer</b><br>53        |
|                                    | <b>Black</b><br>690                    | <b>Coronary heart disease</b><br>174   | <b>Lung cancer</b><br>48          | <b>Stroke</b><br>44               |
|                                    | <b>Asian/Pacific Islander</b><br>415   | <b>Coronary heart disease</b><br>75    | <b>Stroke</b><br>33               | <b>Lung cancer</b><br>28          |
| <b>75+ deaths</b><br>18,162 deaths | <b>White</b><br>10,993                 | <b>Coronary heart disease</b><br>2,844 | <b>Alzheimer's disease</b><br>947 | <b>Stroke</b><br>806              |
|                                    | <b>Hispanic</b><br>3,230               | <b>Coronary heart disease</b><br>777   | <b>Stroke</b><br>271              | <b>Alzheimer's disease</b><br>224 |
|                                    | <b>Black</b><br>1,887                  | <b>Coronary heart disease</b><br>554   | <b>Stroke</b><br>157              | <b>Alzheimer's disease</b><br>126 |
|                                    | <b>Asian/Pacific Islander</b><br>2,000 | <b>Coronary heart disease</b><br>548   | <b>Stroke</b><br>196              | <b>Pneumonia/influenza</b><br>120 |

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

- 120 of the 121 female perinatal period condition deaths were among infants less than 1 year of age. Low birthweight/pre-maturity (44 deaths) was the most common condition.
- Among female children aged 0 to 14 years, heart defects (29 deaths) were the most common congenital defect.
- Accidents, most commonly motor vehicle crashes, were the leading cause of death among girls and young adults aged 15 to 24 years.
- Cancer caused 41% of all the deaths among women aged 45 to 64 years. Among this group, breast cancer was the leading cause of cancer death. Among older women (65-74 years), lung cancer was the leading cause of cancer death.
- Among women, the median age at death from coronary heart disease was 87 years for whites, 85 years for Asian/Pacific Islanders, 82 years for Hispanics, and 79 years for blacks.

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

**Antelope Valley (SPA 1)**  
2,230 deaths  
21,576 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 | 476           | 1.                   | 1.                                  | Coronary heart disease | 2,821               | 1.         |
| 2.                      | Emphysema/COPD         | 202           | 6.                   | 2.                                  | Motor vehicle crash    | 1,522               | 10.        |
| 3.                      | Lung cancer            | 118           | 7.                   | 3.                                  | Homicide               | 1,236               | 15.        |
| 4.                      | Diabetes               | 113           | 4.                   | 4.                                  | Diabetes               | 1,101               | 4.         |
| 5.                      | Stroke                 | 94            | 13.                  | 5.                                  | Liver disease          | 963                 | 8.         |

**San Fernando (SPA 2)**  
12,132 deaths  
84,124 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 | 2,828         | 1.                   | 1.                                  | Coronary heart disease | 11,516              | 1.         |
| 2.                      | Stroke                 | 690           | 9.                   | 2.                                  | Suicide                | 5,131               | 12.        |
| 3.                      | Lung cancer            | 664           | 6.                   | 3.                                  | Drug overdose          | 4,736               | 17.        |
| 4.                      | Emphysema/COPD         | 572           | 14.                  | 4.                                  | Motor vehicle crash    | 4,203               | 18.        |
| 5.                      | Alzheimer's disease    | 568           | 42.                  | 5.                                  | Liver disease          | 3,609               | 11.        |

**San Gabriel (SPA 3)**  
10,636 deaths  
71,001 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 | 2,304         | 1.                   | 1.                                  | Coronary heart disease | 8,974               | 1.         |
| 2.                      | Stroke                 | 694           | 7.                   | 2.                                  | Motor vehicle crash    | 3,906               | 18.        |
| 3.                      | Emphysema/COPD         | 631           | 12.                  | 3.                                  | Suicide                | 3,461               | 16.        |
| 4.                      | Lung cancer            | 573           | 5.                   | 4.                                  | Liver disease          | 3,424               | 10.        |
| 5.                      | Pneumonia/influenza    | 404           | 13.                  | 5.                                  | Lung cancer            | 3,324               | 4.         |

**Metro (SPA 4)**  
6,032 deaths  
49,573 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 | 1,414         | 1.                   | 1.                                  | Coronary heart disease | 5,993               | 1.         |
| 2.                      | Stroke                 | 344           | 8.                   | 2.                                  | Homicide               | 3,207               | 17.        |
| 3.                      | Lung cancer            | 265           | 10.                  | 3.                                  | Liver disease          | 2,843               | 8.         |
| 4.                      | Pneumonia/influenza    | 256           | 12.                  | 4.                                  | Suicide                | 2,831               | 13.        |
| 5.                      | Emphysema/COPD         | 251           | 17.                  | 5.                                  | Drug overdose          | 2,650               | 16.        |

**West (SPA 5)**  
3,967 deaths  
20,426 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 | 854           | 1.                   | 1.                                  | Coronary heart disease | 2,664               | 1.         |
| 2.                      | Stroke                 | 232           | 10.                  | 2.                                  | Suicide                | 1,703               | 9.         |
| 3.                      | Lung cancer            | 216           | 6.                   | 3.                                  | Drug overdose          | 1,237               | 19.        |
| 4.                      | Alzheimer's disease    | 216           | 37.                  | 4.                                  | Liver disease          | 1,078               | 15.        |
| 5.                      | Emphysema/COPD         | 182           | 12.                  | 5.                                  | Breast cancer          | 1,072               | 8.         |

**South (SPA 6)**  
5,638 deaths  
65,813 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 | 1,271         | 1.                   | 1.                                  | Coronary heart disease | 8,926               | 1.         |
| 2.                      | Stroke                 | 323           | 5.                   | 2.                                  | Homicide               | 8,891               | 6.         |
| 3.                      | Lung cancer            | 275           | 7.                   | 3.                                  | Motor vehicle crash    | 3,480               | 15.        |
| 4.                      | Diabetes               | 247           | 4.                   | 4.                                  | Diabetes               | 2,661               | 4.         |
| 5.                      | Emphysema/COPD         | 216           | 15.                  | 5.                                  | Stroke                 | 2,545               | 2.         |

**East (SPA 7)**  
7,184 deaths  
59,269 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 | 1,488         | 1.                   | 1.                                  | Coronary heart disease | 7,235               | 1.         |
| 2.                      | Stroke                 | 411           | 8.                   | 2.                                  | Homicide               | 4,341               | 13.        |
| 3.                      | Emphysema/COPD         | 359           | 17.                  | 3.                                  | Liver disease          | 3,585               | 8.         |
| 4.                      | Diabetes               | 323           | 6.                   | 4.                                  | Motor vehicle crash    | 2,831               | 18.        |
| 5.                      | Lung cancer            | 300           | 10.                  | 5.                                  | Suicide                | 2,634               | 15.        |

**South Bay (SPA 8)**  
9,455 deaths  
76,521 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 | 2,029         | 1.                   | 1.                                  | Coronary heart disease | 10,507              | 1.         |
| 2.                      | Lung cancer            | 541           | 3.                   | 2.                                  | Homicide               | 6,623               | 13.        |
| 3.                      | Stroke                 | 510           | 8.                   | 3.                                  | Lung cancer            | 3,282               | 2.         |
| 4.                      | Emphysema/COPD         | 488           | 13.                  | 4.                                  | Drug overdose          | 3,222               | 18.        |
| 5.                      | Pneumonia/influenza    | 360           | 12.                  | 5.                                  | Liver disease          | 2,895               | 10.        |

\*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<br>Number of deaths<br>Age-adjusted death rate | #1 cause<br>Number of deaths<br>Age-adjusted death rate    | #2 cause<br>Number of deaths<br>Age-adjusted death rate | #3 cause<br>Number of deaths<br>Age-adjusted death rate | #4 cause<br>Number of deaths<br>Age-adjusted death rate | #5 cause<br>Number of deaths<br>Age-adjusted death rate |
|--|--|---|---|---|---|
| <b>SPA 1: Antelope Valley</b><br>2,230<br>815 per 100,000            | <b>Coronary heart disease</b><br>476<br>183 per 100,000    | <b>Emphysema/COPD</b><br>202<br>79 per 100,000          | <b>Lung cancer</b><br>118<br>43 per 100,000             | <b>Diabetes</b><br>113<br>41 per 100,000                | <b>Stroke</b><br>94<br>37 per 100,000                   |
| <b>SPA 2: San Fernando</b><br>12,132<br>559 per 100,000              | <b>Coronary heart disease</b><br>2,828<br>130 per 100,000  | <b>Stroke</b><br>690<br>32 per 100,000                  | <b>Lung cancer</b><br>664<br>32 per 100,000             | <b>Emphysema/COPD</b><br>572<br>27 per 100,000          | <b>Alzheimer's disease</b><br>568<br>26 per 100,000     |
| <b>SPA 3: San Gabriel</b><br>10,636<br>553 per 100,000               | <b>Coronary heart disease</b><br>2,304<br>118 per 100,000  | <b>Stroke</b><br>694<br>36 per 100,000                  | <b>Emphysema/COPD</b><br>631<br>33 per 100,000          | <b>Lung cancer</b><br>573<br>31 per 100,000             | <b>Pneumonia/influenza</b><br>404<br>21 per 100,000     |
| <b>SPA 4: Metro</b><br>6,032<br>505 per 100,000                      | <b>Coronary heart disease</b><br>1,414<br>119 per 100,000  | <b>Stroke</b><br>344<br>29 per 100,000                  | <b>Lung cancer</b><br>265<br>24 per 100,000             | <b>Pneumonia/influenza</b><br>256<br>21 per 100,000     | <b>Emphysema/COPD</b><br>251<br>21 per 100,000          |
| <b>SPA 5: West</b><br>3,967<br>487 per 100,000                       | <b>Coronary heart disease</b><br>854<br>101 per 100,000    | <b>Stroke</b><br>232<br>28 per 100,000                  | <b>Lung cancer</b><br>216<br>28 per 100,000             | <b>Alzheimer's disease</b><br>216<br>24 per 100,000     | <b>Emphysema/COPD</b><br>182<br>22 per 100,000          |
| <b>SPA 6: South</b><br>5,638<br>754 per 100,000                      | <b>Coronary heart disease</b><br>1,271<br>178 per 100,000  | <b>Stroke</b><br>323<br>46 per 100,000                  | <b>Lung cancer</b><br>275<br>40 per 100,000             | <b>Diabetes</b><br>247<br>34 per 100,000                | <b>Emphysema/COPD</b><br>216<br>31 per 100,000          |
| <b>SPA 7: East</b><br>7,184<br>590 per 100,000                       | <b>Coronary heart disease</b><br>1,488<br>122 per 100,000  | <b>Stroke</b><br>411<br>34 per 100,000                  | <b>Emphysema/COPD</b><br>359<br>31 per 100,000          | <b>Diabetes</b><br>323<br>27 per 100,000                | <b>Lung cancer</b><br>300<br>26 per 100,000             |
| <b>SPA 8: South Bay</b><br>9,455<br>611 per 100,000                  | <b>Coronary heart disease</b><br>2,029<br>131 per 100,000  | <b>Lung cancer</b><br>541<br>36 per 100,000             | <b>Stroke</b><br>510<br>33 per 100,000                  | <b>Emphysema/COPD</b><br>488<br>32 per 100,000          | <b>Pneumonia/influenza</b><br>360<br>24 per 100,000     |
| <b>Los Angeles County Total</b><br>57,620<br>583 per 100,000         | <b>Coronary heart disease</b><br>12,725<br>129 per 100,000 | <b>Stroke</b><br>3,301<br>34 per 100,000                | <b>Lung cancer</b><br>2,958<br>31 per 100,000           | <b>Emphysema/COPD</b><br>2,904<br>30 per 100,000        | <b>Alzheimer's disease</b><br>2,125<br>21 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 | Motor vehicle crash | Homicide            | Diabetes            | Liver disease |
| SPA 2: San Fernando      | Coronary heart disease | Suicide             | Drug overdose       | Motor vehicle crash | Liver disease |
| SPA 3: San Gabriel       | Coronary heart disease | Motor vehicle crash | Suicide             | Liver disease       | Lung cancer   |
| SPA 4: Metro             | Coronary heart disease | Homicide            | Liver disease       | Suicide             | Drug overdose |
| SPA 5: West              | Coronary heart disease | Suicide             | Drug overdose       | Liver disease       | Breast cancer |
| SPA 6: South             | Coronary heart disease | Homicide            | Motor vehicle crash | Diabetes            | Stroke        |
| SPA 7: East              | Coronary heart disease | Homicide            | Liver disease       | Motor vehicle crash | Suicide       |
| SPA 8: South Bay         | Coronary heart disease | Homicide            | Lung cancer         | Drug overdose       | Liver disease |
| Los Angeles County Total | Coronary heart disease | Homicide            | Motor vehicle crash | Liver disease       | Suicide       |

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 | Homicide               | Motor vehicle crash | Liver disease       | Diabetes            |
| SPA 2: San Fernando    | Coronary heart disease | Suicide                | Drug overdose       | Motor vehicle crash | Liver disease       |
| SPA 3: San Gabriel     | Coronary heart disease | Suicide                | Motor vehicle crash | Liver disease       | Homicide            |
| SPA 4: Metro           | Coronary heart disease | Homicide               | Liver disease       | HIV                 | Drug overdose       |
| SPA 5: West            | Coronary heart disease | Suicide                | Drug overdose       | Liver disease       | Motor vehicle crash |
| SPA 6: South           | Homicide               | Coronary heart disease | Motor vehicle crash | Liver disease       | Diabetes            |
| SPA 7: East            | Coronary heart disease | Homicide               | Liver disease       | Suicide             | Motor vehicle crash |
| SPA 8: South Bay       | Coronary heart disease | Homicide               | Drug overdose       | Suicide             | Liver disease       |
| All males              | Coronary heart disease | Homicide               | Motor vehicle crash | Liver disease       | Suicide             |

Notes: All males includes persons of unknown residence.

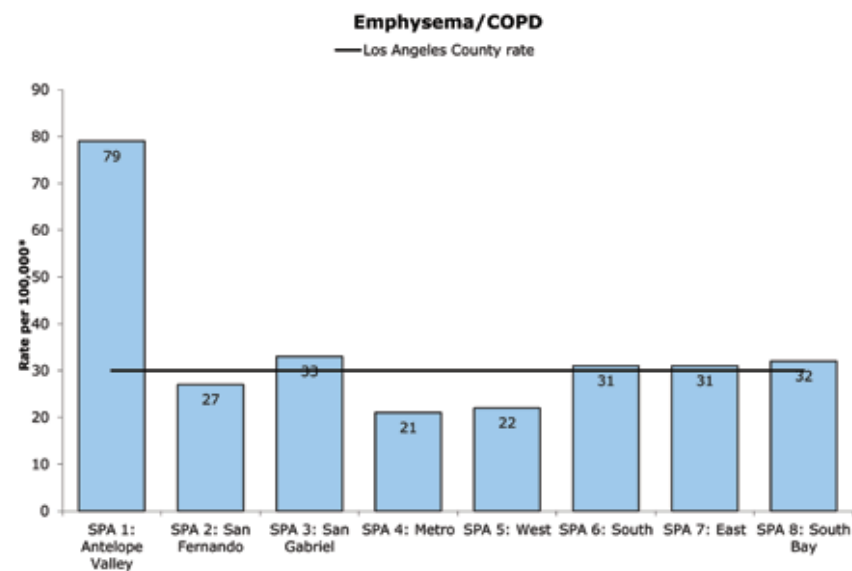
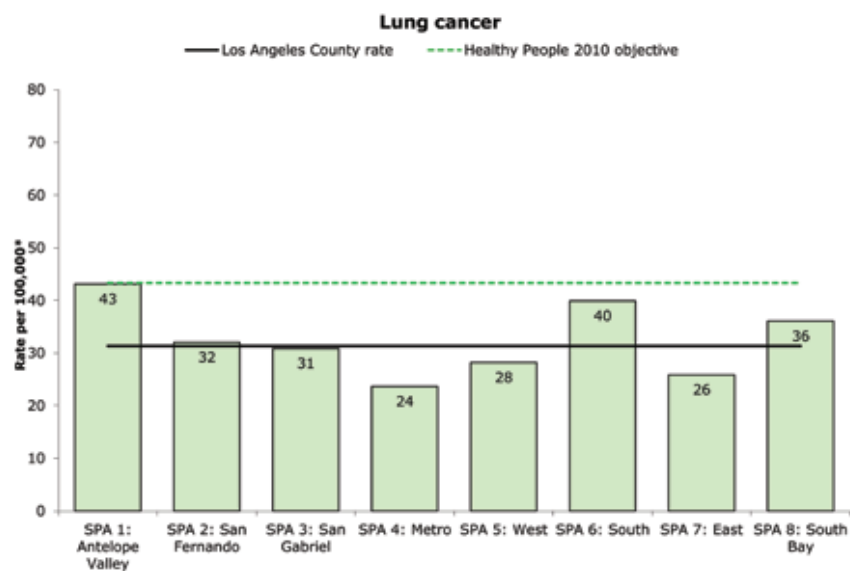
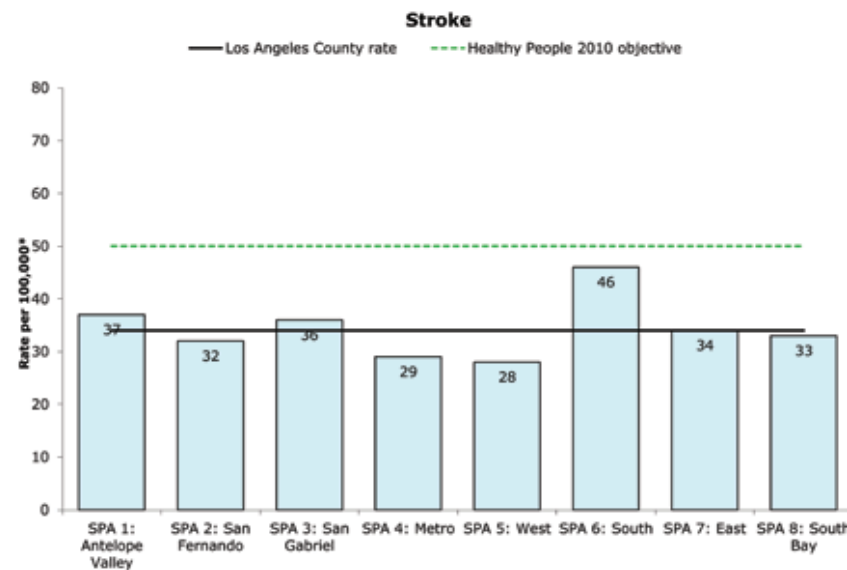
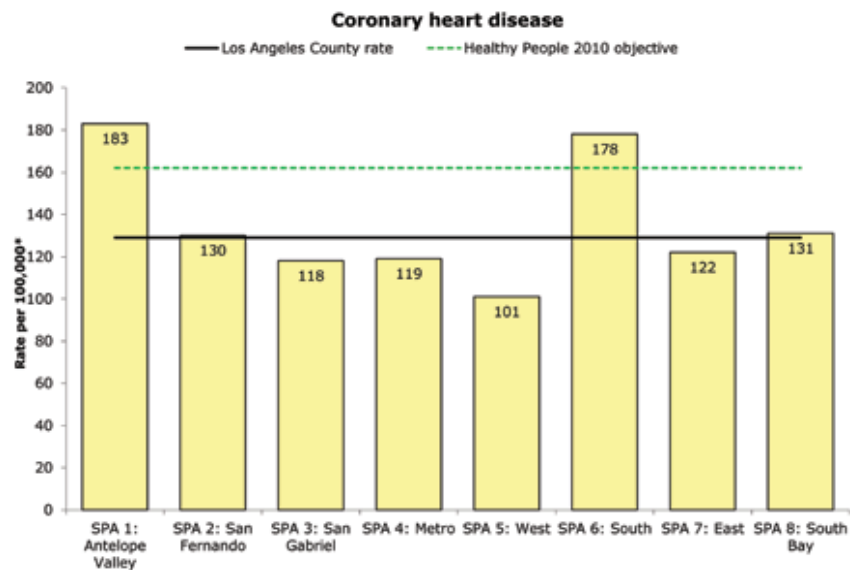
## Females: Leading causes of premature death (before age 75 years)

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

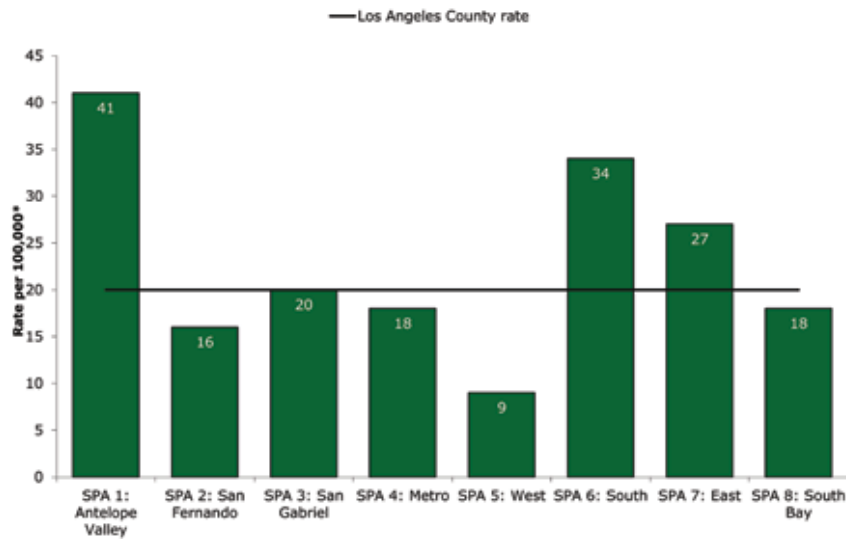
Notes: All females includes persons of unknown residence.



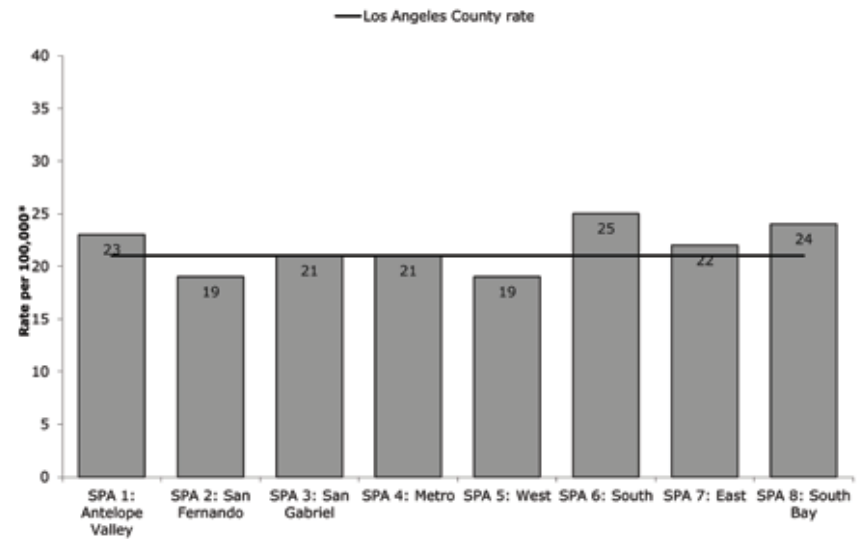
Figure 13. Death rates for selected causes of death, by service planning area (SPA) of residence



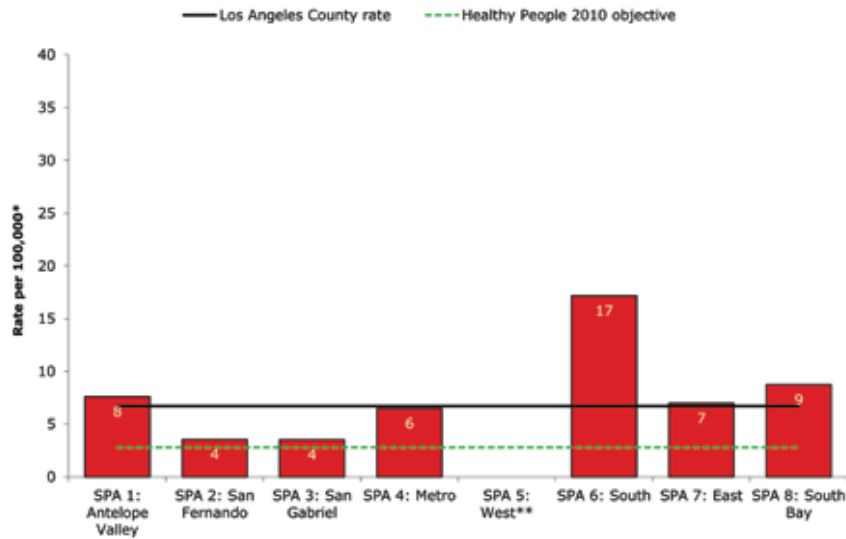
### Diabetes



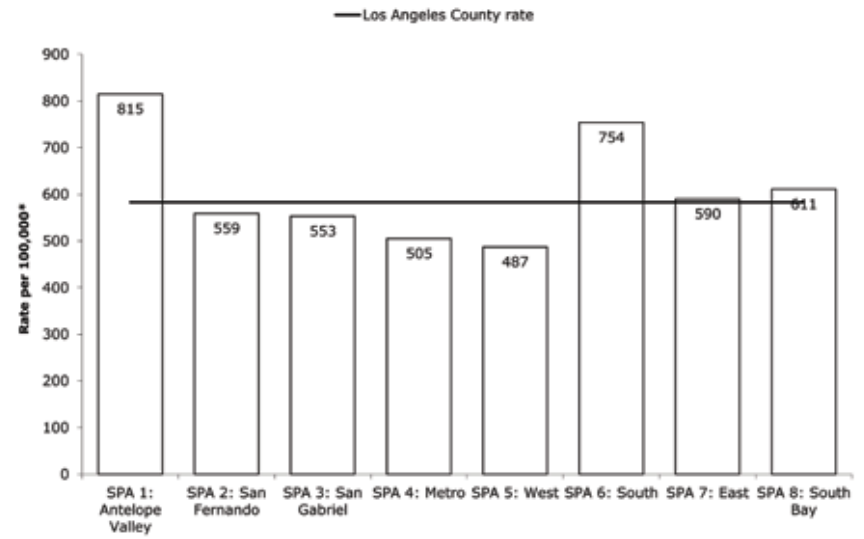
### Pneumonia/Influenza



### 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<br>Number of deaths<br>Age-adjusted death rate | #1 cause<br>Number of deaths  | #2 cause<br>Number of deaths | #3 cause<br>Number of deaths | #4 cause<br>Number of deaths | #5 cause<br>Number of deaths |
|--|-------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| <b>Alhambra</b><br>2,273<br>471 per 100,000                    | Coronary heart disease<br>531 | Stroke<br>162                | Emphysema/COPD<br>128        | Pneumonia/influenza<br>122   | Lung cancer<br>118           |
| <b>Antelope Valley</b><br>2,230<br>815 per 100,000             | Coronary heart disease<br>476 | Emphysema/COPD<br>202        | Lung cancer<br>118           | Diabetes<br>113              | Stroke<br>94                 |
| <b>Bellflower</b><br>2,242<br>638 per 100,000                  | Coronary heart disease<br>468 | Stroke<br>138                | Emphysema/COPD<br>130        | Lung cancer<br>120           | Diabetes<br>92               |
| <b>Central</b><br>1,719<br>512 per 100,000                     | Coronary heart disease<br>425 | Stroke<br>92                 | Emphysema/COPD<br>79         | Diabetes<br>75               | Pneumonia/influenza<br>75    |
| <b>Compton</b><br>1,440<br>752 per 100,000                     | Coronary heart disease<br>291 | Stroke<br>83                 | Diabetes<br>71               | Lung cancer<br>68            | Homicide<br>63               |
| <b>East LA</b><br>1,095<br>554 per 100,000                     | Coronary heart disease<br>213 | Diabetes<br>74               | Stroke<br>55                 | Liver disease<br>51          | Pneumonia/influenza<br>49    |
| <b>East Valley</b><br>2,419<br>572 per 100,000                 | Coronary heart disease<br>561 | Lung cancer<br>145           | Stroke<br>126                | Emphysema/COPD<br>97         | Pneumonia/influenza<br>93    |
| <b>El Monte</b><br>2,166<br>541 per 100,000                    | Coronary heart disease<br>445 | Stroke<br>130                | Lung cancer<br>123           | Emphysema/COPD<br>121        | Diabetes<br>104              |
| <b>Foothill</b><br>1,973<br>577 per 100,000                    | Coronary heart disease<br>439 | Stroke<br>127                | Emphysema/COPD<br>112        | Lung cancer<br>104           | Alzheimer's disease<br>96    |
| <b>Glendale</b><br>2,302<br>518 per 100,000                    | Coronary heart disease<br>521 | Stroke<br>149                | Alzheimer's disease<br>136   | Lung cancer<br>111           | Emphysema/COPD<br>109        |
| <b>Harbor</b><br>1,326<br>568 per 100,000                      | Coronary heart disease<br>265 | Stroke<br>70                 | Lung cancer<br>68            | Alzheimer's disease<br>67    | Emphysema/COPD<br>63         |
| <b>Hollywood-Wilshire</b><br>2,751<br>498 per 100,000          | Coronary heart disease<br>664 | Stroke<br>171                | Lung cancer<br>127           | Emphysema/COPD<br>112        | Pneumonia/influenza<br>102   |
| <b>Inglewood</b><br>2,189<br>614 per 100,000                   | Coronary heart disease<br>490 | Lung cancer<br>114           | Stroke<br>110                | Emphysema/COPD<br>99         | Pneumonia/influenza<br>91    |

|  |                                  |                       |                           |                            |                              |
|--|----------------------------------|-----------------------|---------------------------|----------------------------|------------------------------|
| <b>Long Beach</b><br>3,027<br>681 per 100,000                | Coronary heart disease<br>656    | Emphysema/COPD<br>167 | Lung cancer<br>165        | Stroke<br>164              | Pneumonia/influenza<br>121   |
| <b>Northeast</b><br>1,562<br>512 per 100,000                 | Coronary heart disease<br>325    | Stroke<br>81          | Pneumonia/influenza<br>79 | Lung cancer<br>70          | Diabetes<br>65               |
| <b>Pasadena</b><br>928<br>546 per 100,000                    | Coronary heart disease<br>200    | Emphysema/COPD<br>58  | Stroke<br>58              | Lung cancer<br>55          | Alzheimer's disease<br>39    |
| <b>Pomona</b><br>3,296<br>613 per 100,000                    | Coronary heart disease<br>689    | Stroke<br>217         | Emphysema/COPD<br>212     | Lung cancer<br>173         | Alzheimer's disease<br>140   |
| <b>San Antonio</b><br>1,716<br>550 per 100,000               | Coronary heart disease<br>353    | Stroke<br>84          | Emphysema/COPD<br>82      | Diabetes<br>81             | Alzheimer's disease<br>63    |
| <b>San Fernando</b><br>2,399<br>616 per 100,000              | Coronary heart disease<br>542    | Stroke<br>149         | Lung cancer<br>131        | Emphysema/COPD<br>118      | Alzheimer's disease<br>95    |
| <b>South</b><br>973<br>834 per 100,000                       | Coronary heart disease<br>214    | Stroke<br>61          | Lung cancer<br>50         | Homicide<br>42             | Emphysema/COPD<br>34         |
| <b>Southeast</b><br>631<br>629 per 100,000                   | Coronary heart disease<br>134    | Stroke<br>45          | Diabetes<br>31            | Emphysema/COPD<br>28       | Homicide<br>27               |
| <b>Southwest</b><br>2,594<br>763 per 100,000                 | Coronary heart disease<br>632    | Stroke<br>134         | Lung cancer<br>134        | Diabetes<br>117            | Pneumonia/influenza<br>97    |
| <b>Torrance</b><br>2,913<br>565 per 100,000                  | Coronary heart disease<br>618    | Lung cancer<br>194    | Stroke<br>166             | Emphysema/COPD<br>159      | Alzheimer's disease<br>108   |
| <b>West</b><br>3,967<br>487 per 100,000                      | Coronary heart disease<br>854    | Stroke<br>232         | Lung cancer<br>216        | Alzheimer's disease<br>216 | Emphysema/COPD<br>182        |
| <b>West Valley</b><br>5,012<br>549 per 100,000               | Coronary heart disease<br>1,204  | Lung cancer<br>277    | Stroke<br>266             | Alzheimer's disease<br>251 | Emphysema/COPD<br>248        |
| <b>Whittier</b><br>2,131<br>603 per 100,000                  | Coronary heart disease<br>454    | Stroke<br>134         | Emphysema/COPD<br>104     | Lung cancer<br>96          | Alzheimer's disease<br>94    |
| <b>Los Angeles County Total</b><br>57,620<br>583 per 100,000 | Coronary heart disease<br>12,725 | Stroke<br>3,301       | Lung cancer<br>2,958      | Emphysema/COPD<br>2,904    | Alzheimer's disease<br>2,125 |

