MORTALITY IN LOS ANGELES COUNTY 2011

Leading Causes of Death and Premature Death with Trends for 2002-2011

A PUBLICATION OF THE LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH

County of Los Angeles Public Health

What's Inside

Message from the Director 1
Data highlights for 2011 2
Trend data highlights for 2002-2011 3
Background 4
User's guide to cause of death and premature death figures 8

MORTALITY 2011

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

MORTALITY TRENDS 2002-2011

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

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

At a glance

ALZHEIMER'S DISEASE
Figure T3. Trends in Alzheimer's disease mortality 37-38

BREAST CANCER
Figure T4. Trends in breast cancer (female) mortality 39-40

CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)
Figure T5. Trends in COPD mortality 41-42

COLORECTAL CANCER
Figure T6. Trends in colorectal cancer mortality 43-44

CORONARY HEART DISEASE
Figure T7. Trends in coronary heart disease mortality 45-46

DIABETES
Figure T8. Trends in diabetes mortality 47-48

DRUG OVERDOSE
Figure T9. Trends in drug overdose mortality 49-50

HOMICIDE
Figure T10. Trends in homicide mortality 51-52

HUMAN IMMUNODEFICIENCY VIRUS (HIV)
Figure T11. Trends in HIV mortality 53-54

LIVER DISEASE/CIRRHOSIS
Figure T12. Trends in liver disease/cirrhosis mortality 55-56

LUNG CANCER
Figure T13. Trends in lung cancer mortality 57-58

MOTOR VEHICLE CRASH
Figure T14. Trends in motor vehicle crash mortality 59-60

PNEUMONIA/INFLUENZA
Figure T15. Trends in pneumonia/influenza mortality 61-62

STROKE
Figure T16. Trends in stroke mortality 63-64

SUICIDE
Figure T17. Trends in suicide mortality 65-66

ALL CAUSES OF DEATH
Figure T18. Trends in mortality from all causes of death 67

TREND GRAPH
Figure T19. Trends in death rates of leading causes of death 68

Appendix 1. Sample California Certificate of Death 69

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

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

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

Message from the Director

I am pleased to report that the death rate among residents of Los Angeles (LA) County continues to decline. During the 10-year period from 2002 through 2011, the death rate in the county decreased 18%. During the same time period, the United States death rate decreased only 13%. Notable declines in the death rate from many of the leading causes of death contributed to the overall decline. For example, from 2002 through 2011, there was a 41% decrease in the death rate from coronary heart disease, a 36% decrease in the death rate from stroke, and a 20% decrease in the death rate from lung cancer. The reductions in the county reflect the important work of the LA County Department of Public Health, and our partners, in educating the community about how to reduce the risk of certain conditions and adopt healthier lifestyles, ensuring access to quality medical screenings and treatment, and creating communities that promote health.

In 2011, there were 57,988 deaths in the county and the age-adjusted death rate was substantially below the U.S. rate. Death rates in the county were at or below national goals established by Healthy People 2020 for chronic obstructive pulmonary disease, colorectal cancer, HIV, lung cancer, motor vehicle traffic crashes, stroke, and suicide.

Although there have been improvements, we face challenges in making certain that all Angelenos benefit equally. The lowest overall death rate (348 deaths per 100,000 population) was among Asian/Pacific Islander women while the highest overall death rate (1,062 deaths per 100,000 population) was among black men. Geographically, the lowest overall death rate (485 deaths per 100,000 population) was in the West Service Planning Area while the highest death rates (759 and 760 deaths per 100,000 population) were in the South and Antelope Valley Service Planning Areas, respectively. Some residents are at higher risk of death than others because of their health behaviors, the environment in which they live, their educational and employment opportunities, and their access to medical care. We continue to work with our partners to close this gap.

While many death rates decreased, the death rate from Alzheimer's disease has doubled in the past 10 years. Intentional and unintentional injuries, which are often preventable, typically affect younger people so their impact on life expectancy and premature mortality is significant. Injury prevention initiatives for communities and individuals can help to increase life expectancy.

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

This report, *Mortality in Los Angeles County 2011: Leading Causes of Death and Premature Death with Trends for 2002-2011*, 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 empower communities and stakeholders, and 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, MD, MPH
DIRECTOR AND HEALTH OFFICER

Data Highlights for 2011

Unless otherwise noted, rates are age-adjusted

- In 2011, there were 57,988 deaths in LA County, and the death rate was 596 deaths per 100,000 population. Compared with 2010, the number of deaths *increased* 3% while the overall death rate *decreased* 3%.
- The number of deaths among men and women was nearly equal—29,191 men and 28,797 women—but overall, men died at a younger age than women. The median age at death for men was 74 years compared with 82 years for women.
- Overall, whites and Asians/Pacific Islanders lived longer than blacks and Hispanics. The median age at death was 82 years for whites, 80 years for Asians/Pacific Islanders, and 71 years for both blacks and Hispanics.
- The highest overall death rate, 1,062 deaths per 100,000 population, was among black men. This was more than three times higher than the rate among Asian/Pacific Islander women, who had the lowest death rate at 348 deaths per 100,000 population.
- On an average day in the county, 159 people died, including 33 from coronary heart disease, 9 from injuries (homicide, suicide, and unintentional), and 9 from stroke. Four of the deaths typically occurred among children or young adults less than 25 years of age.
- Twenty-one percent of the deaths in 2011 were caused by coronary heart disease (11,913 deaths), which was the leading cause of both death and premature death.
- Of cancer deaths, lung cancer was the most common (2,908 deaths), followed by colorectal cancer (1,400 deaths) and breast cancer (1,153 deaths). There were 13,926 deaths from all types of cancer combined.
- Diabetes (2,196 deaths) remained an important cause of death and premature death for both men and women, and for all race/ethnic groups. The death rates were highest for blacks and Hispanics, and higher for men than for women.
- Among people aged 1 to 44 years, unintentional injuries (sometimes called accidents)—primarily motor vehicle crashes and drug overdoses—were the leading cause of death. In this age group, all types of injuries combined caused 42% of the deaths (765 unintentional injuries, 466 homicides, and 348 suicides).
- Homicide was the leading cause of death for 15- to 24-year-olds and 25- to 44-year-olds, the second-leading cause of death for 1- to 4-year-olds, and the leading cause of premature death for Hispanic men.
- Firearms caused 740 deaths: 74% of the 609 homicides and 37% of the 766 suicides.
- Alzheimer's disease was the third-leading cause of death for women (1,614 deaths), but it was the ninth-leading cause of death for men (732 deaths).
- HIV remained an important cause of premature death for both black men and in the Hollywood/Wilshire Health District.
- Death rates were higher for men than for women for every leading cause of death and premature death, except for Alzheimer's disease and breast cancer.
- For most of the leading causes of death and premature death, the highest death rate was among black men, and the lowest rate was among Asian/Pacific Islander or Hispanic women.
- For most of the leading causes of death and premature death, the highest death rates were in the Antelope Valley and South Service Planning Areas.
- Overall, 43% of the deaths were among persons less than 75 years of age. These 24,904 deaths contributed more than 426,000 years of life lost before age 75.

Trend Data Highlights for 2002-2011

Unless otherwise noted, rates are age-adjusted

- From 2002 through 2011, the overall death rate in the county decreased 18%, from 731 to 596 deaths per 100,000 population. The U.S. death rate decreased 13%, from 856 to 741 deaths per 100,000 population, during the same time period.
- There was a notable decrease (41%) in the death rate from coronary heart disease—the leading cause of death and premature death—from 205 deaths per 100,000 in 2002 to 122 in 2011. The death rates from coronary heart disease among residents of the Antelope Valley and South Service Planning Areas were consistently higher than other areas.
- Coronary heart disease was the leading cause of both death and premature death every year for the last 10 years.
- Death rates from stroke, the second-leading cause of death, decreased 36% overall during the last 10 years. The largest decreases (42%) were among white men and black women. While the overall death rate for blacks decreased 38% from 79 to 49 deaths per 100,000 population, the 2011 rate still exceeded the Healthy People 2020 goal.
- Stroke was the second-leading cause of death every year for the last 10 years.
- Since 2002, the overall death rate from lung cancer decreased 20%. The rate was consistently highest for black men, and lowest for Hispanic women. In 2011, the death rate for blacks remained above the Healthy People 2020 goal.
- From 2002 through 2011, the overall death rate from diabetes decreased 14%. The decrease was greater for women than men. Throughout the 10-year time period, black men consistently had the highest death rate.
- During the last 10 years, the four leading causes of death have remained unchanged: coronary heart disease, stroke, lung cancer, and chronic obstructive pulmonary disease.
- Coronary heart disease and homicide were the two leading causes of premature death during the last 10 years. Suicide has been the third-leading cause of premature death since 2010.
- Since 2002, the number of deaths from Alzheimer's disease has more than doubled from 973 in 2002 to 2,346 in 2011.
- From 2002 through 2011, the number and rate of homicides has decreased by almost one-half but the rate is still above the Healthy People 2020 goal. In 2011, the homicide rate among black men (41 deaths per 100,000 population) was almost seven times higher than the overall county rate.
- Drug overdose has been one of the leading causes of premature death every year for the past 10 years. From 2002 through 2011, the death rate has fluctuated between 5 and 7 deaths per 100,000 population.
- The number of suicides peaked in 2008, but the suicide rate has changed little during the past 10 years. The suicide rate was consistently highest for white men. Since 2009, the number of suicides has exceeded the number of homicides.
- HIV has not been among the overall leading causes of death or premature death since 2004; in 2011, it remained an important cause of premature death for some groups.

Background

When a death occurs in California, state law requires that a certificate of death be registered 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 certificate of death is complete, it is registered with the local registrar using the Electronic Death Registration System.[1] Then, the local registrar submits the document to the State Registrar of Vital Records, and state records are aggregated by the National Center for Health Statistics to create an annual national mortality database. There is a delay of about two years before the annual national mortality database is available for use, although the use of electronic death registration systems are helping to shorten this timeframe. Errors, omissions, and inaccuracies can occur when the certificate of death 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 certificates of death (Appendix 1) for all LA County residents who died in 2011, and mortality trends for 2002 through 2011. 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. Certificate of death data represent an important endpoint in the spectrum of disease and help us to better understand the burden of disease in our community. Because certificates of death 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 2011, 43% of the people who died were less than 75 years old. To quantify the impact of early, or premature, death we must consider how long a person was expected to live. For this report, we set our expected lifespan at 75 years of age, a standard cut-off used in public health. Ideally, most people will live longer than 75 years.

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

MEASURES

This report provides the numbers of deaths, death rates, and years of life lost before age 75 for the leading causes of death and premature death for 2011 and the 10-year period, 2002 through 2011, for LA County residents. The variables included in the analysis were age at death, gender, race/ethnicity, service planning area and health district of residence, and underlying cause of death. To protect the identity of decedents, the exact number of deaths was not provided if there were fewer than five deaths in a particular group.

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

A standardized coding system, the International Classification of Diseases (ICD), was used to classify causes of death and to group similar causes of death into categories for analysis.[2] The cause of death groups were based on categories developed by the National Center for Health Statistics.[3] To identify the leading causes of death, the cause of death groups were ranked by the number of deaths in each group. If two groups had the same number of deaths, then the cause of death that resulted in the most years of life lost was ranked first. To identify the leading causes of premature death, the groups were ranked by the years of life lost in each group. If two causes of death resulted in the same number of years of life lost, then the group that resulted in the greatest number of deaths was ranked first. The ICD 10th revision was used for classifying deaths that occurred in 1999 or later. From 1979 through 1998, the ICD 9th revision was in use. To facilitate comparisons with earlier years, ICD 9th and 10th revision codes are provided for each of the leading causes of death and premature death included in this report.

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

Healthy People is a set of national health objectives for improving the health of all Americans. They 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 2020.[5] Changes from Healthy People 2010 to Healthy People 2020 may result in discontinuity with prior years for some causes of death, which is highlighted in the tables.

---

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 March 2011 to include WHO updates to ICD-10 for data year 2011). http://www.cdc.gov/nchs/data/dvs/Part9InstructionManual2011.pdf.

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

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

DEFINITIONS AND TECHNICAL NOTES

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

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

- **Age-specific death rate:** The number of deaths in a specific age group divided by the population at risk in that age group.

- **Death rate:** The number of deaths divided by the population at risk. Death rates make comparisons between different population groups more meaningful than frequencies alone. This type of rate is also called the crude death rate.

- **Health District:** Using census tract boundaries, the county is divided into 26 health districts that are responsible for planning and providing public health services according to the health needs of the local communities.

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

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

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

In previous reports, the annual population of the county for 2001-2009 was estimated based on the 2000 U.S. Census. The estimates suggested that the county population would increase each year. In 2010, the U.S. Census enumeration resulted in a 5.7% *reduction* in the county population from 2009 to 2010, suggesting that the population for 2001-2009 was overestimated. Because population estimates were used to calculate death rates, overestimation of the poulation would result in underestimation of the true mortality rate. **For this report, the death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published.**

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

USER'S GUIDE TO COLOR

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

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

HOW TO GET MORE INFORMATION

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

User's Guide

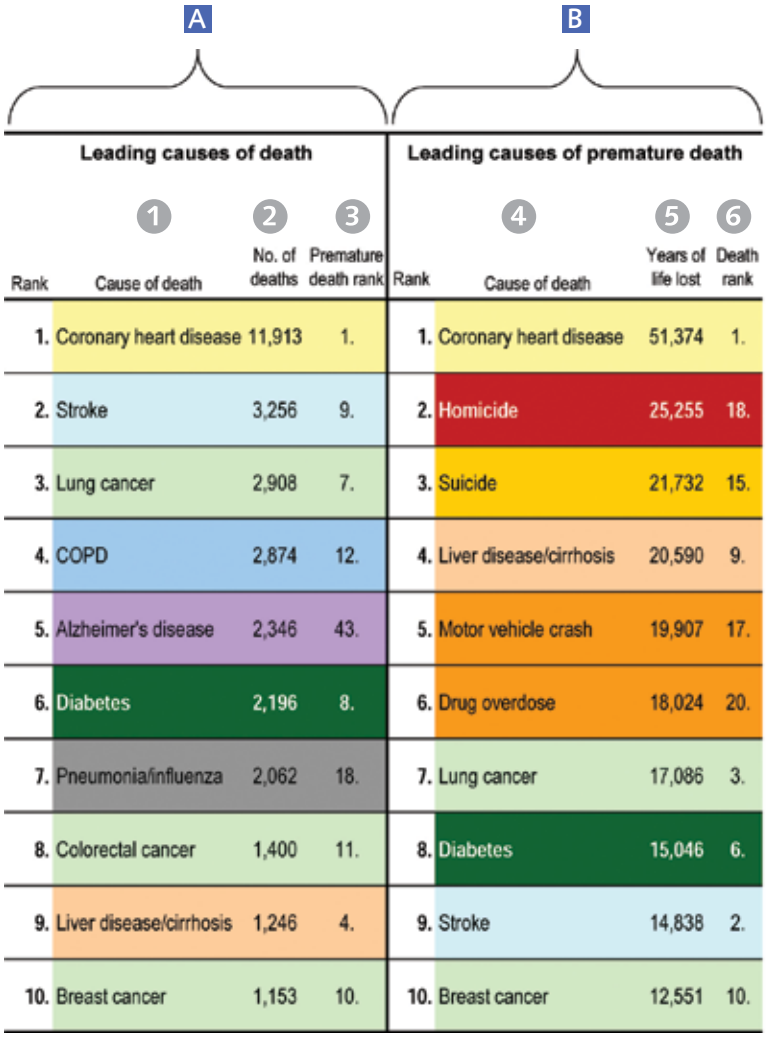
The following series of figures compares the 10 leading causes of death with the 10 leading causes of premature death (death before age 75) for the county overall and selected population groups. These figures are designed to facilitate comparisons within population groups. Other figures are designed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

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

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

---

1. The cause of death group coded by color (see Page 7).
2. The number of deaths due to the specific cause; e.g., there were 11,913 deaths from coronary heart disease and 2,874 deaths from chronic obstructive pulmonary disease (COPD).
3. The premature death rank for this cause of death; e.g., liver disease/cirrhosis was the ninth-ranked cause of death (1,246 deaths), but was the fourth-ranked cause of premature death (20,590 years of life lost before age 75).
4. The cause of premature death group coded by color (see Page 7).
5. The total years of life lost before age 75 for the specific cause of death.
6. The death rank for this cause of premature death; e.g., stroke was the ninth-ranked cause of premature death, resulting in 14,838 years of life lost before age 75, but was the second-ranked cause of death (3,256 deaths).



Leading causes of death				Leading causes of premature death			
	①	②	③		④	⑤	⑥
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost	Death rank
1.	Coronary heart disease	11,913	1.	1.	Coronary heart disease	51,374	1.
2.	Stroke	3,256	9.	2.	Homicide	25,255	18.
3.	Lung cancer	2,908	7.	3.	Suicide	21,732	15.
4.	COPD	2,874	12.	4.	Liver disease/cirrhosis	20,590	9.
5.	Alzheimer's disease	2,346	43.	5.	Motor vehicle crash	19,907	17.
6.	Diabetes	2,196	8.	6.	Drug overdose	18,024	20.
7.	Pneumonia/influenza	2,062	18.	7.	Lung cancer	17,086	3.
8.	Colorectal cancer	1,400	11.	8.	Diabetes	15,046	6.
9.	Liver disease/cirrhosis	1,246	4.	9.	Stroke	14,838	2.
10.	Breast cancer	1,153	10.	10.	Breast cancer	12,551	10.

Figure 1. Ten leading causes of death and premature death

Los Angeles County
57,988 total deaths
426,452 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	11,913	1.	1.	Coronary heart disease	51,374	1.
2.	Stroke	3,256	9.	2.	Homicide	25,255	18.
3.	Lung cancer	2,908	7.	3.	Suicide	21,732	15.
4.	COPD	2,874	12.	4.	Liver disease/cirrhosis	20,590	9.
5.	Alzheimer's disease	2,346	43.	5.	Motor vehicle crash	19,907	17.
6.	Diabetes	2,196	8.	6.	Drug overdose	18,024	20.
7.	Pneumonia/influenza	2,062	18.	7.	Lung cancer	17,086	3.
8.	Colorectal cancer	1,400	11.	8.	Diabetes	15,046	6.
9.	Liver disease/cirrhosis	1,246	4.	9.	Stroke	14,838	2.
10.	Breast cancer	1,153	10.	10.	Breast cancer	12,551	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 (11,913 deaths) than there were from stroke (3,256 deaths), the second-leading cause of death.
- Together, cancer and coronary heart disease caused nearly half (45%) of all the deaths. All cancers combined (13,926 deaths) caused more deaths than coronary heart disease (11,913 deaths).
- Injuries (unintentional [1,852 deaths], suicide [766 deaths], and homicide [609 deaths]) caused 22% of the years of life lost, but only 6% of the deaths, highlighting the dramatic impact of injuries, which are largely preventable, on younger people.
- Alzheimer's disease continued to be an important cause of death, although it had limited impact on premature death.

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

Males

29,191 total deaths
271,007 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	6,237	1.	1.	Coronary heart disease	38,263	1.
2.	Lung cancer	1,596	7.	2.	Homicide	22,094	13.
3.	Stroke	1,370	9.	3.	Suicide	16,646	11.
4.	COPD	1,342	13.	4.	Liver disease/cirrhosis	14,869	7.
5.	Diabetes	1,170	8.	5.	Motor vehicle crash	14,409	17.
6.	Pneumonia/influenza	962	19.	6.	Drug overdose	12,877	18.
7.	Liver disease/cirrhosis	818	4.	7.	Lung cancer	9,485	2.
8.	Prostate cancer	757	26.	8.	Diabetes	9,049	5.
9.	Alzheimer's disease	732	45.	9.	Stroke	8,478	3.
10.	Colorectal cancer	715	10.	10.	Colorectal cancer	6,146	10.

Females

28,797 total deaths
155,445 years of life lost*

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	5,676	1.	1.	Coronary heart disease	13,111	1.
2.	Stroke	1,886	4.	2.	Breast cancer	12,487	6.
3.	Alzheimer's disease	1,614	39.	3.	Lung cancer	7,601	5.
4.	COPD	1,532	11.	4.	Stroke	6,360	2.
5.	Lung cancer	1,312	3.	5.	Diabetes	5,997	8.
6.	Breast cancer	1,143	2.	6.	Liver disease/cirrhosis	5,721	12.
7.	Pneumonia/influenza	1,100	15.	7.	Motor vehicle crash	5,498	21.
8.	Diabetes	1,026	5.	8.	Drug overdose	5,147	22.
9.	Colorectal cancer	685	10.	9.	Suicide	5,086	23.
10.	Hypertension	569	25.	10.	Colorectal cancer	5,051	9.

