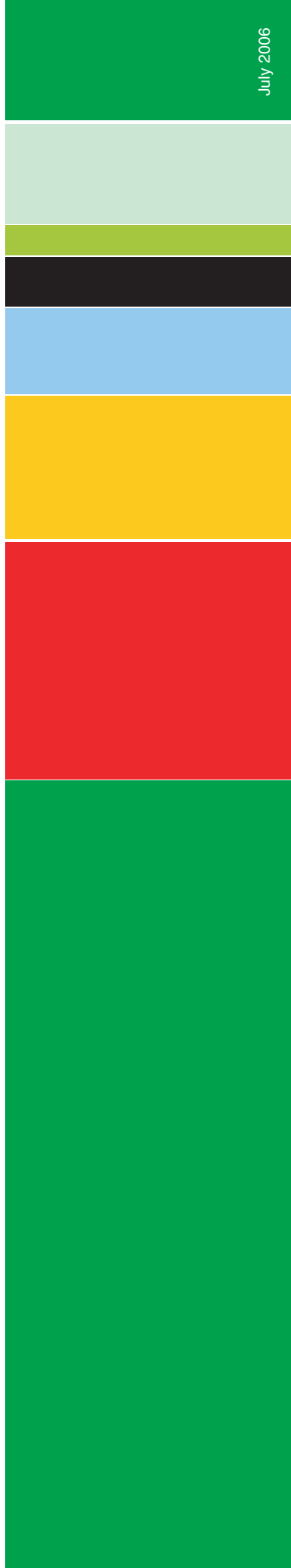




# MORTALITY IN LOS ANGELES COUNTY 2003 LEADING CAUSES OF DEATH AND PREMATURE DEATH

A publication of the Los Angeles County Department of Public Health



# What's INSIDE?

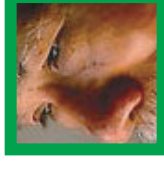
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*Mortality in Los Angeles County, 2003*

## LEADING CAUSES OF DEATH AND PREMATURE DEATH

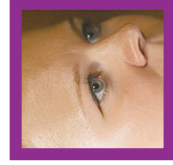
### **Background**

Many factors influence how long a person will live including their lifestyle, socioeconomic status, access to quality medical care, and genetic makeup. We monitor mortality trends to identify risks to health. We especially want to identify those conditions and circumstances that cause people to die at younger ages so we can focus education and prevention programs to reduce those risks. This report summarizes information obtained from death certificates for all Los Angeles County residents who died in 2003.



### **Mortality reporting**

When a death occurs in California, state law requires that a certificate of death be filed within eight days of death and before a decedent is buried or cremated. The certificate of death is a legal document that serves as a permanent record of the death of an individual. Data from death certificates provide valuable information for public health and medical research, evaluation of prevention and other intervention programs, community needs assessments, policy development, and program planning.

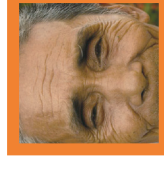


To complete a death certificate, the funeral director collects identifying and demographic information about the decedent from sources including family members and medical records. The decedent's physician or the coroner, when applicable, provides information about the medical conditions or events that precipitated the death. When the death certificate is complete, it is filed with the local registrar. The local registrar in turn files the document with the State Registrar of Vital Records. State records are aggregated by the National Center for Health Statistics to create a national mortality database. Errors, omissions, and inaccuracies can occur when the death certificate is completed and later when it is processed. Some of these errors are detected and corrected; others are not.

### **Premature death: What is it?**

We expect that most people will live to reach old age, but many do not. In 2003, almost half (46%) of those who died were less than 75 years of age. 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, many people will live longer than 75 years.

If we expect everyone to live to be at least 75 years of age then people who die before that age 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 years of age. 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.



Consider coronary heart disease and homicide--the first and second leading causes of premature death. Fifteen times more people died from coronary heart disease (16,320 deaths) than homicide (1,066 deaths), but the years of life lost from coronary heart disease (69,552 years) were only slightly greater than the years of life lost from homicide (47,493 years). This means that most people who died from coronary heart disease

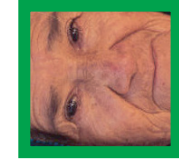
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## LEADING CAUSES OF DEATH AND PREMATURE DEATH

were older and lost few, if any, years of expected life. Because most homicides were among younger people each homicide resulted in a large number of years of life lost. The median age at death from coronary heart disease was 81 years compared with 26 years for homicide.

### Measures

This report provides the number of deaths, death rates standardized by age, years of life lost before age 75, and the leading causes of death and premature death for 2003 and the 10-year period 1994 through 2003. The variables included in the analysis were age at death, gender, race/ethnicity, underlying cause of death, and service planning area and health district of residence for residents of Los Angeles County. Calculations of years of potential life lost were limited to persons who were at least 1 year of age at the time of death. Infants less than 1 year of age were excluded because prevention of infant mortality differs from prevention of other causes of early mortality.



A standardized coding system, the International Classification of Diseases (ICD), was used to classify causes of death and to group similar causes of death into categories for analysis.<sup>1</sup> The cause of death groups were based on categories developed by the National Center for Health Statistics.<sup>2</sup> After deaths were grouped into categories they were ranked by the number of deaths and years of life lost. If two causes of death had the same number of deaths, then the cause of death that resulted in the most years of life lost was ranked first. For premature death rankings, if two causes of death resulted in the same number of years of life lost, then the cause of death that resulted in the greatest number of deaths was ranked first. To protect the identity of decedents, the exact number of deaths was not provided for conditions that caused fewer than five deaths.

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 represent the minimum impact of certain diseases and conditions.

Some figures include national goals established by Healthy People 2010.<sup>3</sup> Healthy People 2010 is a set of health-related objectives for the nation to achieve with the goal of increasing life expectancy and quality of life, and eliminating health disparities in population groups.

### Definitions

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



<sup>1</sup> *International statistical classification of diseases and related health problems, tenth revision*. Geneva: World Health Organization, 1992.

<sup>2</sup> Instruction manual, Part 9. ICD-10 cause-of-death lists for tabulating mortality statistics. Available at: [http://www.cdc.gov/nchs/data/dvs/im9\\_2002.pdf](http://www.cdc.gov/nchs/data/dvs/im9_2002.pdf).

<sup>3</sup> Healthy People, Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. [www.healthypeople.gov](http://www.healthypeople.gov).

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**LEADING CAUSES OF DEATH AND PREMATURE DEATH**

*Death rate (adjusted by age):* There are age-related differences in the rate at which most health conditions occur. Some conditions are more common among young people while others are more common among older people. Because of differences in the death rate among different population groups it is difficult to compare the crude death rate of populations that have different age distributions. 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 to create a comparable summary measure of mortality. In this report, death rates adjusted by age were calculated using the 2000 standard population published by the National Center for Health Statistics.<sup>4</sup> All rates were rounded to the nearest whole number; therefore, rates that appear to be the same differ by a fractional amount.

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

**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, all cancers have the same color code whether it was lung cancer, colorectal cancer, breast cancer, or another cancer. The same is true for unintentional injuries (accidents); all unintentional injuries such as drug overdose, motor vehicle crash, or any other unintentional injury have the same color code.

Coronary heart disease
Stroke
Cancer
Emphysema
Pneumonia and influenza
Diabetes
Alzheimer's disease
Homicide
Unintentional injury (accident)
Self-inflicted injury (suicide)
Liver disease
HIV
Birth defect
Perinatal period condition
Other conditions

<sup>4</sup> Anderson RN, Rosenberg HM. Age standardization of death rates: Implementation of the year 2000 standard. *National Vital Statistics Reports*; Vol. 47 No. 3. Hyattsville, Maryland: National Center for Health Statistics, 1998.

## LEADING CAUSES OF DEATH AND PREMATURE DEATH

### Highlights

- On an average day in Los Angeles County in 2003, 167 people died--45 from coronary heart disease, 38 from cancer, 12 from stroke, and 11 from injuries (accident, homicide, suicide). Six were children or young adults less than 25 years of age.

- There were 61,026 deaths--30,907 males and 30,119 females.

- Coronary heart disease was the leading cause of death overall and the leading cause of death for both males and females, all race/ethnic groups, persons aged 45 years and older, and in every service planning area and health district.

*Injuries (accident, homicide, suicide) were the leading cause of death for persons 1-44 years of age.*

- During the last five years, there has been no change in the top seven causes of death: coronary heart disease, stroke, lung cancer, emphysema, pneumonia and influenza, diabetes, and colorectal cancer.
- Half of all deaths in 2003 were caused by coronary heart disease (16,320 deaths) and cancer (13,712 deaths).
- Among those who died of cancer, lung cancer was most common (3,150 deaths) followed by colorectal cancer (1,450 deaths), and breast cancer (1,084 deaths).

- Death rates were highest among blacks. For all race/ethnic groups males had higher death rates than females.

- Almost half (46%) of all deaths in the county were among persons less than 75 years of age resulting in nearly 514,000 years of life lost.

- Homicide was the leading cause of premature death for blacks, Hispanics, persons aged 15 to 44 years, and in the South Service Planning Area; and the second leading cause of premature death for males.

- After coronary heart disease, breast cancer was the second leading cause of premature death for females.

*HIV infection was the third leading cause of premature death for blacks and the ninth leading cause of premature death for Hispanics.*

- Motor vehicle crashes were the leading cause of death for children 5-14 years of age, and the second leading cause of death for persons 15-44 years of age. The rate for males was more than twice that for females.

- More than one-fourth of all years of life lost before age 75 were from injuries (accident, homicide, suicide).

- Healthy People 2010 goals were met for lung cancer and diabetes but not for coronary heart disease, stroke, and homicide.

*Almost one of every four deaths was caused by coronary heart disease.*

*For the first time, Alzheimer's disease was one of the ten leading causes of death; it was the eighth leading cause of death in 2003.*

Mortality in Los Angeles County, 2003  
**User's guide to cause of death and premature death figures**

This series of figures compares the ten leading causes of death with the ten 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			B		
Leading causes of death			Leading causes of <i>premature</i> death		
Rank	Cause of death	No. of deaths	Rank	Cause of death	Years of Death life lost
		death rank			rank
1.	Coronary heart disease	16,320	1.	Coronary heart disease	69,552
2.	Stroke	4,249	2.	Homicide	47,493
3.	Lung cancer	3,150	3.	Motor vehicle crash	33,448
4.	Emphysema	2,796	4.	Suicide	20,949
5.	Pneumonia & influenza	2,419	5.	Lung cancer	20,859
6.	Diabetes	2,178	6.	Drug overdose	19,942
7.	Colorectal cancer	1,450	7.	Liver disease	19,018
8.	Alzheimer's disease	1,285	8.	Stroke	17,233
9.	Breast cancer	1,084	9.	Diabetes	15,962
10.	Homicide	1,066	10.	HIV	15,065

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

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

- ① The cause of death group coded by color.
- ② The number of deaths due to the specific cause, e.g., there were 16,320 deaths from coronary heart disease and 2,796 deaths from emphysema.
- ③ The *premature* death rank for this cause of death, e.g., homicide was the tenth ranked cause of death (1,066 deaths), but the second ranked cause of *premature* death (47,493 years of life lost).
- ④ The cause of premature death group coded by color.
- ⑤ The total years of life lost before age 75 for the specific cause of death.
- ⑥ The death rank for this cause of *premature* death, e.g., stroke was the eighth ranked cause of *premature* death resulting in 17,233 years of life lost before age 75, but the second ranked cause of death (4,249 deaths).