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)**

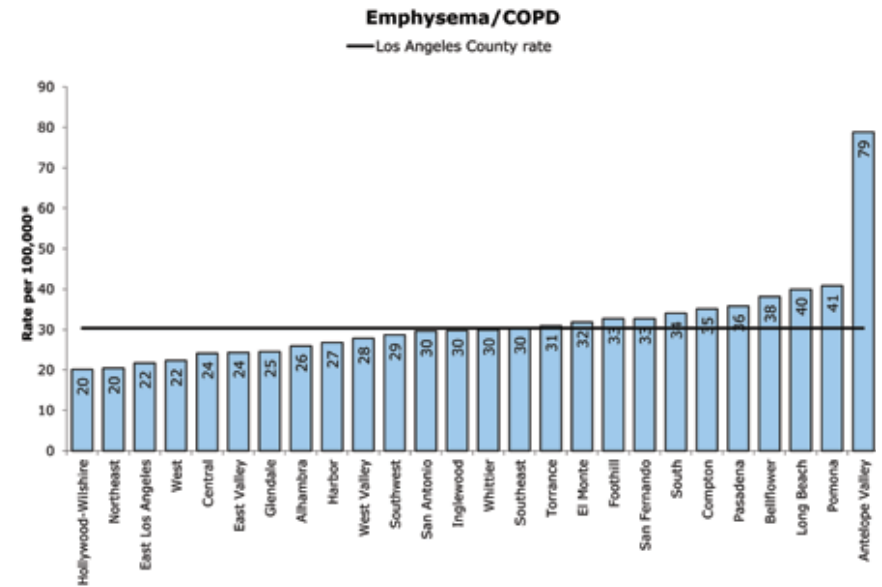
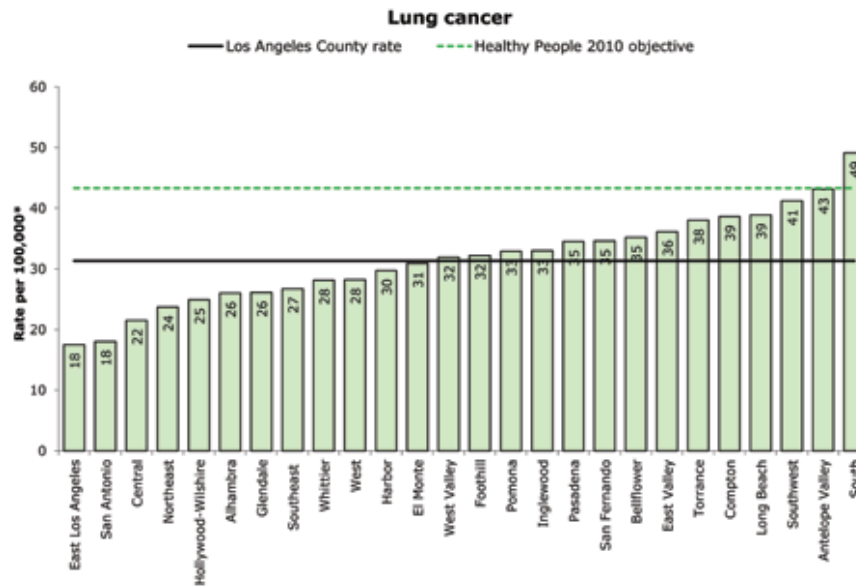
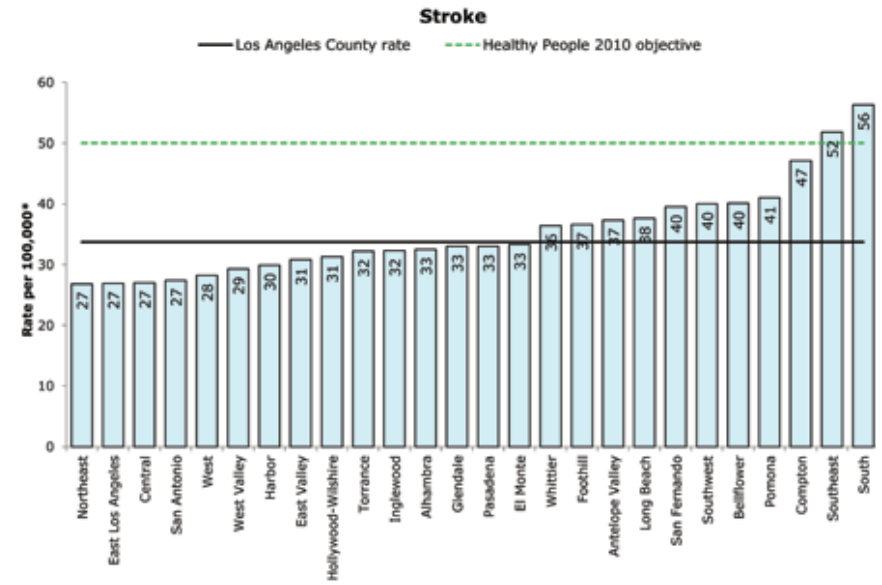
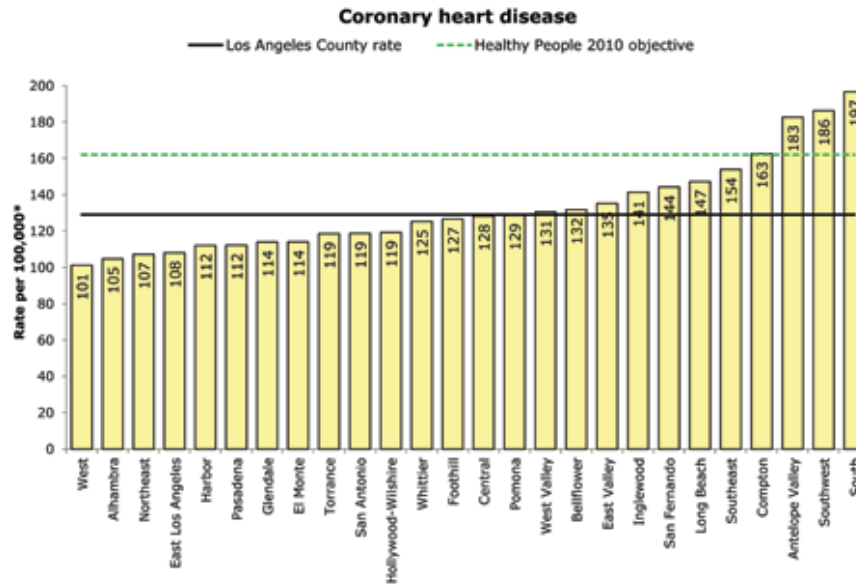
| Health District    | #1 cause               | #2 cause               | #3 cause            | #4 cause            | #5 cause            |
|--------------------|------------------------|------------------------|---------------------|---------------------|---------------------|
| Alhambra           |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



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

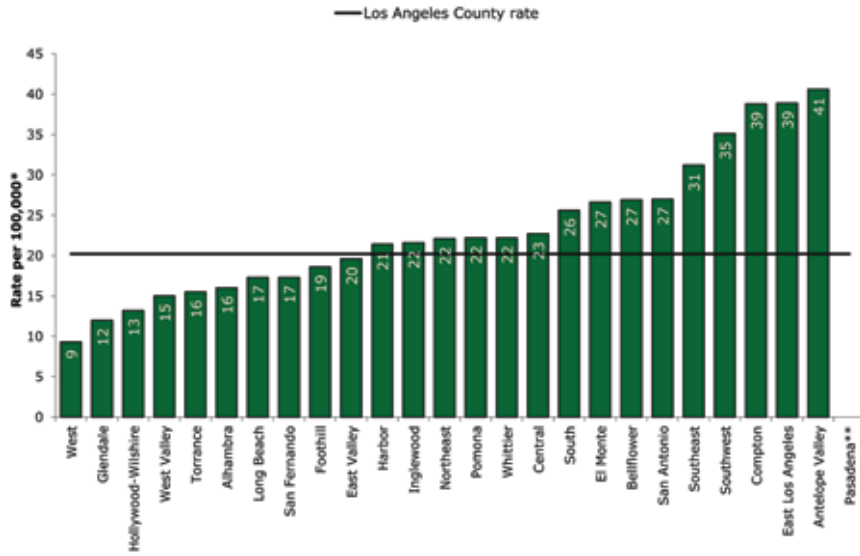
Notes: Los Angeles County Total includes persons of unknown residence.

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

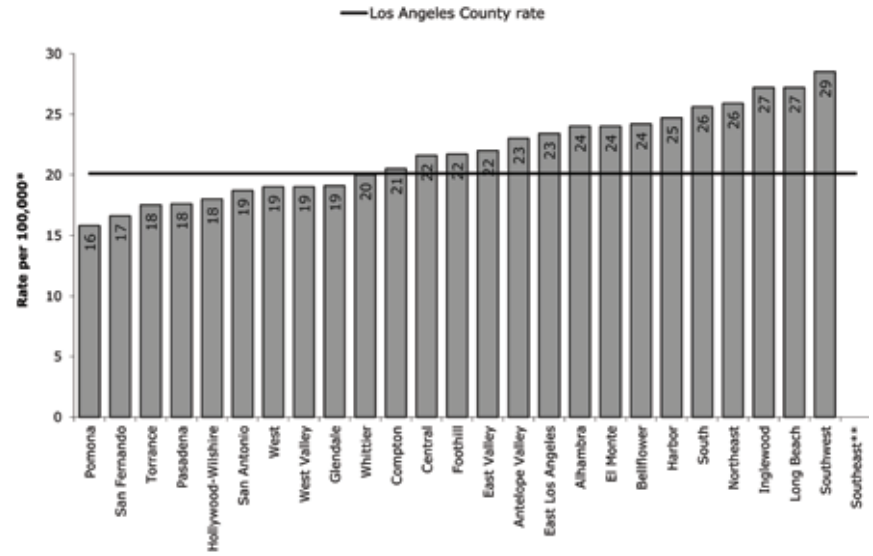




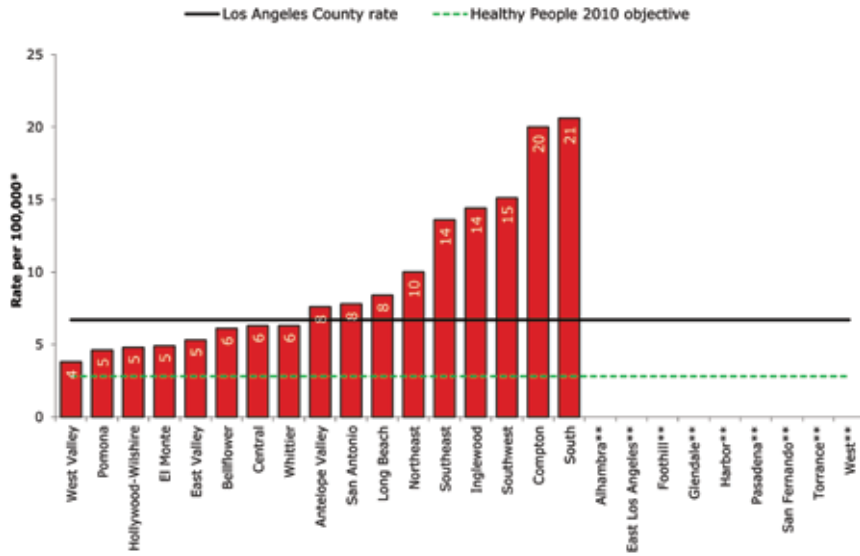
### Diabetes



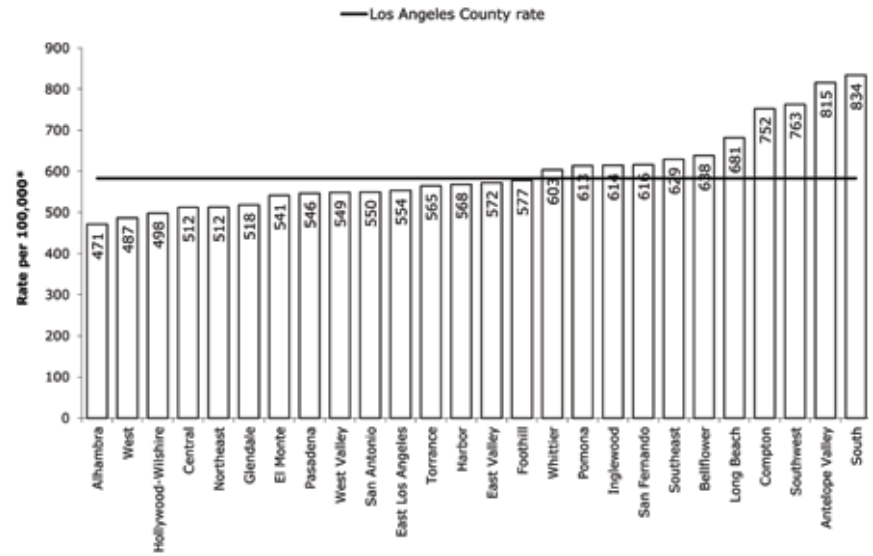
### Pneumonia/Influenza



### Homicide



### All causes of death



\*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<br>No. of deaths        | #2 cause<br>No. of deaths | #3 cause<br>No. of deaths | #4 cause<br>No. of deaths | #5 cause<br>No. of deaths        | #6 cause<br>No. of deaths        | #7 cause<br>No. of deaths    | #8 cause<br>No. of deaths    | #9 cause<br>No. of deaths | #10 cause<br>No. of deaths |
|------|----------------------------------|---------------------------|---------------------------|---------------------------|----------------------------------|----------------------------------|------------------------------|------------------------------|---------------------------|----------------------------|
| 2009 | Coronary heart disease<br>12,725 | Stroke<br>3,301           | Lung cancer<br>2,958      | Emphysema/COPD<br>2,904   | Alzheimer's disease<br>2,125     | Pneumonia/<br>influenza<br>2,097 | Diabetes<br>1,964            | Colorectal cancer<br>1,388   | Liver disease<br>1,246    | Breast cancer<br>1,173     |
| 2008 | Coronary heart disease<br>13,428 | Stroke<br>3,280           | Lung cancer<br>2,910      | Emphysema/COPD<br>2,889   | Diabetes<br>2,190                | Pneumonia/<br>influenza<br>2,171 | Alzheimer's disease<br>2,121 | Colorectal cancer<br>1,365   | Liver disease<br>1,134    | Breast cancer<br>1,079     |
| 2007 | Coronary heart disease<br>13,890 | Stroke<br>3,323           | Lung cancer<br>2,950      | Emphysema/COPD<br>2,625   | Pneumonia/<br>influenza<br>2,184 | Diabetes<br>2,127                | Alzheimer's disease<br>1,780 | Colorectal cancer<br>1,323   | Breast cancer<br>1,139    | Liver disease<br>1,133     |
| 2006 | Coronary heart disease<br>14,842 | Stroke<br>3,662           | Lung cancer<br>3,021      | Emphysema/COPD<br>2,665   | Pneumonia/<br>influenza<br>2,283 | Diabetes<br>2,188                | Alzheimer's disease<br>1,551 | Colorectal cancer<br>1,362   | Liver disease<br>1,102    | Breast cancer<br>1,071     |
| 2005 | Coronary heart disease<br>15,154 | Stroke<br>3,775           | Lung cancer<br>3,036      | Emphysema/COPD<br>2,770   | Pneumonia/<br>influenza<br>2,333 | Diabetes<br>2,305                | Alzheimer's disease<br>1,546 | Colorectal cancer<br>1,409   | Breast cancer<br>1,174    | Homicide<br>1,066          |
| 2004 | Coronary heart disease<br>15,296 | Stroke<br>4,121           | Lung cancer<br>3,034      | Emphysema/COPD<br>2,641   | Pneumonia/<br>influenza<br>2,272 | Diabetes<br>2,201                | Colorectal cancer<br>1,414   | Alzheimer's disease<br>1,340 | Breast cancer<br>1,166    | Homicide<br>1,069          |
| 2003 | Coronary heart disease<br>16,320 | Stroke<br>4,249           | Lung cancer<br>3,150      | Emphysema/COPD<br>2,796   | Pneumonia/<br>influenza<br>2,419 | Diabetes<br>2,178                | Colorectal cancer<br>1,450   | Alzheimer's disease<br>1,285 | Breast cancer<br>1,084    | Homicide<br>1,066          |
| 2002 | Coronary heart disease<br>16,293 | Stroke<br>4,169           | Lung cancer<br>3,081      | Emphysema/COPD<br>2,604   | Pneumonia/<br>influenza<br>2,494 | Diabetes<br>2,122                | Colorectal cancer<br>1,315   | Homicide<br>1,148            | Liver disease<br>1,085    | Breast cancer<br>1,064     |
| 2001 | Coronary heart disease<br>16,828 | Stroke<br>4,259           | Lung cancer<br>3,232      | Emphysema/COPD<br>2,723   | Pneumonia/<br>influenza<br>2,421 | Diabetes<br>1,890                | Colorectal cancer<br>1,423   | Homicide<br>1,099            | Breast cancer<br>1,096    | Liver disease<br>1,010     |
| 2000 | Coronary heart disease<br>16,903 | Stroke<br>4,410           | Lung cancer<br>3,150      | Emphysema/COPD<br>2,660   | Pneumonia/<br>influenza<br>2,477 | Diabetes<br>1,879                | Colorectal cancer<br>1,360   | Liver disease<br>1,121       | Breast cancer<br>1,058    | Homicide<br>992            |

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     |
|------|------------------------|----------|---------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 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      |
| 2000 | Coronary heart disease | Homicide | Motor vehicle crash | Lung cancer   | Liver disease | Suicide       | Stroke        | Drug overdose | HIV           | Breast cancer |

# Alzheimer's Disease

48th cause of premature death  
5th cause of death

*ALZHEIMER'S DISEASE became the fifth-leading cause of death in 2009, moving up from the seventh-leading cause of death in 2008. The highest death rate, 28 deaths per 100,000 population, was among white women, while the lowest death rate, 6 deaths per 100,000 population, was among Asian/Pacific Islander men. The death rate from Alzheimer's disease increased 94% 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 and 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 2,125  
Death Rate 21 deaths per 100,000 population

Healthy People 2010 Objective None

ICD-9 codes (1979-1998) 331.0

ICD-10 codes (1999-2009) 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](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

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>820</b>    | <b>11</b>   | <b>905</b>    | <b>12</b>   | <b>973</b>    | <b>12</b>   | <b>1,285</b>  | <b>16</b>   | <b>1,340</b>  | <b>16</b>   | <b>1,546</b>  | <b>18</b>   | <b>1,551</b>  | <b>18</b>   | <b>1,780</b>  | <b>19</b>   | <b>2,121</b>  | <b>22</b>   | <b>2,125</b>  | <b>21</b>   |
| <b>Males</b>                  | <b>270</b>    | <b>10</b>   | <b>309</b>    | <b>11</b>   | <b>318</b>    | <b>11</b>   | <b>405</b>    | <b>14</b>   | <b>399</b>    | <b>13</b>   | <b>450</b>    | <b>14</b>   | <b>477</b>    | <b>15</b>   | <b>586</b>    | <b>17</b>   | <b>676</b>    | <b>19</b>   | <b>694</b>    | <b>19</b>   |
| <b>Females</b>                | <b>550</b>    | <b>11</b>   | <b>596</b>    | <b>12</b>   | <b>655</b>    | <b>13</b>   | <b>880</b>    | <b>17</b>   | <b>941</b>    | <b>17</b>   | <b>1,096</b>  | <b>20</b>   | <b>1,074</b>  | <b>19</b>   | <b>1,194</b>  | <b>20</b>   | <b>1,445</b>  | <b>23</b>   | <b>1,431</b>  | <b>22</b>   |
| <b>White</b>                  | <b>618</b>    | <b>13</b>   | <b>719</b>    | <b>15</b>   | <b>755</b>    | <b>15</b>   | <b>957</b>    | <b>19</b>   | <b>975</b>    | <b>19</b>   | <b>1,132</b>  | <b>22</b>   | <b>1,105</b>  | <b>22</b>   | <b>1,297</b>  | <b>25</b>   | <b>1,487</b>  | <b>27</b>   | <b>1,480</b>  | <b>26</b>   |
| <b>Hispanic</b>               | <b>84</b>     | <b>7</b>    | <b>73</b>     | <b>6</b>    | <b>93</b>     | <b>7</b>    | <b>161</b>    | <b>11</b>   | <b>143</b>    | <b>9</b>    | <b>168</b>    | <b>10</b>   | <b>217</b>    | <b>12</b>   | <b>239</b>    | <b>12</b>   | <b>310</b>    | <b>15</b>   | <b>349</b>    | <b>16</b>   |
| <b>Black</b>                  | <b>89</b>     | <b>13</b>   | <b>90</b>     | <b>14</b>   | <b>97</b>     | <b>14</b>   | <b>119</b>    | <b>17</b>   | <b>155</b>    | <b>21</b>   | <b>176</b>    | <b>24</b>   | <b>151</b>    | <b>21</b>   | <b>159</b>    | <b>21</b>   | <b>204</b>    | <b>25</b>   | <b>184</b>    | <b>22</b>   |
| <b>Asian/Pacific Islander</b> | <b>28</b>     | <b>3</b>    | <b>22</b>     | <b>3</b>    | <b>25</b>     | <b>3</b>    | <b>42</b>     | <b>4</b>    | <b>65</b>     | <b>6</b>    | <b>69</b>     | <b>6</b>    | <b>76</b>     | <b>6</b>    | <b>80</b>     | <b>6</b>    | <b>116</b>    | <b>8</b>    | <b>108</b>    | <b>7</b>    |
| <b>Males</b>                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>203</b>    | <b>12</b>   | <b>238</b>    | <b>14</b>   | <b>246</b>    | <b>14</b>   | <b>295</b>    | <b>16</b>   | <b>289</b>    | <b>16</b>   | <b>319</b>    | <b>17</b>   | <b>336</b>    | <b>19</b>   | <b>417</b>    | <b>22</b>   | <b>478</b>    | <b>24</b>   | <b>497</b>    | <b>24</b>   |
| <b>Hispanic</b>               | <b>24</b>     | <b>5</b>    | <b>30</b>     | <b>7</b>    | <b>37</b>     | <b>7</b>    | <b>46</b>     | <b>9</b>    | <b>46</b>     | <b>8</b>    | <b>53</b>     | <b>8</b>    | <b>71</b>     | <b>11</b>   | <b>71</b>     | <b>10</b>   | <b>91</b>     | <b>12</b>   | <b>108</b>    | <b>14</b>   |
| <b>Black</b>                  | <b>29</b>     | <b>12</b>   | <b>34</b>     | <b>14</b>   | <b>28</b>     | <b>12</b>   | <b>37</b>     | <b>15</b>   | <b>40</b>     | <b>17</b>   | <b>55</b>     | <b>22</b>   | <b>45</b>     | <b>19</b>   | <b>63</b>     | <b>24</b>   | <b>58</b>     | <b>21</b>   | <b>51</b>     | <b>19</b>   |
| <b>Asian/Pacific Islander</b> | <b>14</b>     | <b>--</b>   | <b>7</b>      | <b>--</b>   | <b>6</b>      | <b>--</b>   | <b>23</b>     | <b>6</b>    | <b>24</b>     | <b>5</b>    | <b>23</b>     | <b>5</b>    | <b>25</b>     | <b>5</b>    | <b>33</b>     | <b>6</b>    | <b>47</b>     | <b>8</b>    | <b>36</b>     | <b>6</b>    |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>415</b>    | <b>13</b>   | <b>481</b>    | <b>16</b>   | <b>509</b>    | <b>16</b>   | <b>662</b>    | <b>21</b>   | <b>686</b>    | <b>21</b>   | <b>813</b>    | <b>25</b>   | <b>769</b>    | <b>24</b>   | <b>880</b>    | <b>27</b>   | <b>1,009</b>  | <b>29</b>   | <b>983</b>    | <b>28</b>   |
| <b>Hispanic</b>               | <b>60</b>     | <b>8</b>    | <b>43</b>     | <b>5</b>    | <b>56</b>     | <b>6</b>    | <b>115</b>    | <b>12</b>   | <b>97</b>     | <b>10</b>   | <b>115</b>    | <b>10</b>   | <b>146</b>    | <b>12</b>   | <b>168</b>    | <b>13</b>   | <b>219</b>    | <b>16</b>   | <b>241</b>    | <b>17</b>   |
| <b>Black</b>                  | <b>60</b>     | <b>13</b>   | <b>56</b>     | <b>13</b>   | <b>69</b>     | <b>15</b>   | <b>82</b>     | <b>17</b>   | <b>115</b>    | <b>24</b>   | <b>121</b>    | <b>24</b>   | <b>106</b>    | <b>21</b>   | <b>96</b>     | <b>19</b>   | <b>146</b>    | <b>27</b>   | <b>133</b>    | <b>24</b>   |
| <b>Asian/Pacific Islander</b> | <b>14</b>     | <b>--</b>   | <b>15</b>     | <b>--</b>   | <b>19</b>     | <b>--</b>   | <b>19</b>     | <b>--</b>   | <b>41</b>     | <b>6</b>    | <b>46</b>     | <b>7</b>    | <b>51</b>     | <b>7</b>    | <b>47</b>     | <b>6</b>    | <b>69</b>     | <b>8</b>    | <b>72</b>     | <b>8</b>    |
| <b>SPA 1: Antelope Valley</b> | <b>30</b>     | <b>17</b>   | <b>26</b>     | <b>15</b>   | <b>39</b>     | <b>21</b>   | <b>43</b>     | <b>24</b>   | <b>43</b>     | <b>24</b>   | <b>60</b>     | <b>31</b>   | <b>50</b>     | <b>25</b>   | <b>70</b>     | <b>32</b>   | <b>74</b>     | <b>32</b>   | <b>72</b>     | <b>31</b>   |
| <b>SPA 2: San Fernando</b>    | <b>181</b>    | <b>11</b>   | <b>206</b>    | <b>12</b>   | <b>255</b>    | <b>15</b>   | <b>325</b>    | <b>18</b>   | <b>343</b>    | <b>19</b>   | <b>409</b>    | <b>22</b>   | <b>407</b>    | <b>22</b>   | <b>490</b>    | <b>25</b>   | <b>595</b>    | <b>28</b>   | <b>568</b>    | <b>26</b>   |
| <b>SPA 3: San Gabriel</b>     | <b>175</b>    | <b>12</b>   | <b>177</b>    | <b>12</b>   | <b>210</b>    | <b>14</b>   | <b>273</b>    | <b>17</b>   | <b>268</b>    | <b>16</b>   | <b>307</b>    | <b>18</b>   | <b>313</b>    | <b>18</b>   | <b>384</b>    | <b>21</b>   | <b>381</b>    | <b>20</b>   | <b>399</b>    | <b>20</b>   |
| <b>SPA 4: Metro</b>           | <b>86</b>     | <b>9</b>    | <b>101</b>    | <b>10</b>   | <b>102</b>    | <b>10</b>   | <b>119</b>    | <b>11</b>   | <b>120</b>    | <b>11</b>   | <b>137</b>    | <b>12</b>   | <b>142</b>    | <b>13</b>   | <b>131</b>    | <b>11</b>   | <b>189</b>    | <b>15</b>   | <b>169</b>    | <b>13</b>   |
| <b>SPA 5: West</b>            | <b>83</b>     | <b>11</b>   | <b>75</b>     | <b>10</b>   | <b>77</b>     | <b>10</b>   | <b>115</b>    | <b>15</b>   | <b>133</b>    | <b>16</b>   | <b>161</b>    | <b>20</b>   | <b>116</b>    | <b>15</b>   | <b>167</b>    | <b>21</b>   | <b>198</b>    | <b>23</b>   | <b>216</b>    | <b>24</b>   |
| <b>SPA 6: South</b>           | <b>53</b>     | <b>10</b>   | <b>63</b>     | <b>12</b>   | <b>60</b>     | <b>11</b>   | <b>75</b>     | <b>13</b>   | <b>108</b>    | <b>18</b>   | <b>101</b>    | <b>16</b>   | <b>99</b>     | <b>16</b>   | <b>89</b>     | <b>14</b>   | <b>128</b>    | <b>19</b>   | <b>128</b>    | <b>18</b>   |
| <b>SPA 7: East</b>            | <b>79</b>     | <b>9</b>    | <b>93</b>     | <b>10</b>   | <b>93</b>     | <b>10</b>   | <b>135</b>    | <b>13</b>   | <b>144</b>    | <b>13</b>   | <b>148</b>    | <b>13</b>   | <b>194</b>    | <b>17</b>   | <b>170</b>    | <b>14</b>   | <b>240</b>    | <b>20</b>   | <b>262</b>    | <b>21</b>   |
| <b>SPA 8: South Bay</b>       | <b>130</b>    | <b>11</b>   | <b>158</b>    | <b>14</b>   | <b>132</b>    | <b>11</b>   | <b>196</b>    | <b>16</b>   | <b>175</b>    | <b>14</b>   | <b>222</b>    | <b>17</b>   | <b>221</b>    | <b>17</b>   | <b>272</b>    | <b>19</b>   | <b>309</b>    | <b>21</b>   | <b>311</b>    | <b>20</b>   |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.