*Excludes infants less than 1 year of age and persons of unknown age.
**Death before age 75 years.

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

White

29,104 total deaths
145,350 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	6,475	1.	1.	Coronary heart disease	21,482	1.
2.	COPD	1,843	8.	2.	Drug overdose	9,866	17.
3.	Lung cancer	1,578	4.	3.	Suicide	9,228	13.
4.	Stroke	1,546	11.	4.	Lung cancer	8,006	3.
5.	Alzheimer's disease	1,525	38.	5.	Liver disease/cirrhosis	6,713	12.
6.	Pneumonia/influenza	982	15.	6.	Motor vehicle crash	4,922	24.
7.	Diabetes	783	9.	7.	Breast cancer	4,479	9.
8.	Colorectal cancer	613	10.	8.	COPD	4,252	2.
9.	Breast cancer	557	7.	9.	Diabetes	3,891	7.
10.	Pancreatic cancer	466	12.	10.	Colorectal cancer	3,847	8.

Hispanic

14,301 total deaths
163,111 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	2,404	2.	1.	Homicide	15,128	10.
2.	Diabetes	799	6.	2.	Coronary heart disease	13,672	1.
3.	Stroke	774	7.	3.	Liver disease/cirrhosis	11,316	4.
4.	Liver disease/cirrhosis	637	3.	4.	Motor vehicle crash	10,989	11.
5.	Pneumonia/influenza	509	18.	5.	Suicide	7,769	17.
6.	Lung cancer	452	12.	6.	Diabetes	6,931	2.
7.	Alzheimer's disease	412	47.	7.	Stroke	5,720	3.
8.	COPD	383	28.	8.	Drug overdose	5,569	21.
9.	Colorectal cancer	359	10.	9.	Breast cancer	3,876	13.
10.	Homicide	333	1.	10.	Colorectal cancer	3,840	9.

Black

7,623 total deaths
74,764 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	1,571	1.	1.	Coronary heart disease	10,398	1.
2.	Lung cancer	431	3.	2.	Homicide	7,694	11.
3.	Stroke	423	5.	3.	Lung cancer	3,360	2.
4.	COPD	349	9.	4.	Diabetes	2,712	5.
5.	Diabetes	316	4.	5.	Stroke	2,627	3.
6.	Pneumonia/influenza	242	16.	6.	Breast cancer	2,570	9.
7.	Alzheimer's disease	226	50.	7.	Motor vehicle crash	2,275	19.
8.	Hypertension	200	14.	8.	HIV	2,193	16.
9.	Breast cancer	197	6.	9.	COPD	2,053	4.
10.	Colorectal cancer	194	13.	10.	Drug overdose	1,923	17.

*Excludes infants less than 1 year of age and persons of unknown age.
**Death before age 75 years.

Asian/Pacific Islander

6,630 total deaths
39,923 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	1,396	1.	1.	Coronary heart disease	5,460	1.
2.	Stroke	498	4.	2.	Suicide	2,944	15.
3.	Lung cancer	428	3.	3.	Lung cancer	2,658	3.
4.	Pneumonia/influenza	319	19.	4.	Stroke	2,630	2.
5.	COPD	287	30.	5.	Colorectal cancer	1,884	7.
6.	Diabetes	278	9.	6.	Liver cancer	1,659	8.
7.	Colorectal cancer	228	5.	7.	Motor vehicle crash	1,613	20.
8.	Liver cancer	199	6.	8.	Breast cancer	1,502	12.
9.	Alzheimer's disease	176	46.	9.	Diabetes	1,334	6.
10.	Pancreatic cancer	135	10.	10.	Pancreatic cancer	881	10.

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

Leading causes of death

Race/ethnicity Total number of deaths Age-adjusted death rate	#1 cause Number of deaths Age-adjusted death rate	#2 cause Number of deaths Age-adjusted death rate	#3 cause Number of deaths Age-adjusted death rate	#4 cause Number of deaths Age-adjusted death rate	#5 cause Number of deaths Age-adjusted death rate
White 29,104 647 per 100,000	Coronary heart disease 6,475 135 per 100,000	COPD 1,843 40 per 100,000	Lung cancer 1,578 37 per 100,000	Stroke 1,546 32 per 100,000	Alzheimer's disease 1,525 29 per 100,000
Hispanic 14,301 512 per 100,000	Coronary heart disease 2,404 96 per 100,000	Diabetes 799 30 per 100,000	Stroke 774 30 per 100,000	Liver disease/cirrhosis 637 19 per 100,000	Pneumonia/influenza 509 21 per 100,000
Black 7,623 875 per 100,000	Coronary heart disease 1,571 179 per 100,000	Lung cancer 431 49 per 100,000	Stroke 423 49 per 100,000	COPD 349 41 per 100,000	Diabetes 316 36 per 100,000
Asian/Pacific Islander 6,630 417 per 100,000	Coronary heart disease 1,396 87 per 100,000	Stroke 498 31 per 100,000	Lung cancer 428 27 per 100,000	Pneumonia/influenza 319 20 per 100,000	COPD 287 18 per 100,000
Los Angeles County Total 57,988 596 per 100,000	Coronary heart disease 11,913 122 per 100,000	Stroke 3,256 34 per 100,000	Lung cancer 2,908 31 per 100,000	COPD 2,874 30 per 100,000	Alzheimer's disease 2,346 24 per 100,000

Leading causes of premature death (before age 75 years)

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

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 Total number of deaths Age-adjusted death rate	#1 cause Number of deaths Age-adjusted death rate	#2 cause Number of deaths Age-adjusted death rate	#3 cause Number of deaths Age-adjusted death rate	#4 cause Number of deaths Age-adjusted death rate	#5 cause Number of deaths Age-adjusted death rate
White 14,232 751 per 100,000	Coronary heart disease 3,342 171 per 100,000	Lung cancer 846 45 per 100,000	COPD 799 42 per 100,000	Stroke 596 31 per 100,000	Pneumonia/influenza 475 24 per 100,000
Hispanic 7,591 612 per 100,000	Coronary heart disease 1,323 124 per 100,000	Liver disease/cirrhosis 455 27 per 100,000	Diabetes 430 36 per 100,000	Stroke 344 31 per 100,000	Homicide 285 10 per 100,000
Black 3,788 1,062 per 100,000	Coronary heart disease 817 228 per 100,000	Lung cancer 225 63 per 100,000	Stroke 183 53 per 100,000	COPD 181 54 per 100,000	Homicide 168 41 per 100,000
Asian/Pacific Islander 3,386 509 per 100,000	Coronary heart disease 706 106 per 100,000	Lung cancer 258 38 per 100,000	Stroke 237 36 per 100,000	Pneumonia/influenza 174 27 per 100,000	COPD 167 27 per 100,000
All males 29,191 707 per 100,000	Coronary heart disease 6,237 154 per 100,000	Lung cancer 1,596 40 per 100,000	Stroke 1,370 34 per 100,000	COPD 1,342 35 per 100,000	Diabetes 1,170 28 per 100,000

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

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

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 Total number of deaths Age-adjusted death rate	#1 cause Number of deaths Age-adjusted death rate	#2 cause Number of deaths Age-adjusted death rate	#3 cause Number of deaths Age-adjusted death rate	#4 cause Number of deaths Age-adjusted death rate	#5 cause Number of deaths Age-adjusted death rate
White 14,872 556 per 100,000	Coronary heart disease 3,133 105 per 100,000	Alzheimer's disease 1,060 32 per 100,000	COPD 1,044 39 per 100,000	Stroke 950 32 per 100,000	Lung cancer 732 31 per 100,000
Hispanic 6,710 432 per 100,000	Coronary heart disease 1,081 75 per 100,000	Stroke 430 29 per 100,000	Diabetes 369 24 per 100,000	Pneumonia/influenza 297 21 per 100,000	Alzheimer's disease 277 20 per 100,000
Black 3,835 737 per 100,000	Coronary heart disease 754 141 per 100,000	Stroke 240 46 per 100,000	Lung cancer 206 39 per 100,000	Breast cancer 196 38 per 100,000	COPD 168 32 per 100,000
Asian/Pacific Islander 3,244 348 per 100,000	Coronary heart disease 690 72 per 100,000	Stroke 261 28 per 100,000	Lung cancer 170 19 per 100,000	Diabetes 149 16 per 100,000	Pneumonia/influenza 145 15 per 100,000
All females 28,797 506 per 100,000	Coronary heart disease 5,676 96 per 100,000	Stroke 1,886 33 per 100,000	Alzheimer's disease 1,614 26 per 100,000	COPD 1,532 27 per 100,000	Lung cancer 1,312 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
White	Coronary heart disease	Breast cancer	Lung cancer	Drug overdose	Suicide
Hispanic	Breast cancer	Coronary heart disease	Motor vehicle crash	Diabetes	Liver disease/cirrhosis
Black	Coronary heart disease	Breast cancer	Lung cancer	Diabetes	Stroke
Asian/Pacific Islander	Breast cancer	Coronary heart disease	Stroke	Lung cancer	Colorectal cancer
All females	Coronary heart disease	Breast cancer	Lung cancer	Stroke	Diabetes

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 Total deaths in age group Age-specific death rate	#1 cause Number of deaths Age-specific death rate	#2 cause Number of deaths Age-specific death rate	#3 cause Number of deaths Age-specific death rate	#4 cause Number of deaths Age-specific death rate	#5 cause Number of deaths Age-specific death rate
<1 year old 618 486 per 100,000	Low birthweight/prematurity 117 92 per 100,000	SIDS* 43 34 per 100,000	Heart defect 28 22 per 100,000	Placenta/cord complication 27 21 per 100,000	Pregnancy complication 22 17 per 100,000
1-4 years old 105 20 per 100,000	Birth defect 12 --	Homicide 11 --	Brain/CNS† cancer 8 --	Drowning 7 --	Motor vehicle crash 7 --
5-14 years old 129 10 per 100,000	Motor vehicle crash 20 2 per 100,000	Birth defect 14 --	Asthma 9 --	Leukemia 9 --	Brain/CNS cancer 6 --
15-24 years old 725 49 per 100,000	Homicide 201 13 per 100,000	Motor vehicle crash 129 9 per 100,000	Suicide 97 7 per 100,000	Drug overdose 41 3 per 100,000	Leukemia 27 2 per 100,000
25-44 years old 2,768 95 per 100,000	Homicide 251 9 per 100,000	Suicide 245 8 per 100,000	Drug overdose 229 8 per 100,000	Motor vehicle crash 188 6 per 100,000	Coronary heart disease 141 5 per 100,000
45-64 years old 11,577 477 per 100,000	Coronary heart disease 2,060 85 per 100,000	Liver disease/cirrhosis 720 30 per 100,000	Lung cancer 666 27 per 100,000	Diabetes 544 22 per 100,000	Stroke 507 21 per 100,000
65-74 years old 8,982 1,518 per 100,000	Coronary heart disease 1,792 303 per 100,000	Lung cancer 830 140 per 100,000	COPD 499 84 per 100,000	Diabetes 473 80 per 100,000	Stroke 412 70 per 100,000
75+ years old 33,082 6,267 per 100,000	Coronary heart disease 7,918 1,500 per 100,000	Stroke 2,252 427 per 100,000	Alzheimer's disease 2,242 425 per 100,000	COPD 2,092 396 per 100,000	Pneumonia/influenza 1,607 304 per 100,000
Los Angeles County Total 57,988 596 per 100,000**	Coronary heart disease 11,913 122 per 100,000	Stroke 3,256 34 per 100,000	Lung cancer 2,908 31 per 100,000	COPD 2,874 30 per 100,000	Alzheimer's disease 2,346 24 per 100,000

Notes: Los Angeles County Total includes persons of unknown age.
*SIDS=Sudden Infant Death Syndrome.
†CNS=Central Nervous System.
**Age-adjusted rate.
--Number of deaths is too small to calculate a reliable rate.

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

		Race/ethnicity Deaths from all causes	#1 Cause Number of deaths	#2 Cause Number of deaths	#3 Cause Number of deaths
Males	0-14 years 473 deaths	White 72	Perinatal period condition 29	Birth defect 14	Drowning <5
		Hispanic 272	Perinatal period condition 105	Birth defect 58	Homicide 15
		Black 83	Perinatal period condition 36	Birth defect 8	Asthma 5
		Asian/Pacific Islander 44	Perinatal period condition 17	Birth defect 7	Brain/CNS* cancer <5
	15-24 years 544 deaths	White 88	Motor vehicle crash 20	Drug overdose 16	Suicide 14
		Hispanic 323	Homicide 122	Motor vehicle crash 56	Suicide 39
		Black 103	Homicide 56	Motor vehicle crash 8	Suicide 7
		Asian/Pacific Islander 27	Suicide 11	Motor vehicle crash 6	Homicide <5
	25-44 years 1,886 deaths	White 533	Drug overdose 89	Suicide 80	Motor vehicle crash 38
		Hispanic 911	Homicide 117	Motor vehicle crash 80	Suicide 74
		Black 285	Homicide 74	HIV 23	Suicide 17
		Asian/Pacific Islander 143	Suicide 27	Coronary heart disease 15	Motor vehicle crash 14
	45-64 years 6,991 deaths	White 2,887	Coronary heart disease 686	Lung cancer 184	Liver disease/cirrhosis 162
		Hispanic 2,173	Coronary heart disease 369	Liver disease/cirrhosis 291	Diabetes 163
		Black 1,210	Coronary heart disease 304	Lung cancer 66	Stroke 55
		Asian/Pacific Islander 673	Coronary heart disease 150	Lung cancer 61	Liver cancer 51

65-74 years 5,157 deaths	White 2,401	Coronary heart disease 534	Lung cancer 265	COPD 162
	Hispanic 1,305	Coronary heart disease 275	Diabetes 94	Liver disease/cirrhosis 72
	Black 780	Coronary heart disease 194	Lung cancer 71	COPD 54
	Asian/Pacific Islander 621	Coronary heart disease 124	Lung cancer 80	Stroke 37
75+ years 14,139 deaths	White 8,250	Coronary heart disease 2,087	COPD 557	Alzheimer's disease 438
	Hispanic 2,607	Coronary heart disease 623	Stroke 154	Diabetes 149
	Black 1,327	Coronary heart disease 303	Prostate cancer 100	COPD 89
	Asian/Pacific Islander 1,878	Coronary heart disease 417	COPD 147	Stroke 143

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

*CNS=Central Nervous System.

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

		Race/ethnicity Deaths from all causes	#1 Cause Number of deaths	#2 Cause Number of deaths	#3 Cause Number of deaths
Females	0-14 years 379 deaths	White 58	Perinatal period condition 28	Birth defect 7	Motor vehicle crash <5
		Hispanic 226	Perinatal period condition 77	Birth defect 61	Brain/CNS* cancer 7
		Black 57	Perinatal period condition 22	Birth defect 7	Homicide <5
		Asian/Pacific Islander 37	Birth defect 11	Perinatal period condition 11	Insufficient number
	15-24 years 181 deaths	White 40	Motor vehicle crash 9	Suicide 6	Drug overdose 6
		Hispanic 104	Motor vehicle crash 21	Suicide 16	Homicide 13
		Black 24	Motor vehicle crash <5	Homicide <5	Suicide <5
		Asian/Pacific Islander 11	Motor vehicle crash 5	Insufficient number	Insufficient number
	25-44 years 882 deaths	White 240	Drug overdose 35	Suicide 20	Breast cancer 20
		Hispanic 368	Breast cancer 36	Motor vehicle crash 25	Homicide 21
		Black 168	Breast cancer 19	Diabetes 8	Drug overdose 7
		Asian/Pacific Islander 95	Suicide 13	Breast cancer 10	Cervical cancer 7
	45-64 years 4,586 deaths	White 1,786	Coronary heart disease 218	Breast cancer 174	Lung cancer 142
		Hispanic 1,315	Coronary heart disease 123	Breast cancer 115	Liver disease/cirrhosis 91
		Black 947	Coronary heart disease 139	Breast cancer 88	Lung cancer 72
		Asian/Pacific Islander 505	Coronary heart disease 56	Breast cancer 54	Stroke 41

65-74 years 3,825 deaths	White 1,698	Coronary heart disease 275	Lung cancer 192	COPD 153
	Hispanic 1,006	Coronary heart disease 165	Diabetes 81	Lung cancer 49
	Black 666	Coronary heart disease 135	Lung cancer 57	Stroke 41
	Asian/Pacific Islander 424	Coronary heart disease 67	Lung cancer 42	Breast cancer 32
75+ years 18,943 deaths	White 11,050	Coronary heart disease 2,636	Alzheimer's disease 1,031	Stroke 833
	Hispanic 3,691	Coronary heart disease 785	Stroke 292	Alzheimer's disease 260
	Black 1,973	Coronary heart disease 475	Alzheimer's disease 152	Stroke 148
	Asian/Pacific Islander 2,171	Coronary heart disease 564	Stroke 184	Pneumonia/influenza 133

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

*CNS=Central Nervous System.

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

Antelope Valley (SPA 1)

2,243 deaths
22,557 years of life lost

Leading causes of death

Rank	Cause of death	No. of deaths	Premature death rank
1.	Coronary heart disease	404	1.
2.	COPD	204	7.
3.	Lung cancer	110	10.
4.	Diabetes	109	8.
5.	Stroke	99	13.

Leading causes of premature death**

Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	2,650	1.
2.	Motor vehicle crash	1,570	11.
3.	Suicide	1,361	10.
4.	Drug overdose	1,027	14.
5.	Homicide	997	16.

San Fernando (SPA 2)

12,313 deaths
79,756 years of life lost

Leading causes of death

Rank	Cause of death	No. of deaths	Premature death rank
1.	Coronary heart disease	2,702	1.
2.	Stroke	657	9.
3.	Lung cancer	638	4.
4.	Alzheimer's disease	618	43.
5.	COPD	596	17.

Leading causes of premature death**

Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	10,578	1.
2.	Suicide	5,240	13.
3.	Drug overdose	4,468	17.
4.	Lung cancer	3,822	3.
5.	Motor vehicle crash	3,398	21.

San Gabriel (SPA 3)

10,758 deaths
68,539 years of life lost

Leading causes of death

Rank	Cause of death	No. of deaths	Premature death rank
1.	Coronary heart disease	2,219	1.
2.	COPD	625	14.
3.	Stroke	616	6.
4.	Lung cancer	575	5.
5.	Alzheimer's disease	473	43.

Leading causes of premature death**

Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	8,304	1.
2.	Suicide	3,487	17.
3.	Liver disease/cirrhosis	3,414	10.
4.	Motor vehicle crash	3,128	21.
5.	Lung cancer	2,973	4.

Metro (SPA 4)

6,098 deaths
46,469 years of life lost

Leading causes of death

Rank	Cause of death	No. of deaths	Premature death rank
1.	Coronary heart disease	1,350	1.
2.	Stroke	345	7.
3.	Diabetes	276	6.
4.	Lung cancer	267	10.
5.	Pneumonia/influenza	257	17.

Leading causes of premature death**

Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	6,012	1.
2.	Liver disease/cirrhosis	2,709	8.
3.	Homicide	2,594	21.
4.	Suicide	2,435	15.
5.	Drug overdose	2,432	16.

West (SPA 5)

4,040 deaths
20,061 years of life lost

Leading causes of death

Rank	Cause of death	No. of deaths	Premature death rank
1.	Coronary heart disease	823	1.
2.	Stroke	242	8.
3.	Lung cancer	191	6.
4.	Alzheimer's disease	188	42.
5.	COPD	180	19.

Leading causes of premature death**

Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	2,253	1.
2.	Suicide	1,987	11.
3.	Drug overdose	1,149	22.
4.	Motor vehicle crash	840	23.
5.	Liver disease/cirrhosis	812	12.

South (SPA 6)

5,477 deaths
57,722 years of life lost

Leading causes of death

Rank	Cause of death	No. of deaths	Premature death rank
1.	Coronary heart disease	1,063	2.
2.	Stroke	311	5.
3.	Lung cancer	277	6.
4.	Diabetes	245	7.
5.	COPD	217	11.

Leading causes of premature death**

Rank	Cause of death	Years of life lost*	Death rank
1.	Homicide	7,990	7.
2.	Coronary heart disease	6,195	1.
3.	Motor vehicle crash	3,332	14.
4.	Liver disease/cirrhosis	2,778	8.
5.	Stroke	2,167	2.