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

Leading causes of death		Leading causes of premature* death			
Rank	Cause of death	No. of deaths	Rank	Cause of death	Years of Death life lost** rank
1.	Coronary heart disease	16,320	1.	Coronary heart disease	69,552
2.	Stroke	4,249	8.	Homicide	47,493
3.	Lung cancer	3,150	5.	Motor vehicle crash	33,448
4.	Emphysema	2,796	13.	Suicide	20,949
5.	Pneumonia & influenza	2,419	18.	Lung cancer	20,859
6.	Diabetes	2,178	9.	Drug overdose	19,942
7.	Colorectal cancer	1,450	12.	Liver disease	19,018
8.	Alzheimer's disease	1,285	51.	Stroke	17,233
9.	Breast cancer	1,084	11.	Diabetes	15,962
10.	Homicide	1,066	2.	HIV	15,065

There were almost four times as many deaths from coronary heart disease as there were from stroke, the second leading cause of death.

Overall, coronary heart disease (16,320 deaths) and cancer (13,712 deaths) caused more deaths than all other causes of death combined.

For each death from homicide (the second leading cause of premature death) an average of 45 years of life were lost compared with four years for coronary heart disease.

Homicide, suicide, and accidents caused nearly one-third of all years of life lost.

There was little difference in the years of life lost between suicide, lung cancer, drug overdose, and liver disease, but there were substantial differences in the number of deaths from these causes highlighting the dramatic impact of suicide and drug overdose on premature death.

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



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

Male 30,907 total deaths					Female 30,119 total deaths				
Leading causes of death			Leading causes of premature* death		Leading causes of death			Leading causes of premature* death	
Rank	Cause of death	No. of Premature deaths death rank	Rank	Cause of death	Rank	Cause of death	Rank	Cause of death	Years of Death life lost** rank
1.	Coronary heart disease	8,131	1.	Coronary heart disease	1.	Coronary heart disease	1.	Coronary heart disease	19,401
2.	Stroke	1,754	9.	Homicide	7.	Stroke	6.	Breast cancer	13,793
3.	Lung cancer	1,713	8.	Motor vehicle crash	11.	Lung cancer	3.	Lung cancer	8,670
4.	Emphysema	1,377	13.	Suicide	12.	Emphysema	13.	Motor vehicle crash	8,649
5.	Pneumonia & influenza	1,121	17.	Liver disease	8.	Pneumonia & influenza	19.	Diabetes	7,418
6.	Diabetes	1,053	10.	Drug overdose	13.	Diabetes	5.	Stroke	7,057
7.	Homicide	931	2.	HIV	14.	Breast cancer	2.	Drug overdose	5,495
8.	Liver disease	727	5.	Lung cancer	3.	Alzheimer's disease	44.	Colorectal cancer	4,916
9.	Prostate cancer	725	25.	Stroke	2.	Colorectal cancer	8.	Homicide	4,862
10.	Colorectal cancer	710	11.	Diabetes	6.	Pancreatic cancer	20.	Liver disease	4,505

**C**oronary heart disease and homicide were the leading causes of premature death for men even though the number of coronary heart disease deaths was almost nine times greater than the number of homicide deaths.

**P**neumonia and influenza, and prostate cancer were leading causes of death for men but had less impact on premature death.

**H**omicide, motor vehicle crashes, and suicide caused 25% of the years of life lost among men and 7% of the deaths.

**T**he number of coronary heart disease deaths for men and women was similar, but men lost more than twice as many years of life as women meaning that men die from coronary heart disease at a younger age.

**M**otor vehicle crashes, drug overdoses, and homicide caused 2% of the deaths among women and 11% of the years of life lost.

**E**mphysema, pneumonia and influenza, Alzheimer's disease, and pancreatic cancer were leading causes of death for women but contributed only 5% of the years of life lost.

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

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

White 34,105 total deaths						Hispanic 12,803 total deaths						
Leading causes of death			Leading causes of premature* death			Leading causes of death			Leading causes of premature* death			
Rank	Cause of death	No. of deaths	Rank	Cause of death	Years of Death life lost** rank	Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of Death life lost** rank
1.	Coronary heart disease	10,003	1.	Coronary heart disease	31,814	1.	Coronary heart disease	2,632	3.	1.	Homicide	24,564
2.	Stroke	2,441	9.	Lung cancer	11,014	2.	Stroke	755	6.	2.	Motor vehicle crash	17,573
3.	Emphysema	1,989	7.	Suicide	10,695	3.	Diabetes	719	5.	3.	Coronary heart disease	15,343
4.	Lung cancer	1,942	2.	Drug overdose	10,405	4.	Homicide	520	1.	4.	Liver disease	9,666
5.	Pneumonia & influenza	1,475	17.	Motor vehicle crash	9,521	5.	Liver disease	498	4.	5.	Diabetes	6,341
6.	Alzheimer's disease	957	46.	Liver disease	6,739	6.	Motor vehicle crash	418	2.	6.	Stroke	6,285
7.	Diabetes	835	10.	Emphysema	5,575	7.	Pneumonia & influenza	411	19.	7.	Suicide	6,133
8.	Colorectal cancer	824	12.	Breast cancer	5,506	8.	Lung cancer	381	13.	8.	Drug overdose	6,118
9.	Breast cancer	576	8.	Stroke	4,974	9.	Emphysema	311	29.	9.	HIV	5,328
10.	Pancreatic cancer	462	16.	Diabetes	4,778	10.	Breast cancer	243	10.	10.	Breast cancer	4,333

Nearly one-third of all deaths among whites were from coronary heart disease.

Suicide, drug overdose, and motor vehicle crashes caused 1,113 deaths, one-ninth as many as coronary heart disease, but resulted in nearly as many years of life lost (30,621 years).

Homicide was the leading cause of premature death for Hispanics even though the number of homicides was five times less than the number of coronary heart disease deaths.

The years of life lost from diabetes, stroke, suicide, drug overdose, and HIV were similar, but there were dramatic differences in the number of deaths highlighting the impact of certain conditions on premature death.

## Black 8,517 total deaths

Leading causes of death		Leading causes of premature* death					
Rank	Cause of death	No. of Premature deaths death rank	Rank	Cause of death	Years of Death life lost** rank		
1.	Coronary heart disease	2,269	2.	1.	Homicide	16,651	5.
2.	Stroke	584	5.	2.	Coronary heart disease	16,107	1.
3.	Lung cancer	451	4.	3.	HIV	4,498	12.
4.	Diabetes	378	7.	4.	Lung cancer	4,156	3.
5.	Homicide	369	1.	5.	Stroke	3,984	2.
6.	Emphysema	287	12.	6.	Motor vehicle crash	3,731	16.
7.	Pneumonia & influenza	271	17.	7.	Diabetes	3,691	4.
8.	Colorectal cancer	211	10.	8.	Drug overdose	3,034	17.
9.	Breast cancer	161	9.	9.	Breast cancer	2,387	9.
10.	High blood pressure & related kidney disease	159	16.	10.	Colorectal cancer	2,030	8.

**F**or blacks, homicide caused more years of life lost than coronary heart disease even though coronary heart disease caused six times more deaths than homicide.

**H**IV infection was the third leading cause of years of life lost for blacks. The median age at death for those who died of HIV infection was 43 years compared with 27 years for homicide, 75 years for coronary heart disease, and 77 years for stroke.

## Asian/Pacific Islander 5,352 total deaths

Leading causes of death		Leading causes of premature* death					
Rank	Cause of death	No. of Premature deaths death rank	Rank	Cause of death	Years of Death life lost** rank		
1.	Coronary heart disease	1,352	1.	1.	Coronary heart disease	5,846	1.
2.	Stroke	462	6.	2.	Lung cancer	2,604	3.
3.	Lung cancer	367	2.	3.	Motor vehicle crash	2,541	11.
4.	Pneumonia & influenza	250	17.	4.	Homicide	2,149	17.
5.	Diabetes	233	10.	5.	Suicide	1,997	14.
6.	Emphysema	198	32.	6.	Stroke	1,947	2.
7.	Colorectal cancer	170	8.	7.	Breast cancer	1,661	10.
8.	Liver cancer	157	9.	8.	Colorectal cancer	1,579	7.
9.	Stomach cancer	107	11.	9.	Liver cancer	1,528	8.
10.	Breast cancer	102	7.	10.	Diabetes	1,037	5.

**C**ancers were leading causes of death and premature death among Asian/Pacific Islanders.

**F**or Asian/Pacific Islanders, pneumonia and influenza, and emphysema were leading causes of death but had less impact on premature death.

**M**otor vehicle crashes, homicide, and suicide caused 4% of the deaths and 17% of the premature deaths among Asian/Pacific Islanders.

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

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

**Leading causes of death**

Race/ethnicity	#1 cause Number of deaths Death rate*	#2 cause Number of deaths Death rate*	#3 cause Number of deaths Death rate*	#4 cause Number of deaths Death rate*	#5 cause Number of deaths Death rate*
<b>White</b> 34,105 794 per 100,000	Coronary heart disease 10,003 223 per 100,000	Stroke 2,441 54 per 100,000	Emphysema 1,989 46 per 100,000	Lung cancer 1,942 47 per 100,000	Pneumonia and influenza 1,475 32 per 100,000
<b>Hispanic</b> 12,803 535 per 100,000	Coronary heart disease 2,632 133 per 100,000	Stroke 755 36 per 100,000	Diabetes 719 34 per 100,000	Homicide 520 10 per 100,000	Liver disease 498 18 per 100,000
<b>Black</b> 8,517 1,117 per 100,000	Coronary heart disease 2,269 312 per 100,000	Stroke 584 82 per 100,000	Lung cancer 451 58 per 100,000	Diabetes 378 50 per 100,000	Homicide 369 38 per 100,000
<b>Asian/Pacific Islander</b> 5,352 459 per 100,000	Coronary heart disease 1,352 119 per 100,000	Stroke 462 41 per 100,000	Lung cancer 367 30 per 100,000	Pneumonia and influenza 250 23 per 100,000	Diabetes 233 20 per 100,000
<b>Los Angeles County Totals</b> 61,026 717 per 100,000	Coronary heart disease 16,320 196 per 100,000	Stroke 4,249 51 per 100,000	Lung cancer 3,150 38 per 100,000	Emphysema 2,796 34 per 100,000	Pneumonia and influenza 2,419 29 per 100,000

**Leading causes of premature\*\* death**

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

\*Adjusted by age. See definition on Page 3.

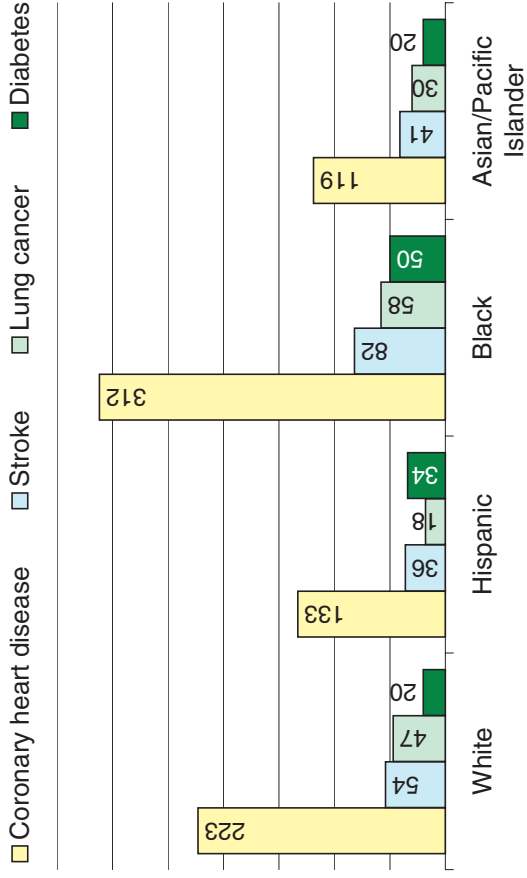
\*\*Death before age 75 years.