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



# Breast Cancer (Female)

2nd cause of premature death  
6th cause of death

***BREAST CANCER** was the leading cause of death for Hispanic and Asian/Pacific Islander women aged 25 to 44 years, and white and Asian/Pacific Islander women aged 45 to 64 years. The median age at death was 62 years for Hispanic women, 63 for Asian/Pacific Islanders, 64 years for blacks, and 69 for whites. The highest death rate (28 deaths per 100,000 females) was in the South Service Planning Area while the lowest death rate (15 deaths per 100,000 females) was in the Metro Service Planning Area.*

### 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 low-cost 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 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 and vegetables, and whole grains
- Make time to be physically active every day
- Talk to your doctor about the risks and benefits of hormone replacement therapy

## LOS ANGELES COUNTY

Deaths 1,166  
Death Rate 21.3 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 (1999-2009) C50

References **American Cancer Society**  
[www.cancer.org](http://www.cancer.org)  
**National Cancer Institute**  
[www.cancer.gov](http://www.cancer.gov)  
**Centers for Disease Control and Prevention**  
[www.cdc.gov/cancer/breast](http://www.cdc.gov/cancer/breast)  
**Guide to Community Preventive Services**  
[www.thecommunityguide.org](http://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

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>1,045</b>  | <b>24</b>   | <b>1,088</b>  | <b>24</b>   | <b>1,052</b>  | <b>23</b>   | <b>1,074</b>  | <b>22</b>   | <b>1,157</b>  | <b>24</b>   | <b>1,168</b>  | <b>23</b>   | <b>1,063</b>  | <b>21</b>   | <b>1,127</b>  | <b>22</b>   | <b>1,071</b>  | <b>20</b>   | <b>1,166</b>  | <b>21</b>   |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>606</b>    | <b>28</b>   | <b>621</b>    | <b>28</b>   | <b>612</b>    | <b>27</b>   | <b>570</b>    | <b>25</b>   | <b>613</b>    | <b>27</b>   | <b>631</b>    | <b>27</b>   | <b>557</b>    | <b>25</b>   | <b>571</b>    | <b>24</b>   | <b>560</b>    | <b>23</b>   | <b>593</b>    | <b>25</b>   |
| <b>Hispanic</b>               | <b>169</b>    | <b>14</b>   | <b>213</b>    | <b>17</b>   | <b>176</b>    | <b>14</b>   | <b>242</b>    | <b>17</b>   | <b>222</b>    | <b>15</b>   | <b>223</b>    | <b>15</b>   | <b>237</b>    | <b>15</b>   | <b>249</b>    | <b>15</b>   | <b>221</b>    | <b>14</b>   | <b>262</b>    | <b>16</b>   |
| <b>Black</b>                  | <b>170</b>    | <b>36</b>   | <b>159</b>    | <b>34</b>   | <b>150</b>    | <b>31</b>   | <b>158</b>    | <b>32</b>   | <b>199</b>    | <b>40</b>   | <b>181</b>    | <b>36</b>   | <b>164</b>    | <b>32</b>   | <b>194</b>    | <b>37</b>   | <b>180</b>    | <b>34</b>   | <b>187</b>    | <b>35</b>   |
| <b>Asian/Pacific Islander</b> | <b>97</b>     | <b>15</b>   | <b>91</b>     | <b>14</b>   | <b>112</b>    | <b>16</b>   | <b>102</b>    | <b>14</b>   | <b>120</b>    | <b>16</b>   | <b>132</b>    | <b>17</b>   | <b>101</b>    | <b>12</b>   | <b>112</b>    | <b>13</b>   | <b>108</b>    | <b>12</b>   | <b>120</b>    | <b>14</b>   |
| <b>SPA 1: Antelope Valley</b> | <b>25</b>     | <b>20</b>   | <b>30</b>     | <b>25</b>   | <b>36</b>     | <b>29</b>   | <b>41</b>     | <b>30</b>   | <b>30</b>     | <b>23</b>   | <b>51</b>     | <b>36</b>   | <b>40</b>     | <b>27</b>   | <b>39</b>     | <b>26</b>   | <b>38</b>     | <b>25</b>   | <b>34</b>     | <b>22</b>   |
| <b>SPA 2: San Fernando</b>    | <b>244</b>    | <b>25</b>   | <b>253</b>    | <b>26</b>   | <b>242</b>    | <b>24</b>   | <b>238</b>    | <b>23</b>   | <b>241</b>    | <b>22</b>   | <b>261</b>    | <b>24</b>   | <b>264</b>    | <b>23</b>   | <b>249</b>    | <b>22</b>   | <b>240</b>    | <b>20</b>   | <b>235</b>    | <b>19</b>   |
| <b>SPA 3: San Gabriel</b>     | <b>183</b>    | <b>21</b>   | <b>213</b>    | <b>24</b>   | <b>203</b>    | <b>22</b>   | <b>185</b>    | <b>20</b>   | <b>209</b>    | <b>22</b>   | <b>204</b>    | <b>21</b>   | <b>192</b>    | <b>19</b>   | <b>202</b>    | <b>20</b>   | <b>187</b>    | <b>18</b>   | <b>233</b>    | <b>22</b>   |
| <b>SPA 4: Metro</b>           | <b>110</b>    | <b>22</b>   | <b>97</b>     | <b>19</b>   | <b>117</b>    | <b>22</b>   | <b>104</b>    | <b>19</b>   | <b>130</b>    | <b>22</b>   | <b>117</b>    | <b>20</b>   | <b>104</b>    | <b>17</b>   | <b>120</b>    | <b>19</b>   | <b>108</b>    | <b>17</b>   | <b>92</b>     | <b>15</b>   |
| <b>SPA 5: West</b>            | <b>94</b>     | <b>25</b>   | <b>79</b>     | <b>22</b>   | <b>101</b>    | <b>27</b>   | <b>88</b>     | <b>23</b>   | <b>97</b>     | <b>26</b>   | <b>99</b>     | <b>25</b>   | <b>85</b>     | <b>22</b>   | <b>84</b>     | <b>20</b>   | <b>98</b>     | <b>23</b>   | <b>96</b>     | <b>22</b>   |
| <b>SPA 6: South</b>           | <b>97</b>     | <b>27</b>   | <b>83</b>     | <b>23</b>   | <b>89</b>     | <b>24</b>   | <b>97</b>     | <b>26</b>   | <b>113</b>    | <b>28</b>   | <b>113</b>    | <b>29</b>   | <b>110</b>    | <b>27</b>   | <b>100</b>    | <b>24</b>   | <b>104</b>    | <b>25</b>   | <b>121</b>    | <b>28</b>   |
| <b>SPA 7: East</b>            | <b>115</b>    | <b>21</b>   | <b>132</b>    | <b>24</b>   | <b>105</b>    | <b>18</b>   | <b>144</b>    | <b>24</b>   | <b>130</b>    | <b>21</b>   | <b>130</b>    | <b>21</b>   | <b>122</b>    | <b>19</b>   | <b>142</b>    | <b>22</b>   | <b>117</b>    | <b>17</b>   | <b>153</b>    | <b>23</b>   |
| <b>SPA 8: South Bay</b>       | <b>176</b>    | <b>25</b>   | <b>193</b>    | <b>27</b>   | <b>159</b>    | <b>22</b>   | <b>171</b>    | <b>23</b>   | <b>201</b>    | <b>26</b>   | <b>192</b>    | <b>24</b>   | <b>143</b>    | <b>18</b>   | <b>185</b>    | <b>22</b>   | <b>176</b>    | <b>21</b>   | <b>202</b>    | <b>23</b>   |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.

# 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 2009, it was the 11th-leading cause of premature death overall, but was the fifth-leading cause of premature death for Asian/Pacific Islanders. The overall colorectal cancer death rate was 14 deaths per 100,000 population. The highest death rate, 26 deaths per 100,000 population, was among black males.

## 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 low-cost 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 to walk, play, and exercise

## Individual opportunities for prevention

- Follow recommended guidelines for colorectal cancer screening (e.g. stool tests, sigmoidoscopy, colonoscopy) that can detect colon cancer early, remove precancerous colorectal polyps, and remove 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 and vegetables, and whole grains
- Make time to be physically active every day

## LOS ANGELES COUNTY

|            |                                    |
|------------|------------------------------------|
| Deaths     | 1,388                              |
| Death Rate | 14.3 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 (1999-2009) | C18-C21 |
|--------------------------|---------|

|            |   |
|------------|---|
| References | <p><b>American Cancer Society</b><br/>www.cancer.org</p> <p><b>National Cancer Institute</b><br/>www.cancer.gov</p> <p><b>Centers for Disease Control and Prevention</b><br/>www.cdc.gov/cancer/colorectal</p> <p><b>Guide to Community Preventive Services</b><br/>www.thecommunityguide.org</p> |
|------------|---|

|          |  |
|----------|--|
| Referral | <p><b>American Cancer Society Helpline:</b><br/>1-800-227-2345</p> |
|----------|--|

Figure T5. Trends in colorectal cancer mortality

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>1,360</b>  | <b>18</b>   | <b>1,423</b>  | <b>18</b>   | <b>1,315</b>  | <b>16</b>   | <b>1,450</b>  | <b>17</b>   | <b>1,414</b>  | <b>17</b>   | <b>1,409</b>  | <b>16</b>   | <b>1,362</b>  | <b>15</b>   | <b>1,323</b>  | <b>14</b>   | <b>1,365</b>  | <b>14</b>   | <b>1,388</b>  | <b>14</b>   |
| <b>Males</b>                  | <b>676</b>    | <b>21</b>   | <b>722</b>    | <b>22</b>   | <b>655</b>    | <b>19</b>   | <b>710</b>    | <b>20</b>   | <b>674</b>    | <b>19</b>   | <b>708</b>    | <b>19</b>   | <b>686</b>    | <b>18</b>   | <b>686</b>    | <b>18</b>   | <b>703</b>    | <b>17</b>   | <b>710</b>    | <b>17</b>   |
| <b>Females</b>                | <b>684</b>    | <b>15</b>   | <b>701</b>    | <b>15</b>   | <b>660</b>    | <b>14</b>   | <b>740</b>    | <b>15</b>   | <b>740</b>    | <b>15</b>   | <b>701</b>    | <b>14</b>   | <b>676</b>    | <b>13</b>   | <b>637</b>    | <b>12</b>   | <b>662</b>    | <b>12</b>   | <b>678</b>    | <b>12</b>   |
| <b>White</b>                  | <b>787</b>    | <b>19</b>   | <b>812</b>    | <b>19</b>   | <b>763</b>    | <b>18</b>   | <b>824</b>    | <b>19</b>   | <b>767</b>    | <b>18</b>   | <b>737</b>    | <b>17</b>   | <b>689</b>    | <b>16</b>   | <b>689</b>    | <b>15</b>   | <b>660</b>    | <b>14</b>   | <b>696</b>    | <b>15</b>   |
| <b>Hispanic</b>               | <b>221</b>    | <b>13</b>   | <b>217</b>    | <b>12</b>   | <b>206</b>    | <b>11</b>   | <b>241</b>    | <b>12</b>   | <b>230</b>    | <b>11</b>   | <b>270</b>    | <b>12</b>   | <b>275</b>    | <b>12</b>   | <b>264</b>    | <b>11</b>   | <b>306</b>    | <b>12</b>   | <b>286</b>    | <b>11</b>   |
| <b>Black</b>                  | <b>204</b>    | <b>27</b>   | <b>227</b>    | <b>30</b>   | <b>192</b>    | <b>25</b>   | <b>211</b>    | <b>26</b>   | <b>237</b>    | <b>29</b>   | <b>213</b>    | <b>26</b>   | <b>223</b>    | <b>27</b>   | <b>181</b>    | <b>22</b>   | <b>196</b>    | <b>22</b>   | <b>209</b>    | <b>24</b>   |
| <b>Asian/Pacific Islander</b> | <b>142</b>    | <b>14</b>   | <b>164</b>    | <b>16</b>   | <b>148</b>    | <b>13</b>   | <b>170</b>    | <b>14</b>   | <b>177</b>    | <b>15</b>   | <b>184</b>    | <b>14</b>   | <b>171</b>    | <b>13</b>   | <b>184</b>    | <b>13</b>   | <b>197</b>    | <b>13</b>   | <b>195</b>    | <b>13</b>   |
| <b>Males</b>                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>391</b>    | <b>22</b>   | <b>409</b>    | <b>23</b>   | <b>368</b>    | <b>20</b>   | <b>401</b>    | <b>22</b>   | <b>358</b>    | <b>20</b>   | <b>365</b>    | <b>20</b>   | <b>350</b>    | <b>19</b>   | <b>352</b>    | <b>19</b>   | <b>325</b>    | <b>17</b>   | <b>345</b>    | <b>17</b>   |
| <b>Hispanic</b>               | <b>103</b>    | <b>15</b>   | <b>116</b>    | <b>16</b>   | <b>111</b>    | <b>14</b>   | <b>127</b>    | <b>14</b>   | <b>116</b>    | <b>15</b>   | <b>154</b>    | <b>17</b>   | <b>134</b>    | <b>14</b>   | <b>146</b>    | <b>14</b>   | <b>167</b>    | <b>15</b>   | <b>169</b>    | <b>16</b>   |
| <b>Black</b>                  | <b>99</b>     | <b>34</b>   | <b>107</b>    | <b>37</b>   | <b>94</b>     | <b>30</b>   | <b>90</b>     | <b>28</b>   | <b>111</b>    | <b>34</b>   | <b>102</b>    | <b>29</b>   | <b>110</b>    | <b>33</b>   | <b>88</b>     | <b>27</b>   | <b>96</b>     | <b>27</b>   | <b>95</b>     | <b>26</b>   |
| <b>Asian/Pacific Islander</b> | <b>80</b>     | <b>18</b>   | <b>88</b>     | <b>19</b>   | <b>79</b>     | <b>17</b>   | <b>90</b>     | <b>17</b>   | <b>87</b>     | <b>16</b>   | <b>82</b>     | <b>14</b>   | <b>89</b>     | <b>15</b>   | <b>98</b>     | <b>16</b>   | <b>111</b>    | <b>17</b>   | <b>101</b>    | <b>15</b>   |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>396</b>    | <b>16</b>   | <b>403</b>    | <b>16</b>   | <b>395</b>    | <b>15</b>   | <b>423</b>    | <b>16</b>   | <b>409</b>    | <b>16</b>   | <b>372</b>    | <b>14</b>   | <b>339</b>    | <b>13</b>   | <b>337</b>    | <b>13</b>   | <b>335</b>    | <b>13</b>   | <b>351</b>    | <b>13</b>   |
| <b>Hispanic</b>               | <b>118</b>    | <b>12</b>   | <b>101</b>    | <b>10</b>   | <b>95</b>     | <b>9</b>    | <b>114</b>    | <b>10</b>   | <b>114</b>    | <b>9</b>    | <b>116</b>    | <b>9</b>    | <b>141</b>    | <b>10</b>   | <b>118</b>    | <b>8</b>    | <b>139</b>    | <b>9</b>    | <b>117</b>    | <b>8</b>    |
| <b>Black</b>                  | <b>105</b>    | <b>23</b>   | <b>120</b>    | <b>27</b>   | <b>98</b>     | <b>21</b>   | <b>121</b>    | <b>25</b>   | <b>126</b>    | <b>26</b>   | <b>111</b>    | <b>23</b>   | <b>113</b>    | <b>23</b>   | <b>93</b>     | <b>18</b>   | <b>100</b>    | <b>19</b>   | <b>114</b>    | <b>22</b>   |
| <b>Asian/Pacific Islander</b> | <b>62</b>     | <b>11</b>   | <b>76</b>     | <b>13</b>   | <b>69</b>     | <b>11</b>   | <b>80</b>     | <b>12</b>   | <b>90</b>     | <b>13</b>   | <b>102</b>    | <b>14</b>   | <b>82</b>     | <b>11</b>   | <b>86</b>     | <b>11</b>   | <b>86</b>     | <b>10</b>   | <b>94</b>     | <b>11</b>   |
| <b>SPA 1: Antelope Valley</b> | <b>36</b>     | <b>18</b>   | <b>45</b>     | <b>22</b>   | <b>43</b>     | <b>21</b>   | <b>60</b>     | <b>27</b>   | <b>59</b>     | <b>26</b>   | <b>56</b>     | <b>24</b>   | <b>30</b>     | <b>13</b>   | <b>35</b>     | <b>14</b>   | <b>36</b>     | <b>14</b>   | <b>52</b>     | <b>20</b>   |
| <b>SPA 2: San Fernando</b>    | <b>309</b>    | <b>18</b>   | <b>304</b>    | <b>18</b>   | <b>286</b>    | <b>16</b>   | <b>292</b>    | <b>16</b>   | <b>322</b>    | <b>17</b>   | <b>327</b>    | <b>17</b>   | <b>306</b>    | <b>16</b>   | <b>306</b>    | <b>16</b>   | <b>301</b>    | <b>14</b>   | <b>294</b>    | <b>13</b>   |
| <b>SPA 3: San Gabriel</b>     | <b>250</b>    | <b>17</b>   | <b>266</b>    | <b>18</b>   | <b>255</b>    | <b>16</b>   | <b>278</b>    | <b>17</b>   | <b>248</b>    | <b>15</b>   | <b>286</b>    | <b>17</b>   | <b>267</b>    | <b>15</b>   | <b>239</b>    | <b>13</b>   | <b>251</b>    | <b>13</b>   | <b>263</b>    | <b>14</b>   |
| <b>SPA 4: Metro</b>           | <b>157</b>    | <b>17</b>   | <b>176</b>    | <b>19</b>   | <b>149</b>    | <b>15</b>   | <b>163</b>    | <b>16</b>   | <b>146</b>    | <b>14</b>   | <b>148</b>    | <b>14</b>   | <b>151</b>    | <b>14</b>   | <b>149</b>    | <b>13</b>   | <b>154</b>    | <b>13</b>   | <b>149</b>    | <b>13</b>   |
| <b>SPA 5: West</b>            | <b>103</b>    | <b>15</b>   | <b>115</b>    | <b>17</b>   | <b>95</b>     | <b>14</b>   | <b>110</b>    | <b>16</b>   | <b>89</b>     | <b>13</b>   | <b>103</b>    | <b>14</b>   | <b>89</b>     | <b>12</b>   | <b>108</b>    | <b>15</b>   | <b>98</b>     | <b>13</b>   | <b>102</b>    | <b>13</b>   |
| <b>SPA 6: South</b>           | <b>135</b>    | <b>23</b>   | <b>133</b>    | <b>23</b>   | <b>133</b>    | <b>22</b>   | <b>137</b>    | <b>22</b>   | <b>149</b>    | <b>23</b>   | <b>134</b>    | <b>20</b>   | <b>143</b>    | <b>21</b>   | <b>112</b>    | <b>16</b>   | <b>128</b>    | <b>18</b>   | <b>140</b>    | <b>20</b>   |
| <b>SPA 7: East</b>            | <b>163</b>    | <b>17</b>   | <b>157</b>    | <b>16</b>   | <b>149</b>    | <b>15</b>   | <b>159</b>    | <b>15</b>   | <b>159</b>    | <b>15</b>   | <b>148</b>    | <b>13</b>   | <b>161</b>    | <b>14</b>   | <b>160</b>    | <b>14</b>   | <b>163</b>    | <b>14</b>   | <b>152</b>    | <b>13</b>   |
| <b>SPA 8: South Bay</b>       | <b>207</b>    | <b>17</b>   | <b>219</b>    | <b>18</b>   | <b>202</b>    | <b>16</b>   | <b>241</b>    | <b>19</b>   | <b>230</b>    | <b>17</b>   | <b>204</b>    | <b>15</b>   | <b>213</b>    | <b>15</b>   | <b>208</b>    | <b>14</b>   | <b>229</b>    | <b>15</b>   | <b>235</b>    | <b>15</b>   |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.

# Coronary Heart Disease

1st cause of premature death

1st cause of death

**DURING THE LAST 10 YEARS**, the death rate from coronary heart disease decreased 42%, although it remained the overall leading cause of death and premature death. In 2009, the highest death rate, 266 deaths per 100,000 population, was among black men, while the lowest death rate, 75 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 your 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 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 diabetes, cholesterol, and blood pressure control
- Maintain a healthy weight
- Eat a healthy diet that is rich in fruits and vegetables, fiber, and omega-3
- Make time to be physically active every day

## LOS ANGELES COUNTY

|            |                                   |
|------------|-----------------------------------|
| Deaths     | 12,725                            |
| Death Rate | 129 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 (1999-2009) | I11, I20-I25 |
|--------------------------|--------------|

|            |  |
|------------|--|
| References | <b>American Heart Association</b><br><a href="http://www.americanheart.org">www.americanheart.org</a><br><b>Centers for Disease Control and Prevention</b><br><a href="http://www.cdc.gov/heartdisease/">www.cdc.gov/heartdisease/</a> |
|------------|--|

|          |   |
|----------|---|
| Referral | <b>Los Angeles County Division of the American Heart Association:</b><br>213-291-7000 |
|----------|---|



Figure T6. Trends in coronary heart disease mortality

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>16,903</b> | <b>220</b>  | <b>16,828</b> | <b>220</b>  | <b>16,293</b> | <b>204</b>  | <b>16,320</b> | <b>197</b>  | <b>15,296</b> | <b>180</b>  | <b>15,154</b> | <b>174</b>  | <b>14,842</b> | <b>168</b>  | <b>13,890</b> | <b>150</b>  | <b>13,428</b> | <b>139</b>  | <b>12,725</b> | <b>129</b>  |
| <b>Males</b>                  | <b>8,200</b>  | <b>268</b>  | <b>8,343</b>  | <b>272</b>  | <b>8,029</b>  | <b>250</b>  | <b>8,131</b>  | <b>243</b>  | <b>7,662</b>  | <b>222</b>  | <b>7,613</b>  | <b>215</b>  | <b>7,541</b>  | <b>210</b>  | <b>7,082</b>  | <b>188</b>  | <b>7,001</b>  | <b>178</b>  | <b>6,638</b>  | <b>163</b>  |
| <b>Females</b>                | <b>8,703</b>  | <b>183</b>  | <b>8,485</b>  | <b>179</b>  | <b>8,264</b>  | <b>168</b>  | <b>8,189</b>  | <b>161</b>  | <b>7,634</b>  | <b>146</b>  | <b>7,541</b>  | <b>141</b>  | <b>7,301</b>  | <b>135</b>  | <b>6,808</b>  | <b>120</b>  | <b>6,427</b>  | <b>109</b>  | <b>6,087</b>  | <b>101</b>  |
| <b>White</b>                  | <b>10,967</b> | <b>243</b>  | <b>10,592</b> | <b>238</b>  | <b>10,016</b> | <b>219</b>  | <b>10,003</b> | <b>216</b>  | <b>9,236</b>  | <b>197</b>  | <b>8,953</b>  | <b>190</b>  | <b>8,653</b>  | <b>185</b>  | <b>7,994</b>  | <b>167</b>  | <b>7,596</b>  | <b>154</b>  | <b>6,980</b>  | <b>138</b>  |
| <b>Hispanic</b>               | <b>2,376</b>  | <b>161</b>  | <b>2,571</b>  | <b>170</b>  | <b>2,600</b>  | <b>160</b>  | <b>2,632</b>  | <b>151</b>  | <b>2,626</b>  | <b>141</b>  | <b>2,766</b>  | <b>139</b>  | <b>2,675</b>  | <b>129</b>  | <b>2,475</b>  | <b>109</b>  | <b>2,536</b>  | <b>108</b>  | <b>2,428</b>  | <b>99</b>   |
| <b>Black</b>                  | <b>2,261</b>  | <b>309</b>  | <b>2,308</b>  | <b>316</b>  | <b>2,262</b>  | <b>301</b>  | <b>2,269</b>  | <b>292</b>  | <b>2,085</b>  | <b>264</b>  | <b>2,045</b>  | <b>254</b>  | <b>2,053</b>  | <b>255</b>  | <b>1,936</b>  | <b>231</b>  | <b>1,804</b>  | <b>209</b>  | <b>1,878</b>  | <b>211</b>  |
| <b>Asian/Pacific Islander</b> | <b>1,255</b>  | <b>136</b>  | <b>1,319</b>  | <b>141</b>  | <b>1,365</b>  | <b>136</b>  | <b>1,352</b>  | <b>125</b>  | <b>1,292</b>  | <b>113</b>  | <b>1,344</b>  | <b>111</b>  | <b>1,409</b>  | <b>112</b>  | <b>1,452</b>  | <b>106</b>  | <b>1,437</b>  | <b>99</b>   | <b>1,387</b>  | <b>92</b>   |
| <b>Males</b>                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>5,135</b>  | <b>293</b>  | <b>5,162</b>  | <b>298</b>  | <b>4,878</b>  | <b>273</b>  | <b>4,880</b>  | <b>267</b>  | <b>4,505</b>  | <b>243</b>  | <b>4,362</b>  | <b>234</b>  | <b>4,299</b>  | <b>232</b>  | <b>4,030</b>  | <b>212</b>  | <b>3,905</b>  | <b>197</b>  | <b>3,598</b>  | <b>177</b>  |
| <b>Hispanic</b>               | <b>1,238</b>  | <b>202</b>  | <b>1,338</b>  | <b>214</b>  | <b>1,323</b>  | <b>195</b>  | <b>1,382</b>  | <b>188</b>  | <b>1,415</b>  | <b>180</b>  | <b>1,465</b>  | <b>176</b>  | <b>1,414</b>  | <b>162</b>  | <b>1,319</b>  | <b>136</b>  | <b>1,349</b>  | <b>135</b>  | <b>1,333</b>  | <b>128</b>  |
| <b>Black</b>                  | <b>1,095</b>  | <b>390</b>  | <b>1,124</b>  | <b>395</b>  | <b>1,084</b>  | <b>368</b>  | <b>1,093</b>  | <b>355</b>  | <b>1,012</b>  | <b>325</b>  | <b>1,044</b>  | <b>324</b>  | <b>1,053</b>  | <b>333</b>  | <b>950</b>    | <b>284</b>  | <b>940</b>    | <b>274</b>  | <b>957</b>    | <b>266</b>  |
| <b>Asian/Pacific Islander</b> | <b>712</b>    | <b>175</b>  | <b>701</b>    | <b>172</b>  | <b>714</b>    | <b>162</b>  | <b>739</b>    | <b>156</b>  | <b>696</b>    | <b>141</b>  | <b>717</b>    | <b>138</b>  | <b>748</b>    | <b>138</b>  | <b>761</b>    | <b>131</b>  | <b>770</b>    | <b>126</b>  | <b>718</b>    | <b>113</b>  |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>5,832</b>  | <b>200</b>  | <b>5,430</b>  | <b>189</b>  | <b>5,138</b>  | <b>175</b>  | <b>5,123</b>  | <b>173</b>  | <b>4,731</b>  | <b>158</b>  | <b>4,591</b>  | <b>153</b>  | <b>4,354</b>  | <b>146</b>  | <b>3,964</b>  | <b>131</b>  | <b>3,691</b>  | <b>118</b>  | <b>3,382</b>  | <b>106</b>  |
| <b>Hispanic</b>               | <b>1,138</b>  | <b>132</b>  | <b>1,233</b>  | <b>139</b>  | <b>1,277</b>  | <b>134</b>  | <b>1,250</b>  | <b>123</b>  | <b>1,211</b>  | <b>112</b>  | <b>1,301</b>  | <b>113</b>  | <b>1,261</b>  | <b>104</b>  | <b>1,156</b>  | <b>88</b>   | <b>1,187</b>  | <b>87</b>   | <b>1,095</b>  | <b>78</b>   |
| <b>Black</b>                  | <b>1,166</b>  | <b>256</b>  | <b>1,184</b>  | <b>262</b>  | <b>1,178</b>  | <b>254</b>  | <b>1,176</b>  | <b>244</b>  | <b>1,073</b>  | <b>220</b>  | <b>1,001</b>  | <b>202</b>  | <b>1,000</b>  | <b>200</b>  | <b>986</b>    | <b>192</b>  | <b>864</b>    | <b>163</b>  | <b>921</b>    | <b>169</b>  |
| <b>Asian/Pacific Islander</b> | <b>543</b>    | <b>106</b>  | <b>618</b>    | <b>118</b>  | <b>651</b>    | <b>114</b>  | <b>613</b>    | <b>101</b>  | <b>596</b>    | <b>92</b>   | <b>627</b>    | <b>91</b>   | <b>661</b>    | <b>91</b>   | <b>691</b>    | <b>86</b>   | <b>667</b>    | <b>78</b>   | <b>669</b>    | <b>75</b>   |
| <b>SPA 1: Antelope Valley</b> | <b>461</b>    | <b>239</b>  | <b>471</b>    | <b>245</b>  | <b>500</b>    | <b>246</b>  | <b>496</b>    | <b>237</b>  | <b>488</b>    | <b>232</b>  | <b>467</b>    | <b>215</b>  | <b>463</b>    | <b>205</b>  | <b>468</b>    | <b>193</b>  | <b>459</b>    | <b>177</b>  | <b>476</b>    | <b>183</b>  |
| <b>SPA 2: San Fernando</b>    | <b>3,603</b>  | <b>213</b>  | <b>3,577</b>  | <b>213</b>  | <b>3,550</b>  | <b>204</b>  | <b>3,520</b>  | <b>196</b>  | <b>3,419</b>  | <b>187</b>  | <b>3,377</b>  | <b>180</b>  | <b>3,262</b>  | <b>172</b>  | <b>3,071</b>  | <b>155</b>  | <b>3,081</b>  | <b>147</b>  | <b>2,828</b>  | <b>130</b>  |
| <b>SPA 3: San Gabriel</b>     | <b>3,188</b>  | <b>214</b>  | <b>3,175</b>  | <b>213</b>  | <b>2,972</b>  | <b>191</b>  | <b>2,949</b>  | <b>181</b>  | <b>2,704</b>  | <b>161</b>  | <b>2,781</b>  | <b>162</b>  | <b>2,666</b>  | <b>153</b>  | <b>2,541</b>  | <b>138</b>  | <b>2,486</b>  | <b>130</b>  | <b>2,304</b>  | <b>118</b>  |
| <b>SPA 4: Metro</b>           | <b>1,935</b>  | <b>207</b>  | <b>1,890</b>  | <b>202</b>  | <b>1,855</b>  | <b>189</b>  | <b>1,826</b>  | <b>180</b>  | <b>1,662</b>  | <b>160</b>  | <b>1,724</b>  | <b>161</b>  | <b>1,673</b>  | <b>153</b>  | <b>1,478</b>  | <b>130</b>  | <b>1,469</b>  | <b>124</b>  | <b>1,414</b>  | <b>119</b>  |
| <b>SPA 5: West</b>            | <b>1,273</b>  | <b>179</b>  | <b>1,135</b>  | <b>131</b>  | <b>1,056</b>  | <b>145</b>  | <b>1,089</b>  | <b>147</b>  | <b>1,036</b>  | <b>137</b>  | <b>980</b>    | <b>128</b>  | <b>1,004</b>  | <b>133</b>  | <b>912</b>    | <b>118</b>  | <b>882</b>    | <b>108</b>  | <b>854</b>    | <b>101</b>  |
| <b>SPA 6: South</b>           | <b>1,558</b>  | <b>275</b>  | <b>1,644</b>  | <b>289</b>  | <b>1,606</b>  | <b>271</b>  | <b>1,562</b>  | <b>257</b>  | <b>1,443</b>  | <b>230</b>  | <b>1,404</b>  | <b>218</b>  | <b>1,422</b>  | <b>218</b>  | <b>1,295</b>  | <b>191</b>  | <b>1,222</b>  | <b>176</b>  | <b>1,271</b>  | <b>178</b>  |
| <b>SPA 7: East</b>            | <b>2,073</b>  | <b>225</b>  | <b>2,053</b>  | <b>222</b>  | <b>1,976</b>  | <b>203</b>  | <b>1,949</b>  | <b>189</b>  | <b>1,847</b>  | <b>172</b>  | <b>1,854</b>  | <b>169</b>  | <b>1,836</b>  | <b>164</b>  | <b>1,660</b>  | <b>142</b>  | <b>1,588</b>  | <b>133</b>  | <b>1,488</b>  | <b>122</b>  |
| <b>SPA 8: South Bay</b>       | <b>2,721</b>  | <b>230</b>  | <b>2,754</b>  | <b>233</b>  | <b>2,704</b>  | <b>221</b>  | <b>2,758</b>  | <b>217</b>  | <b>2,529</b>  | <b>193</b>  | <b>2,493</b>  | <b>185</b>  | <b>2,360</b>  | <b>173</b>  | <b>2,332</b>  | <b>162</b>  | <b>2,143</b>  | <b>143</b>  | <b>2,029</b>  | <b>131</b>  |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.