East (SPA 7)

7,161 deaths
53,489 years of life lost

Leading causes of death

Rank	Cause of death	No. of deaths	Premature death rank
1.	Coronary heart disease	1,401	1.
2.	Stroke	432	8.
3.	Diabetes	350	6.
4.	Lung cancer	337	7.
5.	COPD	325	13.

Leading causes of premature death**

Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	6,182	1.
2.	Homicide	3,337	17.
3.	Motor vehicle crash	3,321	16.
4.	Liver disease/cirrhosis	3,050	8.
5.	Suicide	2,499	18.

South Bay (SPA 8)

9,722 deaths
74,905 years of life lost

Leading causes of death

Rank	Cause of death	No. of deaths	Premature death rank
1.	Coronary heart disease	1,936	1.
2.	Stroke	551	9.
3.	COPD	521	12.
4.	Lung cancer	511	5.
5.	Alzheimer's disease	367	41.

Leading causes of premature death**

Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	9,087	1.
2.	Homicide	4,965	18.
3.	Drug overdose	3,660	15.
4.	Liver disease/cirrhosis	3,412	9.
5.	Lung cancer	3,353	4.

*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 Total number of deaths Age-adjusted death rate	#1 cause Number of deaths Age-adjusted death rate	#2 cause Number of deaths Age-adjusted death rate	#3 cause Number of deaths Age-adjusted death rate	#4 cause Number of deaths Age-adjusted death rate	#5 cause Number of deaths Age-adjusted death rate
SPA 1: Antelope Valley 2,243 760 per 100,000	Coronary heart disease 404 142 per 100,000	COPD 204 76 per 100,000	Lung cancer 110 38 per 100,000	Diabetes 109 37 per 100,000	Stroke 99 37 per 100,000
SPA 2: San Fernando 12,313 559 per 100,000	Coronary heart disease 2,702 121 per 100,000	Stroke 657 30 per 100,000	Lung cancer 638 30 per 100,000	Alzheimer's disease 618 27 per 100,000	COPD 596 28 per 100,000
SPA 3: San Gabriel 10,758 560 per 100,000	Coronary heart disease 2,219 112 per 100,000	COPD 625 33 per 100,000	Stroke 616 32 per 100,000	Lung cancer 575 31 per 100,000	Alzheimer's disease 473 23 per 100,000
SPA 4: Metro 6,098 565 per 100,000	Coronary heart disease 1,350 125 per 100,000	Stroke 345 32 per 100,000	Diabetes 276 26 per 100,000	Lung cancer 267 26 per 100,000	Pneumonia/influenza 257 24 per 100,000
SPA 5: West 4,040 485 per 100,000	Coronary heart disease 823 94 per 100,000	Stroke 242 28 per 100,000	Lung cancer 191 25 per 100,000	Alzheimer's disease 188 20 per 100,000	COPD 180 21 per 100,000
SPA 6: South 5,477 759 per 100,000	Coronary heart disease 1,063 155 per 100,000	Stroke 311 45 per 100,000	Lung cancer 277 40 per 100,000	Diabetes 245 35 per 100,000	COPD 217 33 per 100,000
SPA 7: East 7,161 604 per 100,000	Coronary heart disease 1,401 119 per 100,000	Stroke 432 37 per 100,000	Diabetes 350 30 per 100,000	Lung cancer 337 30 per 100,000	COPD 325 28 per 100,000
SPA 8: South Bay 9,722 639 per 100,000	Coronary heart disease 1,936 127 per 100,000	Stroke 551 36 per 100,000	COPD 521 35 per 100,000	Lung cancer 511 34 per 100,000	Alzheimer's disease 367 24 per 100,000
Los Angeles County Total 57,988 596 per 100,000	Coronary heart disease 11,913 122 per 100,000	Stroke 3,256 34 per 100,000	Lung cancer 2,908 31 per 100,000	COPD 2,874 30 per 100,000	Alzheimer's disease 2,346 24 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	Suicide	Drug overdose	Homicide
SPA 2: San Fernando	Coronary heart disease	Suicide	Drug overdose	Lung cancer	Motor vehicle crash
SPA 3: San Gabriel	Coronary heart disease	Suicide	Liver disease/cirrhosis	Motor vehicle crash	Lung cancer
SPA 4: Metro	Coronary heart disease	Liver disease/cirrhosis	Homicide	Suicide	Drug overdose
SPA 5: West	Coronary heart disease	Suicide	Drug overdose	Motor vehicle crash	Liver disease/cirrhosis
SPA 6: South	Homicide	Coronary heart disease	Motor vehicle crash	Liver disease/cirrhosis	Stroke
SPA 7: East	Coronary heart disease	Homicide	Motor vehicle crash	Liver disease/cirrhosis	Suicide
SPA 8: South Bay	Coronary heart disease	Homicide	Drug overdose	Liver disease/cirrhosis	Lung cancer
Los Angeles County Total	Coronary heart disease	Homicide	Suicide	Liver disease/cirrhosis	Motor vehicle crash

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

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

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

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

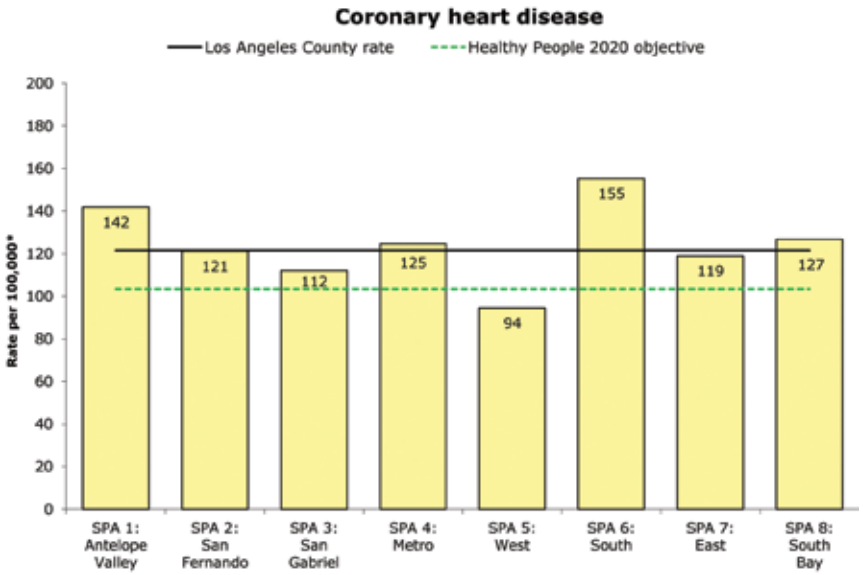
Notes: All males includes persons of unknown residence.

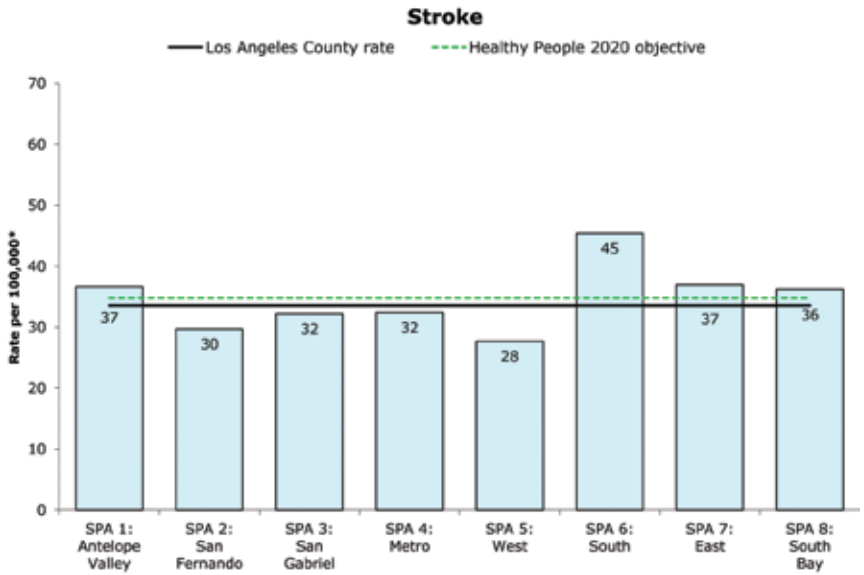
Females: Leading causes of premature death (before age 75 years)

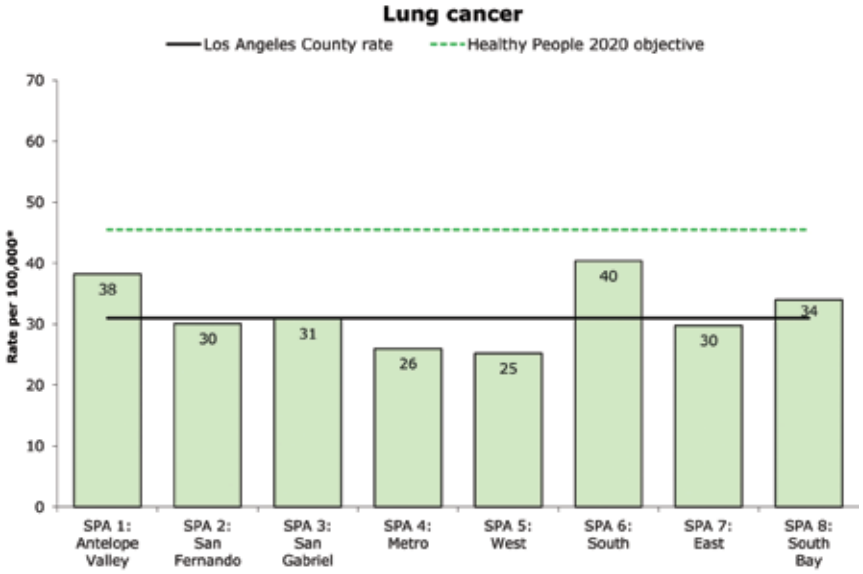
Service Planning Area	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause
SPA 1: Antelope Valley	Coronary heart disease	Breast cancer	Diabetes	Lung cancer	Liver disease/cirrhosis
SPA 2: San Fernando	Coronary heart disease	Breast cancer	Drug overdose	Lung cancer	Suicide
SPA 3: San Gabriel	Breast cancer	Coronary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

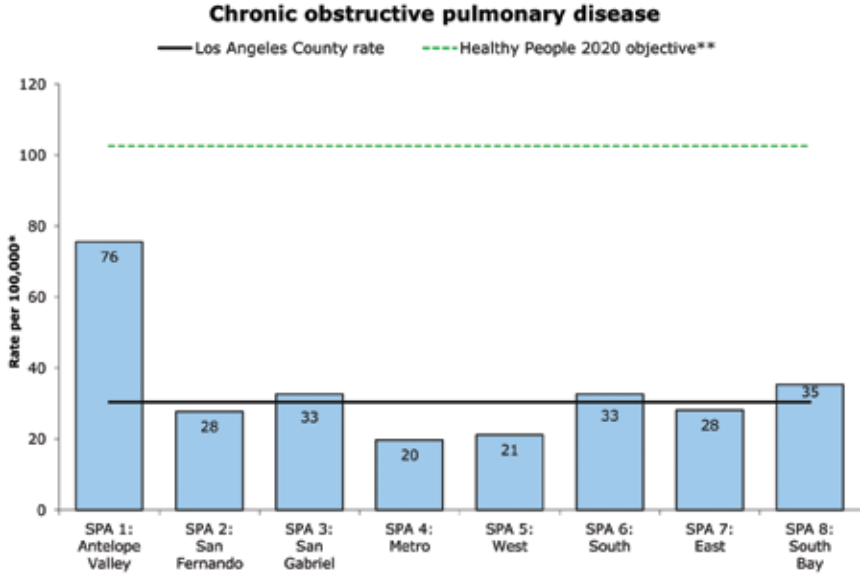
Notes: All females includes persons of unknown residence.

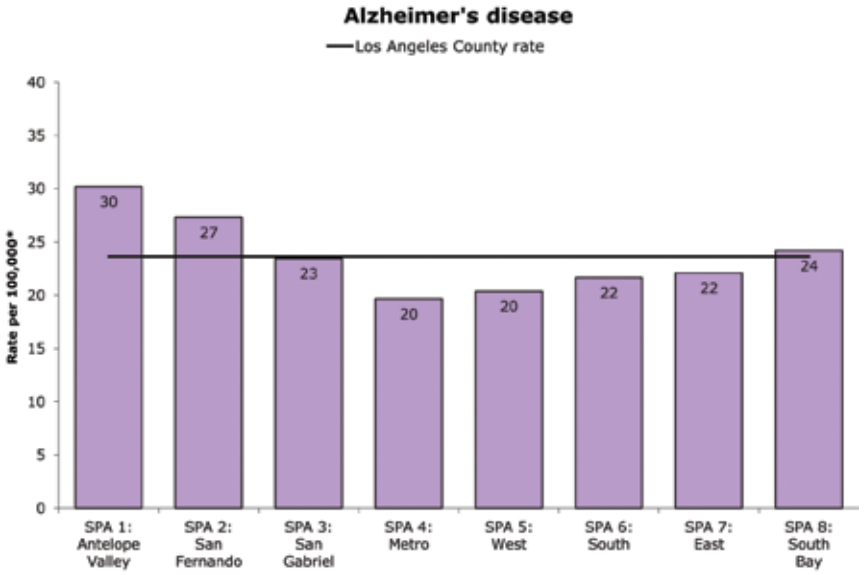
Figure 13. Death rates for selected causes of death, by service planning area (SPA) of residence

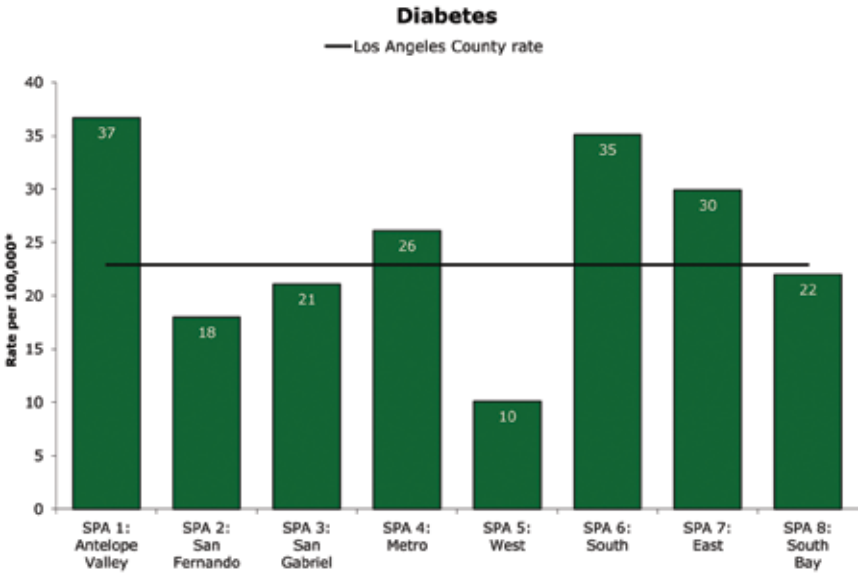


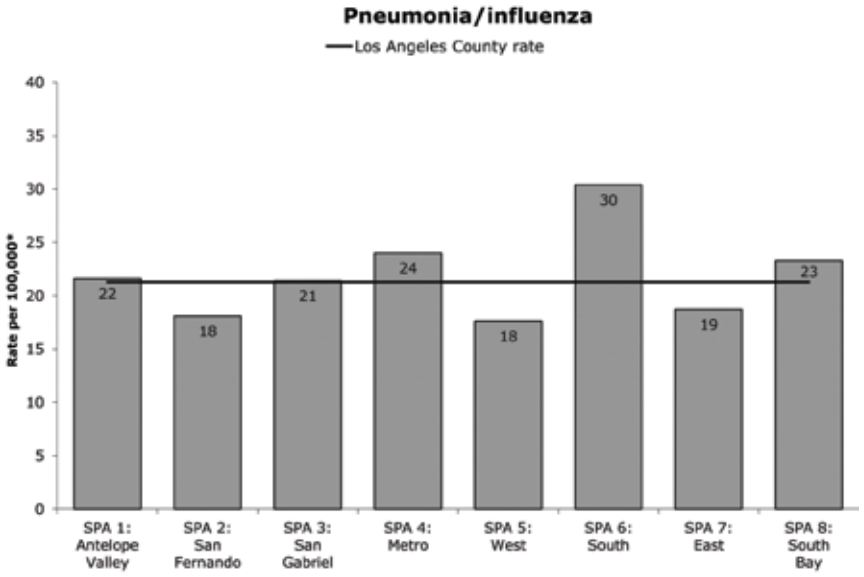


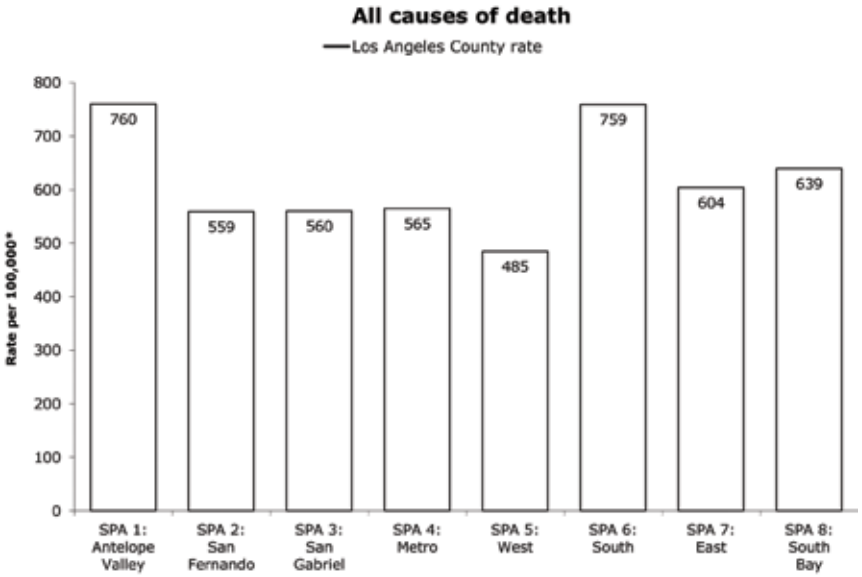












*Age-adjusted.

**The Healthy People 2020 goal for chronic obstructive pulmonary disease is 102.6 deaths per 100,000 population aged 45 years and over. The county rate is 30.5 deaths per 100,000 population, and 86.9 for those aged 45 years and over.