§Includes persons of other or unknown race/ethnicity.

For all race/ethnic groups, coronary heart disease and stroke were the two leading causes of death.

Blacks had the highest death rate for coronary heart disease, stroke, lung cancer, breast cancer, diabetes, homicide, colorectal cancer, and HIV infection.

**Race-specific death rate per 100,000**



The death rate from lung cancer was lowest among Hispanics -- 18 deaths per 100,000 compared with 58 deaths per 100,000 for blacks.

For all race/ethnic groups, emphysema, and pneumonia and influenza were important causes of death but contributed less to premature death.

Homicide was the leading cause of premature death for Hispanics and blacks. For both groups, 4% of the deaths were caused by homicide while approximately 15% of the years of life lost were caused by homicide.

Overall, HIV was the tenth leading cause of premature death but it was the third leading cause of premature death for blacks.

Homicide and motor vehicle crashes caused 23% of the years of life lost for Hispanics but only 7% of the deaths.

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

**Males: Leading causes of death**

Race/ethnicity	#1 cause Number of deaths Death rate*	#2 cause Number of deaths Death rate*	#3 cause Number of deaths Death rate*	#4 cause Number of deaths Death rate*	#5 cause Number of deaths Death rate*
<b>White</b> 16,454 950 per 100,000	Coronary heart disease 4,880 281 per 100,000	Lung cancer 989 55 per 100,000	Stroke 918 54 per 100,000	Emphysema 896 51 per 100,000	Pneumonia and influenza 659 39 per 100,000
<b>Hispanic</b> 7,100 650 per 100,000	Coronary heart disease 1,382 164 per 100,000	Homicide 471 18 per 100,000	Liver disease 377 28 per 100,000	Stroke 342 38 per 100,000	Diabetes 339 38 per 100,000
<b>Black</b> 4,365 1,413 per 100,000	Coronary heart disease 1,093 386 per 100,000	Homicide 324 72 per 100,000	Lung cancer 267 85 per 100,000	Stroke 248 91 per 100,000	Emphysema 169 63 per 100,000
<b>Asian/Pacific Islander</b> 2,846 563 per 100,000	Coronary heart disease 739 151 per 100,000	Stroke 242 50 per 100,000	Lung cancer 215 41 per 100,000	Emphysema 131 29 per 100,000	Pneumonia and influenza 130 29 per 100,000
<b>All males§</b> 30,907 866 per 100,000	Coronary heart disease 8,131 243 per 100,000	Stroke 1,754 53 per 100,000	Lung cancer 1,713 48 per 100,000	Emphysema 1,377 43 per 100,000	Pneumonia and influenza 1,121 36 per 100,000

**Males: Leading causes of premature\*\* death**

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

\*Adjusted by age. See definition on Page 3.  
 \*\*Death before age 75 years.  
 §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**

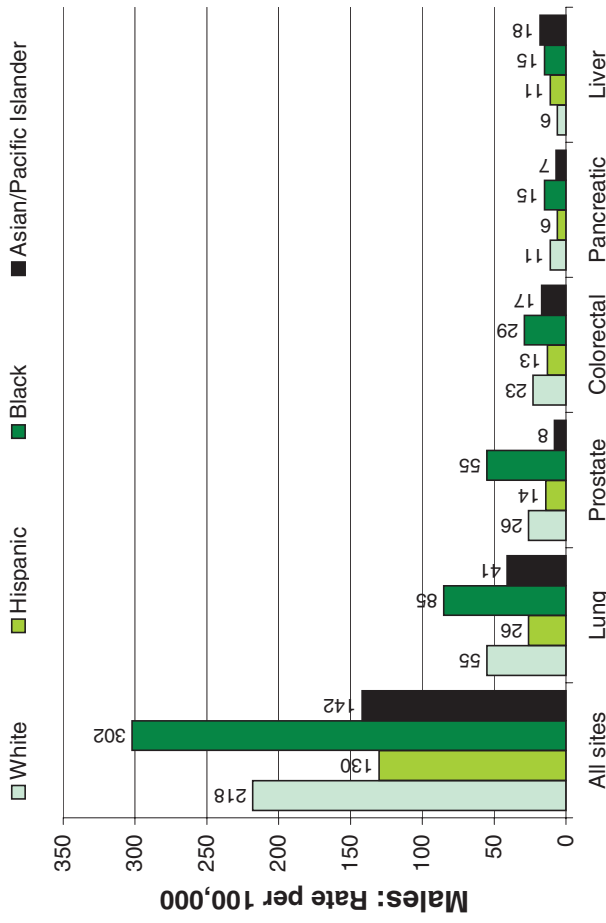
Race/ethnicity	#1 cause Number of deaths Death rate*	#2 cause Number of deaths Death rate*	#3 cause Number of deaths Death rate*	#4 cause Number of deaths Death rate*	#5 cause Number of deaths Death rate*
<b>White</b> 17,651 671 per 100,000	Coronary heart disease 5,123 178 per 100,000	Stroke 1,523 53 per 100,000	Emphysema 1,093 42 per 100,000	Lung cancer 953 40 per 100,000	Pneumonia and influenza 816 28 per 100,000
<b>Hispanic</b> 5,703 440 per 100,000	Coronary heart disease 1,250 109 per 100,000	Stroke 413 34 per 100,000	Diabetes 380 31 per 100,000	Breast cancer 242 16 per 100,000	Pneumonia and influenza 222 19 per 100,000
<b>Black</b> 4,152 906 per 100,000	Coronary heart disease 1,176 260 per 100,000	Stroke 336 74 per 100,000	Diabetes 220 48 per 100,000	Lung cancer 184 40 per 100,000	Breast cancer 158 33 per 100,000
<b>Asian/Pacific Islander</b> 2,506 378 per 100,000	Coronary heart disease 613 95 per 100,000	Stroke 220 34 per 100,000	Lung cancer 152 22 per 100,000	Pneumonia and influenza 120 19 per 100,000	Diabetes 109 17 per 100,000
<b>All females</b> 30,119 599 per 100,000	Coronary heart disease 8,189 160 per 100,000	Stroke 2,495 49 per 100,000	Lung cancer 1,437 30 per 100,000	Emphysema 1,419 29 per 100,000	Pneumonia and influenza 1,298 25 per 100,000

**Females: Leading causes of premature\*\* death**

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

\*Adjusted by age. See definition on Page 3.  
 \*\*Death before age 75 years.  
 §Includes persons of other or unknown race/ethnicity.

**Figure 7. Cancer mortality rates by gender and race/ethnicity**

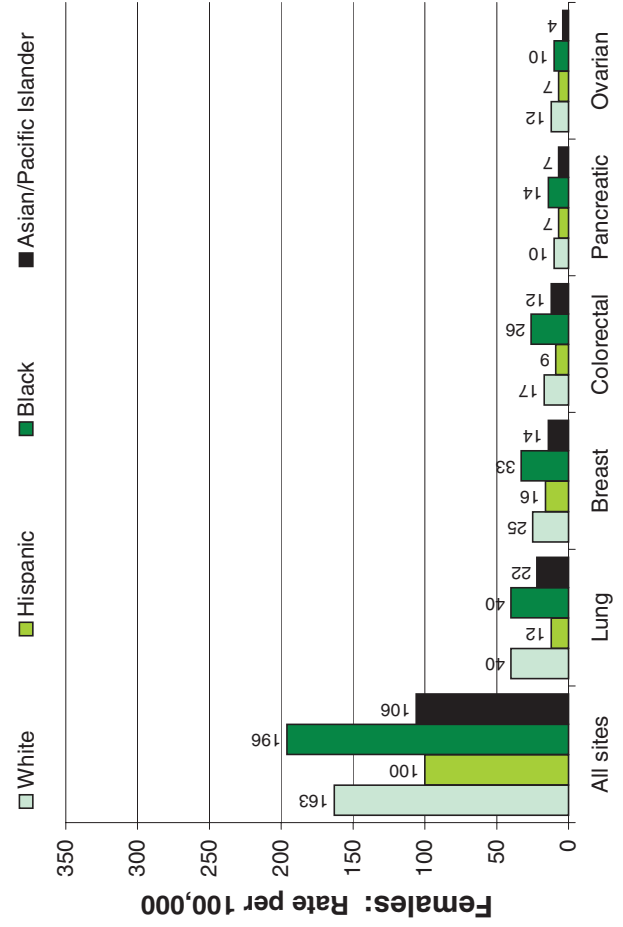


**Black** males had the highest overall cancer death rate, and among males the highest rate for lung, prostate, colorectal, and pancreatic cancer.

**Among females, blacks** had the highest overall cancer death rate, and the highest rate for breast, colorectal, and pancreatic cancer.

**Lung** cancer rates were higher for men than women.

**Death** rates from pancreatic cancer were similar for men and women.



\* Adjusted by age. See definition on Page 3.



**Figure 8. Comparison of the leading causes of death by age group (Rev. 8/4/06)**

**Leading causes of death**

Age group Number of deaths Death rate*	#1 cause Number of deaths Death rate*	#2 cause Number of deaths Death rate*	#3 cause Number of deaths Death rate*	#4 cause Number of deaths Death rate*	#5 cause Number of deaths Death rate*
<b>Less than 1 year</b> 822 536 per 100,000	<b>Low birthweight</b> 150 98 per 100,000	<b>Congenital heart defect</b> 60 39 per 100,000	<b>Circulatory system disorder</b> 31 20 per 100,000	<b>Respiratory distress</b> 26 17 per 100,000	<b>Complication of placenta/cord</b> 26 17 per 100,000
<b>1-4 years</b> 158 26 per 100,000	<b>Birth defect</b> 28 5 per 100,000	<b>Motor vehicle crash</b> 19 --	<b>Homicide</b> 15 --	<b>Drowning</b> 8 --	<b>Leukemia</b> 6 --
<b>5-14 years</b> 228 14 per 100,000	<b>Motor vehicle crash</b> 45 3 per 100,000	<b>Leukemia</b> 29 2 per 100,000	<b>Birth defect</b> 19 --	<b>Homicide</b> 17 --	<b>Brain cancer</b> 12 --
<b>15-24 years</b> 1,085 77 per 100,000	<b>Homicide</b> 426 30 per 100,000	<b>Motor vehicle crash</b> 216 15 per 100,000	<b>Suicide</b> 83 6 per 100,000	<b>Drug overdose</b> 29 2 per 100,000	<b>Birth defect</b> 23 2 per 100,000
<b>25-44 years</b> 3,901 124 per 100,000	<b>Homicide</b> 453 14 per 100,000	<b>Motor vehicle crash</b> 314 10 per 100,000	<b>Drug overdose</b> 287 9 per 100,000	<b>Suicide</b> 264 8 per 100,000	<b>Coronary heart disease</b> 262 8 per 100,000
<b>45-64 years</b> 11,741 554 per 100,000	<b>Coronary heart disease</b> 2,530 119 per 100,000	<b>Lung cancer</b> 786 37 per 100,000	<b>Liver disease</b> 551 26 per 100,000	<b>Diabetes</b> 547 26 per 100,000	<b>Stroke</b> 521 25 per 100,000
<b>65-74 years</b> 9,858 1,913 per 100,000	<b>Coronary heart disease</b> 2,498 485 per 100,000	<b>Lung cancer</b> 957 186 per 100,000	<b>Stroke</b> 591 115 per 100,000	<b>Emphysema</b> 553 107 per 100,000	<b>Diabetes</b> 491 95 per 100,000
<b>75+ years</b> 33,220 6,829 per 100,000	<b>Coronary heart disease</b> 11,020 2,265 per 100,000	<b>Stroke</b> 3,016 620 per 100,000	<b>Pneumonia and influenza</b> 1,948 400 per 100,000	<b>Emphysema</b> 1,917 394 per 100,000	<b>Lung cancer</b> 1,355 279 per 100,000
<b>Los Angeles County Totals</b> 61,026 717 per 100,000	<b>Coronary heart disease</b> 16,320 196 per 100,000	<b>Stroke</b> 4,249 51 per 100,000	<b>Lung cancer</b> 3,150 38 per 100,000	<b>Emphysema</b> 2,796 34 per 100,000	<b>Pneumonia and influenza</b> 2,419 29 per 100,000