# Diabetes

9th cause of premature death  
7th cause of death

*FROM 2008 TO 2009, diabetes moved from the fifth-leading cause of death to the seventh-leading cause of death, and the premature death ranking moved from eighth to ninth. However, diabetes remained the third-leading cause of death for Hispanics and the third-leading cause of premature death for blacks. The highest death rate, 44 deaths per 100,000 population, was among black males, while the lowest death rate, 11 deaths per 100,000 population, was among white females.*

### 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 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
- Work with your health care provider to control blood pressure and manage cholesterol
- 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 1,964  
Death Rate 20.2 deaths per 100,000 population

Healthy People 2010 Objective 5-5 Not comparable

ICD-9 codes (1979-1998) 250

ICD-10 codes (1999-2009) E10-E14

References **American Diabetes Association**  
[www.diabetes.org](http://www.diabetes.org)  
**National Diabetes Education Program**  
[www.ndep.nih.gov](http://www.ndep.nih.gov)  
**"Trends in Diabetes: A Reversible Public Health Crisis"**  
[http://publichealth.lacounty.gov/ha/reports/habriefs/2007/diabetes/diabetes\\_secure/diabetes\\_2010\\_english\\_1pg\\_sfinal.PDF](http://publichealth.lacounty.gov/ha/reports/habriefs/2007/diabetes/diabetes_secure/diabetes_2010_english_1pg_sfinal.PDF)

Referral **American Diabetes Association information line:**  
1-800-DIABETES (1-800-342-2383)

Figure T7. Trends in diabetes mortality

|                        | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                        | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| Los Angeles County     | 1,879         | 24          | 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          |
| Males                  | 876           | 27          | 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          |
| Females                | 1,003         | 22          | 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          |
| White                  | 797           | 19          | 775           | 19          | 840           | 20          | 835           | 19          | 863           | 20          | 897           | 20          | 806           | 19          | 751           | 17          | 801           | 17          | 672           | 14          |
| Hispanic               | 579           | 35          | 639           | 38          | 678           | 38          | 719           | 37          | 741           | 36          | 773           | 36          | 774           | 34          | 754           | 31          | 764           | 30          | 694           | 27          |
| Black                  | 325           | 43          | 308           | 41          | 374           | 48          | 378           | 48          | 339           | 42          | 389           | 47          | 367           | 44          | 357           | 42          | 359           | 41          | 340           | 38          |
| Asian/Pacific Islander | 171           | 17          | 164           | 16          | 212           | 20          | 233           | 21          | 251           | 22          | 236           | 19          | 230           | 18          | 257           | 19          | 257           | 18          | 248           | 17          |
| Males                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| White                  | 384           | 22          | 380           | 21          | 400           | 22          | 424           | 23          | 446           | 24          | 455           | 25          | 412           | 22          | 385           | 21          | 429           | 22          | 364           | 18          |
| Hispanic               | 265           | 38          | 279           | 39          | 319           | 42          | 339           | 42          | 347           | 40          | 390           | 42          | 371           | 39          | 378           | 35          | 371           | 34          | 361           | 33          |
| Black                  | 141           | 46          | 144           | 45          | 164           | 52          | 158           | 49          | 158           | 48          | 181           | 55          | 178           | 54          | 147           | 43          | 157           | 44          | 161           | 44          |
| Asian/Pacific Islander | 83            | 19          | 83            | 18          | 107           | 23          | 124           | 25          | 109           | 22          | 109           | 20          | 132           | 23          | 127           | 22          | 126           | 20          | 131           | 21          |
| Females                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| White                  | 413           | 17          | 395           | 16          | 440           | 17          | 411           | 16          | 417           | 16          | 442           | 18          | 394           | 16          | 366           | 14          | 372           | 14          | 308           | 11          |
| Hispanic               | 314           | 33          | 360           | 36          | 359           | 34          | 380           | 33          | 394           | 34          | 383           | 31          | 403           | 31          | 376           | 27          | 393           | 27          | 333           | 22          |
| Black                  | 184           | 41          | 164           | 37          | 210           | 45          | 220           | 46          | 181           | 37          | 208           | 42          | 189           | 38          | 210           | 41          | 202           | 39          | 179           | 33          |
| Asian/Pacific Islander | 88            | 16          | 81            | 14          | 105           | 17          | 109           | 18          | 142           | 21          | 127           | 18          | 98            | 13          | 130           | 16          | 131           | 15          | 117           | 13          |
| SPA 1: Antelope Valley | 43            | 20          | 54            | 26          | 71            | 33          | 69            | 29          | 73            | 35          | 78            | 32          | 106           | 44          | 81            | 31          | 106           | 39          | 113           | 41          |
| SPA 2: San Fernando    | 330           | 20          | 330           | 19          | 335           | 19          | 395           | 22          | 396           | 22          | 411           | 22          | 377           | 20          | 349           | 18          | 408           | 20          | 337           | 16          |
| SPA 3: San Gabriel     | 354           | 24          | 306           | 20          | 395           | 25          | 361           | 22          | 423           | 25          | 438           | 26          | 389           | 22          | 387           | 22          | 405           | 22          | 375           | 20          |
| SPA 4: Metro           | 220           | 24          | 269           | 29          | 276           | 29          | 271           | 27          | 257           | 25          | 277           | 26          | 245           | 23          | 281           | 26          | 241           | 21          | 212           | 18          |
| SPA 5: West            | 80            | 12          | 76            | 11          | 101           | 15          | 113           | 16          | 115           | 16          | 103           | 14          | 91            | 13          | 95            | 13          | 100           | 13          | 75            | 9           |
| SPA 6: South           | 247           | 42          | 237           | 40          | 286           | 47          | 289           | 46          | 258           | 40          | 294           | 45          | 256           | 38          | 275           | 40          | 262           | 37          | 247           | 34          |
| SPA 7: East            | 315           | 33          | 337           | 35          | 350           | 35          | 336           | 32          | 356           | 33          | 381           | 35          | 366           | 33          | 310           | 27          | 352           | 30          | 323           | 27          |
| SPA 8: South Bay       | 285           | 23          | 274           | 22          | 303           | 24          | 337           | 26          | 310           | 23          | 320           | 23          | 343           | 25          | 339           | 23          | 309           | 21          | 282           | 18          |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.

# Drug Overdose (Unintentional)

6th cause of premature death  
18th cause of death

***DRUG OVERDOSE** has been one of the 10 leading causes of premature death for each of the past 10 years. There has been minimal fluctuation in death rates from drug overdose during the past 10 years. In 2009, it was the sixth-leading cause of premature death overall, but the second-leading cause of premature death among whites. Overall, the median age at death from drug overdose was 46 years. The highest death rate, 13 deaths per 100,000 population, was among white males.*

**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** 685  
**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 (1999-2009)** X40-X45

**References** **National Institute on Drug Abuse** [www.drugabuse.gov](http://www.drugabuse.gov)  
**Center for Substance Abuse Prevention** [www.samhsa.gov/prevention](http://www.samhsa.gov/prevention)

**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

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>489</b>    | <b>5</b>    | <b>484</b>    | <b>5</b>    | <b>611</b>    | <b>6</b>    | <b>620</b>    | <b>6</b>    | <b>556</b>    | <b>6</b>    | <b>528</b>    | <b>5</b>    | <b>557</b>    | <b>5</b>    | <b>691</b>    | <b>7</b>    | <b>625</b>    | <b>6</b>    | <b>685</b>    | <b>6</b>    |
| <b>Males</b>                  | <b>375</b>    | <b>8</b>    | <b>353</b>    | <b>8</b>    | <b>444</b>    | <b>9</b>    | <b>437</b>    | <b>9</b>    | <b>388</b>    | <b>8</b>    | <b>377</b>    | <b>7</b>    | <b>372</b>    | <b>7</b>    | <b>501</b>    | <b>10</b>   | <b>431</b>    | <b>8</b>    | <b>471</b>    | <b>9</b>    |
| <b>Females</b>                | <b>114</b>    | <b>2</b>    | <b>131</b>    | <b>3</b>    | <b>167</b>    | <b>3</b>    | <b>183</b>    | <b>4</b>    | <b>168</b>    | <b>3</b>    | <b>151</b>    | <b>3</b>    | <b>185</b>    | <b>4</b>    | <b>190</b>    | <b>4</b>    | <b>194</b>    | <b>4</b>    | <b>214</b>    | <b>4</b>    |
| <b>White</b>                  | <b>253</b>    | <b>8</b>    | <b>243</b>    | <b>7</b>    | <b>301</b>    | <b>9</b>    | <b>326</b>    | <b>10</b>   | <b>308</b>    | <b>9</b>    | <b>266</b>    | <b>8</b>    | <b>288</b>    | <b>9</b>    | <b>351</b>    | <b>10</b>   | <b>326</b>    | <b>10</b>   | <b>356</b>    | <b>10</b>   |
| <b>Hispanic</b>               | <b>148</b>    | <b>4</b>    | <b>141</b>    | <b>4</b>    | <b>170</b>    | <b>5</b>    | <b>178</b>    | <b>5</b>    | <b>155</b>    | <b>4</b>    | <b>137</b>    | <b>3</b>    | <b>172</b>    | <b>4</b>    | <b>232</b>    | <b>5</b>    | <b>195</b>    | <b>4</b>    | <b>219</b>    | <b>5</b>    |
| <b>Black</b>                  | <b>80</b>     | <b>9</b>    | <b>96</b>     | <b>11</b>   | <b>131</b>    | <b>14</b>   | <b>102</b>    | <b>11</b>   | <b>80</b>     | <b>8</b>    | <b>113</b>    | <b>12</b>   | <b>81</b>     | <b>8</b>    | <b>92</b>     | <b>9</b>    | <b>87</b>     | <b>9</b>    | <b>93</b>     | <b>9</b>    |
| <b>Asian/Pacific Islander</b> | <b>4</b>      | <b>--</b>   | <b>4</b>      | <b>--</b>   | <b>8</b>      | <b>--</b>   | <b>11</b>     | <b>--</b>   | <b>6</b>      | <b>--</b>   | <b>5</b>      | <b>--</b>   | <b>10</b>     | <b>--</b>   | <b>13</b>     | <b>--</b>   | <b>13</b>     | <b>--</b>   | <b>13</b>     | <b>--</b>   |
| <b>Males</b>                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>184</b>    | <b>11</b>   | <b>168</b>    | <b>10</b>   | <b>199</b>    | <b>12</b>   | <b>206</b>    | <b>12</b>   | <b>204</b>    | <b>12</b>   | <b>180</b>    | <b>11</b>   | <b>181</b>    | <b>11</b>   | <b>229</b>    | <b>13</b>   | <b>204</b>    | <b>12</b>   | <b>229</b>    | <b>13</b>   |
| <b>Hispanic</b>               | <b>127</b>    | <b>7</b>    | <b>118</b>    | <b>7</b>    | <b>146</b>    | <b>8</b>    | <b>151</b>    | <b>8</b>    | <b>128</b>    | <b>6</b>    | <b>114</b>    | <b>5</b>    | <b>134</b>    | <b>6</b>    | <b>200</b>    | <b>9</b>    | <b>164</b>    | <b>8</b>    | <b>181</b>    | <b>8</b>    |
| <b>Black</b>                  | <b>56</b>     | <b>14</b>   | <b>63</b>     | <b>16</b>   | <b>93</b>     | <b>22</b>   | <b>70</b>     | <b>17</b>   | <b>47</b>     | <b>11</b>   | <b>73</b>     | <b>17</b>   | <b>46</b>     | <b>10</b>   | <b>61</b>     | <b>14</b>   | <b>53</b>     | <b>12</b>   | <b>53</b>     | <b>12</b>   |
| <b>Asian/Pacific Islander</b> | <b>4</b>      | <b>--</b>   | <b>4</b>      | <b>--</b>   | <b>5</b>      | <b>--</b>   | <b>7</b>      | <b>--</b>   | <b>4</b>      | <b>--</b>   | <b>5</b>      | <b>--</b>   | <b>6</b>      | <b>--</b>   | <b>9</b>      | <b>--</b>   | <b>7</b>      | <b>--</b>   | <b>6</b>      | <b>--</b>   |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>69</b>     | <b>4</b>    | <b>75</b>     | <b>4</b>    | <b>102</b>    | <b>6</b>    | <b>120</b>    | <b>7</b>    | <b>104</b>    | <b>6</b>    | <b>86</b>     | <b>5</b>    | <b>107</b>    | <b>6</b>    | <b>122</b>    | <b>7</b>    | <b>122</b>    | <b>7</b>    | <b>127</b>    | <b>7</b>    |
| <b>Hispanic</b>               | <b>21</b>     | <b>1</b>    | <b>23</b>     | <b>1</b>    | <b>24</b>     | <b>1</b>    | <b>27</b>     | <b>1</b>    | <b>27</b>     | <b>1</b>    | <b>23</b>     | <b>1</b>    | <b>38</b>     | <b>2</b>    | <b>32</b>     | <b>2</b>    | <b>31</b>     | <b>1</b>    | <b>38</b>     | <b>2</b>    |
| <b>Black</b>                  | <b>24</b>     | <b>5</b>    | <b>33</b>     | <b>7</b>    | <b>38</b>     | <b>7</b>    | <b>32</b>     | <b>6</b>    | <b>33</b>     | <b>6</b>    | <b>40</b>     | <b>8</b>    | <b>35</b>     | <b>7</b>    | <b>31</b>     | <b>6</b>    | <b>34</b>     | <b>6</b>    | <b>40</b>     | <b>8</b>    |
| <b>Asian/Pacific Islander</b> | <b>0</b>      | <b>--</b>   | <b>0</b>      | <b>--</b>   | <b>3</b>      | <b>--</b>   | <b>4</b>      | <b>--</b>   | <b>2</b>      | <b>--</b>   | <b>0</b>      | <b>0</b>    | <b>4</b>      | <b>--</b>   | <b>4</b>      | <b>--</b>   | <b>6</b>      | <b>--</b>   | <b>7</b>      | <b>--</b>   |
| <b>SPA 1: Antelope Valley</b> | <b>19</b>     | <b>--</b>   | <b>17</b>     | <b>--</b>   | <b>27</b>     | <b>8</b>    | <b>30</b>     | <b>9</b>    | <b>31</b>     | <b>10</b>   | <b>19</b>     | <b>--</b>   | <b>31</b>     | <b>9</b>    | <b>33</b>     | <b>9</b>    | <b>24</b>     | <b>7</b>    | <b>27</b>     | <b>8</b>    |
| <b>SPA 2: San Fernando</b>    | <b>82</b>     | <b>4</b>    | <b>80</b>     | <b>4</b>    | <b>126</b>    | <b>6</b>    | <b>97</b>     | <b>4</b>    | <b>101</b>    | <b>5</b>    | <b>114</b>    | <b>5</b>    | <b>104</b>    | <b>5</b>    | <b>113</b>    | <b>5</b>    | <b>133</b>    | <b>6</b>    | <b>146</b>    | <b>6</b>    |
| <b>SPA 3: San Gabriel</b>     | <b>72</b>     | <b>4</b>    | <b>64</b>     | <b>4</b>    | <b>75</b>     | <b>4</b>    | <b>63</b>     | <b>4</b>    | <b>65</b>     | <b>4</b>    | <b>64</b>     | <b>4</b>    | <b>75</b>     | <b>4</b>    | <b>89</b>     | <b>5</b>    | <b>70</b>     | <b>4</b>    | <b>91</b>     | <b>5</b>    |
| <b>SPA 4: Metro</b>           | <b>88</b>     | <b>8</b>    | <b>66</b>     | <b>6</b>    | <b>75</b>     | <b>6</b>    | <b>107</b>    | <b>9</b>    | <b>84</b>     | <b>7</b>    | <b>67</b>     | <b>5</b>    | <b>73</b>     | <b>6</b>    | <b>97</b>     | <b>7</b>    | <b>91</b>     | <b>7</b>    | <b>89</b>     | <b>7</b>    |
| <b>SPA 5: West</b>            | <b>25</b>     | <b>4</b>    | <b>32</b>     | <b>5</b>    | <b>49</b>     | <b>7</b>    | <b>54</b>     | <b>8</b>    | <b>41</b>     | <b>6</b>    | <b>29</b>     | <b>4</b>    | <b>33</b>     | <b>5</b>    | <b>47</b>     | <b>7</b>    | <b>46</b>     | <b>6</b>    | <b>41</b>     | <b>6</b>    |
| <b>SPA 6: South</b>           | <b>45</b>     | <b>6</b>    | <b>43</b>     | <b>6</b>    | <b>68</b>     | <b>9</b>    | <b>56</b>     | <b>7</b>    | <b>45</b>     | <b>5</b>    | <b>68</b>     | <b>8</b>    | <b>49</b>     | <b>6</b>    | <b>70</b>     | <b>8</b>    | <b>63</b>     | <b>7</b>    | <b>69</b>     | <b>8</b>    |
| <b>SPA 7: East</b>            | <b>59</b>     | <b>5</b>    | <b>70</b>     | <b>6</b>    | <b>55</b>     | <b>5</b>    | <b>68</b>     | <b>6</b>    | <b>60</b>     | <b>5</b>    | <b>51</b>     | <b>4</b>    | <b>75</b>     | <b>6</b>    | <b>77</b>     | <b>6</b>    | <b>62</b>     | <b>5</b>    | <b>70</b>     | <b>5</b>    |
| <b>SPA 8: South Bay</b>       | <b>71</b>     | <b>5</b>    | <b>76</b>     | <b>5</b>    | <b>100</b>    | <b>7</b>    | <b>101</b>    | <b>6</b>    | <b>90</b>     | <b>6</b>    | <b>79</b>     | <b>5</b>    | <b>81</b>     | <b>5</b>    | <b>105</b>    | <b>6</b>    | <b>110</b>    | <b>7</b>    | <b>108</b>    | <b>7</b>    |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.



# Emphysema/COPD

14th 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, but it has not been among the overall leading causes of premature death. In 2009, the median age at death from emphysema was 81 years. The highest death rate, 54 deaths per 100,000 population, was among black males. The death rate in the Antelope Valley Service Planning Area, 79 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** 2,904  
**Death Rate** 30.3 deaths per 100,000 population  
80.4 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. These additional causes would increase the number of deaths in Los Angeles by 1%.

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

**ICD-10 codes (1999-2009)** J43-J44

**References** **American Lung Association**  
[www.lungusa.org](http://www.lungusa.org)  
**National Heart Lung and Blood Institute**  
[www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)  
**It's Quitting Time L.A.**  
[www.laquits.com](http://www.laquits.com)

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

Figure T9. Trends in emphysema/COPD mortality

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>2,660</b>  | <b>35</b>   | <b>2,723</b>  | <b>36</b>   | <b>2,604</b>  | <b>33</b>   | <b>2,796</b>  | <b>34</b>   | <b>2,641</b>  | <b>32</b>   | <b>2,770</b>  | <b>33</b>   | <b>2,665</b>  | <b>31</b>   | <b>2,625</b>  | <b>29</b>   | <b>2,889</b>  | <b>31</b>   | <b>2,904</b>  | <b>30</b>   |
| <b>Males</b>                  | <b>1,299</b>  | <b>43</b>   | <b>1,301</b>  | <b>43</b>   | <b>1,246</b>  | <b>40</b>   | <b>1,377</b>  | <b>43</b>   | <b>1,278</b>  | <b>39</b>   | <b>1,348</b>  | <b>39</b>   | <b>1,275</b>  | <b>37</b>   | <b>1,286</b>  | <b>36</b>   | <b>1,398</b>  | <b>37</b>   | <b>1,420</b>  | <b>37</b>   |
| <b>Females</b>                | <b>1,361</b>  | <b>30</b>   | <b>1,422</b>  | <b>31</b>   | <b>1,358</b>  | <b>29</b>   | <b>1,419</b>  | <b>29</b>   | <b>1,363</b>  | <b>27</b>   | <b>1,422</b>  | <b>28</b>   | <b>1,390</b>  | <b>27</b>   | <b>1,339</b>  | <b>25</b>   | <b>1,491</b>  | <b>27</b>   | <b>1,484</b>  | <b>26</b>   |
| <b>White</b>                  | <b>1,979</b>  | <b>45</b>   | <b>1,992</b>  | <b>46</b>   | <b>1,887</b>  | <b>43</b>   | <b>1,989</b>  | <b>45</b>   | <b>1,835</b>  | <b>41</b>   | <b>1,840</b>  | <b>41</b>   | <b>1,771</b>  | <b>39</b>   | <b>1,801</b>  | <b>39</b>   | <b>1,955</b>  | <b>41</b>   | <b>1,895</b>  | <b>39</b>   |
| <b>Hispanic</b>               | <b>231</b>    | <b>17</b>   | <b>261</b>    | <b>18</b>   | <b>249</b>    | <b>16</b>   | <b>311</b>    | <b>19</b>   | <b>305</b>    | <b>18</b>   | <b>344</b>    | <b>18</b>   | <b>346</b>    | <b>18</b>   | <b>299</b>    | <b>14</b>   | <b>343</b>    | <b>15</b>   | <b>392</b>    | <b>18</b>   |
| <b>Black</b>                  | <b>263</b>    | <b>36</b>   | <b>281</b>    | <b>38</b>   | <b>293</b>    | <b>40</b>   | <b>287</b>    | <b>38</b>   | <b>297</b>    | <b>39</b>   | <b>331</b>    | <b>52</b>   | <b>329</b>    | <b>41</b>   | <b>265</b>    | <b>32</b>   | <b>318</b>    | <b>37</b>   | <b>337</b>    | <b>39</b>   |
| <b>Asian/Pacific Islander</b> | <b>178</b>    | <b>20</b>   | <b>184</b>    | <b>20</b>   | <b>164</b>    | <b>17</b>   | <b>198</b>    | <b>19</b>   | <b>192</b>    | <b>18</b>   | <b>238</b>    | <b>20</b>   | <b>213</b>    | <b>17</b>   | <b>247</b>    | <b>19</b>   | <b>258</b>    | <b>18</b>   | <b>267</b>    | <b>18</b>   |
| <b>Males</b>                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>892</b>    | <b>50</b>   | <b>887</b>    | <b>51</b>   | <b>855</b>    | <b>48</b>   | <b>896</b>    | <b>49</b>   | <b>830</b>    | <b>45</b>   | <b>823</b>    | <b>45</b>   | <b>793</b>    | <b>44</b>   | <b>823</b>    | <b>44</b>   | <b>894</b>    | <b>46</b>   | <b>887</b>    | <b>45</b>   |
| <b>Hispanic</b>               | <b>125</b>    | <b>23</b>   | <b>125</b>    | <b>24</b>   | <b>126</b>    | <b>22</b>   | <b>175</b>    | <b>28</b>   | <b>162</b>    | <b>25</b>   | <b>177</b>    | <b>25</b>   | <b>167</b>    | <b>23</b>   | <b>155</b>    | <b>19</b>   | <b>175</b>    | <b>20</b>   | <b>194</b>    | <b>23</b>   |
| <b>Black</b>                  | <b>151</b>    | <b>53</b>   | <b>153</b>    | <b>54</b>   | <b>149</b>    | <b>55</b>   | <b>169</b>    | <b>58</b>   | <b>154</b>    | <b>52</b>   | <b>184</b>    | <b>60</b>   | <b>170</b>    | <b>56</b>   | <b>144</b>    | <b>46</b>   | <b>157</b>    | <b>48</b>   | <b>176</b>    | <b>54</b>   |
| <b>Asian/Pacific Islander</b> | <b>127</b>    | <b>34</b>   | <b>133</b>    | <b>35</b>   | <b>111</b>    | <b>27</b>   | <b>131</b>    | <b>30</b>   | <b>125</b>    | <b>28</b>   | <b>154</b>    | <b>32</b>   | <b>141</b>    | <b>28</b>   | <b>155</b>    | <b>29</b>   | <b>162</b>    | <b>28</b>   | <b>158</b>    | <b>27</b>   |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>1,087</b>  | <b>41</b>   | <b>1,105</b>  | <b>43</b>   | <b>1,032</b>  | <b>39</b>   | <b>1,093</b>  | <b>41</b>   | <b>1,005</b>  | <b>38</b>   | <b>1,017</b>  | <b>37</b>   | <b>978</b>    | <b>37</b>   | <b>978</b>    | <b>36</b>   | <b>1,061</b>  | <b>38</b>   | <b>1,008</b>  | <b>35</b>   |
| <b>Hispanic</b>               | <b>106</b>    | <b>13</b>   | <b>136</b>    | <b>15</b>   | <b>123</b>    | <b>13</b>   | <b>136</b>    | <b>14</b>   | <b>143</b>    | <b>13</b>   | <b>167</b>    | <b>15</b>   | <b>179</b>    | <b>15</b>   | <b>144</b>    | <b>11</b>   | <b>168</b>    | <b>12</b>   | <b>198</b>    | <b>15</b>   |
| <b>Black</b>                  | <b>112</b>    | <b>25</b>   | <b>128</b>    | <b>28</b>   | <b>144</b>    | <b>31</b>   | <b>118</b>    | <b>25</b>   | <b>143</b>    | <b>31</b>   | <b>147</b>    | <b>30</b>   | <b>159</b>    | <b>33</b>   | <b>121</b>    | <b>24</b>   | <b>161</b>    | <b>31</b>   | <b>161</b>    | <b>30</b>   |
| <b>Asian/Pacific Islander</b> | <b>51</b>     | <b>10</b>   | <b>51</b>     | <b>10</b>   | <b>53</b>     | <b>9</b>    | <b>67</b>     | <b>11</b>   | <b>67</b>     | <b>10</b>   | <b>84</b>     | <b>12</b>   | <b>72</b>     | <b>10</b>   | <b>92</b>     | <b>11</b>   | <b>96</b>     | <b>11</b>   | <b>109</b>    | <b>12</b>   |
| <b>SPA 1: Antelope Valley</b> | <b>119</b>    | <b>63</b>   | <b>138</b>    | <b>70</b>   | <b>125</b>    | <b>63</b>   | <b>140</b>    | <b>69</b>   | <b>120</b>    | <b>58</b>   | <b>159</b>    | <b>74</b>   | <b>150</b>    | <b>67</b>   | <b>148</b>    | <b>63</b>   | <b>184</b>    | <b>75</b>   | <b>202</b>    | <b>79</b>   |
| <b>SPA 2: San Fernando</b>    | <b>538</b>    | <b>32</b>   | <b>529</b>    | <b>32</b>   | <b>519</b>    | <b>30</b>   | <b>575</b>    | <b>33</b>   | <b>513</b>    | <b>29</b>   | <b>563</b>    | <b>31</b>   | <b>578</b>    | <b>32</b>   | <b>562</b>    | <b>30</b>   | <b>527</b>    | <b>26</b>   | <b>572</b>    | <b>27</b>   |
| <b>SPA 3: San Gabriel</b>     | <b>487</b>    | <b>33</b>   | <b>484</b>    | <b>33</b>   | <b>494</b>    | <b>32</b>   | <b>529</b>    | <b>33</b>   | <b>515</b>    | <b>31</b>   | <b>537</b>    | <b>32</b>   | <b>536</b>    | <b>31</b>   | <b>504</b>    | <b>28</b>   | <b>614</b>    | <b>33</b>   | <b>631</b>    | <b>33</b>   |
| <b>SPA 4: Metro</b>           | <b>234</b>    | <b>25</b>   | <b>259</b>    | <b>28</b>   | <b>236</b>    | <b>24</b>   | <b>246</b>    | <b>24</b>   | <b>234</b>    | <b>23</b>   | <b>270</b>    | <b>26</b>   | <b>247</b>    | <b>23</b>   | <b>236</b>    | <b>21</b>   | <b>260</b>    | <b>22</b>   | <b>251</b>    | <b>21</b>   |
| <b>SPA 5: West</b>            | <b>187</b>    | <b>27</b>   | <b>179</b>    | <b>26</b>   | <b>191</b>    | <b>27</b>   | <b>178</b>    | <b>25</b>   | <b>166</b>    | <b>22</b>   | <b>158</b>    | <b>22</b>   | <b>139</b>    | <b>19</b>   | <b>140</b>    | <b>18</b>   | <b>195</b>    | <b>24</b>   | <b>182</b>    | <b>22</b>   |
| <b>SPA 6: South</b>           | <b>199</b>    | <b>35</b>   | <b>201</b>    | <b>35</b>   | <b>212</b>    | <b>36</b>   | <b>195</b>    | <b>32</b>   | <b>205</b>    | <b>34</b>   | <b>219</b>    | <b>34</b>   | <b>197</b>    | <b>30</b>   | <b>185</b>    | <b>28</b>   | <b>214</b>    | <b>31</b>   | <b>216</b>    | <b>31</b>   |
| <b>SPA 7: East</b>            | <b>359</b>    | <b>39</b>   | <b>356</b>    | <b>38</b>   | <b>335</b>    | <b>35</b>   | <b>402</b>    | <b>39</b>   | <b>372</b>    | <b>35</b>   | <b>316</b>    | <b>29</b>   | <b>330</b>    | <b>30</b>   | <b>366</b>    | <b>32</b>   | <b>381</b>    | <b>33</b>   | <b>359</b>    | <b>31</b>   |
| <b>SPA 8: South Bay</b>       | <b>527</b>    | <b>45</b>   | <b>558</b>    | <b>48</b>   | <b>489</b>    | <b>40</b>   | <b>521</b>    | <b>42</b>   | <b>497</b>    | <b>38</b>   | <b>542</b>    | <b>41</b>   | <b>479</b>    | <b>36</b>   | <b>475</b>    | <b>34</b>   | <b>501</b>    | <b>35</b>   | <b>488</b>    | <b>32</b>   |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.