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

Leading causes of death

Health District Total number of deaths Age-adjusted death rate	#1 cause Number of deaths	#2 cause Number of deaths	#3 cause Number of deaths	#4 cause Number of deaths	#5 cause Number of deaths
Alhambra 2,359 495 per 100,000	Coronary heart disease 495	Stroke 163	COPD 137	Pneumonia/influenza 123	Lung cancer 119
Antelope Valley 2,243 760 per 100,000	Coronary heart disease 404	COPD 204	Lung cancer 110	Diabetes 109	Stroke 99
Bellflower 2,175 629 per 100,000	Coronary heart disease 419	Stroke 136	COPD 121	Lung cancer 114	Diabetes 98
Central 1,760 557 per 100,000	Coronary heart disease 402	Stroke 98	Pneumonia/influenza 86	Diabetes 79	COPD 78
Compton 1,374 740 per 100,000	Coronary heart disease 223	Stroke 76	Diabetes 75	Lung cancer 69	COPD 64
East LA 1,114 581 per 100,000	Coronary heart disease 238	Diabetes 78	Stroke 62	Pneumonia/influenza 41	Alzheimer's disease 37
East Valley 2,354 591 per 100,000	Coronary heart disease 547	Stroke 120	Lung cancer 118	Alzheimer's disease 103	COPD 100
El Monte 2,179 568 per 100,000	Coronary heart disease 434	Stroke 118	Lung cancer 109	Diabetes 103	COPD 102
Foothill 2,047 587 per 100,000	Coronary heart disease 463	COPD 136	Lung cancer 128	Stroke 109	Alzheimer's disease 93
Glendale 2,343 533 per 100,000	Coronary heart disease 494	Alzheimer's disease 146	Stroke 124	Lung cancer 122	COPD 120
Harbor 1,365 572 per 100,000	Coronary heart disease 245	Stroke 87	Alzheimer's disease 65	Lung cancer 64	COPD 63
Hollywood-Wilshire 2,747 566 per 100,000	Coronary heart disease 633	Stroke 154	Lung cancer 124	Alzheimer's disease 120	Diabetes 102
Inglewood 2,285 656 per 100,000	Coronary heart disease 456	Stroke 120	Lung cancer 108	COPD 103	Diabetes 95

Long Beach 3,084 753 per 100,000	Coronary heart disease 634	COPD 204	Stroke 159	Lung cancer 154	Alzheimer's disease 137
Northeast 1,591 572 per 100,000	Coronary heart disease 315	Diabetes 95	Stroke 93	Lung cancer 71	Pneumonia/influenza 70
Pasadena 966 557 per 100,000	Coronary heart disease 215	COPD 68	Lung cancer 56	Pneumonia/influenza 49	Alzheimer's disease 48
Pomona 3,207 589 per 100,000	Coronary heart disease 612	Stroke 185	COPD 182	Lung cancer 163	Alzheimer's disease 151
San Antonio 1,689 568 per 100,000	Coronary heart disease 284	Stroke 100	Lung cancer 88	Diabetes 77	COPD 70
San Fernando 2,446 558 per 100,000	Coronary heart disease 557	Stroke 137	COPD 135	Lung cancer 118	Alzheimer's disease 115
South 948 863 per 100,000	Coronary heart disease 192	Stroke 54	Lung cancer 48	Homicide 38	Diabetes 37
Southeast 627 728 per 100,000	Coronary heart disease 116	Stroke 37	Homicide 32	Diabetes 32	COPD 24
Southwest 2,528 748 per 100,000	Coronary heart disease 532	Stroke 144	Lung cancer 141	Diabetes 101	COPD 94
Torrance 2,988 570 per 100,000	Coronary heart disease 601	Lung cancer 185	Stroke 185	COPD 151	Alzheimer's disease 116
West 4,040 485 per 100,000	Coronary heart disease 823	Stroke 242	Lung cancer 191	Alzheimer's disease 188	COPD 180
West Valley 5,170 557 per 100,000	Coronary heart disease 1,104	Lung cancer 280	Stroke 276	Alzheimer's disease 254	COPD 241
Whittier 2,183 620 per 100,000	Coronary heart disease 460	Stroke 134	COPD 101	Lung cancer 99	Diabetes 97
Los Angeles County Total 57,988 596 per 100,000	Coronary heart disease 11,913	Stroke 3,256	Lung cancer 2,908	COPD 2,874	Alzheimer's disease 2,346

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

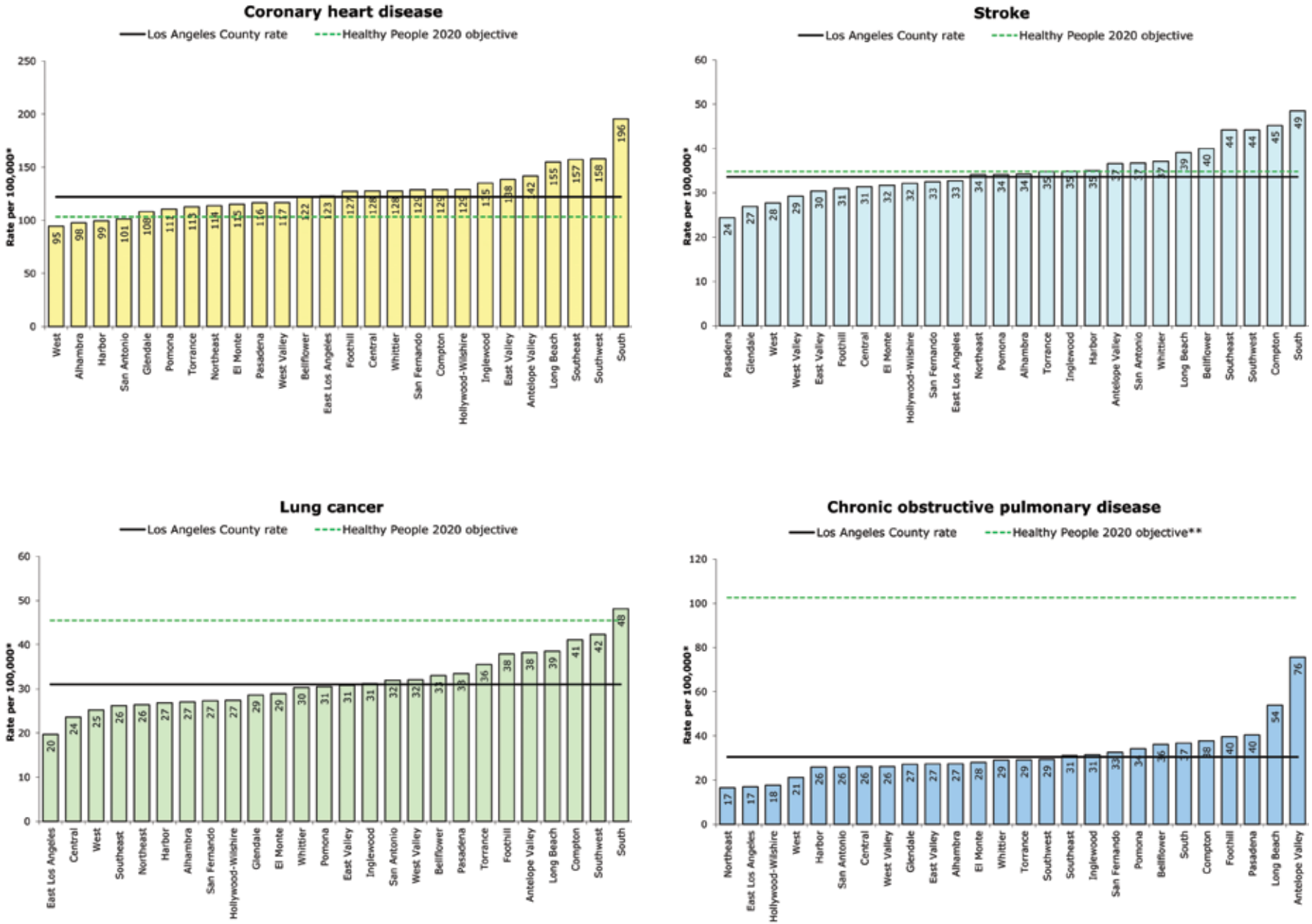
Leading causes of premature death (before age 75 years)

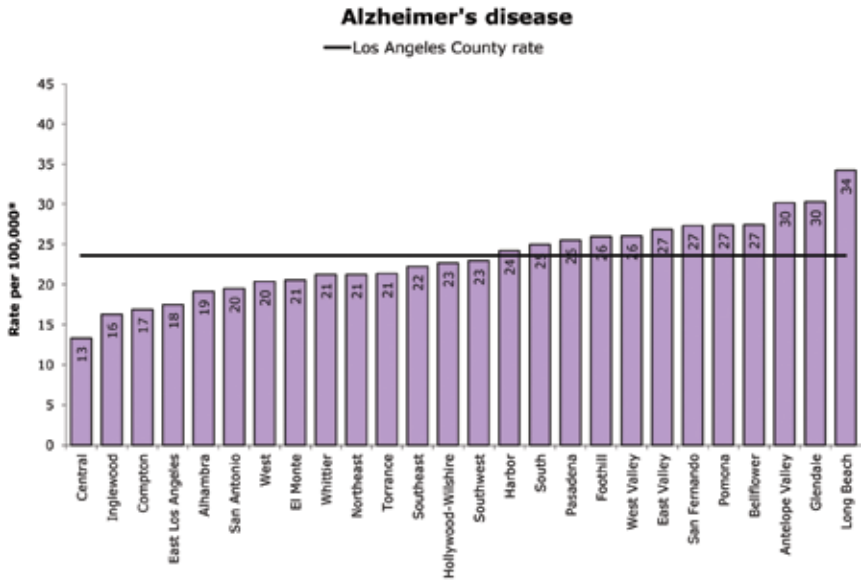
Health District	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause
Alhambra	Coronary heart disease	Motor vehicle crash	Stroke	Lung cancer	Colorectal cancer
Antelope Valley	Coronary heart disease	Motor vehicle crash	Suicide	Drug overdose	Homicide
Bellflower	Coronary heart disease	Motor vehicle crash	Liver disease/cirrhosis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

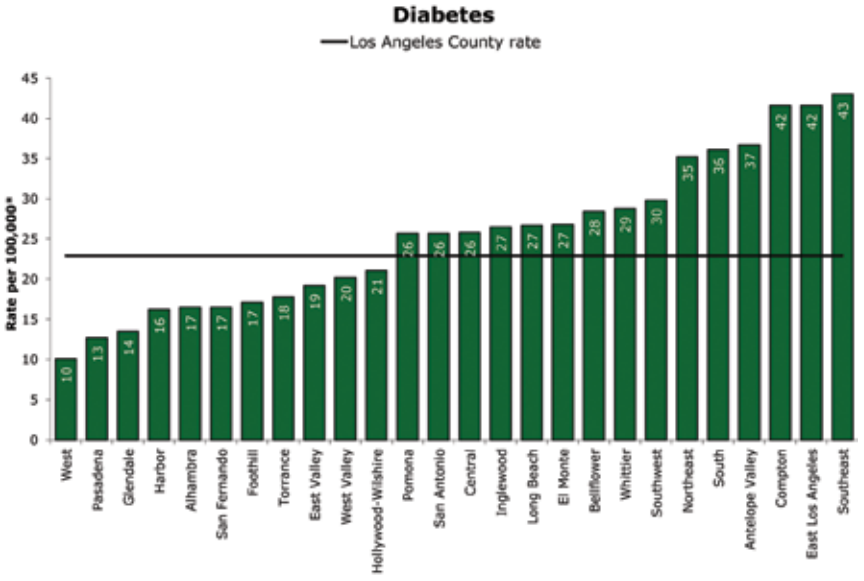
Long Beach	Coronary heart disease	Drug overdose	Suicide	Homicide	Liver disease/cirrhosis
Northeast	Coronary heart disease	Homicide	Liver disease/cirrhosis	Diabetes	Drug overdose
Pasadena	Coronary heart disease	Suicide	Lung cancer	Drug overdose	COPD
Pomona	Coronary heart disease	Motor vehicle crash	Suicide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

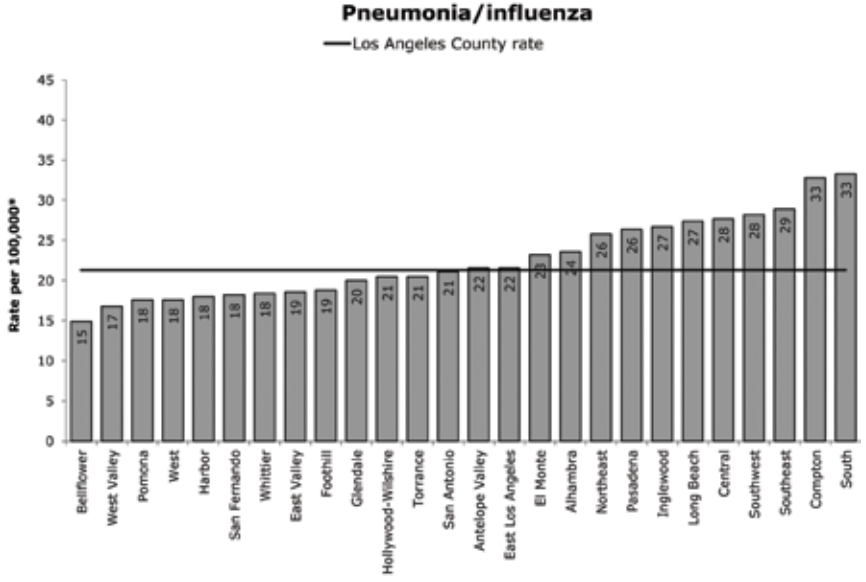
Notes: Los Angeles County Total includes persons of unknown residence.

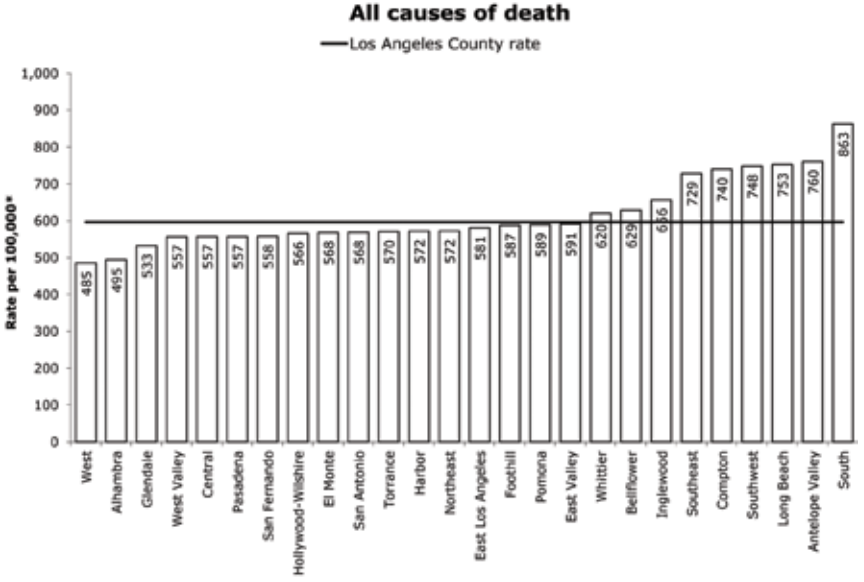
Figure 16. Death rates for selected causes of death, by health district of residence











*Age-adjusted.

**The Healthy People 2020 goal for chronic obstructive pulmonary disease is 102.6 deaths per 100,000 population aged 45 years and over. The county rate is 30.5 deaths per 100,000 population, and 86.9 for those aged 45 years and over.

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

Leading causes of death

Year	#1 cause No. of deaths	#2 cause No. of deaths	#3 cause No. of deaths	#4 cause No. of deaths	#5 cause No. of deaths	#6 cause No. of deaths	#7 cause No. of deaths	#8 cause No. of deaths	#9 cause No. of deaths	#10 cause No. of deaths
2011	Coronary heart disease 11,913	Stroke 3,256	Lung cancer 2,908	COPD 2,874	Alzheimer's disease 2,346	Diabetes 2,196	Pneumonia/ influenza 2,062	Colorectal cancer 1,400	Liver disease/ cirrhosis 1,246	Breast cancer 1,153
Because of changes to the criteria for categorizing some causes of death, 2002-2010 may not be comparable to 2011.										
2010	Coronary heart disease 12,635	Stroke 3,278	Lung cancer 2,941	COPD 2,622	Alzheimer's disease 2,242	Pneumonia/ influenza 1,964	Diabetes 1,894	Colorectal cancer 1,285	Liver disease/ cirrhosis 1,171	Breast cancer 1,116
2009	Coronary heart disease 12,725	Stroke 3,301	Lung cancer 2,958	COPD 2,904	Alzheimer's disease 2,125	Pneumonia/ influenza 2,097	Diabetes 1,964	Colorectal cancer 1,388	Liver disease/ cirrhosis 1,246	Breast cancer 1,173
2008	Coronary heart disease 13,428	Stroke 3,280	Lung cancer 2,910	COPD 2,889	Diabetes 2,190	Pneumonia/ influenza 2,171	Alzheimer's disease 2,121	Colorectal cancer 1,365	Liver disease/ cirrhosis 1,134	Breast cancer 1,079
2007	Coronary heart disease 13,890	Stroke 3,323	Lung cancer 2,950	COPD 2,625	Pneumonia/ influenza 2,184	Diabetes 2,127	Alzheimer's disease 1,780	Colorectal cancer 1,323	Breast cancer 1,139	Liver disease/ cirrhosis 1,133
2006	Coronary heart disease 14,842	Stroke 3,662	Lung cancer 3,021	COPD 2,665	Pneumonia/ influenza 2,283	Diabetes 2,188	Alzheimer's disease 1,551	Colorectal cancer 1,362	Liver disease/ cirrhosis 1,102	Breast cancer 1,071
2005	Coronary heart disease 15,154	Stroke 3,775	Lung cancer 3,036	COPD 2,770	Pneumonia/ influenza 2,333	Diabetes 2,305	Alzheimer's disease 1,546	Colorectal cancer 1,409	Breast cancer 1,174	Homicide 1,066
2004	Coronary heart disease 15,296	Stroke 4,121	Lung cancer 3,034	COPD 2,641	Pneumonia/ influenza 2,272	Diabetes 2,201	Colorectal cancer 1,414	Alzheimer's disease 1,340	Breast cancer 1,166	Homicide 1,069
2003	Coronary heart disease 16,320	Stroke 4,249	Lung cancer 3,150	COPD 2,796	Pneumonia/ influenza 2,419	Diabetes 2,178	Colorectal cancer 1,450	Alzheimer's disease 1,285	Breast cancer 1,084	Homicide 1,066
2002	Coronary heart disease 16,293	Stroke 4,169	Lung cancer 3,081	COPD 2,604	Pneumonia/ influenza 2,494	Diabetes 2,122	Colorectal cancer 1,315	Homicide 1,148	Liver disease/ cirrhosis 1,085	Breast cancer 1,064

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
2011	Coronary heart disease	Homicide	Suicide	Liver disease	Motor vehicle crash	Drug overdose	Lung cancer	Diabetes	Stroke	Breast cancer
Because of changes to the criteria for categorizing some causes of death, 2002-2010 may not be comparable to 2011.										
2010	Coronary heart disease	Homicide	Suicide	Motor vehicle crash	Liver disease	Drug overdose	Lung cancer	Stroke	Breast cancer	Diabetes
2009	Coronary heart disease	Homicide	Motor vehicle crash	Liver disease	Suicide	Drug overdose	Lung cancer	Stroke	Diabetes	Breast cancer
2008	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Liver disease	Drug overdose	Lung cancer	Diabetes	Stroke	Breast cancer
2007	Coronary heart disease	Homicide	Motor vehicle crash	Drug overdose	Liver disease	Suicide	Lung cancer	Stroke	Diabetes	Breast cancer
2006	Coronary heart disease	Homicide	Motor vehicle crash	Liver disease	Suicide	Lung cancer	Stroke	Drug overdose	Diabetes	Breast cancer
2005	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Lung cancer	Liver disease	Diabetes	Stroke	Drug overdose	Breast cancer
2004	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Lung cancer	Liver disease	Drug overdose	Stroke	Diabetes	HIV
2003	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Lung cancer	Drug overdose	Liver disease	Stroke	Diabetes	HIV
2002	Coronary heart disease	Homicide	Motor vehicle crash	Lung cancer	Suicide	Liver disease	Drug overdose	Stroke	HIV	Diabetes

Alzheimer's Disease

43rd cause of premature death
5th cause of death

ALZHEIMER'S DISEASE *has been the fifth-leading cause of death since 2009, moving up from the seventh-leading cause of death in 2008. In 2011, it was the third-leading cause of death for women, while it was the ninth-leading cause of death for men. The highest death rate, 32 deaths per 100,000 population, was among white women. The number of Alzheimer's disease deaths increased every year during the last 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 prevention

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

Individual opportunities for prevention

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

LOS ANGELES COUNTY

Deaths	2,346
Death Rate	24 deaths per 100,000 population
Healthy People 2020 Objective	None
ICD-9 codes (1979-1998)	331.0
ICD-10 codes (1999-2011)	G30

References

Alzheimer's Association
www.alz.org

"Alzheimer's Disease: An Emerging Public Health Concern"
http://publichealth.lacounty.gov/ha/reports/LAHealthBrief2007/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

	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011	
	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	973	12	1,285	16	1,340	16	1,546	18	1,551	18	1,780	20	2,121	23	2,125	22	2,242	25	2,346	24
Males	318	11	405	14	399	13	450	15	477	15	586	18	676	20	694	20	751	22	732	20
Females	655	13	880	17	941	18	1,096	20	1,074	20	1,194	21	1,445	24	1,431	23	1,491	26	1,614	26
White	755	16	957	19	975	20	1,132	23	1,105	23	1,297	26	1,487	29	1,480	28	1,509	31	1,525	29
Hispanic	93	7	161	11	143	9	168	10	217	12	239	12	310	15	349	17	376	20	412	19
Black	97	14	119	17	155	22	176	24	151	21	159	22	204	26	184	23	186	25	226	28
Asian/Pacific Islander	25	3	42	4	65	6	69	6	76	7	80	6	116	8	108	8	167	12	176	11
Males																				
White	246	14	295	17	289	16	319	18	336	19	417	23	478	25	497	25	510	28	465	24
Hispanic	37	7	46	9	46	8	53	9	71	11	71	10	91	12	108	14	133	19	135	17
Black	28	12	37	16	40	17	55	23	45	19	63	25	58	22	51	19	55	22	67	24
Asian/Pacific Islander	6	--	23	6	24	5	23	5	25	5	33	6	47	9	36	7	52	9	62	10
Females																				
White	509	16	662	21	686	22	813	26	769	25	880	28	1,009	31	983	29	999	32	1,060	32
Hispanic	56	6	115	12	97	10	115	11	146	13	168	14	219	17	241	18	243	20	277	20
Black	69	15	82	17	115	24	121	25	106	22	96	19	146	28	133	26	131	26	159	29
Asian/Pacific Islander	19	--	19	--	41	7	46	7	51	7	47	6	69	8	72	8	115	13	114	11
SPA 1: Antelope Valley	39	21	43	24	43	24	60	31	50	25	70	32	74	32	72	30	86	39	75	30
SPA 2: San Fernando	255	15	325	19	343	19	409	22	407	22	490	25	595	29	568	27	606	29	618	27
SPA 3: San Gabriel	210	14	273	17	268	16	307	18	313	19	384	22	381	21	399	21	422	23	473	23
SPA 4: Metro	102	10	119	11	120	12	137	13	142	13	131	12	189	16	169	14	190	19	222	20
SPA 5: West	77	10	115	15	133	17	161	20	116	15	167	21	198	23	216	25	210	24	188	20
SPA 6: South	60	11	75	13	108	18	101	17	99	16	89	14	128	19	128	19	96	17	139	22
SPA 7: East	93	10	135	13	144	14	148	14	194	18	170	15	240	20	262	22	293	27	263	22
SPA 8: South Bay	132	11	196	16	175	14	222	17	221	17	272	20	309	22	311	21	339	24	367	24

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

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

Breast Cancer (Female)

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

IN 2011, BREAST CANCER *was the leading cause of premature death for Hispanic and Asian/Pacific Islander women. Among women 25 to 44 years of age, breast cancer was the leading cause of death for Hispanics and blacks, the second-leading cause of death for Asians/Pacific Islanders, and the third-leading cause of death for whites. The death rate among black women, 38 deaths per 100,000 females, was substantially higher than the county overall.*

In simple terms . . .