Injuries (homicide, accidents, suicide) were leading causes of death in persons 1-44 years of age causing 45% of all deaths in this age group.

Almost half (46%) of all deaths were among persons less than 75 years of age.

Sixty-eight percent of coronary heart disease deaths, 71% of stroke deaths, 43% of lung cancer deaths, 69% of emphysema deaths, and 81% of pneumonia and influenza deaths were among persons aged 75 years or older. Conversely, 30% of breast cancer deaths, 12% of suicide deaths, 11% of motor vehicle crash deaths, 2% of homicide deaths, and 1% of HIV deaths were among persons aged 75 years or older.

\*Age-specific death rate per 100,000 people.  
§Includes persons of unknown age. Rate adjusted by age. See definition on Page 3.

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

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

Race/ethnicity		#1 Cause	#2 Cause	#3 Cause
Number of deaths*		Number of deaths	Number of deaths	Number of deaths
0-14 years 687**	White	Perinatal period condition 48	Birth defect 20	Motor vehicle crash 6
	Hispanic	Perinatal period condition 114	Birth defect 89	Motor vehicle crash 34
	Black	Perinatal period condition 54	Birth defect 15	Homicide 10
	Asian/Pacific Islander	Birth defect 13	Perinatal period condition 12	Brain cancer <5
15-24 years 866**	White	Motor vehicle crash 38	Suicide 23	Homicide 20
	Hispanic	Homicide 232	Motor vehicle crash 98	Suicide 40
	Black	Homicide 126	Motor vehicle crash 16	Suicide 7
	Asian/Pacific Islander	Homicide 17	Motor vehicle crash 11	Suicide 6
25-44 years 2,702**	White	Drug overdose 103	Suicide 96	Coronary heart disease 80
	Hispanic	Homicide 191	Motor vehicle crash 121	Drug overdose 86
	Black	Homicide 157	HIV 68	Coronary heart disease 40
	Asian/Pacific Islander	Motor vehicle crash 20	Suicide 19	Coronary heart disease 19
45-64 years 7,206**	White	Coronary heart disease 871	Lung cancer 243	Liver disease 139
	Hispanic	Coronary heart disease 396	Liver disease 219	Diabetes 119
	Black	Coronary heart disease 367	Lung cancer 103	Stroke 59
	Asian/Pacific Islander	Coronary heart disease 166	Lung cancer 51	Stroke 43

Males

		White	Hispanic	Black	Asian/Pacific Islander
65-74 years	Coronary heart disease	865	300	261	136
	Lung cancer	312	Diabetes 85	Lung cancer 82	Lung cancer 72
	Stroke				Stroke 47
	Emphysema	210	Lung cancer 81	Stroke 62	Stroke 47
75+ years	Coronary heart disease	3,062	622	423	418
	Stroke	664	Stroke 145	Stroke 111	Stroke 143
	Diabetes	123	Emphysema 87	Emphysema 87	Emphysema 107
	Emphysema	578	Diabetes 123	Emphysema 87	Emphysema 107

**A**lmost all perinatal period condition deaths were among infants less than one year of age. Specific conditions included prematurity/low birthweight, complications of the placenta, umbilical cord, or membranes; respiratory distress, and bacterial infection.

**M**ost deaths from birth defects were among infants less than one year of age. Congenital heart defects were the most common.

**I**njuries (homicide, suicide, and accidents) caused 82% of all deaths among adolescent and young adult males (15-24 years).

**T**he homicide rate for black males aged 15-24 years was 178 per 100,000 compared with 10 per 100,000 for the county overall, 18 per 100,000 for all males, 38 per 100,000 for all blacks, and 72 per 100,000 for black males of all ages.

**A**mong males, 85% of all homicides and half of all suicides were committed with a gun. The highest proportion of gun suicides was among elderly men (75 years or older), 72% of whom committed suicide with a gun.

**C**oronary heart disease was an important cause of death for males 25-44 years of age and the leading cause of death for males over the age of 44 years.

**S**troke, emphysema, diabetes, and lung cancer were important causes of death among the elderly.

\*Deaths from all causes in age and race/ethnic group.  
 \*\*Deaths from all causes in age group. Includes persons of unknown race/ethnicity.

Figure 10. Leading causes of death for females by age group and race/ethnicity

Race/ethnicity		#1 Cause	#2 Cause	#3 Cause
Number of deaths*		Number of deaths	Number of deaths	Number of deaths
0-14 years 521**	White	Perinatal period condition 34	Birth defect 13	Motor vehicle crash 5
	Hispanic	Perinatal period condition 105	Birth defect 93	Motor vehicle crash 18
	Black	Perinatal period condition 39	Birth defect 17	Motor vehicle crash <5
	Asian/Pacific Islander	Perinatal period condition 16	Birth defect 6	Homicide <5
15-24 years 219**	White	Motor vehicle crash 17	Suicide 6	Drug overdose <5
	Hispanic	Motor vehicle crash 22	Homicide 14	Birth defect <5
	Black	Homicide 14	Motor vehicle crash 7	Pregnancy/childbirth <5
	Asian/Pacific Islander	Motor vehicle crash 7	Insufficient number	Insufficient number
25-44 years 1,199**	White	Drug overdose 46	Suicide 31	Breast cancer 28
	Hispanic	Breast cancer 43	Motor vehicle crash 33	Stroke 24
	Black	Coronary heart disease 21	Diabetes 19	Breast cancer 18
	Asian/Pacific Islander	Breast cancer 14	Suicide 10	Homicide 5
45-64 years 4,535**	White	Coronary heart disease 298	Breast cancer 190	Lung cancer 181
	Hispanic	Coronary heart disease 132	Breast cancer 118	Diabetes 105
	Black	Coronary heart disease 234	Breast cancer 74	Stroke 69
	Asian/Pacific Islander	Breast cancer 54	Coronary heart disease 48	Lung cancer 41

Females

<b>65-74 years</b> 4,351**	<b>White</b> 2,203	Coronary heart disease 463	Lung cancer 273	Emphysema 193
	<b>Hispanic</b> 988	Coronary heart disease 201	<b>Diabetes</b> 96	Stroke 65
	<b>Black</b> 715	Coronary heart disease 181	Lung cancer 52	Stroke 45
	<b>Asian/Pacific Islander</b> 427	Coronary heart disease 75	Stroke 41	Lung cancer 36
<b>75+ years</b> 19,289**	<b>White</b> 12,905	Coronary heart disease 4,345	Stroke 1,320	Emphysema 799
	<b>Hispanic</b> 2,774	Coronary heart disease 895	Stroke 258	<b>Diabetes</b> 160
	<b>Black</b> 2,038	Coronary heart disease 739	Stroke 213	<b>Diabetes</b> 102
	<b>Asian/Pacific Islander</b> 1,523	Coronary heart disease 488	Stroke 158	Pneumonia and influenza 104

**A**lmost all perinatal period condition deaths were among infants less than one year of age. Specific conditions included prematurity/low birthweight, complications of the placenta, umbilical cord, or membranes; maternal complications, and respiratory distress.

**M**ost deaths from birth defects were among infants less than one year of age. Congenital heart defects were the most common.

**M**otor vehicle crashes, homicide, and suicide were leading causes of death for adolescent and young adult women.

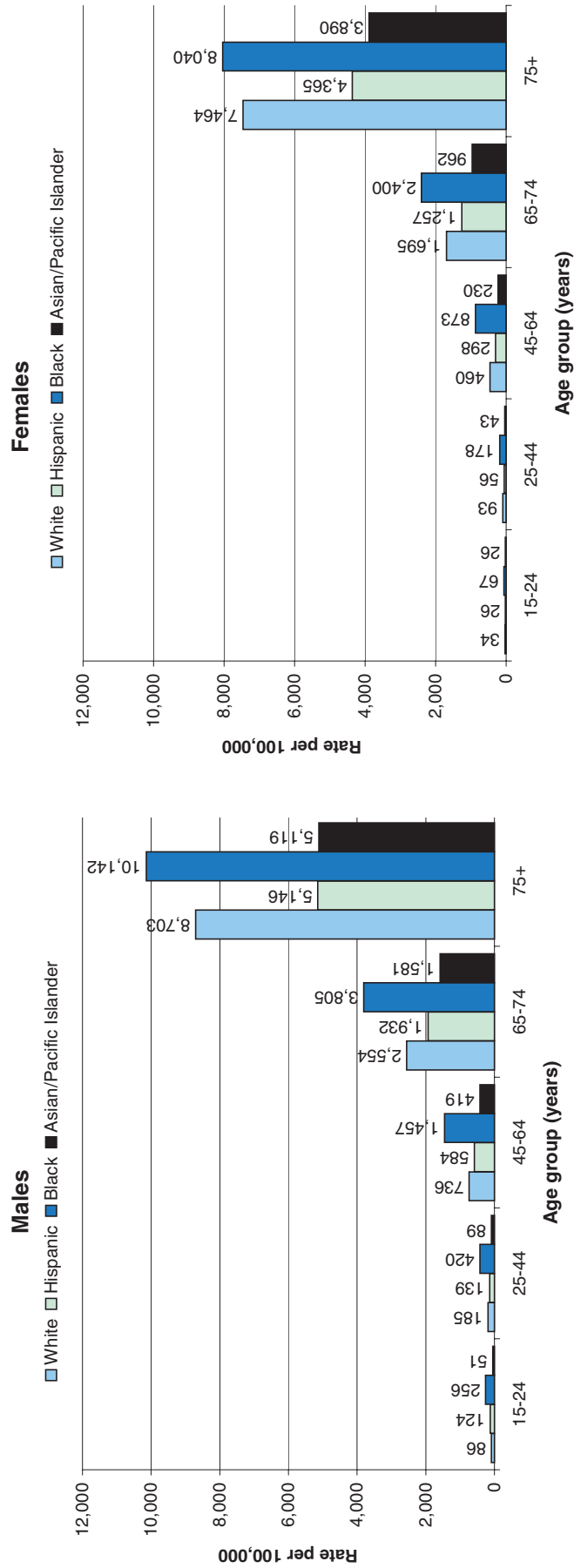
**C**oronary heart disease was a leading cause of death for women over the age of 44 years.