# Homicide

2th cause of premature death  
16th cause of death

***OVERALL, HOMICIDE** has been the second-leading cause of premature death every year for the past 10 years. In 2009, it was the leading cause of premature death in the South Service Planning Area and among Hispanics. It was the leading cause of death for persons aged 15 to 24 and 25 to 44 years. The death rate among black men has decreased in recent years, but at 44 deaths per 100,000 population in 2009, it remained six times higher than the homicide rate for the county overall.*

**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, access to firearms

**Community opportunities for prevention**

- Provide educational and recreational opportunities for youth such as after-school programs for children and adolescents
- Participate in community-based youth violence prevention approaches such as Striving To Reduce Youth Violence

Everywhere (<http://www.vetoviolence.org/STRYVE/>) and Urban Networks to Increase Thriving Youth (<http://www.preventioninstitute.org/unity>)

- Support nurse home-visitation programs for teenage parents
- 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) from a healthcare provider, or call the Substance Abuse Prevention and Control helpline: 1-800-564-6600
- 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** 723  
**Death Rate** 6.7 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 (1999-2009)** \*U01-\*U02, X85-Y09, Y87.1

**References** **National Youth Violence Prevention Resource Center** [www.safeyouth.org](http://www.safeyouth.org)  
**CDC National Center for Injury Prevention and Control** [www.cdc.gov/ncipc/dvp/dvp.htm](http://www.cdc.gov/ncipc/dvp/dvp.htm)

**Referral** **Violence Prevention Coalition of Greater Los Angeles:** (213) 346-3265

Figure T10. Trends in homicide mortality

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>992</b>    | <b>10</b>   | <b>1,099</b>  | <b>11</b>   | <b>1,148</b>  | <b>11</b>   | <b>1,066</b>  | <b>10</b>   | <b>1,069</b>  | <b>10</b>   | <b>1,066</b>  | <b>10</b>   | <b>1,043</b>  | <b>10</b>   | <b>869</b>    | <b>8</b>    | <b>838</b>    | <b>8</b>    | <b>723</b>    | <b>7</b>    |
| <b>Males</b>                  | <b>847</b>    | <b>17</b>   | <b>937</b>    | <b>18</b>   | <b>990</b>    | <b>19</b>   | <b>931</b>    | <b>18</b>   | <b>940</b>    | <b>18</b>   | <b>940</b>    | <b>18</b>   | <b>916</b>    | <b>17</b>   | <b>751</b>    | <b>14</b>   | <b>710</b>    | <b>13</b>   | <b>618</b>    | <b>11</b>   |
| <b>Females</b>                | <b>145</b>    | <b>3</b>    | <b>162</b>    | <b>3</b>    | <b>158</b>    | <b>3</b>    | <b>135</b>    | <b>3</b>    | <b>129</b>    | <b>3</b>    | <b>126</b>    | <b>2</b>    | <b>127</b>    | <b>2</b>    | <b>118</b>    | <b>2</b>    | <b>128</b>    | <b>2</b>    | <b>105</b>    | <b>2</b>    |
| <b>White</b>                  | <b>127</b>    | <b>4</b>    | <b>142</b>    | <b>5</b>    | <b>133</b>    | <b>4</b>    | <b>119</b>    | <b>4</b>    | <b>105</b>    | <b>4</b>    | <b>101</b>    | <b>3</b>    | <b>97</b>     | <b>3</b>    | <b>92</b>     | <b>3</b>    | <b>83</b>     | <b>3</b>    | <b>64</b>     | <b>2</b>    |
| <b>Hispanic</b>               | <b>486</b>    | <b>10</b>   | <b>527</b>    | <b>11</b>   | <b>567</b>    | <b>11</b>   | <b>520</b>    | <b>10</b>   | <b>531</b>    | <b>10</b>   | <b>570</b>    | <b>11</b>   | <b>545</b>    | <b>10</b>   | <b>474</b>    | <b>9</b>    | <b>458</b>    | <b>8</b>    | <b>397</b>    | <b>7</b>    |
| <b>Black</b>                  | <b>343</b>    | <b>36</b>   | <b>361</b>    | <b>38</b>   | <b>393</b>    | <b>41</b>   | <b>369</b>    | <b>38</b>   | <b>388</b>    | <b>41</b>   | <b>362</b>    | <b>38</b>   | <b>344</b>    | <b>36</b>   | <b>272</b>    | <b>28</b>   | <b>250</b>    | <b>26</b>   | <b>227</b>    | <b>23</b>   |
| <b>Asian/Pacific Islander</b> | <b>35</b>     | <b>3</b>    | <b>47</b>     | <b>4</b>    | <b>51</b>     | <b>4</b>    | <b>57</b>     | <b>4</b>    | <b>42</b>     | <b>3</b>    | <b>33</b>     | <b>2</b>    | <b>50</b>     | <b>4</b>    | <b>30</b>     | <b>2</b>    | <b>43</b>     | <b>3</b>    | <b>32</b>     | <b>2</b>    |
| <b>Males</b>                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>86</b>     | <b>6</b>    | <b>97</b>     | <b>6</b>    | <b>98</b>     | <b>6</b>    | <b>93</b>     | <b>6</b>    | <b>77</b>     | <b>5</b>    | <b>69</b>     | <b>4</b>    | <b>76</b>     | <b>5</b>    | <b>71</b>     | <b>5</b>    | <b>62</b>     | <b>4</b>    | <b>43</b>     | <b>3</b>    |
| <b>Hispanic</b>               | <b>437</b>    | <b>18</b>   | <b>473</b>    | <b>19</b>   | <b>501</b>    | <b>19</b>   | <b>471</b>    | <b>18</b>   | <b>481</b>    | <b>17</b>   | <b>528</b>    | <b>19</b>   | <b>491</b>    | <b>18</b>   | <b>420</b>    | <b>15</b>   | <b>407</b>    | <b>14</b>   | <b>344</b>    | <b>13</b>   |
| <b>Black</b>                  | <b>302</b>    | <b>68</b>   | <b>315</b>    | <b>70</b>   | <b>352</b>    | <b>78</b>   | <b>324</b>    | <b>72</b>   | <b>348</b>    | <b>78</b>   | <b>320</b>    | <b>72</b>   | <b>298</b>    | <b>67</b>   | <b>240</b>    | <b>53</b>   | <b>214</b>    | <b>47</b>   | <b>207</b>    | <b>44</b>   |
| <b>Asian/Pacific Islander</b> | <b>22</b>     | <b>4</b>    | <b>37</b>     | <b>6</b>    | <b>36</b>     | <b>6</b>    | <b>42</b>     | <b>6</b>    | <b>33</b>     | <b>5</b>    | <b>23</b>     | <b>3</b>    | <b>46</b>     | <b>7</b>    | <b>20</b>     | <b>3</b>    | <b>24</b>     | <b>4</b>    | <b>23</b>     | <b>3</b>    |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>41</b>     | <b>3</b>    | <b>45</b>     | <b>3</b>    | <b>35</b>     | <b>2</b>    | <b>26</b>     | <b>1</b>    | <b>28</b>     | <b>2</b>    | <b>32</b>     | <b>2</b>    | <b>21</b>     | <b>1</b>    | <b>21</b>     | <b>1</b>    | <b>21</b>     | <b>1</b>    | <b>21</b>     | <b>1</b>    |
| <b>Hispanic</b>               | <b>49</b>     | <b>2</b>    | <b>54</b>     | <b>2</b>    | <b>66</b>     | <b>3</b>    | <b>49</b>     | <b>2</b>    | <b>50</b>     | <b>2</b>    | <b>42</b>     | <b>2</b>    | <b>54</b>     | <b>2</b>    | <b>54</b>     | <b>2</b>    | <b>51</b>     | <b>2</b>    | <b>53</b>     | <b>2</b>    |
| <b>Black</b>                  | <b>41</b>     | <b>8</b>    | <b>46</b>     | <b>9</b>    | <b>41</b>     | <b>8</b>    | <b>45</b>     | <b>9</b>    | <b>40</b>     | <b>8</b>    | <b>42</b>     | <b>8</b>    | <b>46</b>     | <b>9</b>    | <b>32</b>     | <b>6</b>    | <b>36</b>     | <b>7</b>    | <b>20</b>     | <b>4</b>    |
| <b>Asian/Pacific Islander</b> | <b>13</b>     | <b>--</b>   | <b>10</b>     | <b>--</b>   | <b>15</b>     | <b>--</b>   | <b>15</b>     | <b>--</b>   | <b>9</b>      | <b>--</b>   | <b>10</b>     | <b>--</b>   | <b>4</b>      | <b>--</b>   | <b>10</b>     | <b>--</b>   | <b>19</b>     | <b>--</b>   | <b>9</b>      | <b>--</b>   |
| <b>SPA 1: Antelope Valley</b> | <b>18</b>     | <b>--</b>   | <b>21</b>     | <b>7</b>    | <b>27</b>     | <b>8</b>    | <b>36</b>     | <b>11</b>   | <b>33</b>     | <b>10</b>   | <b>37</b>     | <b>11</b>   | <b>46</b>     | <b>13</b>   | <b>37</b>     | <b>10</b>   | <b>26</b>     | <b>6</b>    | <b>31</b>     | <b>8</b>    |
| <b>SPA 2: San Fernando</b>    | <b>99</b>     | <b>5</b>    | <b>142</b>    | <b>7</b>    | <b>139</b>    | <b>7</b>    | <b>120</b>    | <b>6</b>    | <b>101</b>    | <b>5</b>    | <b>104</b>    | <b>5</b>    | <b>98</b>     | <b>5</b>    | <b>81</b>     | <b>4</b>    | <b>91</b>     | <b>4</b>    | <b>79</b>     | <b>4</b>    |
| <b>SPA 3: San Gabriel</b>     | <b>97</b>     | <b>5</b>    | <b>114</b>    | <b>6</b>    | <b>111</b>    | <b>6</b>    | <b>106</b>    | <b>6</b>    | <b>131</b>    | <b>7</b>    | <b>103</b>    | <b>5</b>    | <b>116</b>    | <b>6</b>    | <b>106</b>    | <b>5</b>    | <b>108</b>    | <b>6</b>    | <b>69</b>     | <b>4</b>    |
| <b>SPA 4: Metro</b>           | <b>132</b>    | <b>11</b>   | <b>140</b>    | <b>11</b>   | <b>145</b>    | <b>12</b>   | <b>126</b>    | <b>10</b>   | <b>115</b>    | <b>9</b>    | <b>118</b>    | <b>9</b>    | <b>112</b>    | <b>9</b>    | <b>110</b>    | <b>9</b>    | <b>102</b>    | <b>8</b>    | <b>82</b>     | <b>6</b>    |
| <b>SPA 5: West</b>            | <b>22</b>     | <b>3</b>    | <b>43</b>     | <b>6</b>    | <b>38</b>     | <b>6</b>    | <b>24</b>     | <b>4</b>    | <b>24</b>     | <b>4</b>    | <b>26</b>     | <b>4</b>    | <b>25</b>     | <b>5</b>    | <b>14</b>     | <b>--</b>   | <b>18</b>     | <b>--</b>   | <b>14</b>     | <b>--</b>   |
| <b>SPA 6: South</b>           | <b>311</b>    | <b>31</b>   | <b>337</b>    | <b>32</b>   | <b>355</b>    | <b>34</b>   | <b>315</b>    | <b>29</b>   | <b>356</b>    | <b>32</b>   | <b>372</b>    | <b>34</b>   | <b>310</b>    | <b>28</b>   | <b>245</b>    | <b>22</b>   | <b>233</b>    | <b>21</b>   | <b>194</b>    | <b>17</b>   |
| <b>SPA 7: East</b>            | <b>106</b>    | <b>8</b>    | <b>107</b>    | <b>8</b>    | <b>129</b>    | <b>9</b>    | <b>117</b>    | <b>8</b>    | <b>108</b>    | <b>7</b>    | <b>130</b>    | <b>9</b>    | <b>126</b>    | <b>9</b>    | <b>108</b>    | <b>7</b>    | <b>99</b>     | <b>7</b>    | <b>101</b>    | <b>7</b>    |
| <b>SPA 8: South Bay</b>       | <b>193</b>    | <b>13</b>   | <b>175</b>    | <b>11</b>   | <b>190</b>    | <b>12</b>   | <b>192</b>    | <b>12</b>   | <b>177</b>    | <b>11</b>   | <b>161</b>    | <b>10</b>   | <b>179</b>    | <b>11</b>   | <b>145</b>    | <b>9</b>    | <b>140</b>    | <b>9</b>    | <b>144</b>    | <b>9</b>    |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.

*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 2009, it was the third-leading cause of premature death for black men, and it was the fourth-leading cause of premature death among men in the Metro Service Planning Area. The death rate among black men (18 deaths per 100,000 population) was six 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 313  
Death Rate 3.0 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 (1999-2009) B20-B24

References **National Institute of Allergy and Infectious Diseases**  
[www.niaid.nih.gov/publications/aids.htm](http://www.niaid.nih.gov/publications/aids.htm)

**CDC HIV/AIDS Prevention**  
[www.cdc.gov/hiv](http://www.cdc.gov/hiv)

Referral **Erase Doubt:**  
1-800-367-AIDS (2437) or  
[www.erasedoubt.org](http://www.erasedoubt.org)

**HIV L.A. Directory:**  
(866) 772-2365 or  
[www.hivla.org](http://www.hivla.org)



Figure T11. Trends in HIV mortality

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>506</b>    | <b>6</b>    | <b>558</b>    | <b>6</b>    | <b>502</b>    | <b>5</b>    | <b>497</b>    | <b>5</b>    | <b>498</b>    | <b>5</b>    | <b>438</b>    | <b>4</b>    | <b>414</b>    | <b>4</b>    | <b>391</b>    | <b>4</b>    | <b>371</b>    | <b>4</b>    | <b>313</b>    | <b>3</b>    |
| <b>Males</b>                  | <b>442</b>    | <b>10</b>   | <b>485</b>    | <b>11</b>   | <b>428</b>    | <b>9</b>    | <b>438</b>    | <b>9</b>    | <b>436</b>    | <b>9</b>    | <b>378</b>    | <b>8</b>    | <b>355</b>    | <b>7</b>    | <b>338</b>    | <b>7</b>    | <b>310</b>    | <b>6</b>    | <b>256</b>    | <b>5</b>    |
| <b>Females</b>                | <b>64</b>     | <b>1</b>    | <b>73</b>     | <b>1</b>    | <b>74</b>     | <b>2</b>    | <b>59</b>     | <b>1</b>    | <b>62</b>     | <b>1</b>    | <b>60</b>     | <b>1</b>    | <b>59</b>     | <b>1</b>    | <b>53</b>     | <b>1</b>    | <b>61</b>     | <b>1</b>    | <b>57</b>     | <b>1</b>    |
| <b>White</b>                  | <b>187</b>    | <b>6</b>    | <b>195</b>    | <b>6</b>    | <b>151</b>    | <b>4</b>    | <b>167</b>    | <b>5</b>    | <b>174</b>    | <b>5</b>    | <b>139</b>    | <b>4</b>    | <b>155</b>    | <b>4</b>    | <b>119</b>    | <b>3</b>    | <b>96</b>     | <b>3</b>    | <b>84</b>     | <b>2</b>    |
| <b>Hispanic</b>               | <b>155</b>    | <b>4</b>    | <b>182</b>    | <b>5</b>    | <b>187</b>    | <b>5</b>    | <b>170</b>    | <b>5</b>    | <b>177</b>    | <b>5</b>    | <b>158</b>    | <b>4</b>    | <b>139</b>    | <b>3</b>    | <b>132</b>    | <b>3</b>    | <b>137</b>    | <b>3</b>    | <b>108</b>    | <b>3</b>    |
| <b>Black</b>                  | <b>150</b>    | <b>16</b>   | <b>170</b>    | <b>18</b>   | <b>148</b>    | <b>16</b>   | <b>145</b>    | <b>15</b>   | <b>136</b>    | <b>14</b>   | <b>131</b>    | <b>14</b>   | <b>108</b>    | <b>12</b>   | <b>125</b>    | <b>13</b>   | <b>113</b>    | <b>12</b>   | <b>109</b>    | <b>11</b>   |
| <b>Asian/Pacific Islander</b> | <b>8</b>      | <b>--</b>   | <b>9</b>      | <b>--</b>   | <b>14</b>     | <b>--</b>   | <b>10</b>     | <b>--</b>   | <b>7</b>      | <b>--</b>   | <b>6</b>      | <b>--</b>   | <b>8</b>      | <b>--</b>   | <b>11</b>     | <b>--</b>   | <b>21</b>     | <b>1</b>    | <b>11</b>     | <b>--</b>   |
| <b>Males</b>                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>172</b>    | <b>10</b>   | <b>180</b>    | <b>10</b>   | <b>140</b>    | <b>8</b>    | <b>161</b>    | <b>9</b>    | <b>159</b>    | <b>9</b>    | <b>126</b>    | <b>7</b>    | <b>139</b>    | <b>8</b>    | <b>112</b>    | <b>6</b>    | <b>86</b>     | <b>5</b>    | <b>74</b>     | <b>4</b>    |
| <b>Hispanic</b>               | <b>140</b>    | <b>8</b>    | <b>156</b>    | <b>9</b>    | <b>165</b>    | <b>9</b>    | <b>143</b>    | <b>8</b>    | <b>159</b>    | <b>8</b>    | <b>140</b>    | <b>7</b>    | <b>121</b>    | <b>6</b>    | <b>119</b>    | <b>6</b>    | <b>114</b>    | <b>6</b>    | <b>91</b>     | <b>5</b>    |
| <b>Black</b>                  | <b>118</b>    | <b>29</b>   | <b>138</b>    | <b>33</b>   | <b>109</b>    | <b>26</b>   | <b>121</b>    | <b>28</b>   | <b>109</b>    | <b>25</b>   | <b>102</b>    | <b>24</b>   | <b>87</b>     | <b>21</b>   | <b>94</b>     | <b>22</b>   | <b>90</b>     | <b>21</b>   | <b>79</b>     | <b>18</b>   |
| <b>Asian/Pacific Islander</b> | <b>7</b>      | <b>--</b>   | <b>9</b>      | <b>--</b>   | <b>12</b>     | <b>--</b>   | <b>9</b>      | <b>--</b>   | <b>6</b>      | <b>--</b>   | <b>6</b>      | <b>--</b>   | <b>6</b>      | <b>--</b>   | <b>10</b>     | <b>--</b>   | <b>16</b>     | <b>--</b>   | <b>11</b>     | <b>--</b>   |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>15</b>     | <b>--</b>   | <b>15</b>     | <b>--</b>   | <b>11</b>     | <b>--</b>   | <b>6</b>      | <b>--</b>   | <b>15</b>     | <b>--</b>   | <b>13</b>     | <b>--</b>   | <b>16</b>     | <b>--</b>   | <b>7</b>      | <b>--</b>   | <b>10</b>     | <b>--</b>   | <b>10</b>     | <b>--</b>   |
| <b>Hispanic</b>               | <b>15</b>     | <b>--</b>   | <b>26</b>     | <b>1</b>    | <b>22</b>     | <b>1</b>    | <b>27</b>     | <b>1</b>    | <b>18</b>     | <b>--</b>   | <b>18</b>     | <b>--</b>   | <b>18</b>     | <b>--</b>   | <b>13</b>     | <b>--</b>   | <b>23</b>     | <b>1</b>    | <b>17</b>     | <b>--</b>   |
| <b>Black</b>                  | <b>32</b>     | <b>6</b>    | <b>32</b>     | <b>6</b>    | <b>39</b>     | <b>8</b>    | <b>24</b>     | <b>5</b>    | <b>27</b>     | <b>5</b>    | <b>29</b>     | <b>6</b>    | <b>21</b>     | <b>4</b>    | <b>31</b>     | <b>6</b>    | <b>23</b>     | <b>4</b>    | <b>30</b>     | <b>6</b>    |
| <b>Asian/Pacific Islander</b> | <b>1</b>      | <b>--</b>   | <b>0</b>      | <b>0</b>    | <b>2</b>      | <b>--</b>   | <b>1</b>      | <b>--</b>   | <b>1</b>      | <b>--</b>   | <b>0</b>      | <b>--</b>   | <b>2</b>      | <b>--</b>   | <b>1</b>      | <b>--</b>   | <b>5</b>      | <b>--</b>   | <b>0</b>      | <b>--</b>   |
| <b>SPA 1: Antelope Valley</b> | <b>9</b>      | <b>--</b>   | <b>19</b>     | <b>--</b>   | <b>11</b>     | <b>--</b>   | <b>10</b>     | <b>--</b>   | <b>4</b>      | <b>--</b>   | <b>9</b>      | <b>--</b>   | <b>6</b>      | <b>--</b>   | <b>11</b>     | <b>--</b>   | <b>5</b>      | <b>--</b>   | <b>10</b>     | <b>--</b>   |
| <b>SPA 2: San Fernando</b>    | <b>63</b>     | <b>3</b>    | <b>74</b>     | <b>4</b>    | <b>68</b>     | <b>3</b>    | <b>53</b>     | <b>3</b>    | <b>67</b>     | <b>3</b>    | <b>68</b>     | <b>3</b>    | <b>53</b>     | <b>2</b>    | <b>51</b>     | <b>2</b>    | <b>45</b>     | <b>2</b>    | <b>34</b>     | <b>1</b>    |
| <b>SPA 3: San Gabriel</b>     | <b>45</b>     | <b>3</b>    | <b>47</b>     | <b>3</b>    | <b>51</b>     | <b>3</b>    | <b>39</b>     | <b>2</b>    | <b>49</b>     | <b>3</b>    | <b>30</b>     | <b>2</b>    | <b>47</b>     | <b>3</b>    | <b>30</b>     | <b>2</b>    | <b>30</b>     | <b>2</b>    | <b>32</b>     | <b>2</b>    |
| <b>SPA 4: Metro</b>           | <b>171</b>    | <b>16</b>   | <b>155</b>    | <b>14</b>   | <b>133</b>    | <b>12</b>   | <b>167</b>    | <b>14</b>   | <b>133</b>    | <b>11</b>   | <b>129</b>    | <b>10</b>   | <b>132</b>    | <b>10</b>   | <b>112</b>    | <b>9</b>    | <b>93</b>     | <b>7</b>    | <b>81</b>     | <b>6</b>    |
| <b>SPA 5: West</b>            | <b>16</b>     | <b>--</b>   | <b>19</b>     | <b>--</b>   | <b>16</b>     | <b>--</b>   | <b>20</b>     | <b>3</b>    | <b>23</b>     | <b>3</b>    | <b>14</b>     | <b>--</b>   | <b>17</b>     | <b>--</b>   | <b>10</b>     | <b>--</b>   | <b>11</b>     | <b>--</b>   | <b>11</b>     | <b>--</b>   |
| <b>SPA 6: South</b>           | <b>83</b>     | <b>11</b>   | <b>90</b>     | <b>11</b>   | <b>87</b>     | <b>10</b>   | <b>96</b>     | <b>12</b>   | <b>106</b>    | <b>13</b>   | <b>76</b>     | <b>9</b>    | <b>57</b>     | <b>7</b>    | <b>76</b>     | <b>9</b>    | <b>85</b>     | <b>10</b>   | <b>63</b>     | <b>7</b>    |
| <b>SPA 7: East</b>            | <b>32</b>     | <b>3</b>    | <b>42</b>     | <b>4</b>    | <b>42</b>     | <b>3</b>    | <b>38</b>     | <b>3</b>    | <b>35</b>     | <b>3</b>    | <b>35</b>     | <b>3</b>    | <b>31</b>     | <b>2</b>    | <b>28</b>     | <b>2</b>    | <b>27</b>     | <b>2</b>    | <b>23</b>     | <b>2</b>    |
| <b>SPA 8: South Bay</b>       | <b>83</b>     | <b>6</b>    | <b>97</b>     | <b>6</b>    | <b>85</b>     | <b>5</b>    | <b>67</b>     | <b>4</b>    | <b>71</b>     | <b>5</b>    | <b>69</b>     | <b>4</b>    | <b>65</b>     | <b>4</b>    | <b>70</b>     | <b>4</b>    | <b>72</b>     | <b>4</b>    | <b>56</b>     | <b>3</b>    |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.

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

# Liver Disease

4th 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 2009, it was the ninth-leading cause of death overall, and it was the second-leading cause of death among persons 45 to 64 years of age and 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 liver disease death rate has changed little during the past 10 years.*

### 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

### 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

## LOS ANGELES COUNTY

Deaths 1,246  
Death Rate 12.2 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 (1999-2009) K70, K73-K74

References **American Liver Foundation**  
[www.liverfoundation.org](http://www.liverfoundation.org)

**National Digestive Diseases Information Clearinghouse**  
[www.digestive.niddk.nih.gov](http://www.digestive.niddk.nih.gov)