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

Risk factors (for women)

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

Community opportunities for prevention

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

Individual opportunities for prevention

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

*Available at http://www.uspreventiveservicestaskforce.org/uspstf/uspsbrca.htm

LOS ANGELES COUNTY

Deaths	1,143
Death Rate	21.2 deaths per 100,000 females
Healthy People 2020 Objective C-3	20.7 deaths per 100,000 females
ICD-9 codes (1979-1998)	174-175
ICD-10 codes (1999-2011)	C50

References

American Cancer Society
www.cancer.org

National Cancer Institute, Surveillance, Epidemiology and End Results (SEER) Program
www.seer.cancer.gov/registries/los_angeles.html

Centers for Disease Control and Prevention
www.cdc.gov/cancer/breast

Guide to Community Preventive Services
www.thecommunityguide.org

Referral

CA Department of Public Health, Cancer Detection Programs Every Woman Counts
1-800-511-2300

Los Angeles County Department of Public Health, Office of Women's Health Hotline
1-800-793-8090

Figure T4. Trends in breast cancer (female) mortality

	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011	
	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	1,052	23	1,074	23	1,157	24	1,168	24	1,063	21	1,127	22	1,071	21	1,166	23	1,109	21	1,143	21
Females																				
White	612	28	570	26	613	27	631	28	557	25	571	25	560	24	593	26	532	24	552	24
Hispanic	176	14	242	18	222	16	223	16	237	15	249	16	221	14	262	17	247	15	267	15
Black	150	32	158	33	199	40	181	37	164	33	194	39	180	36	187	36	187	36	196	38
Asian/Pacific Islander	112	17	102	14	120	16	132	17	101	13	112	14	108	13	120	15	137	15	123	13
SPA 1: Antelope Valley	36	29	41	30	30	23	51	36	40	26	39	26	38	24	34	22	42	26	53	30
SPA 2: San Fernando	242	24	238	23	241	23	261	24	264	24	249	22	240	21	235	20	251	21	240	20
SPA 3: San Gabriel	203	22	185	20	209	22	204	21	192	20	202	21	187	19	233	23	230	22	213	20
SPA 4: Metro	117	23	104	20	130	23	117	21	104	19	120	21	108	19	92	16	86	15	115	20
SPA 5: West	101	27	88	24	97	26	99	25	85	22	84	21	98	23	96	23	83	20	83	21
SPA 6: South	89	24	97	26	113	29	113	30	110	28	100	25	104	26	121	30	120	29	115	27
SPA 7: East	105	18	144	24	130	22	130	21	122	20	142	23	117	18	153	24	118	18	129	19
SPA 8: South Bay	159	22	171	23	201	26	192	25	143	18	185	23	176	22	202	25	178	21	194	23

*Age-adjusted rate per 100,000 females. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

COPD (Chronic Obstructive Pulmonary Disease)

12th cause of premature death
4th cause of death

__COPD__ has been the fourth-leading cause of death overall for each of the last 10 years, but in 2011 it was the eighth-leading cause of death for Hispanics. In 2011, the highest death rate, 54 deaths per 100,000 population, was among black men. The death rate in the Antelope Valley Service Planning Area, 76 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 into 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 affordable 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	2,874
Death Rate	30.5* deaths per 100,000 population 86.9 deaths per 100,000 adults aged 45 years and over**
Healthy People 2020 Objective RD-10	102.6 deaths per 100,000 adults aged 45 years and over
ICD-9 codes (1979-1998)	492, 496
ICD-10 codes (1999-2011)	J40-J44 (current year) J43-J44 (previous years)
References	**American Lung Association** www.lungusa.org **National Heart, Lung, and Blood Institute** www.nhlbi.nih.gov **It's Quitting Time L.A.** www.laquits.com **"Adult Smoking on the Decline, but Disparities Remain"** www.publichealth.lacounty.gov/ha/reports/LAHealthBrief2011/Smoking/Smoking2012_finalS.pdf
Referral	**American Lung Association Helpline** 1-800-LUNG-USA1 **California Smokers' Helpline** 1-800-NO-BUTTS

*Actual death rate=30.46

**Shown for comparability with Healthy People 2020 Objective

Figure T5. Trends in COPD mortality

	2002		2003		2004		2005		2006		2007		2008		2009		2010			2011	
	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	2,604	33	2,796	35	2,641	32	2,770	33	2,665	32	2,625	30	2,889	32	2,904	32	2,622	30		2,874	30
Males	1,246	40	1,377	43	1,278	39	1,348	40	1,275	38	1,286	37	1,398	39	1,420	39	1,246	35		1,342	35
Females	1,358	29	1,419	29	1,363	28	1,422	28	1,390	28	1,339	26	1,491	28	1,484	27	1,376	26		1,532	27
White	1,887	43	1,989	45	1,835	42	1,840	42	1,771	41	1,801	41	1,955	43	1,895	41	1,743	40		1,843	40
Hispanic	249	16	311	19	305	18	344	19	346	18	299	15	343	16	392	19	345	17		383	17
Black	293	40	287	38	297	39	331	43	329	43	265	34	318	39	337	41	289	35		349	41
Asian/Pacific Islander	164	17	198	19	192	18	238	21	213	18	247	19	258	19	267	19	229	16		287	18
Males																					
White	855	48	896	50	830	46	823	46	793	45	823	46	894	48	887	47	762	42		799	42
Hispanic	126	22	175	29	162	25	177	25	167	23	155	20	175	21	194	24	172	21		186	20
Black	149	55	169	59	154	53	184	61	170	58	144	48	157	50	176	57	161	50		181	54
Asian/Pacific Islander	111	27	131	31	125	28	154	32	141	28	155	30	162	29	158	28	138	24		167	27
Females																					
White	1,032	39	1,093	42	1,005	38	1,017	38	978	38	978	38	1,061	40	1,008	37	981	38		1,044	39
Hispanic	123	13	136	14	143	14	167	15	179	15	144	12	168	13	198	15	173	14		197	14
Black	144	31	118	25	143	32	147	31	159	34	121	25	161	32	161	31	128	26		168	32
Asian/Pacific Islander	53	10	67	11	67	11	84	13	72	10	92	12	96	12	109	13	91	10		120	12
SPA 1: Antelope Valley	125	63	140	69	120	58	159	74	150	67	148	63	184	74	202	78	172	70		204	76
SPA 2: San Fernando	519	30	575	33	513	29	563	31	578	32	562	30	527	27	572	28	539	27		596	28
SPA 3: San Gabriel	494	33	529	34	515	32	537	33	536	33	504	29	614	35	631	36	534	30		625	33
SPA 4: Metro	236	25	246	25	234	24	270	27	247	25	236	23	260	24	251	23	189	19		206	20
SPA 5: West	191	27	178	25	166	23	158	22	139	19	140	19	195	25	182	23	146	19		180	21
SPA 6: South	212	36	195	33	205	34	219	35	197	31	185	29	214	33	216	33	202	33		217	33
SPA 7: East	335	35	402	40	372	36	316	30	330	31	366	33	381	34	359	32	339	32		325	28
SPA 8: South Bay	489	40	521	42	497	39	542	42	479	37	475	35	501	36	488	34	496	36		521	35

Because of changes to the criteria for categorizing deaths from this cause, 2002-2010 may not be comparable to 2011.

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

Colorectal Cancer

11th cause of premature death
8th cause of death

COLORECTAL CANCER *has been the eighth-leading cause of death overall since 2005. In 2011, it was the 11th-leading cause of premature death overall, but it was the fifth-leading cause of premature death for Asians/ Pacific Islanders. The highest death rate, 27 deaths per 100,000 population, was among black men and the lowest, 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. Colorectal cancer starts in the cells of the colon or rectum.

Risk factors

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

Community opportunities for prevention

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

Individual opportunities for prevention

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

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

LOS ANGELES COUNTY

Deaths	1,400
Death Rate	14.5* deaths per 100,000 population
Healthy People 2020 Objective C-5	14.5 deaths per 100,000 population
ICD-9 codes (1979-1998)	153-154
ICD-10 codes (1999-2011)	C18-C21, C26.0 (current year) C18-C21 (previous years)
References	**American Cancer Society** www.cancer.org **National Cancer Institute** www.cancer.gov **National Cancer Institute, Surveillance, Epidemiology and End Results (SEER) Program** www.seer.cancer.gov/registries/los_angeles.html **Guide to Community Preventive Services** www.thecommunityguide.org
Referral	**American Cancer Society Helpline** 1-800-227-2345

*Actual death rate=14.46

Figure T6. Trends in colorectal cancer mortality

	2002		2003		2004		2005		2006		2007		2008		2009		2010			2011	
	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	1,315	16	1,450	18	1,414	17	1,409	17	1,362	16	1,323	15	1,365	15	1,388	15	1,285	14		1,400	14
Males	655	19	710	21	674	19	708	20	686	19	686	18	703	18	710	18	663	17		715	17
Females	660	14	740	15	740	15	701	14	676	14	637	13	662	13	678	13	622	12		685	13
White	763	18	824	19	767	18	737	17	689	16	689	16	660	15	696	16	619	15		613	14
Hispanic	206	11	241	12	230	12	270	12	275	12	264	11	306	12	286	11	296	11		359	13
Black	192	25	211	27	237	29	213	26	223	28	181	22	196	23	209	25	195	23		194	22
Asian/Pacific Islander	148	13	170	15	177	15	184	15	171	13	184	14	197	14	195	14	173	11		228	14
Males																					
White	368	21	401	22	358	20	365	20	350	20	352	19	325	17	345	18	317	17		312	16
Hispanic	111	14	127	15	116	15	154	17	134	15	146	15	167	15	169	17	157	14		192	16
Black	94	30	90	28	111	34	102	30	110	34	88	27	96	28	95	27	97	28		94	27
Asian/Pacific Islander	79	17	90	18	87	17	82	15	89	16	98	17	111	18	101	16	91	14		113	16
Females																					
White	395	16	423	17	409	16	372	15	339	14	337	14	335	13	351	14	302	13		301	13
Hispanic	95	9	114	10	114	10	116	9	141	10	118	9	139	10	117	8	139	9		167	11
Black	98	22	121	25	126	26	111	23	113	23	93	19	100	20	114	23	98	20		100	19
Asian/Pacific Islander	69	11	80	12	90	13	102	15	82	11	86	11	86	11	94	11	82	9		115	12
SPA 1: Antelope Valley	43	21	60	27	59	26	56	24	30	13	35	14	36	14	52	19	49	17		39	12
SPA 2: San Fernando	286	16	292	16	322	18	327	18	306	16	306	16	301	15	294	14	281	14		312	14
SPA 3: San Gabriel	255	16	278	17	248	15	286	17	267	16	239	14	251	14	263	15	250	14		267	14
SPA 4: Metro	149	16	163	17	146	15	148	15	151	15	149	14	154	15	149	14	133	13		152	14
SPA 5: West	95	14	110	16	89	13	103	14	89	13	108	15	98	13	102	13	92	12		99	13
SPA 6: South	133	22	137	22	149	24	134	21	143	22	112	17	128	19	140	21	117	17		119	17
SPA 7: East	149	15	159	15	159	15	148	14	161	15	160	14	163	15	152	13	149	13		176	15
SPA 8: South Bay	202	16	241	19	230	18	204	15	213	16	208	15	229	16	235	16	213	15		235	16

Because of changes to the criteria for categorizing deaths from this cause, 2002-2010 may not be comparable to 2011.

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

Coronary Heart Disease

1st cause of premature death
1st cause of death

***DURING THE LAST 10 YEARS**, the death rate from coronary heart disease decreased 41%, but it remained the overall leading cause of death and premature death. In 2011, the highest death rate, 228 deaths per 100,000 population, was among black men, while the lowest, 72 deaths per 100,000 population, was among Asian/Pacific Islander women.*

In simple terms . . .

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

This artery narrowing can cause chest pain or discomfort (angina) when the heart muscle does not 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 (over 45 years for men and over 55 years for women), family history of early heart disease, previous heart attack or angina, tobacco use, high cholesterol, high blood pressure, excessive alcohol consumption, diabetes, being overweight, lack of physical activity

Community opportunities for prevention

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

Individual opportunities for prevention

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

LOS ANGELES COUNTY

Deaths	11,913
Death Rate	121.5 deaths per 100,000 population
Healthy People 2020 Objective HDS-2	103.4 deaths per 100,000 population
ICD-9 codes (1979-1998)	402, 410-414, 429.2
ICD-10 codes (1999-2011)	I20-I25 (current year) I11, I20-I25 (previous years)
References	**American Heart Association** www.americanheart.org **Centers for Disease Control and Prevention** www.cdc.gov/heartdisease **The Million Hearts Initiative** www.millionhearts.hhs.gov
Referral	**Los Angeles County Division of the American Heart Association** 213-291-7000

Figure T7. Trends in coronary heart disease mortality

	2002		2003		2004		2005		2006		2007		2008		2009		2010			2011	
	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	16,293	205	16,320	199	15,296	183	15,154	178	14,842	173	13,890	156	13,428	146	12,725	135	12,635	138		11,913	122
Males	8,029	252	8,131	246	7,662	226	7,613	220	7,541	216	7,082	195	7,001	185	6,638	171	6,651	175		6,237	154
Females	8,264	169	8,189	163	7,634	149	7,541	145	7,301	139	6,808	125	6,427	114	6,087	106	5,984	108		5,676	96
White	10,016	220	10,003	218	9,236	201	8,953	194	8,653	191	7,994	173	7,596	160	6,980	145	6,845	151		6,475	135
Hispanic	2,600	160	2,632	153	2,626	143	2,766	143	2,675	133	2,475	114	2,536	113	2,428	105	2,555	111		2,404	96
Black	2,262	303	2,269	295	2,085	269	2,045	260	2,053	263	1,936	239	1,804	218	1,878	221	1,721	208		1,571	179
Asian/Pacific Islander	1,365	136	1,352	126	1,292	115	1,344	114	1,409	115	1,452	110	1,437	103	1,387	97	1,451	98		1,396	87
Males																					
White	4,878	274	4,880	271	4,505	248	4,362	240	4,299	239	4,030	219	3,905	205	3,598	186	3,566	192		3,342	171
Hispanic	1,323	195	1,382	190	1,415	184	1,465	180	1,414	167	1,319	142	1,349	141	1,333	135	1,372	138		1,323	124
Black	1,084	370	1,093	359	1,012	330	1,044	332	1,053	343	950	293	940	285	957	279	898	273		817	228
Asian/Pacific Islander	714	163	739	158	696	143	717	141	748	142	761	136	770	132	718	119	776	128		706	106
Females																					
White	5,138	176	5,123	175	4,731	162	4,591	157	4,354	151	3,964	136	3,691	123	3,382	111	3,279	116		3,133	105
Hispanic	1,277	135	1,250	125	1,211	114	1,301	116	1,261	108	1,156	92	1,187	91	1,095	82	1,183	90		1,081	75
Black	1,178	255	1,176	247	1,073	224	1,001	207	1,000	206	986	199	864	171	921	178	823	163		754	141
Asian/Pacific Islander	651	115	613	102	596	93	627	93	661	94	691	90	667	81	669	79	675	77		690	72
SPA 1: Antelope Valley	500	246	496	237	488	232	467	214	463	205	468	192	459	176	476	180	499	188		404	142
SPA 2: San Fernando	3,550	205	3,520	198	3,419	189	3,377	184	3,262	176	3,071	159	3,081	152	2,828	135	2,852	137		2,702	121
SPA 3: San Gabriel	2,972	193	2,949	184	2,704	165	2,781	167	2,666	159	2,541	145	2,486	137	2,304	126	2,270	124		2,219	112
SPA 4: Metro	1,855	192	1,826	184	1,662	166	1,724	169	1,673	163	1,478	140	1,469	135	1,414	130	1,495	148		1,350	125
SPA 5: West	1,056	146	1,089	148	1,036	138	980	129	1,004	135	912	120	882	111	854	104	817	98		823	94
SPA 6: South	1,606	273	1,562	260	1,443	234	1,404	223	1,422	224	1,295	199	1,222	183	1,271	187	1,112	173		1,063	155
SPA 7: East	1,976	205	1,949	192	1,847	175	1,854	173	1,836	169	1,660	147	1,588	139	1,488	128	1,463	134		1,401	119
SPA 8: South Bay	2,704	223	2,758	219	2,529	196	2,493	189	2,360	177	2,332	168	2,143	149	2,029	137	2,064	144		1,936	127

Because of changes to the criteria for categorizing deaths from this cause, 2002-2010 may not be comparable to 2011.

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

Diabetes

8th cause of premature death
6th cause of death

__DIABETES__ has been a leading cause of death and premature death for each of the past 10 years. In 2011, it was the sixth-leading cause of death overall, but it was the second-leading cause of death for Hispanics. The highest death rate, 43 deaths per 100,000 population, was among black men, while the lowest, 13 deaths per 100,000 population, was among white women. The diabetes death rates were higher in the South and Antelope Valley Service Planning Areas than in other areas of the county.

In simple terms . . .