**B**reast and lung cancer were leading causes of death for women 25-74 years of age.

**O**verall, 19% of all women who died were between the ages of 25 and 64 years. Of the women who died of breast cancer, 50% were between the ages of 25 and 64 years.

\*Deaths from all causes in age and race/ethnic group.  
\*\*Deaths from all causes in age group. Includes persons of unknown race/ethnicity.

**Figure 11. Age-specific death rates by gender and race/ethnicity**



For both males and females, death rates increased with age.

Black males and females had the highest death rate in every age group. Overall, Asian/Pacific Islanders had the lowest rates.

Death rates for females were lower than males in every age group and for all race/ethnic groups.

# Health District and Service Planning Area (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

Health Districts are outlined and labeled.

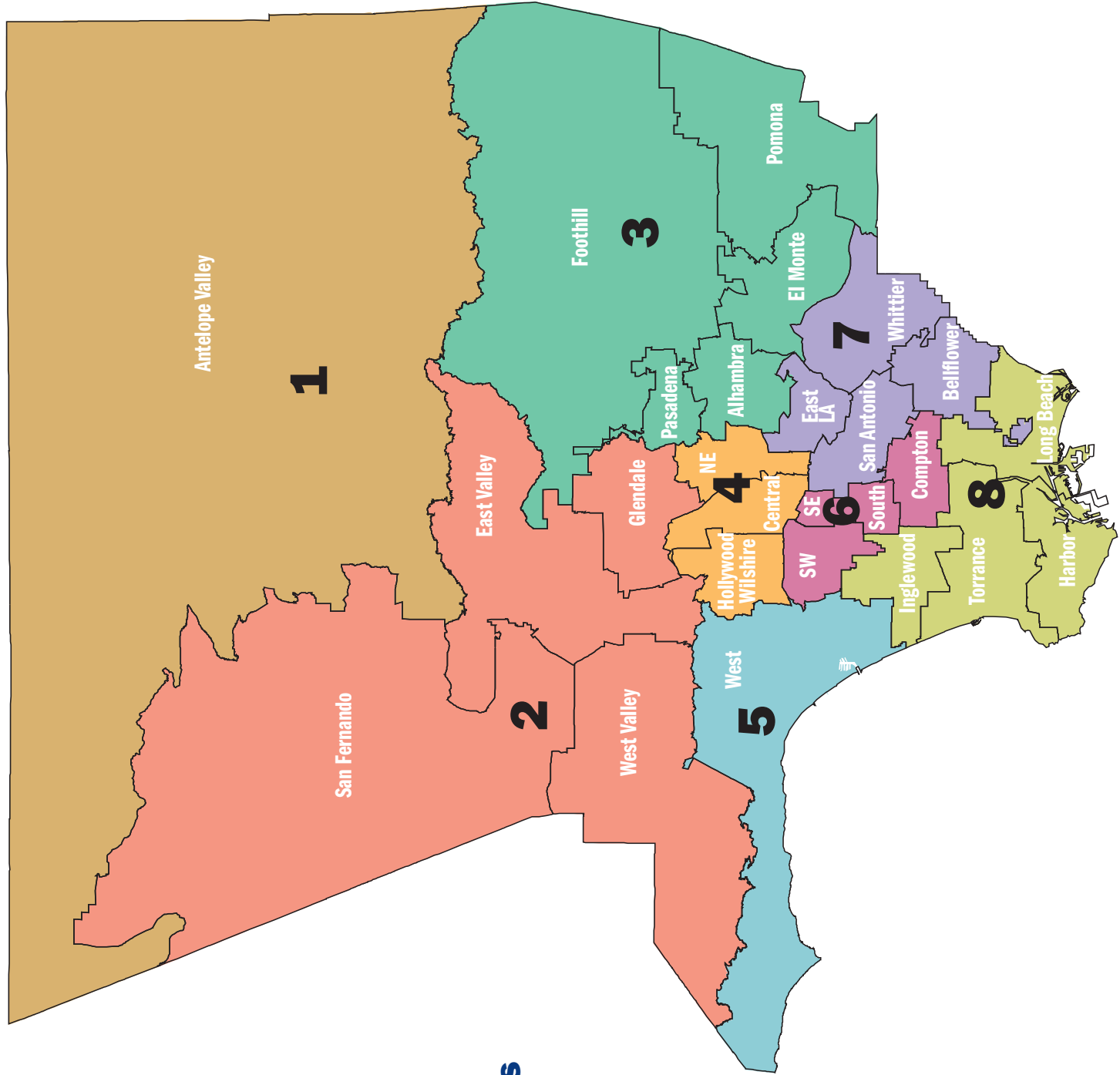


Figure 12. Leading causes of death and premature death by service planning area (SPA) or residence

**Antelope Valley (SPA 1)**

2,075 total deaths

Leading causes of death		Leading causes of premature* death	
Rank	Cause of death	No. of deaths	Years of Death life lost** rank
1.	Coronary heart disease	496	3,122
2.	Emphysema	140	2,958
3.	Stroke	131	1,591
4.	Lung cancer	120	1,141
5.	Pneumonia & influenza	72	1,054

**San Fernando Valley (SPA 2)**

12,670 total deaths

Leading causes of death		Leading causes of premature* death	
Rank	Cause of death	No. of deaths	Years of Death life lost** rank
1.	Coronary heart disease	3,520	12,724
2.	Stroke	898	7,072
3.	Lung cancer	695	5,235
4.	Emphysema	575	4,941
5.	Pneumonia & influenza	521	4,706

**San Gabriel (SPA 3)**

10,895 total deaths

Leading causes of death		Leading causes of premature* death	
Rank	Cause of death	No. of deaths	Years of Death life lost** rank
1.	Coronary heart disease	2,949	10,567
2.	Stroke	822	4,568
3.	Lung cancer	563	4,519
4.	Emphysema	529	3,303
5.	Pneumonia & influenza	467	3,109

**Metro (SPA 4)**

6,866 total deaths

Leading causes of death		Leading causes of premature* death	
Rank	Cause of death	No. of deaths	Years of Death life lost** rank
1.	Coronary heart disease	1,826	7,516
2.	Stroke	453	5,141
3.	Pneumonia & influenza	350	4,859
4.	Lung cancer	313	3,342
5.	Diabetes	271	3,296



**West (SPA 5)**  
4,290 total deaths

Leading causes of death			Leading causes of premature* death		
Rank	Cause of death	No. of Premature deaths death rank	Rank	Cause of death	Years of Death life lost** rank
1.	Coronary heart disease	1,089	1.	Coronary heart disease	3,173
2.	Stroke	342	2.	Drug overdose	1,808
3.	Lung cancer	216	3.	Suicide	1,581
4.	Pneumonia & influenza	212	4.	Breast cancer	1,067
5.	Emphysema	178	5.	Homicide	1,062

**South (SPA 6)**  
6,063 total deaths

Leading causes of death			Leading causes of premature* death		
Rank	Cause of death	No. of Premature deaths death rank	Rank	Cause of death	Years of Death life lost** rank
1.	Coronary heart disease	1,562	2.	Homicide	14,527
2.	Stroke	401	5.	Coronary heart disease	9,145
3.	Homicide	315	1.	Motor vehicle crash	3,965
4.	Diabetes	289	6.	HIV	3,082
5.	Lung cancer	286	7.	Stroke	2,821

**East (SPA 7)**  
7,428 total deaths

Leading causes of death			Leading causes of premature* death		
Rank	Cause of death	No. of Premature deaths death rank	Rank	Cause of death	Years of Death life lost** rank
1.	Coronary heart disease	1,949	1.	Coronary heart disease	8,592
2.	Stroke	479	8.	Homicide	5,364
3.	Emphysema	402	11.	Motor vehicle crash	3,790
4.	Lung cancer	356	9.	Liver disease	3,055
5.	Diabetes	336	6.	Suicide	2,460

**South Bay (SPA 8)**  
9,992 total deaths

Leading causes of death			Leading causes of premature* death		
Rank	Cause of death	No. of Premature deaths death rank	Rank	Cause of death	Years of Death life lost** rank
1.	Coronary heart disease	2,758	1.	Coronary heart disease	13,026
2.	Stroke	676	7.	Homicide	8,780
3.	Lung cancer	580	3.	Lung cancer	4,272
4.	Emphysema	521	13.	Motor vehicle crash	3,924
5.	Pneumonia & influenza	350	19.	Drug overdose	3,163

Coronary heart disease was the leading cause of death and premature death in every service planning area except for the South Service Planning Area in which homicide was the leading cause of premature death and the third leading causes of death.

Stroke was the second leading cause of death in every service planning area except the Antelope Valley Service Planning Area in which emphysema was the second leading cause of death.

Homicide and motor vehicle crashes were important causes of premature death in most service planning areas.

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

Figure 13. Comparison of the leading causes of death and premature death by service planning area (SPA) of residence

**Leading causes of death**

Service Planning Area Number of deaths Death rate*	#1 cause Number of deaths Death rate*	#2 cause Number of deaths Death rate*	#3 cause Number of deaths Death rate*	#4 cause Number of deaths Death rate*	#5 cause Number of deaths Death rate*
<b>SPA 1: Antelope Valley</b> 2,075 904 per 100,000	Coronary heart disease 496 232 per 100,000	Emphysema 140 67 per 100,000	Stroke 131 64 per 100,000	Lung cancer 120 52 per 100,000	Pneumonia and influenza 72 36 per 100,000
<b>SPA 2: San Fernando Valley</b> 12,670 694 per 100,000	Coronary heart disease 3,520 196 per 100,000	Stroke 898 50 per 100,000	Lung cancer 695 38 per 100,000	Emphysema 575 33 per 100,000	Pneumonia and influenza 521 29 per 100,000
<b>SPA 3: San Gabriel</b> 10,895 662 per 100,000	Coronary heart disease 2,949 181 per 100,000	Stroke 822 51 per 100,000	Lung cancer 563 35 per 100,000	Emphysema 529 33 per 100,000	Pneumonia and influenza 467 29 per 100,000
<b>SPA 4: Metro</b> 6,866 654 per 100,000	Coronary heart disease 1,826 177 per 100,000	Stroke 453 44 per 100,000	Pneumonia and influenza 350 34 per 100,000	Lung cancer 313 32 per 100,000	Diabetes 271 27 per 100,000
<b>SPA 5: West</b> 4,290 588 per 100,000	Coronary heart disease 1,089 146 per 100,000	Stroke 342 45 per 100,000	Lung cancer 216 31 per 100,000	Pneumonia and influenza 212 28 per 100,000	Emphysema 178 24 per 100,000
<b>SPA 6: South</b> 6,063 931 per 100,000	Coronary heart disease 1,562 263 per 100,000	Stroke 401 67 per 100,000	Homicide 315 29 per 100,000	Diabetes 289 47 per 100,000	Lung cancer 286 47 per 100,000
<b>SPA 7: East</b> 7,428 702 per 100,000	Coronary heart disease 1,949 190 per 100,000	Stroke 479 47 per 100,000	Emphysema 402 39 per 100,000	Lung cancer 356 34 per 100,000	Diabetes 336 32 per 100,000
<b>SPA 8: South Bay</b> 9,992 754 per 100,000	Coronary heart disease 2,758 215 per 100,000	Stroke 676 53 per 100,000	Lung cancer 580 44 per 100,000	Emphysema 521 41 per 100,000	Pneumonia and influenza 350 28 per 100,000
<b>Los Angeles County Totals</b> 61,026 717 per 100,000	Coronary heart disease 16,320 196 per 100,000	Stroke 4,249 51 per 100,000	Lung cancer 3,150 38 per 100,000	Emphysema 2,796 34 per 100,000	Pneumonia and influenza 2,419 29 per 100,000

## Leading causes of premature\*\* death

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

Injuries (homicide, motor vehicle crash, drug overdose, and suicide) were important causes of premature death in every service planning area.