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

Figure T12. Trends in liver disease mortality

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>1,121</b>  | <b>14</b>   | <b>1,010</b>  | <b>12</b>   | <b>1,085</b>  | <b>12</b>   | <b>1,053</b>  | <b>12</b>   | <b>1,035</b>  | <b>11</b>   | <b>1,061</b>  | <b>11</b>   | <b>1,102</b>  | <b>11</b>   | <b>1,133</b>  | <b>12</b>   | <b>1,134</b>  | <b>11</b>   | <b>1,246</b>  | <b>12</b>   |
| <b>Males</b>                  | <b>760</b>    | <b>20</b>   | <b>695</b>    | <b>18</b>   | <b>741</b>    | <b>18</b>   | <b>727</b>    | <b>17</b>   | <b>698</b>    | <b>16</b>   | <b>759</b>    | <b>17</b>   | <b>758</b>    | <b>17</b>   | <b>792</b>    | <b>17</b>   | <b>773</b>    | <b>16</b>   | <b>837</b>    | <b>17</b>   |
| <b>Females</b>                | <b>361</b>    | <b>8</b>    | <b>315</b>    | <b>7</b>    | <b>344</b>    | <b>7</b>    | <b>326</b>    | <b>7</b>    | <b>337</b>    | <b>7</b>    | <b>302</b>    | <b>6</b>    | <b>344</b>    | <b>7</b>    | <b>341</b>    | <b>7</b>    | <b>361</b>    | <b>7</b>    | <b>409</b>    | <b>8</b>    |
| <b>White</b>                  | <b>461</b>    | <b>12</b>   | <b>416</b>    | <b>11</b>   | <b>432</b>    | <b>11</b>   | <b>403</b>    | <b>10</b>   | <b>428</b>    | <b>11</b>   | <b>397</b>    | <b>10</b>   | <b>386</b>    | <b>10</b>   | <b>396</b>    | <b>10</b>   | <b>398</b>    | <b>10</b>   | <b>419</b>    | <b>10</b>   |
| <b>Hispanic</b>               | <b>499</b>    | <b>22</b>   | <b>458</b>    | <b>19</b>   | <b>504</b>    | <b>19</b>   | <b>498</b>    | <b>19</b>   | <b>458</b>    | <b>17</b>   | <b>501</b>    | <b>17</b>   | <b>554</b>    | <b>18</b>   | <b>586</b>    | <b>19</b>   | <b>594</b>    | <b>18</b>   | <b>645</b>    | <b>20</b>   |
| <b>Black</b>                  | <b>102</b>    | <b>12</b>   | <b>97</b>     | <b>11</b>   | <b>100</b>    | <b>11</b>   | <b>92</b>     | <b>10</b>   | <b>98</b>     | <b>11</b>   | <b>102</b>    | <b>11</b>   | <b>98</b>     | <b>11</b>   | <b>86</b>     | <b>9</b>    | <b>69</b>     | <b>7</b>    | <b>112</b>    | <b>11</b>   |
| <b>Asian/Pacific Islander</b> | <b>46</b>     | <b>4</b>    | <b>32</b>     | <b>3</b>    | <b>39</b>     | <b>3</b>    | <b>42</b>     | <b>3</b>    | <b>46</b>     | <b>4</b>    | <b>48</b>     | <b>4</b>    | <b>49</b>     | <b>4</b>    | <b>55</b>     | <b>4</b>    | <b>59</b>     | <b>4</b>    | <b>58</b>     | <b>4</b>    |
| <b>Males</b>                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>298</b>    | <b>17</b>   | <b>265</b>    | <b>15</b>   | <b>277</b>    | <b>15</b>   | <b>253</b>    | <b>14</b>   | <b>295</b>    | <b>16</b>   | <b>267</b>    | <b>14</b>   | <b>263</b>    | <b>14</b>   | <b>260</b>    | <b>13</b>   | <b>268</b>    | <b>13</b>   | <b>272</b>    | <b>13</b>   |
| <b>Hispanic</b>               | <b>361</b>    | <b>33</b>   | <b>343</b>    | <b>31</b>   | <b>381</b>    | <b>31</b>   | <b>377</b>    | <b>30</b>   | <b>308</b>    | <b>23</b>   | <b>383</b>    | <b>29</b>   | <b>397</b>    | <b>27</b>   | <b>439</b>    | <b>30</b>   | <b>413</b>    | <b>27</b>   | <b>448</b>    | <b>28</b>   |
| <b>Black</b>                  | <b>64</b>     | <b>17</b>   | <b>63</b>     | <b>17</b>   | <b>51</b>     | <b>13</b>   | <b>62</b>     | <b>16</b>   | <b>62</b>     | <b>16</b>   | <b>68</b>     | <b>18</b>   | <b>59</b>     | <b>14</b>   | <b>51</b>     | <b>12</b>   | <b>45</b>     | <b>10</b>   | <b>75</b>     | <b>17</b>   |
| <b>Asian/Pacific Islander</b> | <b>30</b>     | <b>6</b>    | <b>19</b>     | --          | <b>25</b>     | <b>5</b>    | <b>26</b>     | <b>4</b>    | <b>29</b>     | <b>5</b>    | <b>31</b>     | <b>5</b>    | <b>29</b>     | <b>5</b>    | <b>35</b>     | <b>5</b>    | <b>39</b>     | <b>6</b>    | <b>37</b>     | <b>5</b>    |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>163</b>    | <b>8</b>    | <b>151</b>    | <b>8</b>    | <b>155</b>    | <b>8</b>    | <b>150</b>    | <b>7</b>    | <b>133</b>    | <b>6</b>    | <b>130</b>    | <b>6</b>    | <b>123</b>    | <b>6</b>    | <b>136</b>    | <b>7</b>    | <b>130</b>    | <b>6</b>    | <b>147</b>    | <b>7</b>    |
| <b>Hispanic</b>               | <b>138</b>    | <b>12</b>   | <b>115</b>    | <b>10</b>   | <b>123</b>    | <b>9</b>    | <b>121</b>    | <b>10</b>   | <b>150</b>    | <b>11</b>   | <b>118</b>    | <b>8</b>    | <b>157</b>    | <b>11</b>   | <b>147</b>    | <b>9</b>    | <b>181</b>    | <b>11</b>   | <b>197</b>    | <b>12</b>   |
| <b>Black</b>                  | <b>38</b>     | <b>8</b>    | <b>34</b>     | <b>7</b>    | <b>49</b>     | <b>10</b>   | <b>30</b>     | <b>6</b>    | <b>36</b>     | <b>7</b>    | <b>34</b>     | <b>6</b>    | <b>39</b>     | <b>8</b>    | <b>35</b>     | <b>7</b>    | <b>24</b>     | <b>4</b>    | <b>37</b>     | <b>7</b>    |
| <b>Asian/Pacific Islander</b> | <b>16</b>     | --          | <b>13</b>     | --          | <b>14</b>     | --          | <b>16</b>     | --          | <b>17</b>     | --          | <b>17</b>     | --          | <b>20</b>     | <b>3</b>    | <b>20</b>     | <b>3</b>    | <b>20</b>     | <b>2</b>    | <b>21</b>     | <b>2</b>    |
| <b>SPA 1: Antelope Valley</b> | <b>40</b>     | <b>16</b>   | <b>40</b>     | <b>16</b>   | <b>35</b>     | <b>13</b>   | <b>48</b>     | <b>17</b>   | <b>40</b>     | <b>13</b>   | <b>39</b>     | <b>13</b>   | <b>43</b>     | <b>14</b>   | <b>50</b>     | <b>16</b>   | <b>45</b>     | <b>14</b>   | <b>53</b>     | <b>17</b>   |
| <b>SPA 2: San Fernando</b>    | <b>187</b>    | <b>10</b>   | <b>144</b>    | <b>8</b>    | <b>168</b>    | <b>9</b>    | <b>180</b>    | <b>9</b>    | <b>190</b>    | <b>9</b>    | <b>199</b>    | <b>10</b>   | <b>200</b>    | <b>9</b>    | <b>189</b>    | <b>9</b>    | <b>207</b>    | <b>9</b>    | <b>200</b>    | <b>9</b>    |
| <b>SPA 3: San Gabriel</b>     | <b>191</b>    | <b>12</b>   | <b>187</b>    | <b>12</b>   | <b>178</b>    | <b>11</b>   | <b>177</b>    | <b>10</b>   | <b>173</b>    | <b>10</b>   | <b>197</b>    | <b>11</b>   | <b>207</b>    | <b>11</b>   | <b>179</b>    | <b>10</b>   | <b>194</b>    | <b>10</b>   | <b>217</b>    | <b>11</b>   |
| <b>SPA 4: Metro</b>           | <b>151</b>    | <b>16</b>   | <b>136</b>    | <b>14</b>   | <b>159</b>    | <b>16</b>   | <b>134</b>    | <b>13</b>   | <b>131</b>    | <b>12</b>   | <b>127</b>    | <b>11</b>   | <b>136</b>    | <b>12</b>   | <b>144</b>    | <b>12</b>   | <b>147</b>    | <b>12</b>   | <b>163</b>    | <b>13</b>   |
| <b>SPA 5: West</b>            | <b>56</b>     | <b>9</b>    | <b>45</b>     | <b>7</b>    | <b>55</b>     | <b>8</b>    | <b>55</b>     | <b>8</b>    | <b>40</b>     | <b>6</b>    | <b>41</b>     | <b>6</b>    | <b>41</b>     | <b>6</b>    | <b>44</b>     | <b>6</b>    | <b>40</b>     | <b>5</b>    | <b>55</b>     | <b>7</b>    |
| <b>SPA 6: South</b>           | <b>117</b>    | <b>18</b>   | <b>110</b>    | <b>17</b>   | <b>119</b>    | <b>17</b>   | <b>106</b>    | <b>15</b>   | <b>118</b>    | <b>17</b>   | <b>102</b>    | <b>14</b>   | <b>120</b>    | <b>16</b>   | <b>122</b>    | <b>16</b>   | <b>112</b>    | <b>14</b>   | <b>130</b>    | <b>17</b>   |
| <b>SPA 7: East</b>            | <b>197</b>    | <b>19</b>   | <b>161</b>    | <b>15</b>   | <b>185</b>    | <b>17</b>   | <b>177</b>    | <b>16</b>   | <b>173</b>    | <b>15</b>   | <b>176</b>    | <b>15</b>   | <b>163</b>    | <b>14</b>   | <b>199</b>    | <b>17</b>   | <b>198</b>    | <b>16</b>   | <b>226</b>    | <b>18</b>   |
| <b>SPA 8: South Bay</b>       | <b>165</b>    | <b>12</b>   | <b>154</b>    | <b>11</b>   | <b>162</b>    | <b>12</b>   | <b>155</b>    | <b>11</b>   | <b>139</b>    | <b>10</b>   | <b>159</b>    | <b>11</b>   | <b>156</b>    | <b>10</b>   | <b>184</b>    | <b>12</b>   | <b>174</b>    | <b>11</b>   | <b>176</b>    | <b>11</b>   |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.

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

# Lung Cancer

7th cause of premature death  
3th cause of death

**LUNG CANCER** has been the third-leading cause of death each year for the past 10 years. Since 2000, the lung cancer death rate has declined 23% and has been below the Healthy People 2010 objective. In 2009, the highest death rate, 69 deaths per 100,000 population, was among black men, while the lowest rate, 11 deaths per 100,000 population, was among Hispanic women.

## 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; prior lung cancer

## 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 2,958  
Death Rate 31.3 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 (1999-2009) C33-C34

References **American Cancer Society**  
[www.cancer.org](http://www.cancer.org)  
**Guide to Community Preventive Services**  
[www.thecommunityguide.org](http://www.thecommunityguide.org)  
**National Cancer Institute**  
[www.cancer.gov](http://www.cancer.gov)  
**It's Quitting Time L.A.**  
[www.laquits.com](http://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

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>3,150</b>  | <b>41</b>   | <b>3,232</b>  | <b>42</b>   | <b>3,081</b>  | <b>39</b>   | <b>3,150</b>  | <b>38</b>   | <b>3,034</b>  | <b>36</b>   | <b>3,036</b>  | <b>35</b>   | <b>3,021</b>  | <b>35</b>   | <b>2,950</b>  | <b>33</b>   | <b>2,910</b>  | <b>31</b>   | <b>2,958</b>  | <b>31</b>   |
| <b>Males</b>                  | <b>1,765</b>  | <b>54</b>   | <b>1,797</b>  | <b>55</b>   | <b>1,702</b>  | <b>50</b>   | <b>1,713</b>  | <b>49</b>   | <b>1,710</b>  | <b>48</b>   | <b>1,608</b>  | <b>44</b>   | <b>1,719</b>  | <b>47</b>   | <b>1,568</b>  | <b>41</b>   | <b>1,568</b>  | <b>40</b>   | <b>1,650</b>  | <b>41</b>   |
| <b>Females</b>                | <b>1,385</b>  | <b>31</b>   | <b>1,435</b>  | <b>32</b>   | <b>1,379</b>  | <b>30</b>   | <b>1,437</b>  | <b>31</b>   | <b>1,324</b>  | <b>27</b>   | <b>1,428</b>  | <b>29</b>   | <b>1,302</b>  | <b>26</b>   | <b>1,382</b>  | <b>27</b>   | <b>1,342</b>  | <b>25</b>   | <b>1,308</b>  | <b>24</b>   |
| <b>White</b>                  | <b>2,018</b>  | <b>49</b>   | <b>2,039</b>  | <b>50</b>   | <b>1,950</b>  | <b>47</b>   | <b>1,942</b>  | <b>46</b>   | <b>1,825</b>  | <b>43</b>   | <b>1,830</b>  | <b>43</b>   | <b>1,788</b>  | <b>42</b>   | <b>1,700</b>  | <b>39</b>   | <b>1,687</b>  | <b>38</b>   | <b>1,702</b>  | <b>38</b>   |
| <b>Hispanic</b>               | <b>341</b>    | <b>20</b>   | <b>348</b>    | <b>20</b>   | <b>363</b>    | <b>21</b>   | <b>381</b>    | <b>20</b>   | <b>366</b>    | <b>19</b>   | <b>370</b>    | <b>17</b>   | <b>384</b>    | <b>18</b>   | <b>398</b>    | <b>17</b>   | <b>433</b>    | <b>18</b>   | <b>408</b>    | <b>16</b>   |
| <b>Black</b>                  | <b>476</b>    | <b>62</b>   | <b>482</b>    | <b>63</b>   | <b>455</b>    | <b>58</b>   | <b>451</b>    | <b>56</b>   | <b>452</b>    | <b>55</b>   | <b>457</b>    | <b>56</b>   | <b>480</b>    | <b>58</b>   | <b>464</b>    | <b>54</b>   | <b>377</b>    | <b>43</b>   | <b>432</b>    | <b>48</b>   |
| <b>Asian/Pacific Islander</b> | <b>308</b>    | <b>30</b>   | <b>356</b>    | <b>34</b>   | <b>306</b>    | <b>28</b>   | <b>367</b>    | <b>31</b>   | <b>379</b>    | <b>31</b>   | <b>368</b>    | <b>29</b>   | <b>359</b>    | <b>27</b>   | <b>378</b>    | <b>27</b>   | <b>406</b>    | <b>28</b>   | <b>412</b>    | <b>27</b>   |
| <b>Males</b>                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>1,079</b>  | <b>60</b>   | <b>1,056</b>  | <b>60</b>   | <b>1,034</b>  | <b>57</b>   | <b>989</b>    | <b>54</b>   | <b>974</b>    | <b>53</b>   | <b>921</b>    | <b>50</b>   | <b>941</b>    | <b>51</b>   | <b>860</b>    | <b>45</b>   | <b>850</b>    | <b>44</b>   | <b>892</b>    | <b>45</b>   |
| <b>Hispanic</b>               | <b>211</b>    | <b>31</b>   | <b>219</b>    | <b>32</b>   | <b>217</b>    | <b>31</b>   | <b>237</b>    | <b>29</b>   | <b>231</b>    | <b>29</b>   | <b>210</b>    | <b>23</b>   | <b>236</b>    | <b>27</b>   | <b>233</b>    | <b>25</b>   | <b>253</b>    | <b>26</b>   | <b>243</b>    | <b>23</b>   |
| <b>Black</b>                  | <b>271</b>    | <b>86</b>   | <b>289</b>    | <b>94</b>   | <b>258</b>    | <b>81</b>   | <b>267</b>    | <b>82</b>   | <b>263</b>    | <b>78</b>   | <b>243</b>    | <b>73</b>   | <b>286</b>    | <b>85</b>   | <b>245</b>    | <b>70</b>   | <b>200</b>    | <b>58</b>   | <b>247</b>    | <b>69</b>   |
| <b>Asian/Pacific Islander</b> | <b>201</b>    | <b>45</b>   | <b>229</b>    | <b>51</b>   | <b>188</b>    | <b>39</b>   | <b>215</b>    | <b>42</b>   | <b>235</b>    | <b>44</b>   | <b>228</b>    | <b>42</b>   | <b>250</b>    | <b>43</b>   | <b>224</b>    | <b>38</b>   | <b>261</b>    | <b>42</b>   | <b>266</b>    | <b>42</b>   |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>939</b>    | <b>40</b>   | <b>983</b>    | <b>43</b>   | <b>916</b>    | <b>39</b>   | <b>953</b>    | <b>40</b>   | <b>851</b>    | <b>36</b>   | <b>909</b>    | <b>38</b>   | <b>847</b>    | <b>35</b>   | <b>840</b>    | <b>35</b>   | <b>837</b>    | <b>33</b>   | <b>810</b>    | <b>32</b>   |
| <b>Hispanic</b>               | <b>130</b>    | <b>13</b>   | <b>129</b>    | <b>12</b>   | <b>146</b>    | <b>14</b>   | <b>144</b>    | <b>13</b>   | <b>135</b>    | <b>12</b>   | <b>160</b>    | <b>13</b>   | <b>148</b>    | <b>12</b>   | <b>165</b>    | <b>12</b>   | <b>180</b>    | <b>13</b>   | <b>165</b>    | <b>11</b>   |
| <b>Black</b>                  | <b>205</b>    | <b>46</b>   | <b>193</b>    | <b>43</b>   | <b>197</b>    | <b>42</b>   | <b>184</b>    | <b>39</b>   | <b>189</b>    | <b>39</b>   | <b>214</b>    | <b>43</b>   | <b>194</b>    | <b>39</b>   | <b>219</b>    | <b>43</b>   | <b>177</b>    | <b>34</b>   | <b>185</b>    | <b>35</b>   |
| <b>Asian/Pacific Islander</b> | <b>107</b>    | <b>18</b>   | <b>127</b>    | <b>21</b>   | <b>118</b>    | <b>19</b>   | <b>152</b>    | <b>23</b>   | <b>144</b>    | <b>21</b>   | <b>140</b>    | <b>19</b>   | <b>109</b>    | <b>14</b>   | <b>154</b>    | <b>19</b>   | <b>145</b>    | <b>17</b>   | <b>146</b>    | <b>17</b>   |
| <b>SPA 1: Antelope Valley</b> | <b>119</b>    | <b>57</b>   | <b>117</b>    | <b>55</b>   | <b>109</b>    | <b>49</b>   | <b>120</b>    | <b>53</b>   | <b>114</b>    | <b>50</b>   | <b>122</b>    | <b>53</b>   | <b>123</b>    | <b>51</b>   | <b>134</b>    | <b>52</b>   | <b>128</b>    | <b>48</b>   | <b>118</b>    | <b>43</b>   |
| <b>SPA 2: San Fernando</b>    | <b>657</b>    | <b>39</b>   | <b>710</b>    | <b>42</b>   | <b>665</b>    | <b>38</b>   | <b>695</b>    | <b>39</b>   | <b>643</b>    | <b>35</b>   | <b>683</b>    | <b>37</b>   | <b>675</b>    | <b>36</b>   | <b>637</b>    | <b>33</b>   | <b>620</b>    | <b>30</b>   | <b>664</b>    | <b>32</b>   |
| <b>SPA 3: San Gabriel</b>     | <b>554</b>    | <b>37</b>   | <b>597</b>    | <b>40</b>   | <b>544</b>    | <b>35</b>   | <b>563</b>    | <b>35</b>   | <b>531</b>    | <b>32</b>   | <b>596</b>    | <b>35</b>   | <b>562</b>    | <b>32</b>   | <b>550</b>    | <b>31</b>   | <b>564</b>    | <b>31</b>   | <b>573</b>    | <b>31</b>   |
| <b>SPA 4: Metro</b>           | <b>316</b>    | <b>35</b>   | <b>318</b>    | <b>35</b>   | <b>294</b>    | <b>31</b>   | <b>313</b>    | <b>32</b>   | <b>290</b>    | <b>29</b>   | <b>285</b>    | <b>28</b>   | <b>267</b>    | <b>26</b>   | <b>274</b>    | <b>25</b>   | <b>294</b>    | <b>27</b>   | <b>265</b>    | <b>24</b>   |
| <b>SPA 5: West</b>            | <b>230</b>    | <b>35</b>   | <b>236</b>    | <b>36</b>   | <b>255</b>    | <b>38</b>   | <b>216</b>    | <b>32</b>   | <b>222</b>    | <b>32</b>   | <b>220</b>    | <b>31</b>   | <b>217</b>    | <b>31</b>   | <b>204</b>    | <b>29</b>   | <b>212</b>    | <b>28</b>   | <b>216</b>    | <b>28</b>   |
| <b>SPA 6: South</b>           | <b>300</b>    | <b>51</b>   | <b>310</b>    | <b>53</b>   | <b>300</b>    | <b>50</b>   | <b>286</b>    | <b>46</b>   | <b>297</b>    | <b>47</b>   | <b>293</b>    | <b>45</b>   | <b>271</b>    | <b>42</b>   | <b>280</b>    | <b>42</b>   | <b>242</b>    | <b>36</b>   | <b>275</b>    | <b>40</b>   |
| <b>SPA 7: East</b>            | <b>397</b>    | <b>41</b>   | <b>360</b>    | <b>37</b>   | <b>339</b>    | <b>34</b>   | <b>356</b>    | <b>35</b>   | <b>366</b>    | <b>35</b>   | <b>332</b>    | <b>31</b>   | <b>325</b>    | <b>30</b>   | <b>341</b>    | <b>30</b>   | <b>346</b>    | <b>30</b>   | <b>300</b>    | <b>26</b>   |
| <b>SPA 8: South Bay</b>       | <b>569</b>    | <b>46</b>   | <b>569</b>    | <b>46</b>   | <b>567</b>    | <b>45</b>   | <b>580</b>    | <b>44</b>   | <b>544</b>    | <b>41</b>   | <b>496</b>    | <b>36</b>   | <b>564</b>    | <b>41</b>   | <b>520</b>    | <b>36</b>   | <b>494</b>    | <b>34</b>   | <b>541</b>    | <b>36</b>   |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.



# Motor Vehicle Crash

3th cause of premature death  
19th cause of death

*IN 2009, MOTOR VEHICLE CRASHES were the leading cause of death for children 5 to 14 years of age, and the second-leading cause of death for persons 15 to 24 years of age. They were the second-leading cause of premature death in the Antelope Valley and San Gabriel Service Planning Areas. In 2009, the death rate from motor vehicle crashes fell below the Healthy People 2010 goal.*

### 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.

Motor vehicle crashes that occur on public roadways are referred to as traffic collisions. Any type of vehicle can be involved in a motor vehicle crash, including a car, truck, bus, or motorcycle.

The person injured in a motor vehicle crash may be the driver or passenger of the vehicle that caused the crash, or of the vehicle that was hit. The injured person may also be 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

### Community opportunities for prevention

- Actively enforce all traffic laws, including laws addressing distracted driving, seat belt use and child passenger safety
- Use media campaigns to reduce alcohol-impaired driving
- Comply with the graduated licensing system for teen drivers
- Support national efforts for safe car design with safety features such as antilock brakes, electronic stability control systems, and back-up cameras

### Individual opportunities for prevention

- Do not drive while impaired by alcohol or drugs
- Do not text while driving, and use a hands-free device if talking on a cell phone
- Always wear seat belts, even for short trips
- Place young children in an age-appropriate, properly installed child safety seat or booster seat
- Have children younger than 12 years of age ride in the back seat
- Keep your vehicle in good working order

## LOS ANGELES COUNTY

Deaths 677  
Death Rate 6.5 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 (1999-2009) 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](http://www.thecommunityguide.org)  
**The National Highway Traffic Safety Administration**  
[www.nhtsa.dot.gov](http://www.nhtsa.dot.gov)

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

Figure T14. Trends in motor vehicle crash mortality

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>811</b>    | <b>9</b>    | <b>890</b>    | <b>9</b>    | <b>851</b>    | <b>9</b>    | <b>967</b>    | <b>10</b>   | <b>947</b>    | <b>10</b>   | <b>925</b>    | <b>9</b>    | <b>965</b>    | <b>10</b>   | <b>908</b>    | <b>9</b>    | <b>822</b>    | <b>8</b>    | <b>677</b>    | <b>7</b>    |
| <b>Males</b>                  | <b>564</b>    | <b>13</b>   | <b>598</b>    | <b>13</b>   | <b>578</b>    | <b>12</b>   | <b>697</b>    | <b>15</b>   | <b>647</b>    | <b>14</b>   | <b>650</b>    | <b>13</b>   | <b>681</b>    | <b>14</b>   | <b>669</b>    | <b>13</b>   | <b>623</b>    | <b>12</b>   | <b>484</b>    | <b>10</b>   |
| <b>Females</b>                | <b>247</b>    | <b>5</b>    | <b>292</b>    | <b>6</b>    | <b>273</b>    | <b>6</b>    | <b>270</b>    | <b>5</b>    | <b>300</b>    | <b>6</b>    | <b>275</b>    | <b>5</b>    | <b>284</b>    | <b>6</b>    | <b>239</b>    | <b>5</b>    | <b>199</b>    | <b>4</b>    | <b>193</b>    | <b>4</b>    |
| <b>White</b>                  | <b>297</b>    | <b>9</b>    | <b>304</b>    | <b>9</b>    | <b>292</b>    | <b>9</b>    | <b>343</b>    | <b>10</b>   | <b>340</b>    | <b>10</b>   | <b>287</b>    | <b>9</b>    | <b>312</b>    | <b>10</b>   | <b>272</b>    | <b>8</b>    | <b>253</b>    | <b>8</b>    | <b>220</b>    | <b>6</b>    |
| <b>Hispanic</b>               | <b>324</b>    | <b>9</b>    | <b>359</b>    | <b>10</b>   | <b>373</b>    | <b>9</b>    | <b>418</b>    | <b>10</b>   | <b>374</b>    | <b>9</b>    | <b>428</b>    | <b>10</b>   | <b>425</b>    | <b>10</b>   | <b>436</b>    | <b>10</b>   | <b>367</b>    | <b>8</b>    | <b>312</b>    | <b>7</b>    |
| <b>Black</b>                  | <b>99</b>     | <b>11</b>   | <b>129</b>    | <b>14</b>   | <b>108</b>    | <b>12</b>   | <b>107</b>    | <b>12</b>   | <b>120</b>    | <b>13</b>   | <b>106</b>    | <b>11</b>   | <b>115</b>    | <b>12</b>   | <b>110</b>    | <b>12</b>   | <b>107</b>    | <b>11</b>   | <b>74</b>     | <b>8</b>    |
| <b>Asian/Pacific Islander</b> | <b>88</b>     | <b>8</b>    | <b>95</b>     | <b>8</b>    | <b>75</b>     | <b>6</b>    | <b>95</b>     | <b>7</b>    | <b>107</b>    | <b>8</b>    | <b>95</b>     | <b>7</b>    | <b>110</b>    | <b>8</b>    | <b>86</b>     | <b>6</b>    | <b>92</b>     | <b>7</b>    | <b>69</b>     | <b>5</b>    |
| <b>Males</b>                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>205</b>    | <b>13</b>   | <b>216</b>    | <b>13</b>   | <b>190</b>    | <b>12</b>   | <b>246</b>    | <b>15</b>   | <b>218</b>    | <b>14</b>   | <b>201</b>    | <b>13</b>   | <b>220</b>    | <b>14</b>   | <b>191</b>    | <b>12</b>   | <b>198</b>    | <b>12</b>   | <b>169</b>    | <b>10</b>   |
| <b>Hispanic</b>               | <b>241</b>    | <b>13</b>   | <b>242</b>    | <b>14</b>   | <b>270</b>    | <b>13</b>   | <b>317</b>    | <b>15</b>   | <b>270</b>    | <b>13</b>   | <b>304</b>    | <b>14</b>   | <b>321</b>    | <b>15</b>   | <b>334</b>    | <b>15</b>   | <b>290</b>    | <b>13</b>   | <b>223</b>    | <b>10</b>   |
| <b>Black</b>                  | <b>63</b>     | <b>15</b>   | <b>82</b>     | <b>19</b>   | <b>77</b>     | <b>20</b>   | <b>71</b>     | <b>17</b>   | <b>85</b>     | <b>20</b>   | <b>83</b>     | <b>20</b>   | <b>82</b>     | <b>20</b>   | <b>84</b>     | <b>20</b>   | <b>77</b>     | <b>18</b>   | <b>52</b>     | <b>12</b>   |
| <b>Asian/Pacific Islander</b> | <b>54</b>     | <b>10</b>   | <b>56</b>     | <b>10</b>   | <b>40</b>     | <b>7</b>    | <b>60</b>     | <b>10</b>   | <b>71</b>     | <b>12</b>   | <b>58</b>     | <b>10</b>   | <b>55</b>     | <b>8</b>    | <b>57</b>     | <b>9</b>    | <b>56</b>     | <b>9</b>    | <b>39</b>     | <b>6</b>    |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>92</b>     | <b>5</b>    | <b>88</b>     | <b>5</b>    | <b>102</b>    | <b>6</b>    | <b>97</b>     | <b>6</b>    | <b>122</b>    | <b>7</b>    | <b>86</b>     | <b>5</b>    | <b>92</b>     | <b>5</b>    | <b>81</b>     | <b>4</b>    | <b>55</b>     | <b>3</b>    | <b>51</b>     | <b>3</b>    |
| <b>Hispanic</b>               | <b>83</b>     | <b>5</b>    | <b>117</b>    | <b>7</b>    | <b>103</b>    | <b>5</b>    | <b>101</b>    | <b>5</b>    | <b>104</b>    | <b>5</b>    | <b>124</b>    | <b>6</b>    | <b>104</b>    | <b>5</b>    | <b>102</b>    | <b>5</b>    | <b>77</b>     | <b>4</b>    | <b>89</b>     | <b>4</b>    |
| <b>Black</b>                  | <b>36</b>     | <b>7</b>    | <b>47</b>     | <b>9</b>    | <b>31</b>     | <b>6</b>    | <b>36</b>     | <b>7</b>    | <b>35</b>     | <b>7</b>    | <b>23</b>     | <b>5</b>    | <b>33</b>     | <b>7</b>    | <b>26</b>     | <b>5</b>    | <b>30</b>     | <b>6</b>    | <b>22</b>     | <b>4</b>    |
| <b>Asian/Pacific Islander</b> | <b>34</b>     | <b>6</b>    | <b>39</b>     | <b>6</b>    | <b>35</b>     | <b>5</b>    | <b>35</b>     | <b>5</b>    | <b>36</b>     | <b>5</b>    | <b>37</b>     | <b>5</b>    | <b>55</b>     | <b>7</b>    | <b>29</b>     | <b>4</b>    | <b>36</b>     | <b>5</b>    | <b>30</b>     | <b>4</b>    |
| <b>SPA 1: Antelope Valley</b> | <b>45</b>     | <b>15</b>   | <b>64</b>     | <b>22</b>   | <b>69</b>     | <b>22</b>   | <b>71</b>     | <b>22</b>   | <b>83</b>     | <b>28</b>   | <b>80</b>     | <b>25</b>   | <b>73</b>     | <b>22</b>   | <b>51</b>     | <b>15</b>   | <b>44</b>     | <b>12</b>   | <b>45</b>     | <b>13</b>   |
| <b>SPA 2: San Fernando</b>    | <b>167</b>    | <b>9</b>    | <b>196</b>    | <b>10</b>   | <b>172</b>    | <b>8</b>    | <b>203</b>    | <b>10</b>   | <b>180</b>    | <b>9</b>    | <b>197</b>    | <b>9</b>    | <b>197</b>    | <b>9</b>    | <b>156</b>    | <b>7</b>    | <b>167</b>    | <b>8</b>    | <b>142</b>    | <b>6</b>    |
| <b>SPA 3: San Gabriel</b>     | <b>137</b>    | <b>8</b>    | <b>140</b>    | <b>8</b>    | <b>140</b>    | <b>8</b>    | <b>138</b>    | <b>8</b>    | <b>153</b>    | <b>8</b>    | <b>179</b>    | <b>10</b>   | <b>147</b>    | <b>8</b>    | <b>153</b>    | <b>8</b>    | <b>124</b>    | <b>6</b>    | <b>109</b>    | <b>6</b>    |
| <b>SPA 4: Metro</b>           | <b>81</b>     | <b>7</b>    | <b>98</b>     | <b>9</b>    | <b>78</b>     | <b>7</b>    | <b>99</b>     | <b>8</b>    | <b>84</b>     | <b>7</b>    | <b>91</b>     | <b>8</b>    | <b>82</b>     | <b>7</b>    | <b>87</b>     | <b>7</b>    | <b>76</b>     | <b>6</b>    | <b>65</b>     | <b>5</b>    |
| <b>SPA 5: West</b>            | <b>47</b>     | <b>7</b>    | <b>32</b>     | <b>5</b>    | <b>35</b>     | <b>5</b>    | <b>40</b>     | <b>6</b>    | <b>37</b>     | <b>6</b>    | <b>35</b>     | <b>6</b>    | <b>41</b>     | <b>6</b>    | <b>39</b>     | <b>6</b>    | <b>32</b>     | <b>5</b>    | <b>31</b>     | <b>4</b>    |
| <b>SPA 6: South</b>           | <b>93</b>     | <b>11</b>   | <b>121</b>    | <b>13</b>   | <b>110</b>    | <b>12</b>   | <b>106</b>    | <b>12</b>   | <b>106</b>    | <b>11</b>   | <b>99</b>     | <b>10</b>   | <b>118</b>    | <b>13</b>   | <b>119</b>    | <b>13</b>   | <b>112</b>    | <b>12</b>   | <b>94</b>     | <b>10</b>   |
| <b>SPA 7: East</b>            | <b>96</b>     | <b>8</b>    | <b>91</b>     | <b>8</b>    | <b>114</b>    | <b>9</b>    | <b>110</b>    | <b>9</b>    | <b>105</b>    | <b>8</b>    | <b>106</b>    | <b>8</b>    | <b>110</b>    | <b>8</b>    | <b>124</b>    | <b>9</b>    | <b>111</b>    | <b>8</b>    | <b>85</b>     | <b>6</b>    |
| <b>SPA 8: South Bay</b>       | <b>123</b>    | <b>9</b>    | <b>123</b>    | <b>8</b>    | <b>114</b>    | <b>8</b>    | <b>114</b>    | <b>8</b>    | <b>112</b>    | <b>7</b>    | <b>117</b>    | <b>7</b>    | <b>137</b>    | <b>9</b>    | <b>113</b>    | <b>7</b>    | <b>113</b>    | <b>7</b>    | <b>89</b>     | <b>6</b>    |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.