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

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

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

Risk factors

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

Community opportunities for prevention

- Educate the public about diabetes and pre-diabetes through community health education campaigns
- Promote community self-care management programs to prevent diabetes complications
- Promote physical activity by providing access to safe places like parks and schools to walk, play, and exercise
- Offer incentives for employers to provide, and employees to participate in, workplace wellness programs
- Improve access to nutritious foods, and make it easier for the public to find and choose healthier foods

Individual opportunities for prevention

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

LOS ANGELES COUNTY	
Deaths	2,196
Death Rate	23 deaths per 100,000 population
Healthy People 2020 Objective D-3	Not comparable
ICD-9 codes (1979-1998)	250
ICD-10 codes (1999-2011)	E10-E14
References	**American Diabetes Association** www.diabetes.org **National Diabetes Education Program** www.ndep.nih.gov **"Trends in Diabetes: Time for Action"** www.publichealth.lacounty.gov/ha/reports/LAHealthBrief2011/Diabetes/Diabetes_2012_FinalS.pdf
Referral	**American Diabetes Association Information Line** 1-800-DIABETES

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

Figure T8. Trends in diabetes mortality

	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011	
	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	2,122	27	2,178	27	2,201	26	2,305	27	2,188	26	2,127	24	2,190	24	1,964	21	1,894	21	2,196	23
Males	996	29	1,053	30	1,063	30	1,140	32	1,099	30	1,040	28	1,084	28	1,024	26	993	26	1,170	28
Females	1,126	24	1,125	24	1,138	24	1,165	24	1,089	22	1,087	21	1,106	21	940	18	901	17	1,026	19
White	840	20	835	20	863	20	897	21	806	19	751	17	801	18	672	15	667	16	783	18
Hispanic	678	38	719	37	741	37	773	37	774	36	754	32	764	32	694	28	690	29	799	30
Black	374	48	378	48	339	42	389	49	367	46	357	44	359	43	340	40	294	35	316	36
Asian/Pacific Islander	212	20	233	21	251	22	236	19	230	18	257	20	257	18	248	18	237	16	278	17
Males																				
White	400	22	424	24	446	25	455	25	412	23	385	21	429	23	364	19	365	20	453	24
Hispanic	319	42	339	43	347	41	390	43	371	40	378	37	371	36	361	35	356	34	430	36
Black	164	52	158	50	158	49	181	56	178	55	147	45	157	46	161	46	144	43	150	43
Asian/Pacific Islander	107	23	124	26	109	22	109	20	132	24	127	23	126	21	131	22	124	20	129	19
Females																				
White	440	18	411	17	417	17	442	18	394	16	366	14	372	15	308	12	302	13	330	13
Hispanic	359	34	380	34	394	34	383	32	403	32	376	29	393	29	333	24	334	24	369	24
Black	210	45	220	47	181	38	208	44	189	39	210	43	202	41	179	35	150	30	166	32
Asian/Pacific Islander	105	17	109	18	142	22	127	18	98	14	130	17	131	16	117	14	113	13	149	16
SPA 1: Antelope Valley	71	33	69	29	73	35	78	32	106	43	81	31	106	39	113	40	85	31	109	37
SPA 2: San Fernando	335	19	395	22	396	22	411	22	377	20	349	18	408	20	337	16	343	17	391	18
SPA 3: San Gabriel	395	25	361	23	423	26	438	27	389	23	387	23	405	23	375	21	330	19	400	21
SPA 4: Metro	276	29	271	28	257	26	277	28	245	24	281	28	241	23	212	20	230	23	276	26
SPA 5: West	101	15	113	16	115	16	103	14	91	13	95	13	100	13	75	10	90	12	83	10
SPA 6: South	286	47	289	46	258	41	294	46	256	39	275	42	262	39	247	36	218	33	245	35
SPA 7: East	350	36	336	33	356	34	381	36	366	34	310	28	352	31	323	29	302	28	350	30
SPA 8: South Bay	303	24	337	26	310	23	320	24	343	25	339	24	309	21	282	19	293	21	336	22

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

Drug Overdose (Unintentional)

6th cause of premature death
20th cause of death

UNINTENTIONAL DRUG OVERDOSE *has been one of the 10 leading causes of premature death for each of the past 10 years. The majority of drug overdose deaths were among men, and in 2011, the highest drug overdose death rate, 14 deaths per 100,000 population, was among white men. Drug overdose was the leading cause of death for 25- to 44-year-old white men.*

In simple terms . . .

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

Unintentional 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 health care provider, or call the Substance Abuse Prevention and Control Helpline: 1-800-564-6600

LOS ANGELES COUNTY

Deaths	580
Death Rate	6 deaths per 100,000 population
Healthy People 2020 Objective SA-12	Not comparable
ICD-9 codes (1979-1998)	E850-E858, E860
ICD-10 codes (1999-2011)	X40-X45

References

National Institute on Drug Abuse
www.drugabuse.gov

Center for Substance Abuse Prevention
www.samhsa.gov/prevention

"Prescription Drug Abuse in Los Angeles County"
www.publichealth.lacounty.gov/sapc/resources/PrescriptionWEB3.pdf

Referral

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

Figure T9. Trends in drug overdose mortality

	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011	
	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	611	6	620	6	556	6	528	5	557	6	691	7	625	6	685	7	611	6	580	6
Males	444	9	437	9	388	8	377	8	372	8	501	10	431	9	471	10	435	9	407	8
Females	167	3	183	4	168	3	151	3	185	4	190	4	194	4	214	4	176	3	173	3
White	301	9	326	10	308	9	266	8	288	9	351	11	326	10	356	11	314	10	324	10
Hispanic	170	5	178	5	155	4	137	4	172	4	232	6	195	5	219	5	194	4	167	4
Black	131	14	102	11	80	9	113	12	81	9	92	10	87	9	93	10	90	10	71	8
Asian/Pacific Islander	8	--	11	--	6	--	5	--	10	--	13	--	13	--	13	--	9	--	15	--
Males																				
White	199	12	206	12	204	12	180	11	181	11	229	14	204	13	229	14	209	13	216	14
Hispanic	146	8	151	8	128	6	114	6	134	7	200	10	164	8	181	9	163	8	133	6
Black	93	22	70	17	47	11	73	18	46	11	61	14	53	13	53	13	56	13	45	10
Asian/Pacific Islander	5	--	7	--	<5	--	5	--	6	--	9	--	7	--	6	--	<5	--	12	--
Females																				
White	102	6	120	7	104	6	86	5	107	6	122	7	122	7	127	8	105	7	108	7
Hispanic	24	1	27	1	27	1	23	1	38	2	32	2	31	2	38	2	31	1	34	1
Black	38	7	32	6	33	7	40	8	35	7	31	6	34	7	40	8	34	7	26	5
Asian/Pacific Islander	<5	--	<5	--	<5	--	<5	--	<5	--	<5	--	6	--	7	--	6	--	3	--
SPA 1: Antelope Valley	27	8	30	9	31	10	19	--	31	9	33	9	24	7	27	8	38	10	32	8
SPA 2: San Fernando	126	6	97	5	101	5	114	5	104	5	113	5	133	6	146	7	122	5	146	6
SPA 3: San Gabriel	75	4	63	4	65	4	64	4	75	4	89	5	70	4	91	5	70	4	69	4
SPA 4: Metro	75	6	107	9	84	7	67	6	73	6	97	8	91	8	89	8	89	7	80	7
SPA 5: West	49	7	54	8	41	6	29	4	33	5	47	7	46	6	41	6	42	6	33	5
SPA 6: South	68	9	56	7	45	5	68	8	49	6	70	9	63	8	69	9	57	6	52	6
SPA 7: East	55	5	68	6	60	5	51	4	75	6	77	6	62	5	70	6	56	5	42	3
SPA 8: South Bay	100	7	101	7	90	6	79	5	81	5	105	7	110	7	108	7	102	6	121	8

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

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

Homicide

2nd cause of premature death
18th cause of death

__HOMICIDE__ has been the second-leading cause of premature death every year for the past 10 years. In 2011, the highest homicide rate, 17 deaths per 100,000 population, was among residents of the South Service Planning Area. Homicide was the leading cause of death for black and Hispanic men aged 15 to 44 years. In 2011, 79% of homicides among men and 44% of homicides among women were committed with a firearm.

In simple terms . . .

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

Risk factors

Intimate partner violence, poor access to quality education, lack of employment opportunities, social isolation, lack of pro-social opportunities for youth, gang affiliation, alcohol and substance abuse, witnessing and experiencing violence and child abuse, access to firearms

Community opportunities for prevention

- Provide educational and recreational opportunities for children and adolescents such as after-school and summer programs
- Support nurse home-visitation programs for teenage parents
- Participate in community-based youth violence prevention approaches such as Striving To Reduce Youth Violence Everywhere (STRYVE) and Urban Networks to Increase Thriving Youth (UNITY) (see References for links)
- Develop policies that reduce access to firearms
- Support community policing
- Build communities that discourage street violence with well-lit streets and opportunities for increased biking and walking

Individual opportunities for prevention

- Develop skills to handle tough social situations and to resolve problems without using violence
- Participate in youth mentoring programs that pair positive role models with young people to help guide behavior
- Seek help for substance abuse (drug or alcohol)
- Recognize that easy access to firearms is a risk for homicide
- Unload and lock firearms in the home with the ammunition stored and locked separately

LOS ANGELES COUNTY

Deaths	609
Death Rate	5.9 deaths per 100,000 population
Healthy People 2020 Objective IVP-29	5.5 deaths per 100,000 population
ICD-9 codes (1979-1998)	E960-E969
ICD-10 codes (1999-2011)	*U01-*U02, X85-Y09, Y87.1

References

VETO Violence-STRYVE
http://vetoviolence.cdc.gov
http://vetoviolence.cdc.gov/stryve

Prevention Institute UNITY
http://preventioninstitute.org/unity

CDC National Center for Injury Prevention and Control
www.cdc.gov/ncipc/dvp/dvp.htm

Referral

Violence Prevention Coalition of Greater Los Angeles
213-346-3265

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

Figure T10. Trends in homicide mortality

	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011	
	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	1,148	11	1,066	10	1,069	10	1,066	10	1,043	10	869	8	838	8	723	7	651	6	609	6
Males	990	19	931	18	940	18	940	18	916	18	751	15	710	14	618	12	545	10	512	10
Females	158	3	135	3	129	3	126	3	127	3	118	2	128	3	105	2	106	2	97	2
White	133	4	119	4	105	4	101	3	97	3	92	3	83	3	64	2	76	2	61	2
Hispanic	567	11	520	10	531	10	570	11	545	10	474	9	458	9	397	8	328	6	333	6
Black	393	41	369	39	388	41	362	39	344	38	272	29	250	27	227	24	219	25	192	22
Asian/Pacific Islander	51	4	57	4	42	3	33	2	50	4	30	2	43	3	32	2	24	2	21	1
Males																				
White	98	6	93	6	77	5	69	5	76	5	71	5	62	4	43	3	51	3	45	3
Hispanic	501	19	471	18	481	18	528	19	491	18	420	16	407	15	344	13	288	11	285	10
Black	352	79	324	73	348	80	320	74	298	69	240	55	214	49	207	46	186	45	168	41
Asian/Pacific Islander	36	6	42	6	33	5	23	3	46	7	20	3	24	4	23	3	18	--	13	--
Females																				
White	35	2	26	1	28	2	32	2	21	1	21	1	21	1	21	1	25	2	16	--
Hispanic	66	3	49	2	50	2	42	2	54	2	54	2	51	2	53	2	40	2	48	2
Black	41	8	45	9	40	8	42	9	46	9	32	6	36	8	20	4	33	7	24	5
Asian/Pacific Islander	15	--	15	--	9	--	10	--	<5	--	10	--	19	--	9	--	6	--	8	--
SPA 1: Antelope Valley	27	8	36	11	33	10	37	11	46	13	37	10	26	6	31	7	23	6	26	7
SPA 2: San Fernando	139	7	120	6	101	5	104	5	98	5	81	4	91	4	79	4	71	3	54	2
SPA 3: San Gabriel	111	6	106	6	131	7	103	6	116	6	106	6	108	6	69	4	71	4	66	4
SPA 4: Metro	145	12	126	10	115	9	118	10	112	10	110	10	102	9	82	7	73	6	62	5
SPA 5: West	38	6	24	4	24	4	26	4	25	5	14	--	18	--	14	--	12	--	17	--
SPA 6: South	355	34	315	30	356	33	372	35	310	29	245	23	233	22	194	18	189	17	184	17
SPA 7: East	129	9	117	8	108	8	130	9	126	9	108	8	99	7	101	7	88	6	82	6
SPA 8: South Bay	190	12	192	12	177	11	161	10	179	12	145	9	140	9	144	9	120	8	117	8

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

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

HIV (Human Immunodeficiency Virus)

15th cause of premature death
36th cause of death

__HIV__ remained an important cause of death and premature death among some groups even though it has not been one of the overall leading causes of death or premature death since 2004. In 2011, the HIV death rate among black men, 15 deaths per 100,000 population, was six times higher than the overall county rate, and HIV was the second-leading cause of death among black men aged 25 to 44 years.

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. Over 60,000 persons are estimated to be living with HIV in Los Angeles County, one-fifth of whom are believed to be unaware of their infection
- If you test positive for HIV, seek medical care immediately since getting treatment can save your life and protect others

LOS ANGELES COUNTY

Deaths	243
Death Rate	2.4 deaths per 100,000 population
Healthy People 2020 Objective HIV-12	3.3 deaths per 100,000 population
ICD-9 codes (1979-1998)	042-044
ICD-10 codes (1999-2011)	B20-B24

References

National Institute of Allergy and Infectious Diseases
www.niaid.nih.gov/topics/hivaids

CDC HIV/AIDS Prevention
www.cdc.gov/hiv

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

Referral

Erase Doubt
www.erasedoubt.org

California HIV/AIDS Service Referrals and Hotline
1-800-367-2437 (AIDS)
www.aidshotline.org

www.LAcondom.org for free condoms and information

Figure T11. Trends in HIV mortality

	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011	
	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	502	5	497	5	498	5	438	5	414	4	391	4	371	4	313	3	274	3	243	2
Males	428	9	438	9	436	9	378	8	355	7	338	7	310	6	256	5	232	5	199	4
Females	74	2	59	1	62	1	60	1	59	1	53	1	61	1	57	1	42	1	44	1
White	151	4	167	5	174	5	139	4	155	4	119	3	96	3	84	2	74	2	72	2
Hispanic	187	5	170	5	177	5	158	4	139	4	132	3	137	4	108	3	114	3	84	2
Black	148	16	145	16	136	15	131	14	108	12	125	14	113	12	109	12	80	9	77	9
Asian/Pacific Islander	14	--	10	--	7	--	6	--	8	--	11	--	21	1	11	--	5	--	8	--
Males																				
White	140	8	161	9	159	9	126	7	139	8	112	6	86	5	74	4	65	4	60	3
Hispanic	165	9	143	8	159	9	140	7	121	6	119	6	114	6	91	5	98	5	70	4
Black	109	26	121	29	109	26	102	25	87	22	94	23	90	22	79	19	64	15	61	15
Asian/Pacific Islander	12	--	9	--	6	--	6	--	6	--	10	--	16	--	11	--	<5	--	7	--
Females																				
White	11	--	6	--	15	--	13	--	16	--	7	--	10	--	10	--	9	--	12	--
Hispanic	22	1	27	1	18	--	18	--	18	--	13	--	23	1	17	--	16	--	14	--
Black	39	8	24	5	27	5	29	6	21	4	31	6	23	5	30	6	16	--	16	--
Asian/Pacific Islander	<5	--	<5	--	<5	--	<5	--	<5	--	<5	--	5	--	<5	--	<5	--	<5	--
SPA 1: Antelope Valley	11	--	10	--	<5	--	9	--	6	--	11	--	5	--	10	--	10	--	6	--
SPA 2: San Fernando	68	3	53	3	67	3	68	3	53	2	51	2	45	2	34	1	37	2	37	2
SPA 3: San Gabriel	51	3	39	2	49	3	30	2	47	3	30	2	30	2	32	2	30	2	24	1
SPA 4: Metro	133	12	167	15	133	11	129	11	132	11	112	10	93	8	81	7	71	6	71	6
SPA 5: West	16	--	20	3	23	3	14	--	17	--	10	--	11	--	11	--	7	--	7	--
SPA 6: South	87	10	96	12	106	13	76	9	57	7	76	9	85	10	63	8	41	5	34	4
SPA 7: East	42	3	38	3	35	3	35	3	31	3	28	2	27	2	23	2	34	3	20	2
SPA 8: South Bay	85	6	67	4	71	5	69	5	65	4	70	5	72	5	56	4	41	3	42	3

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

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

Liver Disease/Cirrhosis

4th cause of premature death
9th cause of death

LIVER DISEASE/CIRRHOSIS *has been a leading cause of premature death every year for the past 10 years and the overall death rate has remained relatively stable. While it was the ninth-leading cause of death overall in 2011, it was the second-leading cause of death among Hispanic men. Death rates from liver disease have been consistently higher for men than for women, with Hispanic men having the highest rates. The death rate for Hispanic men, 27 deaths per 100,000 population, was more than double the overall county rate.*

In simple terms . . .

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

Risk factors

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

Community opportunities for prevention

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

Individual opportunities for prevention

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

LOS ANGELES COUNTY	
Deaths	1,246
Death Rate	12.5* deaths per 100,000 population
Healthy People 2020 Objective SA-11	8.2 deaths per 100,000 population
ICD-9 codes (1979-1998)	571
ICD-10 codes (1999-2011)	K70, K73-K74

References

American Liver Foundation
www.liverfoundation.org

National Digestive Diseases Information Clearinghouse
www.digestive.niddk.nih.gov

"Disparities and Deaths from Chronic Liver Disease and Cirrhosis, Los Angeles County, 2000-2008"
www.publichealth.lacounty.gov/epi/docs/CLD_mortality_final_web.pdf

Referral

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

*Actual death rate=12.45

Figure T12. Trends in liver disease mortality

	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011	
	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	1,085	13	1,053	12	1,035	12	1,061	12	1,102	12	1,133	12	1,134	12	1,246	13	1,171	12	1,246	12
Males	741	18	727	17	698	17	759	18	758	17	792	18	773	17	837	18	787	17	818	17
Females	344	8	326	7	337	7	302	6	344	7	341	7	361	7	409	8	384	7	428	8
White	432	11	403	11	428	11	397	10	386	10	396	10	398	10	419	11	416	11	436	11
Hispanic	504	19	498	19	458	17	501	18	554	19	586	20	594	19	645	21	587	18	637	19
Black	100	12	92	10	98	11	102	11	98	11	86	10	69	7	112	12	97	10	104	11
Asian/Pacific Islander	39	3	42	3	46	4	48	4	49	4	55	4	59	4	58	4	55	4	56	4
Males																				
White	277	15	253	14	295	16	267	14	263	14	260	14	268	14	272	14	262	14	269	14
Hispanic	381	31	377	30	308	24	383	30	397	28	439	31	413	28	448	30	423	29	455	27
Black	51	13	62	16	62	16	68	18	59	15	51	13	45	11	75	18	54	12	54	12
Asian/Pacific Islander	25	5	26	5	29	5	31	5	29	5	35	6	39	6	37	5	38	5	34	5
Females																				
White	155	8	150	7	133	7	130	6	123	6	136	7	130	6	147	7	154	8	167	8
Hispanic	123	9	121	10	150	12	118	8	157	11	147	10	181	12	197	13	164	10	182	11
Black	49	10	30	6	36	7	34	7	39	8	35	7	24	5	37	7	43	8	50	10
Asian/Pacific Islander	14	--	16	--	17	--	17	--	20	3	20	3	20	3	21	3	17	--	22	2
SPA 1: Antelope Valley	35	13	48	17	40	13	39	13	43	14	50	16	45	14	53	17	47	13	55	15
SPA 2: San Fernando	168	9	180	9	190	10	199	10	200	10	189	9	207	10	200	9	192	9	218	10
SPA 3: San Gabriel	178	11	177	11	173	10	197	12	207	12	179	10	194	11	217	12	191	11	215	11
SPA 4: Metro	159	16	134	13	131	13	127	12	136	13	144	13	147	13	163	15	151	14	156	14
SPA 5: West	55	8	55	8	40	6	41	6	41	6	44	6	40	5	55	7	45	6	61	8
SPA 6: South	119	17	106	15	118	17	102	14	120	16	122	17	112	15	130	17	141	18	150	18
SPA 7: East	185	17	177	16	173	16	176	16	163	14	199	17	198	17	226	19	210	18	193	16
SPA 8: South Bay	162	12	155	11	139	10	159	11	156	11	184	12	174	11	176	11	181	12	196	12

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

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

Lung Cancer

7th cause of premature death
3rd cause of death

LUNG CANCER *has been the third-leading cause of death each year for the past 10 years, and the death rates for men continued to be higher than for women. In 2011, the highest death rate, 40 deaths per 100,000 population, was in the South Service Planning Area, while the lowest, 25 deaths per 100,000 population, was in the West Service Planning Area. The median age at death from lung cancer in 2011 was 74 years.*

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, breathing in the smoke of others (secondhand smoke), exposure to cancer-causing substances including radon, asbestos, uranium, and arsenic

Community opportunities for prevention

- Restrict smoking in public places and worksites to decrease exposure to indoor and outdoor secondhand smoke
- Provide access to affordable smoking-cessation programs
- Reduce youth access to tobacco products through policies and their enforcement
- Increase the tobacco tax
- Promote lung cancer screening for high risk individuals

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
- Follow recommended guidelines* for lung cancer screening of high-risk individuals

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

LOS ANGELES COUNTY

Deaths	2,908
Death Rate	31.0 deaths per 100,000 population
Healthy People 2020 Objective C-2	45.5 deaths per 100,000 population
ICD-9 codes (1979-1998)	162
ICD-10 codes (1999-2011)	C34 (current year) C33-C34 (previous years)
References	**American Cancer Society** www.cancer.org **Guide to Community Preventive Services** www.thecommunityguide.org **National Cancer Institute, Surveillance, Epidemiology and End Results (SEER) Program** www.seer.cancer.gov/registries/los_angeles.html **It's Quitting Time L.A.** www.laquits.com
Referral	**American Cancer Society Helpline** 1-800-227-2345 **California Smokers' Helpline** 1-800-NO-BUTTS