**E**mphysema, pneumonia and influenza, and diabetes were leading causes of death in every service planning area but were not major contributors to years of life lost.

**H**IV and liver disease were significant contributors to years of life lost even though the number of deaths was relatively small highlighting the impact of deaths among younger persons.

\*Adjusted by age. See definition on Page 3.  
 \*\*Death before age 75 years.  
 §Includes persons with unknown residence.

Figure 14. Comparison of the leading causes of premature death by service planning area (SPA) of residence and gender

**Males: Leading causes of premature\* death**

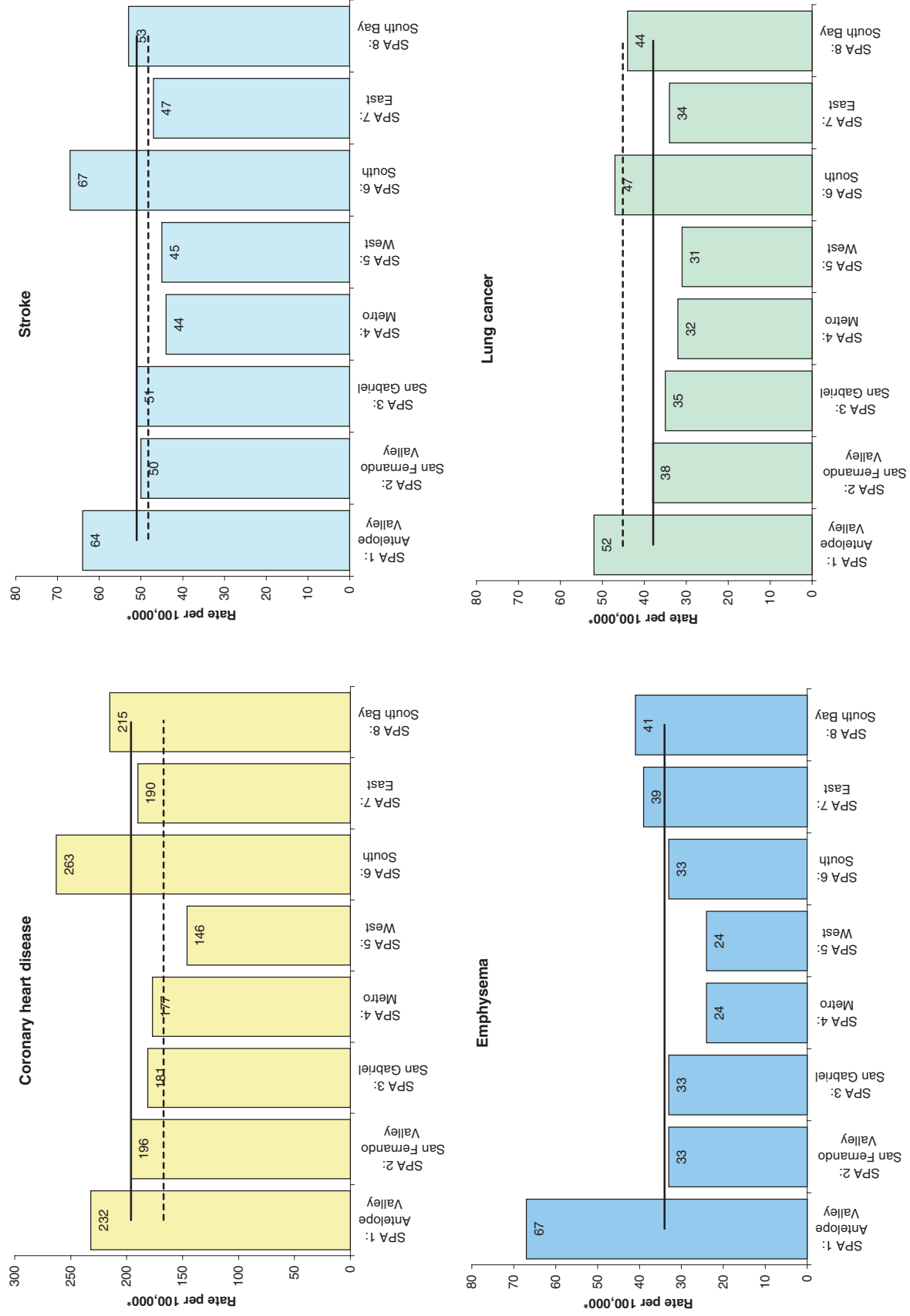
Service Planning Area	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause
SPA 1: Antelope Valley	Motor vehicle crash	Coronary heart disease	Homicide	Suicide	Liver disease
SPA 2: San Fernando Valley	Coronary heart disease	Motor vehicle crash	Homicide	Suicide	Lung cancer
SPA 3: San Gabriel	Coronary heart disease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

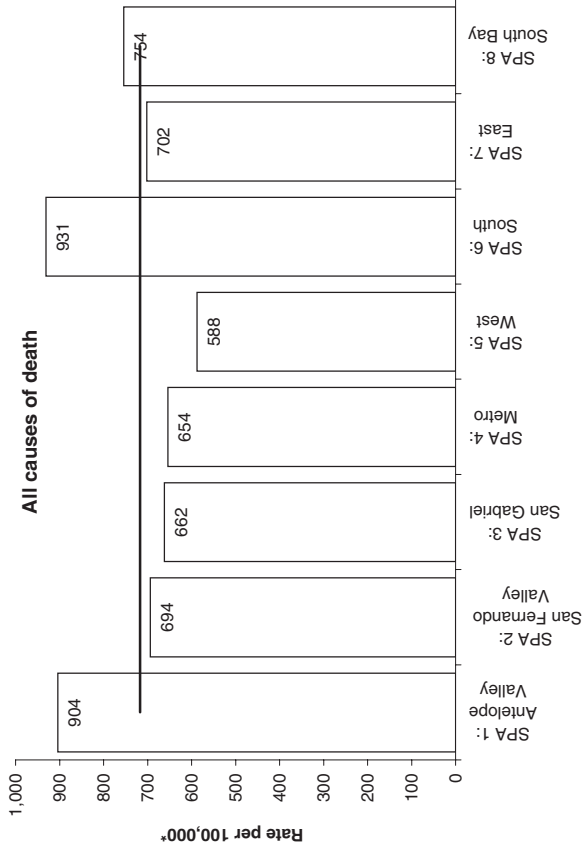
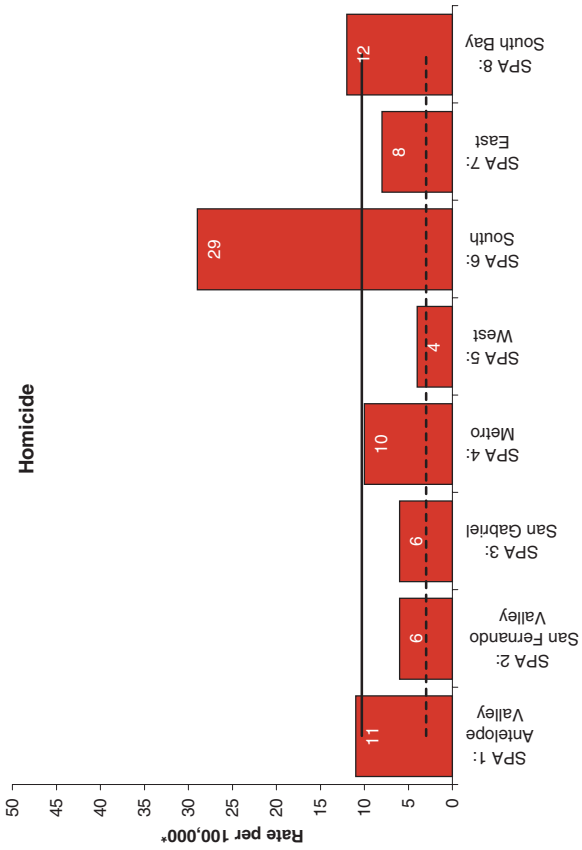
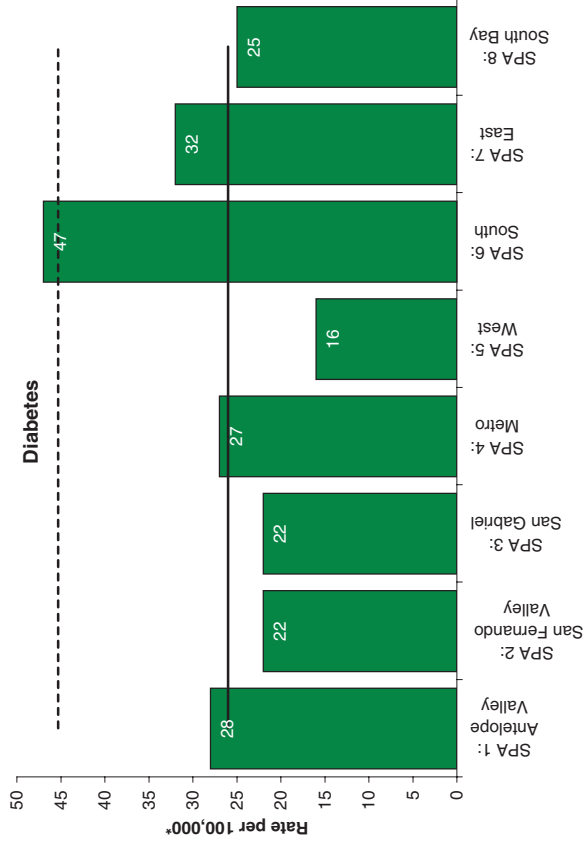
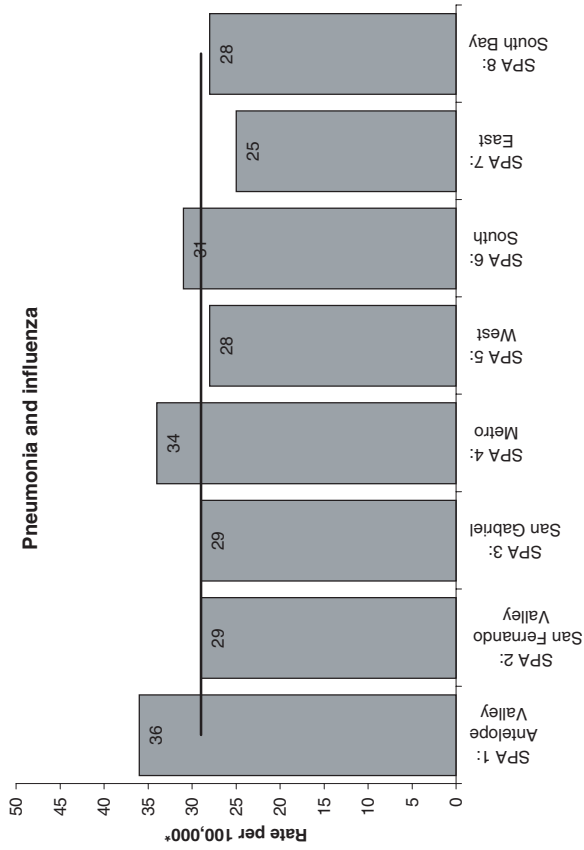
## Females: Leading causes of premature\* death

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

\*Death before age 75 years.  
§ Includes persons with unknown residence.