# Pneumonia/Influenza

12th cause of premature death  
6th cause of death

**SINCE 2000, THE OVERALL DEATH RATE FROM PNEUMONIA/INFLUENZA** decreased 34%, from 32 deaths per 100,000 population in 2000 to 21 deaths per 100,000 population in 2009. However, from 2008 to 2009, pneumonia/influenza moved from the 22nd-leading cause of premature death to the 12th-leading cause of premature death. This change occurred during the H1N1 influenza pandemic of 2009-2010, which resulted in a higher-than-average influenza death rate in adults less than 65 years. Consequently, there was a substantial increase in 2009 in the number of deaths among younger people (aged 15 to 54 years). In 2009, 7.3% of the deaths from pneumonia/influenza were among persons aged 15 to 54 years, compared with 2.2% in this age group during the previous 3 years.

**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**

Age (young and old), underlying chronic medical conditions such as diabetes and asthma, 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 2,097  
Death Rate 21 deaths per 100,000 population

Healthy People 2010 Objective None

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

ICD-10 codes (1999-2009) J09-J18

References **American Lung Association**  
[www.lungusa.org](http://www.lungusa.org)  
**Centers for Disease Control and Prevention**  
[www.cdc.gov/flu](http://www.cdc.gov/flu)

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

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>2,477</b>  | <b>32</b>   | <b>2,421</b>  | <b>32</b>   | <b>2,494</b>  | <b>31</b>   | <b>2,419</b>  | <b>29</b>   | <b>2,272</b>  | <b>27</b>   | <b>2,333</b>  | <b>27</b>   | <b>2,283</b>  | <b>26</b>   | <b>2,184</b>  | <b>24</b>   | <b>2,171</b>  | <b>23</b>   | <b>2,097</b>  | <b>21</b>   |
| <b>Males</b>                  | <b>1,063</b>  | <b>37</b>   | <b>1,065</b>  | <b>38</b>   | <b>1,155</b>  | <b>39</b>   | <b>1,121</b>  | <b>36</b>   | <b>1,013</b>  | <b>32</b>   | <b>1,055</b>  | <b>32</b>   | <b>1,083</b>  | <b>32</b>   | <b>1,018</b>  | <b>29</b>   | <b>990</b>    | <b>27</b>   | <b>1,016</b>  | <b>26</b>   |
| <b>Females</b>                | <b>1,414</b>  | <b>29</b>   | <b>1,356</b>  | <b>28</b>   | <b>1,339</b>  | <b>27</b>   | <b>1,298</b>  | <b>25</b>   | <b>1,259</b>  | <b>24</b>   | <b>1,278</b>  | <b>24</b>   | <b>1,200</b>  | <b>22</b>   | <b>1,166</b>  | <b>20</b>   | <b>1,181</b>  | <b>20</b>   | <b>1,081</b>  | <b>18</b>   |
| <b>White</b>                  | <b>1,608</b>  | <b>34</b>   | <b>1,488</b>  | <b>32</b>   | <b>1,595</b>  | <b>64</b>   | <b>1,475</b>  | <b>31</b>   | <b>1,330</b>  | <b>27</b>   | <b>1,338</b>  | <b>27</b>   | <b>1,314</b>  | <b>27</b>   | <b>1,198</b>  | <b>24</b>   | <b>1,203</b>  | <b>23</b>   | <b>1,076</b>  | <b>21</b>   |
| <b>Hispanic</b>               | <b>366</b>    | <b>26</b>   | <b>398</b>    | <b>28</b>   | <b>383</b>    | <b>26</b>   | <b>411</b>    | <b>25</b>   | <b>408</b>    | <b>24</b>   | <b>448</b>    | <b>24</b>   | <b>429</b>    | <b>22</b>   | <b>418</b>    | <b>20</b>   | <b>430</b>    | <b>19</b>   | <b>492</b>    | <b>20</b>   |
| <b>Black</b>                  | <b>255</b>    | <b>36</b>   | <b>270</b>    | <b>39</b>   | <b>269</b>    | <b>37</b>   | <b>271</b>    | <b>37</b>   | <b>257</b>    | <b>34</b>   | <b>238</b>    | <b>31</b>   | <b>246</b>    | <b>32</b>   | <b>259</b>    | <b>32</b>   | <b>232</b>    | <b>28</b>   | <b>223</b>    | <b>26</b>   |
| <b>Asian/Pacific Islander</b> | <b>239</b>    | <b>28</b>   | <b>259</b>    | <b>30</b>   | <b>236</b>    | <b>25</b>   | <b>250</b>    | <b>25</b>   | <b>265</b>    | <b>24</b>   | <b>300</b>    | <b>26</b>   | <b>284</b>    | <b>23</b>   | <b>305</b>    | <b>23</b>   | <b>297</b>    | <b>21</b>   | <b>290</b>    | <b>20</b>   |
| <b>Males</b>                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>663</b>    | <b>39</b>   | <b>622</b>    | <b>37</b>   | <b>723</b>    | <b>41</b>   | <b>659</b>    | <b>36</b>   | <b>613</b>    | <b>33</b>   | <b>580</b>    | <b>32</b>   | <b>612</b>    | <b>34</b>   | <b>532</b>    | <b>28</b>   | <b>541</b>    | <b>28</b>   | <b>528</b>    | <b>26</b>   |
| <b>Hispanic</b>               | <b>161</b>    | <b>30</b>   | <b>180</b>    | <b>34</b>   | <b>182</b>    | <b>33</b>   | <b>189</b>    | <b>29</b>   | <b>174</b>    | <b>26</b>   | <b>208</b>    | <b>29</b>   | <b>198</b>    | <b>26</b>   | <b>197</b>    | <b>24</b>   | <b>192</b>    | <b>22</b>   | <b>232</b>    | <b>23</b>   |
| <b>Black</b>                  | <b>114</b>    | <b>42</b>   | <b>120</b>    | <b>51</b>   | <b>124</b>    | <b>46</b>   | <b>139</b>    | <b>51</b>   | <b>100</b>    | <b>37</b>   | <b>103</b>    | <b>36</b>   | <b>117</b>    | <b>42</b>   | <b>134</b>    | <b>45</b>   | <b>119</b>    | <b>38</b>   | <b>100</b>    | <b>31</b>   |
| <b>Asian/Pacific Islander</b> | <b>119</b>    | <b>33</b>   | <b>140</b>    | <b>40</b>   | <b>120</b>    | <b>31</b>   | <b>130</b>    | <b>31</b>   | <b>118</b>    | <b>26</b>   | <b>161</b>    | <b>34</b>   | <b>152</b>    | <b>30</b>   | <b>154</b>    | <b>29</b>   | <b>135</b>    | <b>24</b>   | <b>148</b>    | <b>25</b>   |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>945</b>    | <b>31</b>   | <b>866</b>    | <b>29</b>   | <b>872</b>    | <b>29</b>   | <b>816</b>    | <b>27</b>   | <b>717</b>    | <b>24</b>   | <b>758</b>    | <b>25</b>   | <b>702</b>    | <b>23</b>   | <b>666</b>    | <b>22</b>   | <b>662</b>    | <b>20</b>   | <b>548</b>    | <b>18</b>   |
| <b>Hispanic</b>               | <b>205</b>    | <b>24</b>   | <b>218</b>    | <b>25</b>   | <b>201</b>    | <b>22</b>   | <b>222</b>    | <b>22</b>   | <b>234</b>    | <b>22</b>   | <b>240</b>    | <b>21</b>   | <b>231</b>    | <b>19</b>   | <b>221</b>    | <b>17</b>   | <b>238</b>    | <b>18</b>   | <b>260</b>    | <b>18</b>   |
| <b>Black</b>                  | <b>141</b>    | <b>31</b>   | <b>150</b>    | <b>33</b>   | <b>145</b>    | <b>31</b>   | <b>132</b>    | <b>28</b>   | <b>157</b>    | <b>32</b>   | <b>135</b>    | <b>27</b>   | <b>129</b>    | <b>26</b>   | <b>125</b>    | <b>25</b>   | <b>113</b>    | <b>22</b>   | <b>123</b>    | <b>23</b>   |
| <b>Asian/Pacific Islander</b> | <b>120</b>    | <b>25</b>   | <b>119</b>    | <b>23</b>   | <b>116</b>    | <b>21</b>   | <b>120</b>    | <b>20</b>   | <b>147</b>    | <b>23</b>   | <b>139</b>    | <b>20</b>   | <b>132</b>    | <b>18</b>   | <b>151</b>    | <b>19</b>   | <b>162</b>    | <b>19</b>   | <b>142</b>    | <b>16</b>   |
| <b>SPA 1: Antelope Valley</b> | <b>53</b>     | <b>30</b>   | <b>61</b>     | <b>33</b>   | <b>69</b>     | <b>35</b>   | <b>72</b>     | <b>37</b>   | <b>50</b>     | <b>25</b>   | <b>68</b>     | <b>35</b>   | <b>70</b>     | <b>32</b>   | <b>51</b>     | <b>22</b>   | <b>51</b>     | <b>21</b>   | <b>59</b>     | <b>23</b>   |
| <b>SPA 2: San Fernando</b>    | <b>495</b>    | <b>29</b>   | <b>496</b>    | <b>30</b>   | <b>529</b>    | <b>31</b>   | <b>521</b>    | <b>29</b>   | <b>500</b>    | <b>28</b>   | <b>472</b>    | <b>25</b>   | <b>454</b>    | <b>24</b>   | <b>407</b>    | <b>21</b>   | <b>415</b>    | <b>20</b>   | <b>414</b>    | <b>19</b>   |
| <b>SPA 3: San Gabriel</b>     | <b>515</b>    | <b>35</b>   | <b>529</b>    | <b>36</b>   | <b>483</b>    | <b>31</b>   | <b>467</b>    | <b>29</b>   | <b>488</b>    | <b>29</b>   | <b>477</b>    | <b>28</b>   | <b>409</b>    | <b>24</b>   | <b>454</b>    | <b>25</b>   | <b>449</b>    | <b>24</b>   | <b>404</b>    | <b>21</b>   |
| <b>SPA 4: Metro</b>           | <b>344</b>    | <b>36</b>   | <b>335</b>    | <b>35</b>   | <b>344</b>    | <b>34</b>   | <b>350</b>    | <b>34</b>   | <b>293</b>    | <b>28</b>   | <b>319</b>    | <b>29</b>   | <b>302</b>    | <b>28</b>   | <b>294</b>    | <b>25</b>   | <b>255</b>    | <b>21</b>   | <b>256</b>    | <b>21</b>   |
| <b>SPA 5: West</b>            | <b>239</b>    | <b>33</b>   | <b>206</b>    | <b>29</b>   | <b>230</b>    | <b>31</b>   | <b>212</b>    | <b>28</b>   | <b>184</b>    | <b>24</b>   | <b>188</b>    | <b>24</b>   | <b>188</b>    | <b>24</b>   | <b>184</b>    | <b>23</b>   | <b>218</b>    | <b>26</b>   | <b>162</b>    | <b>19</b>   |
| <b>SPA 6: South</b>           | <b>212</b>    | <b>38</b>   | <b>204</b>    | <b>37</b>   | <b>192</b>    | <b>33</b>   | <b>183</b>    | <b>30</b>   | <b>183</b>    | <b>29</b>   | <b>181</b>    | <b>28</b>   | <b>202</b>    | <b>31</b>   | <b>195</b>    | <b>29</b>   | <b>188</b>    | <b>27</b>   | <b>178</b>    | <b>25</b>   |
| <b>SPA 7: East</b>            | <b>292</b>    | <b>32</b>   | <b>259</b>    | <b>29</b>   | <b>262</b>    | <b>27</b>   | <b>253</b>    | <b>25</b>   | <b>262</b>    | <b>25</b>   | <b>2,586</b>  | <b>23</b>   | <b>284</b>    | <b>26</b>   | <b>239</b>    | <b>20</b>   | <b>248</b>    | <b>21</b>   | <b>263</b>    | <b>22</b>   |
| <b>SPA 8: South Bay</b>       | <b>318</b>    | <b>27</b>   | <b>316</b>    | <b>28</b>   | <b>375</b>    | <b>31</b>   | <b>350</b>    | <b>28</b>   | <b>298</b>    | <b>23</b>   | <b>360</b>    | <b>27</b>   | <b>366</b>    | <b>28</b>   | <b>354</b>    | <b>25</b>   | <b>343</b>    | <b>23</b>   | <b>360</b>    | <b>24</b>   |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.

# Stroke

8th cause of premature death

2th 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 highest stroke death rates were among blacks, but the rates have decreased substantially during the last decade and reached Healthy People 2010 levels for the first time in 2009. The overall stroke death rate has been below the Healthy People 2010 goal since 2004.

## 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, physical inactivity, 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 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
- Eat a diet low in fat and salt
- Learn the stroke warning signs

## LOS ANGELES COUNTY

|            |                                  |
|------------|----------------------------------|
| Deaths     | 3,301                            |
| Death Rate | 34 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 (1999-2009) | I60-I69 |
|--------------------------|---------|

|            |  |
|------------|--|
| References | <b>American Stroke Association</b><br><a href="http://www.strokeassociation.org">www.strokeassociation.org</a><br><b>National Institute of Neurological Disorders and Stroke</b><br><a href="http://www.ninds.nih.gov/disorders/stroke">www.ninds.nih.gov/disorders/stroke</a> |
|------------|--|

|          |   |
|----------|---|
| Referral | <b>Los Angeles County Division of the American Heart Association:</b><br>213-291-7000 |
|----------|---|



Figure T16. Trends in stroke mortality

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>4,410</b>  | <b>57</b>   | <b>4,259</b>  | <b>56</b>   | <b>4,169</b>  | <b>52</b>   | <b>4,249</b>  | <b>51</b>   | <b>4,121</b>  | <b>49</b>   | <b>3,775</b>  | <b>43</b>   | <b>3,622</b>  | <b>41</b>   | <b>3,323</b>  | <b>36</b>   | <b>3,280</b>  | <b>34</b>   | <b>3,301</b>  | <b>34</b>   |
| <b>Males</b>                  | <b>1,816</b>  | <b>60</b>   | <b>1,691</b>  | <b>56</b>   | <b>1,701</b>  | <b>54</b>   | <b>1,754</b>  | <b>53</b>   | <b>1,718</b>  | <b>51</b>   | <b>1,554</b>  | <b>45</b>   | <b>1,501</b>  | <b>42</b>   | <b>1,409</b>  | <b>37</b>   | <b>1,373</b>  | <b>35</b>   | <b>1,399</b>  | <b>35</b>   |
| <b>Females</b>                | <b>2,594</b>  | <b>55</b>   | <b>2,568</b>  | <b>55</b>   | <b>2,468</b>  | <b>51</b>   | <b>2,495</b>  | <b>49</b>   | <b>2,403</b>  | <b>47</b>   | <b>2,221</b>  | <b>42</b>   | <b>2,121</b>  | <b>40</b>   | <b>1,914</b>  | <b>34</b>   | <b>1,907</b>  | <b>33</b>   | <b>1,902</b>  | <b>32</b>   |
| <b>White</b>                  | <b>2,599</b>  | <b>57</b>   | <b>2,483</b>  | <b>55</b>   | <b>2,382</b>  | <b>51</b>   | <b>2,441</b>  | <b>52</b>   | <b>2,234</b>  | <b>47</b>   | <b>1,962</b>  | <b>41</b>   | <b>1,817</b>  | <b>39</b>   | <b>1,587</b>  | <b>33</b>   | <b>1,552</b>  | <b>31</b>   | <b>1,623</b>  | <b>32</b>   |
| <b>Hispanic</b>               | <b>717</b>    | <b>46</b>   | <b>708</b>    | <b>44</b>   | <b>711</b>    | <b>42</b>   | <b>755</b>    | <b>41</b>   | <b>785</b>    | <b>42</b>   | <b>782</b>    | <b>38</b>   | <b>779</b>    | <b>36</b>   | <b>742</b>    | <b>32</b>   | <b>749</b>    | <b>31</b>   | <b>733</b>    | <b>29</b>   |
| <b>Black</b>                  | <b>618</b>    | <b>84</b>   | <b>591</b>    | <b>82</b>   | <b>589</b>    | <b>79</b>   | <b>584</b>    | <b>76</b>   | <b>572</b>    | <b>74</b>   | <b>530</b>    | <b>66</b>   | <b>495</b>    | <b>61</b>   | <b>516</b>    | <b>62</b>   | <b>469</b>    | <b>55</b>   | <b>433</b>    | <b>50</b>   |
| <b>Asian/Pacific Islander</b> | <b>465</b>    | <b>49</b>   | <b>472</b>    | <b>49</b>   | <b>473</b>    | <b>46</b>   | <b>462</b>    | <b>43</b>   | <b>513</b>    | <b>44</b>   | <b>489</b>    | <b>40</b>   | <b>522</b>    | <b>41</b>   | <b>469</b>    | <b>34</b>   | <b>496</b>    | <b>34</b>   | <b>504</b>    | <b>34</b>   |
| <b>Males</b>                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>1,005</b>  | <b>58</b>   | <b>923</b>    | <b>54</b>   | <b>932</b>    | <b>53</b>   | <b>918</b>    | <b>51</b>   | <b>881</b>    | <b>48</b>   | <b>770</b>    | <b>42</b>   | <b>704</b>    | <b>39</b>   | <b>645</b>    | <b>34</b>   | <b>603</b>    | <b>31</b>   | <b>668</b>    | <b>33</b>   |
| <b>Hispanic</b>               | <b>343</b>    | <b>54</b>   | <b>322</b>    | <b>48</b>   | <b>326</b>    | <b>48</b>   | <b>342</b>    | <b>44</b>   | <b>364</b>    | <b>47</b>   | <b>360</b>    | <b>43</b>   | <b>356</b>    | <b>38</b>   | <b>338</b>    | <b>33</b>   | <b>343</b>    | <b>32</b>   | <b>325</b>    | <b>29</b>   |
| <b>Black</b>                  | <b>247</b>    | <b>85</b>   | <b>232</b>    | <b>82</b>   | <b>227</b>    | <b>77</b>   | <b>248</b>    | <b>84</b>   | <b>208</b>    | <b>71</b>   | <b>206</b>    | <b>67</b>   | <b>202</b>    | <b>61</b>   | <b>209</b>    | <b>62</b>   | <b>194</b>    | <b>57</b>   | <b>170</b>    | <b>49</b>   |
| <b>Asian/Pacific Islander</b> | <b>216</b>    | <b>52</b>   | <b>212</b>    | <b>51</b>   | <b>209</b>    | <b>48</b>   | <b>242</b>    | <b>82</b>   | <b>260</b>    | <b>53</b>   | <b>216</b>    | <b>42</b>   | <b>235</b>    | <b>43</b>   | <b>211</b>    | <b>35</b>   | <b>223</b>    | <b>37</b>   | <b>235</b>    | <b>38</b>   |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>1,594</b>  | <b>55</b>   | <b>1,560</b>  | <b>55</b>   | <b>1,450</b>  | <b>50</b>   | <b>1,523</b>  | <b>51</b>   | <b>1,353</b>  | <b>46</b>   | <b>1,192</b>  | <b>40</b>   | <b>1,113</b>  | <b>38</b>   | <b>942</b>    | <b>32</b>   | <b>949</b>    | <b>30</b>   | <b>955</b>    | <b>31</b>   |
| <b>Hispanic</b>               | <b>374</b>    | <b>41</b>   | <b>386</b>    | <b>41</b>   | <b>385</b>    | <b>38</b>   | <b>413</b>    | <b>39</b>   | <b>421</b>    | <b>38</b>   | <b>422</b>    | <b>35</b>   | <b>423</b>    | <b>33</b>   | <b>404</b>    | <b>30</b>   | <b>406</b>    | <b>29</b>   | <b>408</b>    | <b>28</b>   |
| <b>Black</b>                  | <b>371</b>    | <b>81</b>   | <b>359</b>    | <b>80</b>   | <b>362</b>    | <b>78</b>   | <b>336</b>    | <b>69</b>   | <b>364</b>    | <b>75</b>   | <b>324</b>    | <b>65</b>   | <b>293</b>    | <b>59</b>   | <b>307</b>    | <b>60</b>   | <b>275</b>    | <b>53</b>   | <b>263</b>    | <b>49</b>   |
| <b>Asian/Pacific Islander</b> | <b>249</b>    | <b>47</b>   | <b>260</b>    | <b>47</b>   | <b>264</b>    | <b>44</b>   | <b>220</b>    | <b>35</b>   | <b>253</b>    | <b>38</b>   | <b>273</b>    | <b>39</b>   | <b>287</b>    | <b>39</b>   | <b>258</b>    | <b>32</b>   | <b>273</b>    | <b>32</b>   | <b>269</b>    | <b>31</b>   |
| <b>SPA 1: Antelope Valley</b> | <b>124</b>    | <b>66</b>   | <b>110</b>    | <b>58</b>   | <b>106</b>    | <b>52</b>   | <b>131</b>    | <b>65</b>   | <b>125</b>    | <b>61</b>   | <b>124</b>    | <b>60</b>   | <b>125</b>    | <b>56</b>   | <b>110</b>    | <b>45</b>   | <b>120</b>    | <b>48</b>   | <b>94</b>     | <b>37</b>   |
| <b>SPA 2: San Fernando</b>    | <b>887</b>    | <b>53</b>   | <b>866</b>    | <b>52</b>   | <b>840</b>    | <b>48</b>   | <b>898</b>    | <b>50</b>   | <b>905</b>    | <b>50</b>   | <b>734</b>    | <b>40</b>   | <b>758</b>    | <b>40</b>   | <b>623</b>    | <b>32</b>   | <b>628</b>    | <b>30</b>   | <b>690</b>    | <b>32</b>   |
| <b>SPA 3: San Gabriel</b>     | <b>784</b>    | <b>52</b>   | <b>749</b>    | <b>50</b>   | <b>806</b>    | <b>52</b>   | <b>822</b>    | <b>51</b>   | <b>756</b>    | <b>45</b>   | <b>729</b>    | <b>43</b>   | <b>679</b>    | <b>39</b>   | <b>608</b>    | <b>33</b>   | <b>629</b>    | <b>33</b>   | <b>694</b>    | <b>36</b>   |
| <b>SPA 4: Metro</b>           | <b>485</b>    | <b>51</b>   | <b>475</b>    | <b>50</b>   | <b>462</b>    | <b>47</b>   | <b>453</b>    | <b>44</b>   | <b>426</b>    | <b>41</b>   | <b>374</b>    | <b>35</b>   | <b>400</b>    | <b>37</b>   | <b>358</b>    | <b>32</b>   | <b>367</b>    | <b>32</b>   | <b>344</b>    | <b>29</b>   |
| <b>SPA 5: West</b>            | <b>383</b>    | <b>53</b>   | <b>368</b>    | <b>51</b>   | <b>379</b>    | <b>52</b>   | <b>342</b>    | <b>45</b>   | <b>321</b>    | <b>42</b>   | <b>332</b>    | <b>43</b>   | <b>258</b>    | <b>34</b>   | <b>251</b>    | <b>32</b>   | <b>262</b>    | <b>33</b>   | <b>232</b>    | <b>28</b>   |
| <b>SPA 6: South</b>           | <b>455</b>    | <b>80</b>   | <b>434</b>    | <b>76</b>   | <b>403</b>    | <b>67</b>   | <b>401</b>    | <b>65</b>   | <b>407</b>    | <b>65</b>   | <b>376</b>    | <b>58</b>   | <b>349</b>    | <b>52</b>   | <b>377</b>    | <b>55</b>   | <b>355</b>    | <b>51</b>   | <b>323</b>    | <b>46</b>   |
| <b>SPA 7: East</b>            | <b>527</b>    | <b>57</b>   | <b>493</b>    | <b>53</b>   | <b>513</b>    | <b>52</b>   | <b>479</b>    | <b>46</b>   | <b>499</b>    | <b>47</b>   | <b>460</b>    | <b>42</b>   | <b>421</b>    | <b>38</b>   | <b>435</b>    | <b>37</b>   | <b>378</b>    | <b>32</b>   | <b>411</b>    | <b>34</b>   |
| <b>SPA 8: South Bay</b>       | <b>745</b>    | <b>63</b>   | <b>733</b>    | <b>62</b>   | <b>651</b>    | <b>64</b>   | <b>676</b>    | <b>64</b>   | <b>635</b>    | <b>49</b>   | <b>638</b>    | <b>48</b>   | <b>600</b>    | <b>44</b>   | <b>535</b>    | <b>37</b>   | <b>519</b>    | <b>35</b>   | <b>510</b>    | <b>33</b>   |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.

***SUICIDE** has been the fourth-, fifth-, or sixth-leading cause of premature death for each of the past 10 years. In 2009, it was the third-leading cause of death for 15- to 24-year-olds and 25- to 44-year-olds. Hanging and firearms were the most frequent mechanisms among these two groups. Overall, death rates from suicide were higher for men than women, and highest for white men. For the first time in 10 years, the number of suicides 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

**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
- Respond to threats of self-harm and do not leave a suicidal person alone

**LOS ANGELES COUNTY**

Deaths 775  
Death Rate 7.5 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 (1999-2009) \*U03, X60-X84, Y87.0

References **National Institute of Mental Health**  
[www.nimh.nih.gov](http://www.nimh.nih.gov)  
**National Mental Health Information Center**  
[www.mentalhealth.samhsa.gov](http://www.mentalhealth.samhsa.gov)

Referral **Didi Hirsch Community Mental Health Center Suicide Prevention Center:**  
1-877-7-CRISIS