Figure T13. Trends in lung cancer mortality

	2002		2003		2004		2005		2006		2007		2008		2009		2010			2011	
	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	3,081	39	3,150	39	3,034	37	3,036	36	3,021	36	2,950	34	2,910	33	2,958	33	2,941	33		2,908	31
Males	1,702	50	1,713	50	1,710	49	1,608	46	1,719	48	1,568	43	1,568	42	1,650	43	1,602	41		1,596	40
Females	1,379	30	1,437	31	1,324	28	1,428	30	1,302	27	1,382	28	1,342	26	1,308	25	1,339	26		1,312	24
White	1,950	47	1,942	47	1,825	44	1,830	44	1,788	43	1,700	41	1,687	39	1,702	40	1,655	40		1,578	37
Hispanic	363	21	381	20	366	19	370	18	384	18	398	18	433	19	408	17	441	18		452	18
Black	455	58	451	57	452	56	457	57	480	60	464	56	377	45	432	51	433	51		431	49
Asian/Pacific Islander	306	28	367	32	379	31	368	30	359	28	378	28	406	29	412	29	400	27		428	27
Males																					
White	1,034	57	989	55	974	54	921	51	941	53	860	47	850	46	892	47	855	47		846	45
Hispanic	217	31	237	30	231	30	210	24	236	28	233	26	253	28	243	25	260	26		253	24
Black	258	81	267	83	263	79	243	75	286	88	245	73	200	60	247	72	228	66		225	63
Asian/Pacific Islander	188	39	215	43	235	45	228	44	250	45	224	39	261	44	266	44	249	39		258	38
Females																					
White	916	40	953	41	851	36	909	39	847	36	840	36	837	35	810	34	800	35		732	31
Hispanic	146	14	144	13	135	12	160	13	148	12	165	12	180	13	165	12	181	13		199	13
Black	197	43	184	39	189	40	214	45	194	41	219	45	177	36	185	37	205	41		206	39
Asian/Pacific Islander	118	19	152	23	144	21	140	20	109	15	154	20	145	18	146	18	151	18		170	19
SPA 1: Antelope Valley	109	49	120	53	114	50	122	53	123	51	134	52	128	48	118	42	123	44		110	38
SPA 2: San Fernando	665	38	695	39	643	36	683	38	675	37	637	34	620	31	664	33	625	31		638	30
SPA 3: San Gabriel	544	35	563	36	531	33	596	37	562	34	550	33	564	33	573	33	566	32		575	31
SPA 4: Metro	294	32	313	33	290	30	285	30	267	28	274	27	294	29	265	26	302	31		267	26
SPA 5: West	255	38	216	32	222	33	220	31	217	31	204	29	212	29	216	29	226	31		191	25
SPA 6: South	300	50	286	47	297	48	293	47	271	43	280	44	242	38	275	42	268	41		277	40
SPA 7: East	339	34	356	35	366	35	332	32	325	31	341	32	346	32	300	27	299	28		337	30
SPA 8: South Bay	567	45	580	45	544	41	496	37	564	42	520	38	494	35	541	38	529	38		511	34

Because of changes to the criteria for categorizing deaths from this cause, 2002-2010 may not be comparable to 2011.

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

Motor Vehicle Crash

5th cause of premature death
17th cause of death

MOTOR VEHICLE CRASHES *were the 17th-leading cause of death overall in 2011, but were the leading cause of death for 5- to 14-years-olds and the second-leading cause of death for 15- to 24-year-olds. The highest death rate, 12 deaths per 100,000 population, was in the Antelope Valley Service Planning Area and was double the overall county rate. Nearly one-third (194 deaths) of those who died in motor vehicle crashes were pedestrians.*

In simple terms . . .

Traffic-related motor vehicle crashes occur on any public roadway, including streets or highways. Crashes can also occur in non-public areas such as parking lots, private roads, or driveways.

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

Risk factors

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

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

Community opportunities for prevention

- Actively enforce all traffic laws, including those addressing distracted driving, seat belt use, child passenger safety, speeding, and driving under the influence
- Use media and educational campaigns to reduce alcohol-impaired driving, and to improve child passenger and teen driving safety
- Use the built environment to reduce motor vehicle injuries and fatalities by adding sidewalks, bike lanes, traffic calming measures, and signal timing
- Support national efforts for safe car design features such as antilock brakes and electronic stability control systems

Individual opportunities for prevention

- Do not drive while impaired by alcohol or drugs
- Do not text while driving
- Always wear seat belts, even for short trips
- Buckle children under age 8 in an age-appropriate, properly installed child safety seat or booster seat in the back seat of the car
- Wear helmets when using bikes, scooters, skates, and skateboards
- When walking near traffic, supervise young children and hold their hand
- Keep your vehicle in good working order

LOS ANGELES COUNTY

Deaths	620 (596 traffic-related)
Death Rate	6.2 deaths per 100,000 population 5.9 deaths per 100,000 population for traffic-related deaths only*
Healthy People 2020 Objective IVP 13.1	12.4 deaths per 100,000 population for traffic-related deaths only
ICD-9 codes (1979-1998)	E810-E825
ICD-10 codes (1999-2011)	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 (codes are for all motor vehicle crashes)
References	**Guide to Community Preventive Services** www.thecommunityguide.org **The National Highway Traffic Safety Administration** www.nhtsa.dot.gov
Referral	**California Highway Patrol (non-emergency)** 1-800-TELL-CHP

*Shown for comparability with Healthy People 2020 Objective

Figure T14. Trends in motor vehicle crash mortality

	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011	
	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	851	9	967	10	947	10	925	10	965	10	908	9	822	8	677	7	625	6	620	6
Males	578	12	697	15	647	14	650	14	681	14	669	14	623	13	484	10	428	9	427	9
Females	273	6	270	5	300	6	275	6	284	6	239	5	199	4	193	4	197	4	193	4
White	292	9	343	10	340	11	287	9	312	10	272	8	253	8	220	7	200	6	189	6
Hispanic	373	9	418	10	374	9	428	10	425	10	436	10	367	9	312	7	290	7	291	7
Black	108	12	107	12	120	13	106	12	115	13	110	12	107	12	74	8	71	8	70	8
Asian/Pacific Islander	75	6	95	7	107	8	95	7	110	8	86	7	92	7	69	5	62	4	63	4
Males																				
White	190	12	246	15	218	14	201	13	220	14	191	12	198	13	169	10	136	8	132	8
Hispanic	270	14	317	15	270	13	304	14	321	16	334	16	290	14	223	11	213	10	204	9
Black	77	20	71	17	85	20	83	21	82	21	84	21	77	19	52	13	54	13	47	11
Asian/Pacific Islander	40	7	60	10	71	12	58	10	55	9	57	9	56	9	39	6	25	4	42	6
Females																				
White	102	6	97	6	122	7	86	5	92	6	81	5	55	3	51	3	64	4	57	3
Hispanic	103	5	101	5	104	5	124	6	104	5	102	5	77	4	89	4	77	4	87	4
Black	31	6	36	7	35	7	23	5	33	7	26	5	30	6	22	4	17	--	23	5
Asian/Pacific Islander	35	5	35	5	36	5	37	5	55	7	29	4	36	5	30	4	37	4	21	3
SPA 1: Antelope Valley	69	22	71	22	83	27	80	25	73	22	51	15	44	12	45	13	35	10	45	12
SPA 2: San Fernando	172	9	203	10	180	9	197	10	197	10	156	8	167	8	142	7	127	6	118	5
SPA 3: San Gabriel	140	8	138	8	153	9	179	10	147	8	153	9	124	7	109	6	100	6	102	6
SPA 4: Metro	78	7	99	9	84	8	91	8	82	7	87	8	76	7	65	6	75	7	53	5
SPA 5: West	35	5	40	6	37	6	35	6	41	6	39	6	32	5	31	4	30	5	32	4
SPA 6: South	110	12	106	12	106	11	99	11	118	13	119	13	112	13	94	10	70	7	89	9
SPA 7: East	114	9	110	9	105	8	106	8	110	9	124	10	111	9	85	7	88	7	87	7
SPA 8: South Bay	114	8	114	8	112	7	117	8	137	9	113	7	113	7	89	6	83	5	89	6

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

Pneumonia/Influenza

18th cause of premature death
7th cause of death

PNEUMONIA/INFLUENZA *was the seventh-leading cause of death in 2011, but it had less impact on premature death. In 2011, the overall death rate from pneumonia/influenza was 21 deaths per 100,000 population, but for seniors 75 years of age or older, the rate was 304 deaths per 100,000 population. The overall death rate from pneumonia/influenza has decreased 32% in the last 10 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 (for complications)

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

Community opportunities for prevention

- Educate the community about the recommendations for influenza and pneumococcal vaccination
- Provide information about the availability of no-cost vaccinations
- Encourage vaccination by providing accurate information about its protective benefits

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	2,062
Death Rate	21 deaths per 100,000 population
Healthy People 2020	None
ICD-9 codes (1979-1998)	480-487
ICD-10 codes (1999- 2011)	J09-J18
References	**American Lung Association** www.lungusa.org **Centers for Disease Control and Prevention** www.cdc.gov/flu **U.S. Department of Health and Human Services** www.flu.gov **California Department of Public Health** www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza(Flu).aspx
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

	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011	
	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	2,494	32	2,419	30	2,272	27	2,333	28	2,283	27	2,184	25	2,171	24	2,097	22	1,964	22	2,062	21
Males	1,155	39	1,121	36	1,013	32	1,055	33	1,083	33	1,018	30	990	28	1,016	28	910	26	962	25
Females	1,339	27	1,298	26	1,259	24	1,278	24	1,200	23	1,166	21	1,181	21	1,081	19	1,054	19	1,100	19
White	1,595	34	1,475	31	1,330	28	1,338	28	1,314	28	1,198	25	1,203	24	1,076	22	1,011	22	982	20
Hispanic	383	26	411	25	408	24	448	25	429	22	418	21	430	20	492	21	399	19	509	21
Black	269	37	271	37	257	35	238	32	246	33	259	34	232	29	223	27	247	31	242	29
Asian/Pacific Islander	236	25	250	25	265	25	300	26	284	24	305	24	297	22	290	21	296	21	319	20
Males																				
White	723	41	659	37	613	34	580	32	612	35	532	29	541	29	528	28	480	26	475	24
Hispanic	182	33	189	29	174	27	208	30	198	27	197	25	192	23	232	24	179	21	212	23
Black	124	46	139	51	100	37	103	37	117	43	134	47	119	40	100	32	91	30	93	30
Asian/Pacific Islander	120	31	130	31	118	26	161	34	152	31	154	30	135	25	148	26	155	27	174	27
Females																				
White	872	29	816	27	717	24	758	25	702	24	666	22	662	21	548	19	531	19	507	18
Hispanic	201	22	222	22	234	22	240	22	231	20	221	18	238	18	260	19	220	17	297	21
Black	145	31	132	28	157	33	135	28	129	27	125	26	113	23	123	24	156	31	149	28
Asian/Pacific Islander	116	21	120	20	147	23	139	21	132	19	151	20	162	20	142	17	141	16	145	15
SPA 1: Antelope Valley	69	35	72	37	50	25	68	35	70	32	51	22	51	21	59	23	61	25	56	22
SPA 2: San Fernando	529	31	521	30	500	28	472	26	454	25	407	21	415	20	414	20	415	20	394	18
SPA 3: San Gabriel	483	31	467	29	488	30	477	29	409	24	454	26	449	25	404	22	390	21	422	21
SPA 4: Metro	344	35	350	35	293	29	319	31	302	29	294	27	255	23	256	23	229	23	257	24
SPA 5: West	230	31	212	28	184	24	188	24	188	24	184	24	218	27	162	19	158	19	166	18
SPA 6: South	192	33	183	31	183	30	181	29	202	32	195	31	188	28	178	26	181	30	201	30
SPA 7: East	262	27	253	25	262	25	256	24	284	26	239	21	248	22	263	23	216	20	216	19
SPA 8: South Bay	375	31	350	28	298	24	360	28	366	28	354	26	343	24	360	25	311	22	350	23

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

Stroke

9th cause of premature death
2nd cause of death

STROKE *has been the second-leading cause of death for each of the past 10 years, and it has been the seventh- to ninth-leading cause of premature death. The death rates for blacks were consistently higher than for other race/ethnic groups. In 2011, the median age at death from stroke was 76 years for blacks, compared with 78 for Hispanics, 80 for Asians/Pacific Islanders, and 85 for whites.*

In simple terms . . .

A stroke occurs when the blood supply to part of the brain is suddenly interrupted or when a blood vessel in the brain bursts, spilling blood into the soft tissue and the spaces containing or surrounding brain cells. When that happens, part of the brain cannot get the blood and oxygen it needs. Without oxygen, nerve cells in the affected part of the brain usually die within minutes and the soft tissue can develop scarring, resulting in the loss of functions controlled by that part of the brain.

Risk factors

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

Community opportunities for prevention

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

Individual opportunities for prevention

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

	LOS ANGELES COUNTY
Deaths	3,256
Death Rate	33.6 deaths per 100,000 population
Healthy People 2020 Objective HDS-3	34.8 deaths per 100,000 population
ICD-9 codes (1979-1998)	430-434, 436-438
ICD-10 codes (1999-2011)	I60-I69
References	**American Stroke Association** www.strokeassociation.org **National Institute of Neurological Disorders and Stroke** www.ninds.nih.gov/disorders/stroke
Referral	**Los Angeles County Division of the American Heart Association** 213-291-7000

Figure T16. Trends in stroke mortality

	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011	
	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	4,169	53	4,249	52	4,121	50	3,775	45	3,622	42	3,323	37	3,280	36	3,301	35	3,278	36	3,256	34
Males	1,701	54	1,754	54	1,718	52	1,554	46	1,501	43	1,409	39	1,373	37	1,399	37	1,405	38	1,370	34
Females	2,468	51	2,495	50	2,403	47	2,221	43	2,121	41	1,914	36	1,907	35	1,902	34	1,873	34	1,886	33
White	2,382	52	2,441	52	2,234	48	1,962	42	1,817	40	1,587	34	1,552	32	1,623	34	1,534	34	1,546	32
Hispanic	711	42	755	42	785	42	782	39	779	37	742	33	749	32	733	31	780	34	774	30
Black	589	79	584	77	572	75	530	68	495	62	516	64	469	58	433	52	446	54	423	49
Asian/Pacific Islander	473	46	462	43	513	45	489	41	522	42	469	35	496	36	504	36	501	34	498	31
Males																				
White	932	53	918	51	881	49	770	43	704	40	645	36	603	32	668	35	629	35	596	31
Hispanic	326	48	342	45	364	47	360	44	356	39	338	35	343	34	325	31	346	35	344	31
Black	227	77	248	84	208	72	206	69	202	63	209	64	194	59	170	51	179	56	183	53
Asian/Pacific Islander	209	48	242	52	260	54	216	43	235	45	211	37	223	39	235	40	243	40	237	36
Females																				
White	1,450	51	1,523	52	1,353	47	1,192	41	1,113	40	942	33	949	32	955	33	905	32	950	32
Hispanic	385	38	413	39	421	38	422	36	423	34	404	31	406	31	408	30	434	32	430	29
Black	362	79	336	70	364	77	324	67	293	61	307	62	275	55	263	52	267	53	240	46
Asian/Pacific Islander	264	44	220	36	253	38	273	40	287	40	258	34	273	34	269	32	258	30	261	28
SPA 1: Antelope Valley	106	52	131	65	125	61	124	60	125	56	110	44	120	48	94	37	114	45	99	37
SPA 2: San Fernando	840	49	898	51	905	50	734	40	758	41	623	33	628	31	690	33	661	32	657	30
SPA 3: San Gabriel	806	52	822	51	756	46	729	44	679	41	608	35	629	35	694	38	650	36	616	32
SPA 4: Metro	462	47	453	45	426	42	374	37	400	40	358	34	367	35	344	32	311	31	345	32
SPA 5: West	379	52	342	45	321	42	332	44	258	35	251	33	262	33	232	29	253	30	242	28
SPA 6: South	403	68	401	66	407	66	376	60	349	54	377	57	355	53	323	48	307	48	311	45
SPA 7: East	513	53	479	47	499	47	460	43	421	39	435	38	378	33	411	35	426	39	432	37
SPA 8: South Bay	651	54	676	54	635	50	638	49	600	45	535	39	519	36	510	35	551	39	551	36

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

Suicide

3rd cause of premature death
15th cause of death

SUICIDE *remained the third-leading cause of premature death, its highest ranking in the past 10 years. Between 2001 and 2007, the number of suicides was declining, but there was a sharp increase in 2008. In 2011, most suicides were among men (77%) and, among men, firearms were the most common method of suicide death (253 deaths). Among women, suffocation/hanging was the most common method (70 deaths).*

In simple terms . . .

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

Risk factors

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

Community opportunities for prevention

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

Individual opportunities for prevention

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

	LOS ANGELES COUNTY
Deaths	766
Death Rate	7.6 suicides per 100,000 population
Healthy People 2020 Objective MHMD-1	10.2 per 100,000 population
ICD-9 codes (1979-1998)	E950-E959
ICD-10 codes (1999-2011)	*U03, X60-X84, Y87.0
References	**National Institute of Mental Health** www.nimh.nih.gov **U.S. Department of Health and Human Services** www.mentalhealth.gov
Referral	**Didi Hirsch Community Mental Health Center Suicide Prevention Center** 1-877-727-4747 **National Suicide Prevention Lifeline** 1-800-273-8255

Figure T17. Trends in suicide mortality

	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011	
	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	727	8	727	8	696	7	695	7	662	7	667	7	802	8	775	8	792	8	766	8
Males	564	13	582	13	537	12	524	12	506	11	529	12	620	13	580	12	635	13	593	12
Females	163	3	145	3	159	3	171	3	156	3	138	3	182	4	195	4	157	3	173	3
White	401	11	442	13	379	11	388	11	367	11	374	11	478	14	449	13	420	13	412	12
Hispanic	171	4	163	4	182	4	172	4	165	4	161	4	160	4	173	4	203	4	206	4
Black	72	8	55	6	42	5	50	6	47	5	48	5	65	7	47	5	56	6	49	6
Asian/Pacific Islander	81	6	65	5	92	7	81	6	82	6	80	6	93	6	101	7	107	7	97	6
Males																				
White	297	17	342	20	284	17	286	17	279	16	297	17	363	21	329	18	324	19	315	19
Hispanic	151	8	148	8	154	8	143	7	133	7	137	7	132	6	142	7	181	8	170	8
Black	55	14	45	11	32	8	37	9	40	10	38	9	52	12	33	8	46	11	40	10
Asian/Pacific Islander	59	10	45	7	67	11	54	8	54	8	54	8	70	11	73	11	81	12	66	9
Females																				
White	104	6	100	6	95	6	102	6	88	5	77	4	115	7	120	7	96	6	97	6
Hispanic	20	1	15	--	28	1	29	1	32	1	24	1	28	1	31	2	22	1	36	1
Black	17	--	10	--	10	--	13	--	7	--	10	--	13	--	14	--	10	--	9	--
Asian/Pacific Islander	22	3	20	3	25	4	27	4	28	4	26	4	23	3	28	4	26	3	31	4
SPA 1: Antelope Valley	37	14	37	13	35	11	34	12	37	11	27	8	48	14	29	8	53	15	47	13
SPA 2: San Fernando	148	7	162	8	159	8	154	7	145	7	168	8	193	9	192	9	169	8	190	9
SPA 3: San Gabriel	125	7	110	6	118	7	122	7	118	7	106	6	101	6	128	7	132	7	128	7
SPA 4: Metro	97	9	97	8	78	7	89	8	81	7	88	8	99	9	101	9	113	10	83	7
SPA 5: West	61	9	65	10	59	9	70	10	56	8	53	8	82	12	79	11	53	8	75	11
SPA 6: South	44	5	41	5	46	5	33	4	46	5	38	4	48	5	33	4	45	4	41	4
SPA 7: East	70	6	80	7	67	5	67	6	57	5	65	5	72	6	93	7	65	5	81	6
SPA 8: South Bay	131	9	114	8	112	8	113	8	105	7	105	7	143	9	109	7	147	10	118	8