Mortality in Los Angeles County, 2003  
**Figure 15. Death rates by service planning area (SPA) of residence for selected causes of death**





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

Figure 16. Comparison of the leading causes of death by health district of residence

**Leading causes of death**

Health District Number of deaths 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
<b>Alhambra</b> 2,357 572 per 100,000	Coronary heart disease 655	Stroke 186	Pneumonia and influenza 133	Lung cancer 122	Emphysema 112
<b>Antelope Valley</b> 2,075 904 per 100,000	Coronary heart disease 496	Emphysema 140	Stroke 131	Lung cancer 120	Pneumonia and influenza 72
<b>Bellflower</b> 2,258 747 per 100,000	Coronary heart disease 622	Stroke 173	Emphysema 132	Lung cancer 131	Diabetes 80
<b>Central</b> 1,840 605 per 100,000	Coronary heart disease 477	Stroke 143	Pneumonia and influenza 104	Lung cancer 82	Diabetes 67
<b>Compton</b> 1,534 948 per 100,000	Coronary heart disease 365	Stroke 101	Lung cancer 83	Homicide 82	Diabetes 68
<b>East Los Angeles</b> 1,206 670 per 100,000	Coronary heart disease 315	Stroke 74	Diabetes 68	Emphysema 51	Liver disease 42
<b>East Valley</b> 2,651 772 per 100,000	Coronary heart disease 745	Stroke 196	Lung cancer 139	Emphysema 135	Pneumonia and influenza 111
<b>El Monte</b> 2,090 654 per 100,000	Coronary heart disease 499	Stroke 150	Lung cancer 109	Emphysema 108	Diabetes 78
<b>Foothill</b> 2,140 693 per 100,000	Coronary heart disease 598	Stroke 160	Emphysema 116	Lung cancer 110	Pneumonia and influenza 86
<b>Glendale</b> 2,456 613 per 100,000	Coronary heart disease 658	Stroke 196	Lung cancer 125	Emphysema 119	Pneumonia and influenza 109
<b>Harbor</b> 1,379 702 per 100,000	Coronary heart disease 353	Stroke 95	Lung cancer 66	Emphysema 62	Diabetes 53
<b>Hollywood/Wilshire</b> 3,344 681 per 100,000	Coronary heart disease 935	Stroke 200	Pneumonia and influenza 159	Lung cancer 154	Emphysema 124
<b>Inglewood</b> 2,375 808 per 100,000	Coronary heart disease 630	Stroke 133	Lung cancer 132	Emphysema 105	Diabetes 100



<b>Long Beach</b> 3,242 827 per 100,000	Coronary heart disease 960	Stroke 263	Emphysema 193	Lung cancer 168	Diabetes 109
<b>Northeast</b> 1,682 659 per 100,000	Coronary heart disease 414	Stroke 110	Diabetes 89	Pneumonia and influenza 87	Lung cancer 77
<b>Pasadena</b> 1,094 712 per 100,000	Coronary heart disease 320	Stroke 85	Pneumonia and influenza 53	Lung cancer 51	Emphysema 40
<b>Pomona</b> 3,214 698 per 100,000	Coronary heart disease 877	Stroke 241	Lung cancer 171	Emphysema 153	Pneumonia and influenza 119
<b>San Antonio</b> 1,784 658 per 100,000	Coronary heart disease 438	Emphysema 98	Stroke 95	Diabetes 88	Lung cancer 73
<b>San Fernando</b> 2,287 718 per 100,000	Coronary heart disease 605	Stroke 158	Lung cancer 134	Diabetes 96	Emphysema 92
<b>South</b> 1,042 1,053 per 100,000	Coronary heart disease 263	Homicide 90	Stroke 69	Lung cancer 46	Diabetes 40
<b>Southeast</b> 694 888 per 100,000	Coronary heart disease 177	Diabetes 40	Stroke 39	Homicide 37	Lung cancer 27
<b>Southwest</b> 2,793 899 per 100,000	Coronary heart disease 757	Stroke 192	Diabetes 141	Lung cancer 130	Pneumonia and influenza 106
<b>Torrance</b> 2,996 678 per 100,000	Coronary heart disease 815	Lung cancer 214	Stroke 185	Emphysema 161	Pneumonia and influenza 114
<b>West</b> 4,290 588 per 100,000	Coronary heart disease 1,089	Stroke 342	Lung cancer 216	Pneumonia and influenza 212	Emphysema 178
<b>West Valley</b> 5,276 692 per 100,000	Coronary heart disease 1,512	Stroke 348	Lung cancer 297	Emphysema 229	Pneumonia and influenza 228
<b>Whittier</b> 2,180 718 per 100,000	Coronary heart disease 574	Stroke 137	Emphysema 121	Lung cancer 116	Diabetes 100
<b>Los Angeles County Totals</b> 61,026 717 per 100,000	Coronary heart disease 16,320	Stroke 4,249	Lung cancer 3,150	Emphysema 2,796	Pneumonia and influenza 2,419

\*Adjusted by age. See definition on Page 3.  
§ Includes persons of unknown residence.

Figure 17. Comparison of the leading causes of premature death by health district of residence