Figure T17. Trends in suicide mortality

|                               | 2000          |             | 2001          |             | 2002          |             | 2003          |             | 2004          |             | 2005          |             | 2006          |             | 2007          |             | 2008          |             | 2009          |             |
|-------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
|                               | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* | No. of deaths | Death rate* |
| <b>Los Angeles County</b>     | <b>711</b>    | <b>8</b>    | <b>762</b>    | <b>8</b>    | <b>727</b>    | <b>8</b>    | <b>727</b>    | <b>8</b>    | <b>696</b>    | <b>7</b>    | <b>695</b>    | <b>7</b>    | <b>662</b>    | <b>7</b>    | <b>667</b>    | <b>7</b>    | <b>802</b>    | <b>8</b>    | <b>775</b>    | <b>7</b>    |
| <b>Males</b>                  | <b>562</b>    | <b>14</b>   | <b>608</b>    | <b>14</b>   | <b>564</b>    | <b>13</b>   | <b>582</b>    | <b>13</b>   | <b>537</b>    | <b>12</b>   | <b>524</b>    | <b>11</b>   | <b>506</b>    | <b>11</b>   | <b>529</b>    | <b>11</b>   | <b>620</b>    | <b>13</b>   | <b>580</b>    | <b>12</b>   |
| <b>Females</b>                | <b>149</b>    | <b>3</b>    | <b>154</b>    | <b>3</b>    | <b>163</b>    | <b>3</b>    | <b>145</b>    | <b>3</b>    | <b>159</b>    | <b>3</b>    | <b>171</b>    | <b>3</b>    | <b>156</b>    | <b>3</b>    | <b>138</b>    | <b>3</b>    | <b>182</b>    | <b>3</b>    | <b>195</b>    | <b>4</b>    |
| <b>White</b>                  | <b>434</b>    | <b>12</b>   | <b>443</b>    | <b>13</b>   | <b>401</b>    | <b>11</b>   | <b>442</b>    | <b>12</b>   | <b>379</b>    | <b>11</b>   | <b>388</b>    | <b>11</b>   | <b>367</b>    | <b>10</b>   | <b>374</b>    | <b>10</b>   | <b>478</b>    | <b>13</b>   | <b>449</b>    | <b>12</b>   |
| <b>Hispanic</b>               | <b>155</b>    | <b>4</b>    | <b>188</b>    | <b>5</b>    | <b>171</b>    | <b>4</b>    | <b>163</b>    | <b>4</b>    | <b>182</b>    | <b>4</b>    | <b>172</b>    | <b>4</b>    | <b>165</b>    | <b>4</b>    | <b>161</b>    | <b>4</b>    | <b>160</b>    | <b>4</b>    | <b>173</b>    | <b>4</b>    |
| <b>Black</b>                  | <b>57</b>     | <b>6</b>    | <b>51</b>     | <b>5</b>    | <b>72</b>     | <b>8</b>    | <b>55</b>     | <b>6</b>    | <b>42</b>     | <b>4</b>    | <b>50</b>     | <b>5</b>    | <b>47</b>     | <b>5</b>    | <b>48</b>     | <b>5</b>    | <b>65</b>     | <b>7</b>    | <b>47</b>     | <b>5</b>    |
| <b>Asian/Pacific Islander</b> | <b>61</b>     | <b>5</b>    | <b>78</b>     | <b>6</b>    | <b>81</b>     | <b>6</b>    | <b>65</b>     | <b>5</b>    | <b>92</b>     | <b>7</b>    | <b>81</b>     | <b>6</b>    | <b>82</b>     | <b>6</b>    | <b>80</b>     | <b>6</b>    | <b>93</b>     | <b>6</b>    | <b>101</b>    | <b>6</b>    |
| <b>Males</b>                  |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>337</b>    | <b>20</b>   | <b>350</b>    | <b>20</b>   | <b>297</b>    | <b>17</b>   | <b>342</b>    | <b>20</b>   | <b>284</b>    | <b>16</b>   | <b>286</b>    | <b>16</b>   | <b>279</b>    | <b>16</b>   | <b>297</b>    | <b>17</b>   | <b>363</b>    | <b>20</b>   | <b>329</b>    | <b>18</b>   |
| <b>Hispanic</b>               | <b>130</b>    | <b>8</b>    | <b>161</b>    | <b>9</b>    | <b>151</b>    | <b>8</b>    | <b>148</b>    | <b>8</b>    | <b>154</b>    | <b>8</b>    | <b>146</b>    | <b>6</b>    | <b>133</b>    | <b>6</b>    | <b>137</b>    | <b>7</b>    | <b>132</b>    | <b>6</b>    | <b>142</b>    | <b>6</b>    |
| <b>Black</b>                  | <b>44</b>     | <b>11</b>   | <b>40</b>     | <b>9</b>    | <b>55</b>     | <b>14</b>   | <b>45</b>     | <b>11</b>   | <b>32</b>     | <b>8</b>    | <b>37</b>     | <b>9</b>    | <b>40</b>     | <b>10</b>   | <b>38</b>     | <b>9</b>    | <b>52</b>     | <b>12</b>   | <b>33</b>     | <b>8</b>    |
| <b>Asian/Pacific Islander</b> | <b>47</b>     | <b>9</b>    | <b>56</b>     | <b>10</b>   | <b>59</b>     | <b>10</b>   | <b>45</b>     | <b>7</b>    | <b>67</b>     | <b>10</b>   | <b>54</b>     | <b>8</b>    | <b>54</b>     | <b>8</b>    | <b>54</b>     | <b>8</b>    | <b>70</b>     | <b>10</b>   | <b>73</b>     | <b>10</b>   |
| <b>Females</b>                |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |               |             |
| <b>White</b>                  | <b>97</b>     | <b>5</b>    | <b>93</b>     | <b>5</b>    | <b>104</b>    | <b>6</b>    | <b>100</b>    | <b>6</b>    | <b>95</b>     | <b>5</b>    | <b>102</b>    | <b>6</b>    | <b>88</b>     | <b>5</b>    | <b>77</b>     | <b>4</b>    | <b>115</b>    | <b>6</b>    | <b>120</b>    | <b>7</b>    |
| <b>Hispanic</b>               | <b>25</b>     | <b>1</b>    | <b>27</b>     | <b>1</b>    | <b>20</b>     | <b>1</b>    | <b>15</b>     | <b>--</b>   | <b>28</b>     | <b>1</b>    | <b>29</b>     | <b>1</b>    | <b>32</b>     | <b>1</b>    | <b>24</b>     | <b>1</b>    | <b>28</b>     | <b>1</b>    | <b>31</b>     | <b>1</b>    |
| <b>Black</b>                  | <b>13</b>     | <b>--</b>   | <b>11</b>     | <b>--</b>   | <b>17</b>     | <b>--</b>   | <b>10</b>     | <b>--</b>   | <b>10</b>     | <b>--</b>   | <b>13</b>     | <b>--</b>   | <b>7</b>      | <b>--</b>   | <b>10</b>     | <b>--</b>   | <b>13</b>     | <b>--</b>   | <b>14</b>     | <b>--</b>   |
| <b>Asian/Pacific Islander</b> | <b>14</b>     | <b>--</b>   | <b>22</b>     | <b>3</b>    | <b>22</b>     | <b>3</b>    | <b>20</b>     | <b>3</b>    | <b>25</b>     | <b>3</b>    | <b>27</b>     | <b>4</b>    | <b>28</b>     | <b>4</b>    | <b>26</b>     | <b>3</b>    | <b>23</b>     | <b>3</b>    | <b>28</b>     | <b>3</b>    |
| <b>SPA 1: Antelope Valley</b> | <b>35</b>     | <b>13</b>   | <b>32</b>     | <b>12</b>   | <b>37</b>     | <b>14</b>   | <b>37</b>     | <b>13</b>   | <b>35</b>     | <b>11</b>   | <b>34</b>     | <b>12</b>   | <b>37</b>     | <b>11</b>   | <b>27</b>     | <b>8</b>    | <b>48</b>     | <b>14</b>   | <b>29</b>     | <b>9</b>    |
| <b>SPA 2: San Fernando</b>    | <b>165</b>    | <b>9</b>    | <b>177</b>    | <b>9</b>    | <b>148</b>    | <b>7</b>    | <b>162</b>    | <b>8</b>    | <b>159</b>    | <b>8</b>    | <b>154</b>    | <b>7</b>    | <b>145</b>    | <b>7</b>    | <b>168</b>    | <b>8</b>    | <b>193</b>    | <b>9</b>    | <b>192</b>    | <b>8</b>    |
| <b>SPA 3: San Gabriel</b>     | <b>124</b>    | <b>8</b>    | <b>131</b>    | <b>8</b>    | <b>125</b>    | <b>7</b>    | <b>110</b>    | <b>6</b>    | <b>118</b>    | <b>7</b>    | <b>122</b>    | <b>7</b>    | <b>118</b>    | <b>6</b>    | <b>106</b>    | <b>6</b>    | <b>101</b>    | <b>5</b>    | <b>128</b>    | <b>7</b>    |
| <b>SPA 4: Metro</b>           | <b>89</b>     | <b>8</b>    | <b>98</b>     | <b>8</b>    | <b>97</b>     | <b>9</b>    | <b>97</b>     | <b>8</b>    | <b>78</b>     | <b>7</b>    | <b>89</b>     | <b>7</b>    | <b>81</b>     | <b>6</b>    | <b>88</b>     | <b>7</b>    | <b>99</b>     | <b>8</b>    | <b>101</b>    | <b>8</b>    |
| <b>SPA 5: West</b>            | <b>66</b>     | <b>10</b>   | <b>54</b>     | <b>8</b>    | <b>61</b>     | <b>9</b>    | <b>65</b>     | <b>10</b>   | <b>59</b>     | <b>8</b>    | <b>70</b>     | <b>10</b>   | <b>56</b>     | <b>8</b>    | <b>53</b>     | <b>7</b>    | <b>82</b>     | <b>11</b>   | <b>79</b>     | <b>11</b>   |
| <b>SPA 6: South</b>           | <b>46</b>     | <b>5</b>    | <b>44</b>     | <b>5</b>    | <b>44</b>     | <b>5</b>    | <b>41</b>     | <b>4</b>    | <b>46</b>     | <b>5</b>    | <b>33</b>     | <b>3</b>    | <b>46</b>     | <b>5</b>    | <b>38</b>     | <b>4</b>    | <b>48</b>     | <b>5</b>    | <b>33</b>     | <b>3</b>    |
| <b>SPA 7: East</b>            | <b>76</b>     | <b>7</b>    | <b>82</b>     | <b>7</b>    | <b>70</b>     | <b>6</b>    | <b>80</b>     | <b>6</b>    | <b>67</b>     | <b>5</b>    | <b>67</b>     | <b>5</b>    | <b>57</b>     | <b>4</b>    | <b>65</b>     | <b>5</b>    | <b>72</b>     | <b>6</b>    | <b>93</b>     | <b>7</b>    |
| <b>SPA 8: South Bay</b>       | <b>101</b>    | <b>7</b>    | <b>134</b>    | <b>9</b>    | <b>131</b>    | <b>9</b>    | <b>114</b>    | <b>8</b>    | <b>112</b>    | <b>7</b>    | <b>113</b>    | <b>7</b>    | <b>105</b>    | <b>7</b>    | <b>105</b>    | <b>7</b>    | <b>143</b>    | <b>9</b>    | <b>109</b>    | <b>7</b>    |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.

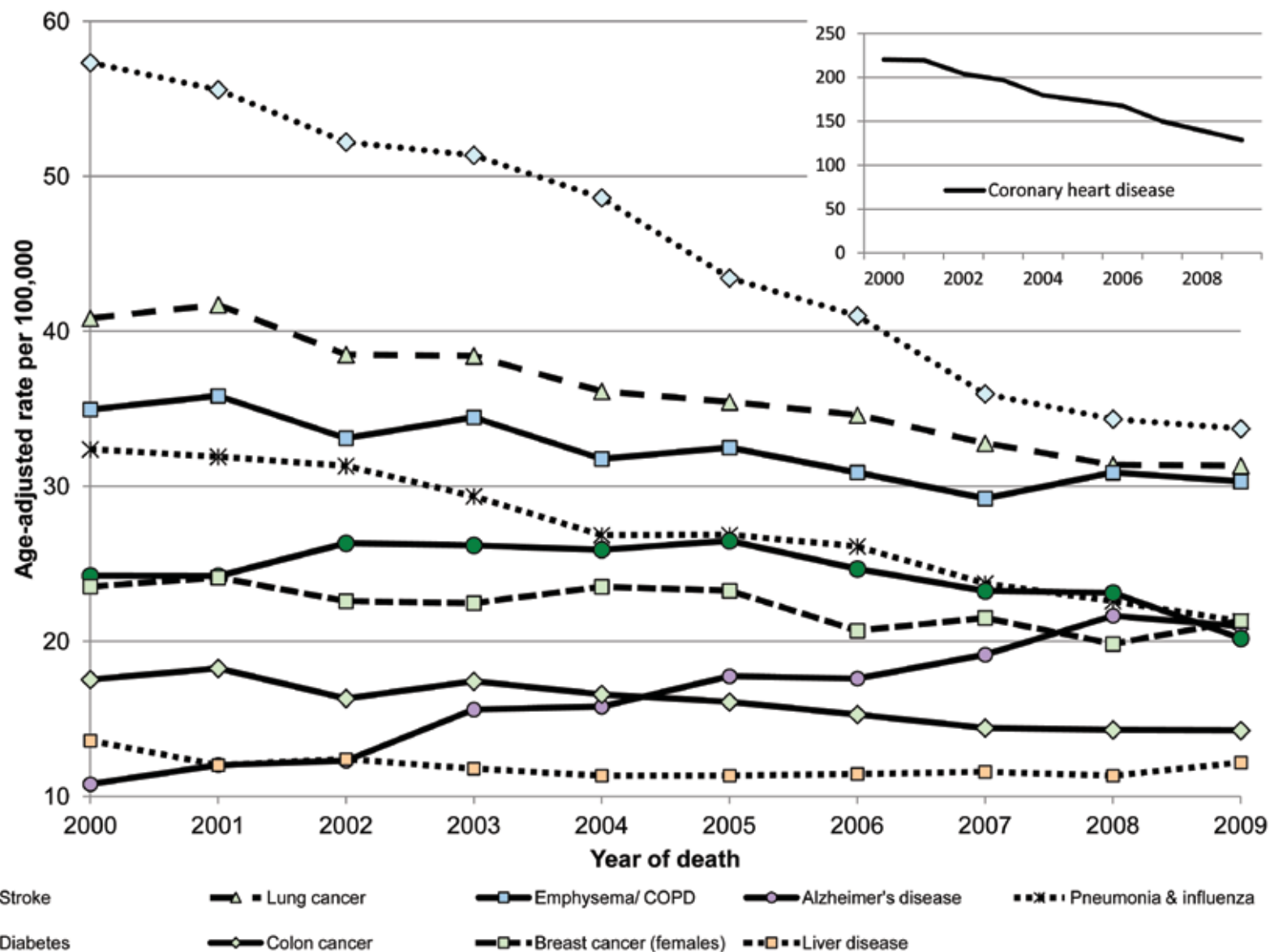
Figure T18. Trends in mortality from all causes of death

|                               | 2000          |              | 2001          |              | 2002          |              | 2003          |              | 2004          |              | 2005          |              | 2006          |              | 2007          |              | 2008          |              | 2009          |              |
|-------------------------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|
|                               | No. of deaths | Death rate*  | No. of deaths | Death rate*  | No. of deaths | Death rate*  | No. of deaths | Death rate*  | No. of deaths | Death rate*  | No. of deaths | Death rate*  | No. of deaths | Death rate*  | No. of deaths | Death rate*  | No. of deaths | Death rate*  | No. of deaths | Death rate*  |
| <b>Los Angeles County</b>     | <b>59,032</b> | <b>749</b>   | <b>59,774</b> | <b>756</b>   | <b>59,586</b> | <b>726</b>   | <b>61,026</b> | <b>721</b>   | <b>59,153</b> | <b>682</b>   | <b>60,145</b> | <b>679</b>   | <b>59,461</b> | <b>661</b>   | <b>58,316</b> | <b>624</b>   | <b>58,043</b> | <b>601</b>   | <b>57,620</b> | <b>583</b>   |
| <b>Males</b>                  | <b>29,660</b> | <b>902</b>   | <b>29,968</b> | <b>908</b>   | <b>29,968</b> | <b>871</b>   | <b>30,907</b> | <b>867</b>   | <b>29,839</b> | <b>818</b>   | <b>30,308</b> | <b>812</b>   | <b>30,035</b> | <b>793</b>   | <b>29,630</b> | <b>753</b>   | <b>29,402</b> | <b>722</b>   | <b>29,342</b> | <b>703</b>   |
| <b>Females</b>                | <b>29,372</b> | <b>630</b>   | <b>29,806</b> | <b>637</b>   | <b>29,618</b> | <b>610</b>   | <b>30,119</b> | <b>599</b>   | <b>29,314</b> | <b>575</b>   | <b>29,837</b> | <b>572</b>   | <b>29,426</b> | <b>556</b>   | <b>28,686</b> | <b>522</b>   | <b>28,641</b> | <b>504</b>   | <b>28,278</b> | <b>488</b>   |
| <b>White</b>                  | <b>34,697</b> | <b>804</b>   | <b>34,189</b> | <b>801</b>   | <b>33,672</b> | <b>773</b>   | <b>34,105</b> | <b>772</b>   | <b>32,324</b> | <b>727</b>   | <b>32,101</b> | <b>716</b>   | <b>31,376</b> | <b>705</b>   | <b>30,593</b> | <b>673</b>   | <b>30,149</b> | <b>643</b>   | <b>29,622</b> | <b>621</b>   |
| <b>Hispanic</b>               | <b>11,107</b> | <b>594</b>   | <b>11,879</b> | <b>622</b>   | <b>11,969</b> | <b>588</b>   | <b>12,803</b> | <b>594</b>   | <b>12,632</b> | <b>561</b>   | <b>13,574</b> | <b>573</b>   | <b>13,783</b> | <b>556</b>   | <b>13,429</b> | <b>506</b>   | <b>13,591</b> | <b>500</b>   | <b>13,671</b> | <b>493</b>   |
| <b>Black</b>                  | <b>8,258</b>  | <b>1,073</b> | <b>8,447</b>  | <b>1,101</b> | <b>8,482</b>  | <b>1,076</b> | <b>8,517</b>  | <b>1,059</b> | <b>8,372</b>  | <b>1,024</b> | <b>8,413</b>  | <b>1,016</b> | <b>8,185</b>  | <b>985</b>   | <b>8,023</b>  | <b>940</b>   | <b>7,697</b>  | <b>879</b>   | <b>7,825</b>  | <b>874</b>   |
| <b>Asian/Pacific Islander</b> | <b>4,787</b>  | <b>494</b>   | <b>5,085</b>  | <b>211</b>   | <b>5,255</b>  | <b>496</b>   | <b>5,352</b>  | <b>476</b>   | <b>5,591</b>  | <b>473</b>   | <b>5,820</b>  | <b>468</b>   | <b>5,884</b>  | <b>454</b>   | <b>6,088</b>  | <b>440</b>   | <b>6,354</b>  | <b>438</b>   | <b>6,267</b>  | <b>419</b>   |
| <b>Males</b>                  |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               |              |
| <b>White</b>                  | <b>16,577</b> | <b>950</b>   | <b>16,360</b> | <b>946</b>   | <b>16,171</b> | <b>912</b>   | <b>16,454</b> | <b>911</b>   | <b>15,615</b> | <b>856</b>   | <b>15,336</b> | <b>836</b>   | <b>15,182</b> | <b>831</b>   | <b>14,872</b> | <b>797</b>   | <b>14,768</b> | <b>764</b>   | <b>14,553</b> | <b>735</b>   |
| <b>Hispanic</b>               | <b>6,179</b>  | <b>742</b>   | <b>6,446</b>  | <b>758</b>   | <b>6,596</b>  | <b>723</b>   | <b>7,100</b>  | <b>731</b>   | <b>6,950</b>  | <b>691</b>   | <b>7,517</b>  | <b>712</b>   | <b>7,440</b>  | <b>673</b>   | <b>7,370</b>  | <b>617</b>   | <b>7,316</b>  | <b>601</b>   | <b>7,433</b>  | <b>604</b>   |
| <b>Black</b>                  | <b>4,217</b>  | <b>1,348</b> | <b>4,356</b>  | <b>1,402</b> | <b>4,338</b>  | <b>1,345</b> | <b>4,365</b>  | <b>1,322</b> | <b>4,224</b>  | <b>1,267</b> | <b>4,321</b>  | <b>1,274</b> | <b>4,181</b>  | <b>1,238</b> | <b>4,078</b>  | <b>1,172</b> | <b>3,871</b>  | <b>1,087</b> | <b>3,961</b>  | <b>1,083</b> |
| <b>Asian/Pacific Islander</b> | <b>2,593</b>  | <b>610</b>   | <b>2,714</b>  | <b>625</b>   | <b>2,744</b>  | <b>594</b>   | <b>2,846</b>  | <b>580</b>   | <b>2,919</b>  | <b>570</b>   | <b>3,012</b>  | <b>563</b>   | <b>3,106</b>  | <b>558</b>   | <b>3,205</b>  | <b>542</b>   | <b>3,301</b>  | <b>538</b>   | <b>3,276</b>  | <b>518</b>   |
| <b>Females</b>                |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               |              |               |              |
| <b>White</b>                  | <b>18,120</b> | <b>686</b>   | <b>17,829</b> | <b>684</b>   | <b>17,501</b> | <b>661</b>   | <b>17,651</b> | <b>656</b>   | <b>16,709</b> | <b>621</b>   | <b>16,765</b> | <b>617</b>   | <b>16,194</b> | <b>601</b>   | <b>15,721</b> | <b>572</b>   | <b>15,381</b> | <b>542</b>   | <b>15,069</b> | <b>526</b>   |
| <b>Hispanic</b>               | <b>4,928</b>  | <b>484</b>   | <b>5,433</b>  | <b>521</b>   | <b>5,373</b>  | <b>486</b>   | <b>5,703</b>  | <b>487</b>   | <b>5,682</b>  | <b>462</b>   | <b>6,057</b>  | <b>482</b>   | <b>6,343</b>  | <b>466</b>   | <b>6,059</b>  | <b>416</b>   | <b>6,275</b>  | <b>419</b>   | <b>6,238</b>  | <b>408</b>   |
| <b>Black</b>                  | <b>4,041</b>  | <b>880</b>   | <b>4,091</b>  | <b>893</b>   | <b>4,144</b>  | <b>882</b>   | <b>4,152</b>  | <b>863</b>   | <b>4,148</b>  | <b>848</b>   | <b>4,092</b>  | <b>466</b>   | <b>4,004</b>  | <b>802</b>   | <b>3,945</b>  | <b>771</b>   | <b>3,826</b>  | <b>730</b>   | <b>3,864</b>  | <b>721</b>   |
| <b>Asian/Pacific Islander</b> | <b>2,194</b>  | <b>404</b>   | <b>2,371</b>  | <b>424</b>   | <b>2,511</b>  | <b>420</b>   | <b>2,506</b>  | <b>395</b>   | <b>2,672</b>  | <b>398</b>   | <b>2,808</b>  | <b>826</b>   | <b>2,778</b>  | <b>376</b>   | <b>2,883</b>  | <b>361</b>   | <b>3,053</b>  | <b>361</b>   | <b>2,991</b>  | <b>344</b>   |
| <b>SPA 1: Antelope Valley</b> | <b>1,778</b>  | <b>863</b>   | <b>1,862</b>  | <b>884</b>   | <b>1,961</b>  | <b>894</b>   | <b>2,075</b>  | <b>921</b>   | <b>1,972</b>  | <b>870</b>   | <b>2,137</b>  | <b>917</b>   | <b>2,125</b>  | <b>868</b>   | <b>2,109</b>  | <b>808</b>   | <b>2,165</b>  | <b>803</b>   | <b>2,230</b>  | <b>815</b>   |
| <b>SPA 2: San Fernando</b>    | <b>12,011</b> | <b>699</b>   | <b>12,182</b> | <b>710</b>   | <b>12,229</b> | <b>688</b>   | <b>12,670</b> | <b>698</b>   | <b>12,435</b> | <b>670</b>   | <b>12,591</b> | <b>664</b>   | <b>12,345</b> | <b>643</b>   | <b>12,018</b> | <b>603</b>   | <b>12,259</b> | <b>585</b>   | <b>12,132</b> | <b>559</b>   |
| <b>SPA 3: San Gabriel</b>     | <b>10,747</b> | <b>709</b>   | <b>10,828</b> | <b>713</b>   | <b>10,827</b> | <b>685</b>   | <b>10,895</b> | <b>664</b>   | <b>10,582</b> | <b>627</b>   | <b>11,074</b> | <b>641</b>   | <b>10,736</b> | <b>612</b>   | <b>10,569</b> | <b>577</b>   | <b>10,616</b> | <b>563</b>   | <b>10,636</b> | <b>553</b>   |
| <b>SPA 4: Metro</b>           | <b>6,817</b>  | <b>713</b>   | <b>6,864</b>  | <b>713</b>   | <b>6,726</b>  | <b>671</b>   | <b>6,866</b>  | <b>665</b>   | <b>6,516</b>  | <b>618</b>   | <b>6,687</b>  | <b>618</b>   | <b>6,540</b>  | <b>593</b>   | <b>6,340</b>  | <b>554</b>   | <b>6,210</b>  | <b>527</b>   | <b>6,032</b>  | <b>505</b>   |
| <b>SPA 5: West</b>            | <b>4,382</b>  | <b>629</b>   | <b>4,192</b>  | <b>607</b>   | <b>4,287</b>  | <b>605</b>   | <b>4,290</b>  | <b>596</b>   | <b>4,098</b>  | <b>560</b>   | <b>4,132</b>  | <b>558</b>   | <b>4,039</b>  | <b>547</b>   | <b>4,026</b>  | <b>533</b>   | <b>4,112</b>  | <b>521</b>   | <b>3,967</b>  | <b>487</b>   |
| <b>SPA 6: South</b>           | <b>5,962</b>  | <b>966</b>   | <b>6,130</b>  | <b>987</b>   | <b>6,174</b>  | <b>956</b>   | <b>6,063</b>  | <b>915</b>   | <b>6,058</b>  | <b>890</b>   | <b>6,019</b>  | <b>865</b>   | <b>5,853</b>  | <b>831</b>   | <b>5,731</b>  | <b>794</b>   | <b>5,614</b>  | <b>760</b>   | <b>5,638</b>  | <b>754</b>   |
| <b>SPA 7: East</b>            | <b>7,395</b>  | <b>769</b>   | <b>7,386</b>  | <b>763</b>   | <b>7,273</b>  | <b>719</b>   | <b>7,428</b>  | <b>701</b>   | <b>7,240</b>  | <b>662</b>   | <b>7,359</b>  | <b>658</b>   | <b>7,370</b>  | <b>647</b>   | <b>7,153</b>  | <b>605</b>   | <b>7,130</b>  | <b>593</b>   | <b>7,184</b>  | <b>590</b>   |
| <b>SPA 8: South Bay</b>       | <b>9,590</b>  | <b>783</b>   | <b>9,786</b>  | <b>797</b>   | <b>9,759</b>  | <b>769</b>   | <b>9,992</b>  | <b>763</b>   | <b>9,453</b>  | <b>702</b>   | <b>9,796</b>  | <b>711</b>   | <b>9,739</b>  | <b>696</b>   | <b>9,629</b>  | <b>661</b>   | <b>9,415</b>  | <b>624</b>   | <b>9,455</b>  | <b>611</b>   |

\*Age-adjusted rate per 100,000. Population estimates were revised; therefore, death rates for 2001-2004 may differ from those previously published.



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







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

**Los Angeles County population estimates, 2009**

|  |                               | Age Group (years) |                |                  |                  |                  |                  |                  |                  |                |                |                |                   |
|--|-------------------------------|-------------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------|----------------|----------------|-------------------|
|  | <b>Males</b>                  | 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                         | 13,335            | 58,306         | 151,519          | 191,630          | 176,324          | 239,022          | 276,400          | 214,909          | 126,421        | 80,127         | 34,169         | 1,562,162         |
|  | Hispanic                      | 47,472            | 193,301        | 452,816          | 433,767          | 420,171          | 396,740          | 276,725          | 148,197          | 68,573         | 35,514         | 11,371         | 2,484,647         |
|  | Black                         | 5,672             | 24,225         | 66,537           | 77,971           | 54,318           | 63,285           | 64,617           | 41,368           | 25,732         | 12,449         | 4,034          | 440,208           |
|  | Asian/Pacific Islander        | 8,408             | 30,744         | 74,284           | 95,723           | 91,365           | 104,348          | 103,132          | 76,685           | 42,927         | 25,018         | 9,055          | 661,689           |
|  | American Indian/Alaska Native | 113               | 497            | 1,515            | 2,195            | 1,653            | 2,122            | 2,355            | 1,477            | 831            | 392            | 163            | 13,313            |
|  | <b>All races</b>              | <b>75,000</b>     | <b>307,073</b> | <b>746,671</b>   | <b>801,286</b>   | <b>743,831</b>   | <b>805,517</b>   | <b>723,229</b>   | <b>482,636</b>   | <b>264,484</b> | <b>153,500</b> | <b>58,792</b>  | <b>5,162,019</b>  |
|  | <b>Females</b>                | 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                         | 12,644            | 55,042         | 142,197          | 183,223          | 167,102          | 224,091          | 255,809          | 215,490          | 140,741        | 111,185        | 65,507         | 1,573,031         |
|  | Hispanic                      | 45,261            | 185,387        | 434,699          | 418,131          | 369,598          | 363,557          | 280,187          | 169,423          | 89,406         | 55,042         | 22,306         | 2,432,997         |
|  | Black                         | 5,567             | 23,185         | 64,868           | 79,036           | 62,228           | 75,338           | 76,010           | 53,602           | 34,194         | 20,240         | 9,676          | 503,944           |
|  | Asian/Pacific Islander        | 7,941             | 28,479         | 69,739           | 90,259           | 97,880           | 121,022          | 121,015          | 90,477           | 52,476         | 35,536         | 14,982         | 729,806           |
|  | American Indian/Alaska Native | 121               | 467            | 1,570            | 2,158            | 1,583            | 2,309            | 2,359            | 1,912            | 957            | 539            | 324            | 14,299            |
|  | <b>All races</b>              | <b>71,534</b>     | <b>292,560</b> | <b>713,073</b>   | <b>772,807</b>   | <b>698,391</b>   | <b>786,317</b>   | <b>735,380</b>   | <b>530,904</b>   | <b>317,774</b> | <b>222,542</b> | <b>112,795</b> | <b>5,254,077</b>  |
|  | <b>Los Angeles County</b>     | 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                         | 25,979            | 113,348        | 293,716          | 374,853          | 343,426          | 463,113          | 532,209          | 430,399          | 267,162        | 191,312        | 99,676         | 3,135,193         |
|  | Hispanic                      | 92,733            | 378,688        | 887,515          | 851,898          | 789,769          | 760,297          | 556,912          | 317,620          | 157,979        | 90,556         | 33,677         | 4,917,644         |
|  | Black                         | 11,239            | 47,410         | 131,405          | 157,007          | 116,546          | 138,623          | 140,627          | 94,970           | 59,926         | 32,689         | 13,710         | 944,152           |
|  | Asian/Pacific Islander        | 16,349            | 59,223         | 144,023          | 185,982          | 189,245          | 225,370          | 224,147          | 167,162          | 95,403         | 60,554         | 24,037         | 1,391,495         |
|  | American Indian/Alaska Native | 234               | 964            | 3,085            | 4,353            | 3,236            | 4,431            | 4,714            | 3,389            | 1,788          | 931            | 487            | 27,612            |
|  | <b>All races</b>              | <b>146,534</b>    | <b>599,633</b> | <b>1,459,744</b> | <b>1,574,093</b> | <b>1,442,222</b> | <b>1,591,834</b> | <b>1,458,609</b> | <b>1,013,540</b> | <b>582,258</b> | <b>376,042</b> | <b>171,587</b> | <b>10,416,096</b> |

Notes: July 1, 2009 population estimates by Walter R. McDonald & Associates, Inc., released April 26, 2010.

**United States standard population, 2000<sup>6</sup>**

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

<sup>6</sup>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.

## 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<br>Antelope Valley<br>Pop. 368,037 | SPA 2<br>San Fernando<br>Pop. 2,214,739   | SPA 3<br>San Gabriel<br>Pop. 1,883,866  | SPA 4<br>Metro<br>Pop. 1,245,071 | SPA 5<br>West<br>Pop. 651,412   | SPA 6<br>South<br>Pop. 1,051,257               | SPA 7<br>East<br>Pop. 1,382,455   | SPA 8<br>South Bay<br>Pop. 1,619,259  |
|--|---|---|----------------------------------|---|--|---|---|
| Lancaster<br>Palmdale                    | Agoura Hills<br>Burbank<br>Calabasas<br>Glendale<br>Hidden Hills<br>La Canada<br>Flintridge<br>Los Angeles<br>San Fernando<br>Santa Clarita<br>Westlake Village | Alhambra<br>Arcadia<br>Azusa<br>Baldwin Park<br>Bradbury<br>Claremont<br>Covina<br>Diamond Bar<br>Duarte<br>El Monte<br>Glendora<br>Industry<br>Irwindale<br>La Puente<br>La Verne<br>Monrovia<br>Monterey Park<br>Pasadena<br>Pomona<br>Rosemead<br>San Dimas<br>San Gabriel<br>San Marino<br>Sierra Madre<br>South El Monte<br>South Pasadena<br>Temple City<br>Walnut<br>West Covina | Los Angeles<br>West Hollywood    | Beverly Hills<br>Culver City<br>Los Angeles<br>Malibu<br>Santa Monica | Compton<br>Los Angeles<br>Lynwood<br>Paramount | Artesia<br>Bell<br>Bell Gardens<br>Bellflower<br>Cerritos<br>Commerce<br>Cudahy<br>Downey<br>Hawaiian Gardens<br>Huntington Park<br>La Habra Heights<br>La Mirada<br>Lakewood<br>Maywood<br>Montebello<br>Norwalk<br>Pico Rivera<br>Santa Fe Springs<br>Signal Hill<br>South Gate<br>Vernon<br>Whittier | Avalon<br>Carson<br>El Segundo<br>Gardena<br>Hawthorne<br>Hermosa Beach<br>Inglewood<br>Lawndale<br>Lomita<br>Long Beach<br>Los Angeles<br>Manhattan Beach<br>Palos Verdes<br>Estates<br>Rancho Palos<br>Verdes<br>Redondo Beach<br>Rolling Hills<br>Rolling Hills<br>Estates<br>Torrance |

Notes: July 1, 2009 population estimates by Walter R. McDonald Associates, Inc., released April 26, 2010.

# MORTALITY IN LOS ANGELES COUNTY 2009

Leading Causes of Death and Premature Death with Trends for 2000-2009

A PUBLICATION OF THE LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH

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