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

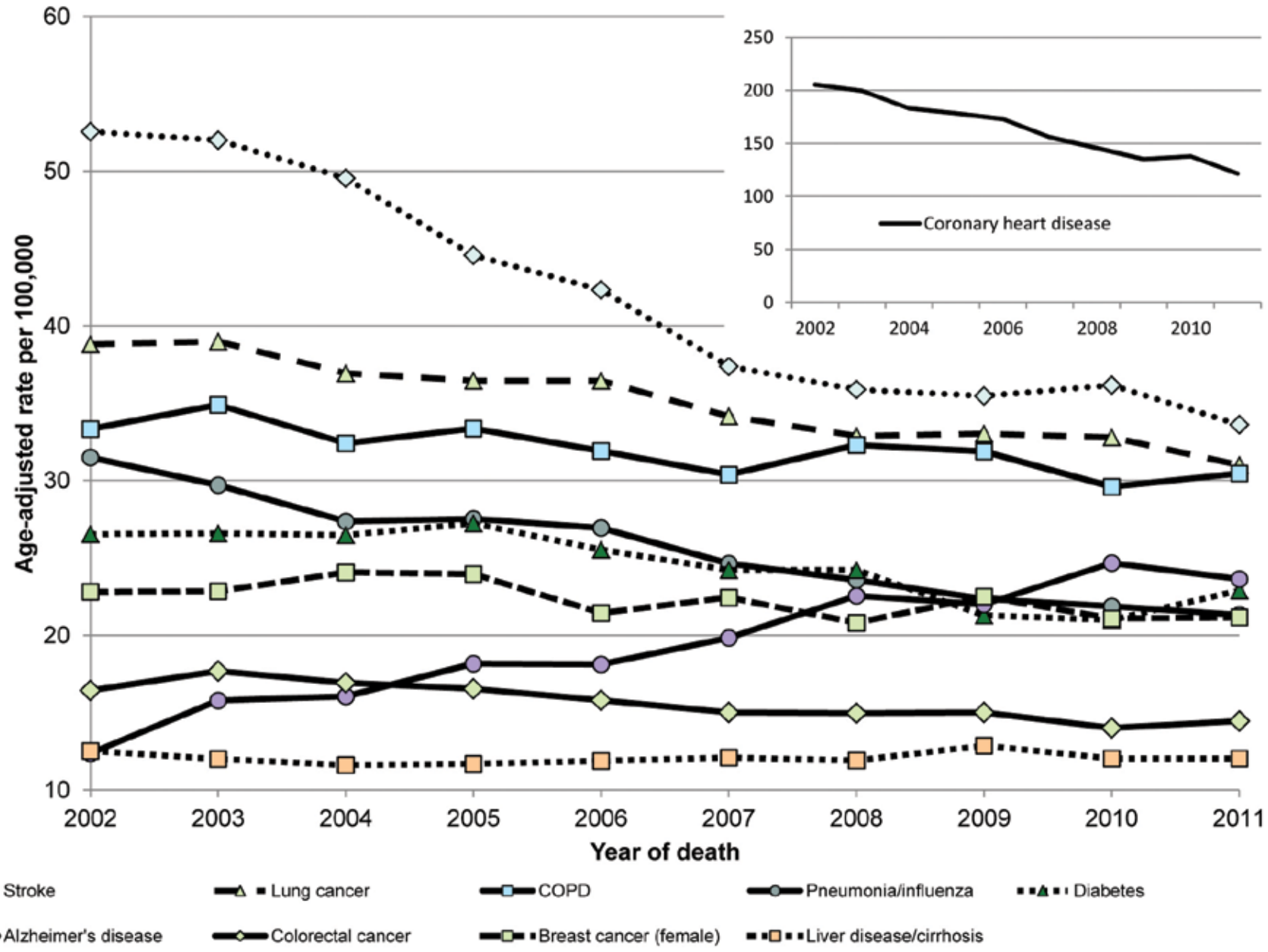
--Number of deaths is too small to calculate a reliable rate.

Figure T18. Trends in mortality from all causes of death

	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011	
	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	59,586	731	61,026	731	59,153	696	60,145	697	59,461	683	58,316	649	58,043	629	57,620	614	56,538	615	57,988	596
Males	29,968	877	30,907	878	29,839	834	30,308	833	30,035	818	29,630	782	29,402	754	29,342	739	28,772	739	29,191	707
Females	29,618	617	30,119	613	29,314	587	29,837	588	29,426	575	28,686	543	28,641	528	28,278	514	27,766	517	28,797	506
White	33,672	779	34,105	783	32,324	741	32,101	735	31,376	727	30,593	699	30,149	670	29,622	651	28,738	667	29,104	647
Hispanic	11,969	592	12,803	602	12,632	572	13,574	589	13,783	576	13,429	528	13,591	525	13,671	521	13,751	529	14,301	512
Black	8,482	1,083	8,517	1,073	8,372	1,044	8,413	1,043	8,185	1,016	8,023	976	7,697	918	7,825	918	7,438	891	7,623	875
Asian/Pacific Islander	5,255	498	5,352	481	5,591	482	5,820	481	5,884	470	6,088	458	6,354	459	6,267	442	6,343	429	6,630	417
Males																				
White	16,171	918	16,454	923	15,615	872	15,336	857	15,182	857	14,872	826	14,768	796	14,553	771	14,184	783	14,232	751
Hispanic	6,596	727	7,100	740	6,950	704	7,517	731	7,440	695	7,370	643	7,316	630	7,433	636	7,448	644	7,591	612
Black	4,338	1,352	4,365	1,338	4,224	1,290	4,321	1,305	4,181	1,275	4,078	1,214	3,871	1,131	3,961	1,135	3,704	1,087	3,788	1,062
Asian/Pacific Islander	2,744	597	2,846	587	2,919	581	3,012	577	3,106	576	3,205	565	3,301	563	3,276	546	3,277	532	3,386	509
Females																				
White	17,501	667	17,651	666	16,709	634	16,765	634	16,194	621	15,721	594	15,381	566	15,069	552	14,554	568	14,872	556
Hispanic	5,373	489	5,703	494	5,682	471	6,057	479	6,343	482	6,059	435	6,275	441	6,238	431	6,303	440	6,710	432
Black	4,144	888	4,152	874	4,148	865	4,092	848	4,004	829	3,945	802	3,826	763	3,864	759	3,734	748	3,835	737
Asian/Pacific Islander	2,511	423	2,506	400	2,672	406	2,808	407	2,778	389	2,883	376	3,053	379	2,991	362	3,066	354	3,244	348
SPA 1: Antelope Valley	1,961	894	2,075	921	1,972	870	2,137	916	2,125	866	2,109	805	2,165	795	2,230	802	2,214	799	2,243	760
SPA 2: San Fernando	12,229	692	12,670	705	12,435	680	12,591	677	12,345	658	12,018	620	12,259	604	12,132	580	12,032	577	12,313	559
SPA 3: San Gabriel	10,827	691	10,895	675	10,582	643	11,074	663	10,736	637	10,569	607	10,616	595	10,636	590	10,457	580	10,758	560
SPA 4: Metro	6,726	681	6,866	683	6,516	643	6,687	651	6,540	633	6,340	598	6,210	576	6,032	557	5,982	585	6,098	565
SPA 5: West	4,287	607	4,290	600	4,098	565	4,135	565	4,039	556	4,026	544	4,112	533	3,967	500	3,943	497	4,040	485
SPA 6: South	6,174	963	6,063	928	6,058	908	6,019	888	5,853	859	5,731	826	5,614	795	5,638	794	5,234	762	5,477	759
SPA 7: East	7,273	724	7,428	711	7,240	675	7,359	675	7,370	667	7,153	628	7,130	620	7,184	620	6,914	622	7,161	604
SPA 8: South Bay	9,759	774	9,992	772	9,453	714	9,796	728	9,739	716	9,629	685	9,415	650	9,455	641	9,402	655	9,722	639

*Age-adjusted rate per 100,000. The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

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



*The death rates for 2002-2009 were recalculated using new population estimates based on the 2010 U.S. Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 6 for additional information.

CERTIFICATE OF DEATH

STATE OF CALIFORNIA
USE BLACK INK ONLY / NO ERASURES, WHITEOUTS OR ALTERATIONS
VS-11 (REV 3/06)

STATE FILE NUMBER | LOCAL REGISTRATION NUMBER

SAMPLE

DECEDENT'S PERSONAL DATA

1. NAME OF DECEDENT– FIRST (Given) | 2. MIDDLE | 3. LAST (Family)

AKA. ALSO KNOWN AS – Include full AKA (FIRST, MIDDLE, LAST) | 4. DATE OF BIRTH mm/dd/ccyy | 5. AGE Yrs. | IF UNDER ONE YEAR: Months, Days | IF UNDER 24 HOURS: Hours, Minutes | 6. SEX

9. BIRTH STATE/FOREIGN COUNTRY | 10. SOCIAL SECURITY NUMBER | 11. EVER IN U.S. ARMED FORCES? ☐ YES ☐ NO ☐ UNK | 12. MARITAL STATUS/SRDP* (at Time of Death) | 7. DATE OF DEATH mm/dd/ccyy | 8. HOUR (24 Hours)

13. EDUCATION – Highest Level/Degree (see worksheet on back) | 14/15. WAS DECEDENT HISPANIC/LATINO/A/SPANISH? (If yes, see worksheet on back) ☐ YES ☐ NO | 16. DECEDENT'S RACE – Up to 3 races may be listed (see worksheet on back)

17. USUAL OCCUPATION – Type of work for most of life. DO NOT USE RETIRED | 18. KIND OF BUSINESS OR INDUSTRY (e.g., grocery store, road construction, employment agency, etc.) | 19. YEARS IN OCCUPATION

USUAL RESIDENCE

20. DECEDENT'S RESIDENCE (Street and number, or location)

21. CITY | 22. COUNTY/PROVINCE | 23. ZIP CODE | 24. YEARS IN COUNTY | 25. STATE/FOREIGN COUNTRY

INFORMANT

26. INFORMANT'S NAME, RELATIONSHIP | 27. INFORMANT'S MAILING ADDRESS (Street and number, or rural route number, city or town, state and zip)

SPOUSE/SRDP AND PARENT INFORMATION

28. NAME OF SURVIVING SPOUSE/SRDP*–FIRST | 29. MIDDLE | 30. LAST (BIRTH NAME)

31. NAME OF FATHER/PARENT–FIRST | 32. MIDDLE | 33. LAST | 34. BIRTH STATE

35. NAME OF MOTHER/PARENT–FIRST | 36. MIDDLE | 37. LAST (BIRTH NAME) | 38. BIRTH STATE

FUNERAL DIRECTOR/ LOCAL REGISTRAR

39. DISPOSITION DATE mm/dd/ccyy | 40. PLACE OF FINAL DISPOSITION

41. TYPE OF DISPOSITION(S) | 42. SIGNATURE OF EMBALMER ▶ | 43. LICENSE NUMBER

44. NAME OF FUNERAL ESTABLISHMENT | 45. LICENSE NUMBER | 46. SIGNATURE OF LOCAL REGISTRAR ▶ | 47. DATE mm/dd/ccyy

PLACE OF DEATH

101. PLACE OF DEATH | 102. IF HOSPITAL, SPECIFY ONE ☐ IP ☐ ER/OP ☐ DOA | 103. IF OTHER THAN HOSPITAL, SPECIFY ONE ☐ Hospice ☐ Nursing Home/LTC ☐ Decedent's Home ☐ Other

104. COUNTY | 105. FACILITY ADDRESS OR LOCATION WHERE FOUND (Street and number, or location) | 106. CITY

CAUSE OF DEATH

107. CAUSE OF DEATH — Enter the chain of events --- diseases, injuries, or complications --- that directly caused death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE.

Time Interval Between Onset and Death

IMMEDIATE CAUSE (Final disease or condition resulting in death) → (A) | (AT)

Sequentially, list conditions, if any, leading to cause on Line A. Enter UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST

(B) | (BT)

(C) | (CT)

(D) | (DT)

108. DEATH REPORTED TO CORONER? ☐ YES ☐ NO — REFERRAL NUMBER

109. BIOPSY PERFORMED? ☐ YES ☐ NO

110. AUTOPSY PERFORMED? ☐ YES ☐ NO

111. USED IN DETERMINING CAUSE? ☐ YES ☐ NO

112. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RESULTING IN THE UNDERLYING CAUSE GIVEN IN 107

113. WAS OPERATION PERFORMED FOR ANY CONDITION IN ITEM 107 OR 112? (If yes, list type of operation and date.) | 113A. IF FEMALE, PREGNANT IN LAST YEAR? ☐ YES ☐ NO ☐ UNK

PHYSICIAN'S CERTIFICATION

114. I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE DEATH OCCURRED AT THE HOUR, DATE, AND PLACE STATED FROM THE CAUSES STATED.
Decedent Attended Since (A) mm/dd/ccyy | Decedent Last Seen Alive (B) mm/dd/ccyy

115. SIGNATURE AND TITLE OF CERTIFIER ▶ | 116. LICENSE NUMBER | 117. DATE mm/dd/ccyy

118. TYPE ATTENDING PHYSICIAN'S NAME, MAILING ADDRESS, ZIP CODE

CORONER'S USE ONLY

119. I CERTIFY THAT IN MY OPINION DEATH OCCURRED AT THE HOUR, DATE, AND PLACE STATED FROM THE CAUSES STATED.
MANNER OF DEATH ☐ Natural ☐ Accident ☐ Homicide ☐ Suicide ☐ Pending Investigation ☐ Could not be determined

120. INJURED AT WORK? ☐ YES ☐ NO ☐ UNK | 121. INJURY DATE mm/dd/ccyy | 122. HOUR (24 Hours)

123. PLACE OF INJURY (e.g., home, construction site, wooded area, etc.)

124. DESCRIBE HOW INJURY OCCURRED (Events which resulted in injury)

125. LOCATION OF INJURY (Street and number, or location, and city, and zip)

126. SIGNATURE OF CORONER / DEPUTY CORONER ▶ | 127. DATE mm/dd/ccyy | 128. TYPE NAME, TITLE OF CORONER / DEPUTY CORONER

STATE REGISTRAR | A | B | C | D | E | | FAX AUTH.# | CENSUS TRACT

Appendix 1. Sample California Certificate of Death

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

Los Angeles County population estimates, 2011

	Age Group (years)											
Males	**Less than 1**	**1-4**	**5-14**	**15-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65-74**	**75-84**	**85+**	**All ages**
White	12,417	49,748	125,765	162,979	203,779	199,406	238,487	210,952	121,917	73,859	34,057	1,433,366
Hispanic	41,162	166,786	407,926	437,030	389,500	360,197	276,886	162,134	74,968	36,619	11,929	2,365,137
Black	5,074	20,434	54,455	66,328	52,147	51,433	62,111	45,055	24,986	12,706	4,084	398,813
Asian/Pacific Islander	6,461	26,200	68,961	93,962	102,940	96,671	96,919	83,376	46,579	25,815	10,072	657,956
American Indian/Alaska Native	80	340	984	1,285	1,227	1,404	1,661	1,245	704	329	95	9,354
All races	**65,194**	**263,508**	**658,091**	**761,584**	**749,593**	**709,111**	**676,064**	**502,762**	**269,154**	**149,328**	**60,237**	**4,864,626**

Females	**Less than 1**	**1-4**	**5-14**	**15-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65-74**	**75-84**	**85+**	**All ages**
White	11,620	46,764	118,555	157,798	189,009	182,593	220,478	208,365	133,105	95,311	62,159	1,425,757
Hispanic	39,235	159,589	392,544	411,241	366,055	352,610	283,020	186,196	97,579	55,835	22,234	2,366,138
Black	5,050	19,829	52,482	67,263	59,422	60,442	71,460	54,800	33,616	19,726	9,427	453,517
Asian/Pacific Islander	6,055	24,750	65,853	89,964	112,446	115,374	118,456	102,809	57,466	36,528	16,542	746,243
American Indian/Alaska Native	83	353	937	1,262	1,306	1,396	1,725	1,524	740	383	204	9,913
All races	**62,043**	**251,285**	**630,371**	**727,528**	**728,238**	**712,415**	**695,139**	**553,694**	**322,506**	**207,783**	**110,566**	**5,001,568**

Los Angeles County	**Less than 1**	**1-4**	**5-14**	**15-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65-74**	**75-84**	**85+**	**All ages**
White	24,037	96,512	244,320	320,777	392,788	381,999	458,965	419,317	255,022	169,170	96,216	2,859,123
Hispanic	80,397	326,375	800,470	848,271	755,555	712,807	559,906	348,330	172,547	92,454	34,163	4,731,275
Black	10,124	40,263	106,937	133,591	111,569	111,875	133,571	99,855	58,602	32,432	13,511	852,330
Asian/Pacific Islander	12,516	50,950	134,814	183,926	215,386	212,045	215,375	186,185	104,045	62,343	26,614	1,404,199
American Indian/Alaska Native	163	693	1,921	2,547	2,533	2,800	3,386	2,769	1,444	712	299	19,267
All races	**127,237**	**514,793**	**1,288,462**	**1,489,112**	**1,477,831**	**1,421,526**	**1,371,203**	**1,056,456**	**591,660**	**357,111**	**170,803**	**9,866,194**

Notes: July 1, 2011 population estimates prepared for LA County Internal Services Department, released September 30, 2012.

United States standard population, 2000[6]

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

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

Appendix 3. Service Planning Areas (SPA) Boundaries

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

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

SPA 1 Antelope Valley Pop. 386,526	SPA 2 San Fernando Pop. 2,136,581	SPA 3 San Gabriel Pop. 1,752,126	SPA 4 Metro Pop. 1,120,091	SPA 5 West Pop. 637,129	SPA 6 South Pop. 1,009,550	SPA 7 East Pop. 1,295,828	SPA 8 South Bay Pop. 1,528,363
Lancaster	Agoura Hills	Alhambra	Los Angeles	Beverly Hills	Compton	Artesia	Avalon
Palmdale	Burbank	Arcadia	West Hollywood	Culver City	Los Angeles	Bell	Carson
	Calabasas	Azusa		Los Angeles	Lynwood	Bell Gardens	El Segundo
	Glendale	Baldwin Park		Malibu	Paramount	Bellflower	Gardena
	Hidden Hills	Bradbury		Santa Monica		Cerritos	Hawthorne
	La Canada Flintridge	Claremont				Commerce	Hermosa Beach
	Los Angeles	Covina				Cudahy	Inglewood
	San Fernando	Diamond Bar				Downey	Lawndale
	Santa Clarita	Duarte				Hawaiian Gardens	Lomita
	Westlake Village	El Monte				Huntington Park	Long Beach
		Glendora				La Habra Heights	Los Angeles
		Industry				La Mirada	Manhattan Beach
		Irwindale				Lakewood	Palos Verdes Estates
		La Puente				Maywood	Rancho Palos Verdes
		La Verne				Montebello	Redondo Beach
		Monrovia				Norwalk	Rolling Hills
		Monterey Park				Pico Rivera	Rolling Hills Estates
		Pasadena				Santa Fe Springs	Torrance
		Pomona				Signal Hill	
		Rosemead				South Gate	
		San Dimas				Vernon	
		San Gabriel				Whittier	
		San Marino					
		Sierra Madre					
		South El Monte					
		South Pasadena					
		Temple City					
		Walnut					
		West Covina					

Notes: July 1, 2011 population estimates prepared for LA County Internal Services Department, released September 30, 2012.

MORTALITY IN LOS ANGELES COUNTY 2011

Leading Causes of Death and Premature Death with Trends for 2002-2011

A PUBLICATION OF THE LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH

Department of Public Health

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

Cynthia A. Harding, MPH
Chief Deputy Director

Office of Health Assessment and Epidemiology

Margaret Shih, MD, PhD
Director

EDITED BY
Loren Lieb, MPH

GRAPHIC DESIGN BY
Alan Albert

We thank Sun Lee, MPH, and Natalia Sejbuk, MPH, for their assistance.

Los Angeles County Board of Supervisors

Gloria Molina, First District

Mark Ridley-Thomas, Second District

Zev Yaroslavsky, Third District

Don Knabe, Fourth District

Michael D. Antonovich, Fifth District

Additional printed copies of this report are available from the Office of Health Assessment and Epidemiology
(213) 240-7785 or from
http://publichealth.lacounty.gov/dca/dcareportspubs.htm

Data are available online
http://dqs.publichealth.lacounty.gov

Suggested citation: Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology. Mortality in Los Angeles County 2011: Leading causes of death and premature death with trends for 2002-2011. August 2014.

County of Los Angeles Public Health

August 2014
Publication no: OHAE/EU-2014-1