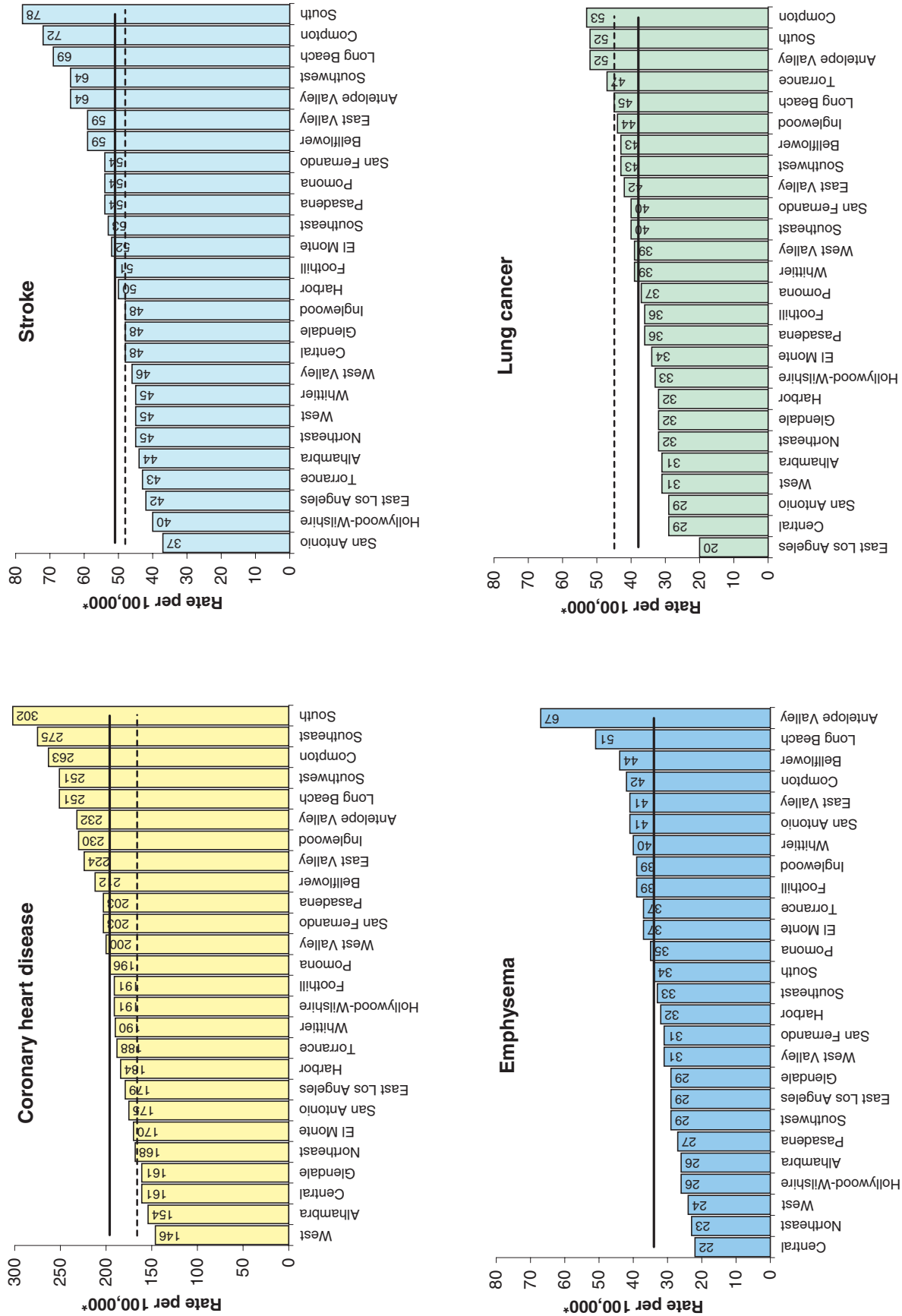
**Leading causes of premature\* death**

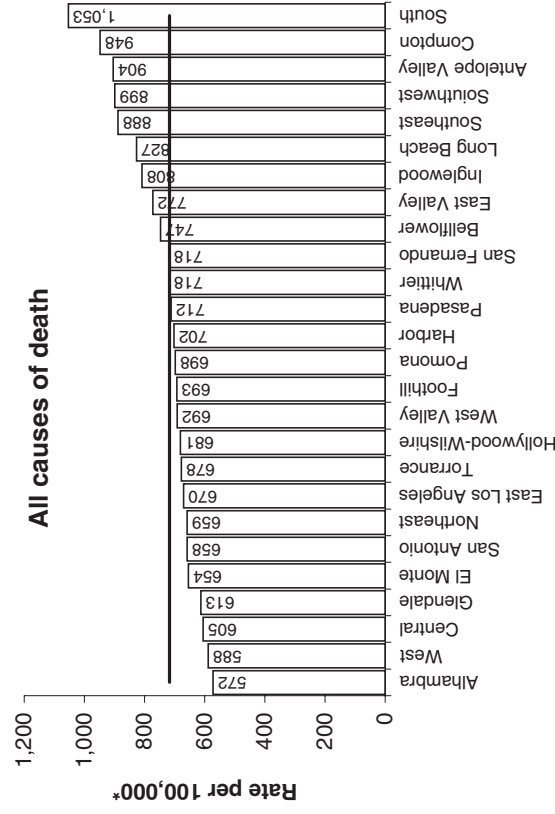
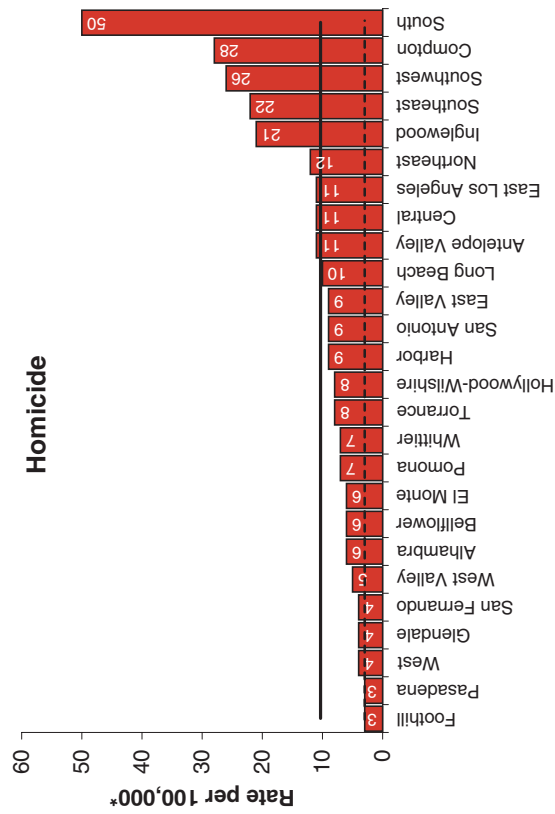
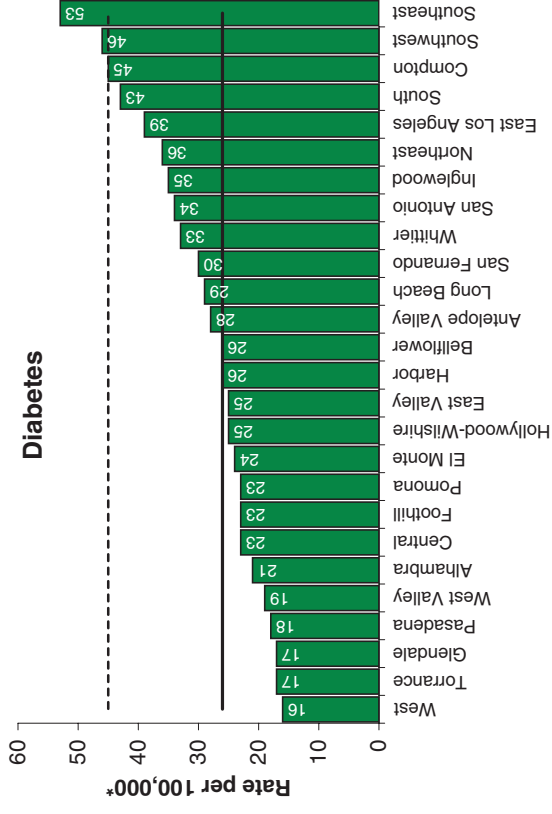
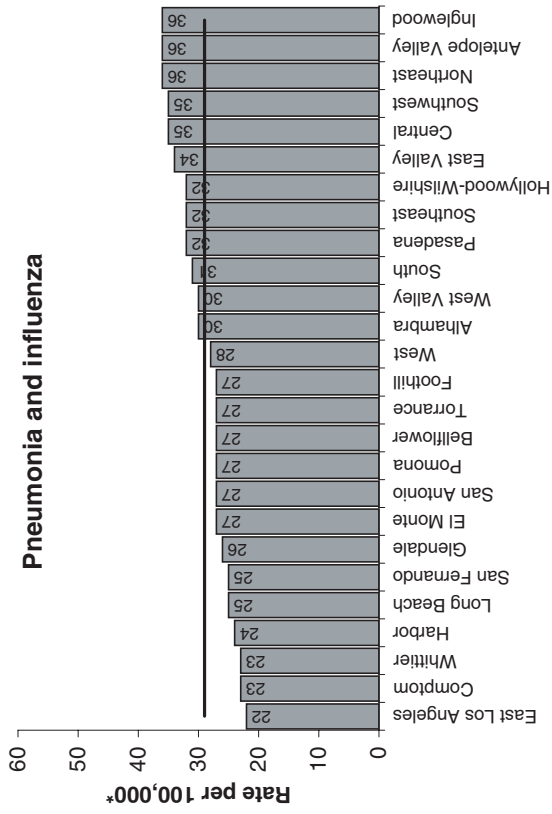
Health District	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause
Alhambra	Coronary heart disease	Homicide	Stroke	Liver disease	Colorectal cancer
Antelope Valley	Coronary heart disease	Motor vehicle crash	Homicide	Suicide	Drug overdose
Bellflower	Coronary heart disease	Motor vehicle crash	Homicide	Lung cancer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

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

\*Death before age 75 years.  
§ Includes persons of unknown residence.

Figure 18. Death rates by health district of residence for selected causes of death





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

\*Adjusted by age. See definition on Page 3.

Figure 19. Comparison of the leading causes of death, 1994-2003

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
2003	Coronary heart disease 16,320	Stroke 4,249	Lung cancer 3,150	Emphysema 2,796	Pneumonia & influenza 2,419	Diabetes 2,178	Colorectal cancer 1,450	Alzheimer's disease 1,285	Breast cancer 1,084	Homicide 1,066
2002	Coronary heart disease 16,293	Stroke 4,169	Lung cancer 3,081	Emphysema 2,604	Pneumonia & influenza 2,494	Diabetes 2,122	Colorectal cancer 1,315	Homicide 1,148	Liver disease 1,085	Breast cancer 1,064
2001	Coronary heart disease 16,828	Stroke 4,259	Lung cancer 3,232	Emphysema 2,723	Pneumonia & influenza 2,421	Diabetes 1,890	Colorectal cancer 1,423	Homicide 1,099	Breast cancer 1,096	Liver disease 1,010
2000	Coronary heart disease 16,903	Stroke 4,410	Lung cancer 3,150	Emphysema 2,660	Pneumonia & influenza 2,477	Diabetes 1,879	Colorectal cancer 1,360	Liver disease 1,121	Breast cancer 1,058	Homicide 992
1999	Coronary heart disease 17,394	Stroke 4,435	Lung cancer 3,243	Emphysema 2,836	Pneumonia & influenza 2,242	Diabetes 1,820	Colorectal cancer 1,378	Breast cancer 1,101	Liver disease 1,047	Homicide 896
<i>Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.</i>										
1998	Coronary heart disease 17,163	Stroke 3,928	Pneumonia & influenza 3,594	Lung cancer 3,150	Emphysema 2,553	Diabetes 1,753	Colorectal cancer 1,302	Breast cancer 1,135	Liver disease 1,019	Homicide 984
1997	Coronary heart disease 17,448	Stroke 4,160	Pneumonia & influenza 3,346	Lung cancer 3,316	Emphysema 2,565	Diabetes 1,746	Colorectal cancer 1,336	Homicide 1,232	Breast cancer 1,120	Liver disease 1,041
1996	Coronary heart disease 17,153	Stroke 4,061	Lung cancer 3,302	Pneumonia & influenza 2,984	Emphysema 2,307	Diabetes 1,647	HIV 1,505	Homicide 1,449	Colorectal cancer 1,325	Breast cancer 1,142
1995	Coronary heart disease 17,487	Stroke 4,073	Lung cancer 3,372	Pneumonia & influenza 2,933	HIV 2,342	Emphysema 2,255	Homicide 1,716	Diabetes 1,533	Colorectal cancer 1,394	Breast cancer 1,186
1994	Coronary heart disease 18,385	Stroke 4,186	Lung cancer 3,368	Pneumonia & influenza 2,888	HIV 2,431	Emphysema 2,369	Homicide 1,752	Diabetes 1,431	Colorectal cancer 1,383	Breast cancer 1,238

Figure 20. Comparison of the leading causes of premature death, 1994-2003

Year	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause	#6 cause	#7 cause	#8 cause	#9 cause	#10 cause
2003	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Lung cancer	Drug overdose	Liver disease	Stroke	Diabetes	HIV
2002	Coronary heart disease	Homicide	Motor vehicle crash	Lung cancer	Suicide	Liver disease	Drug overdose	Stroke	HIV	Diabetes
2001	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Lung cancer	Liver disease	HIV	Stroke	Drug overdose	Diabetes
2000	Coronary heart disease	Homicide	Motor vehicle crash	Lung cancer	Liver disease	Suicide	Stroke	Drug overdose	HIV	Breast cancer
1999	Coronary heart disease	Homicide	Motor vehicle crash	Lung cancer	Suicide	Drug overdose	HIV	Liver disease	Stroke	Diabetes
<i>Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.</i>										
1998	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Lung cancer	Liver disease	HIV	Drug overdose	Stroke	Breast cancer
1997	Coronary heart disease	Homicide	Motor vehicle crash	HIV	Suicide	Lung cancer	Liver disease	Stroke	Drug overdose	Breast cancer
1996	Coronary heart disease	Homicide	HIV	Motor vehicle crash	Suicide	Lung cancer	Drug overdose	Liver disease	Stroke	Breast cancer
1995	HIV	Homicide	Coronary heart disease	Motor vehicle crash	Suicide	Lung cancer	Drug overdose	Stroke	Liver disease	Breast cancer
1994	HIV	Homicide	Coronary heart disease	Motor vehicle crash	Suicide	Lung cancer	Liver disease	Drug overdose	Stroke	Breast cancer

\*Death before age 75 years.

# Alzheimer's disease at a glance

Number 51 cause of premature death  
Number 8 cause of death

*For the first time in the last ten years, Alzheimer's disease became one of the leading causes of death; in 2003, it was the eighth leading cause of death overall and the eighth leading cause of death for females. Alzheimer's disease mortality rates increased substantially since 1993. Changes to the ICD coding system in 1998 account for some of the increase as well as the aging population and greater awareness of the disease.*

## ***In simple terms . . .***

Alzheimer's disease is a progressive brain disorder that results in a decline in a person's ability to carry out daily activities by causing changes in the areas of the brain that control thought, memory, and language. Alzheimer's disease usually progresses slowly starting with memory problems and ending with severe brain damage. There are medications that may lessen some of the symptoms of Alzheimer's disease but there is no cure.

## ***Risk factors***

Age and family history.

## ***Individual opportunities for prevention***

Maintain good overall health. Scientists are exploring possible connections between Alzheimer's disease and high blood cholesterol, high blood pressure, and physical activity. Keeping the brain active by playing puzzle games, reading, and other mentally stimulating activities may be helpful. Early diagnosis and treatment of Alzheimer's disease symptoms may slow the progression of symptoms. Current medications have been shown to work best the earlier they are given.

## ***Los Angeles County deaths***

1,285

## ***Los Angeles County death rate Healthy People 2010 Objective***

16 deaths per 100,000 population  
None

## ***ICD-9 codes***

331.0

## ***ICD-10 codes***

G30

## ***Resources***

- Alzheimer's Association at [www.alz.org](http://www.alz.org)
- Alzheimer's Foundation of America at [www.alzfdn.org](http://www.alzfdn.org)
- Alzheimer's Disease Education and Referral Center, a service of the National Institute on Aging at [www.alzheimers.org](http://www.alzheimers.org)



Mortality in Los Angeles County, 2003  
Trends in Alzheimer's disease mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
<b>Los Angeles County</b>	344	355	410	465	433	772	820	905	973	1,285
<b>Males</b>	138	120	126	156	132	256	270	309	318	405
<b>Females</b>	206	235	284	309	301	516	550	596	655	880
<b>White</b>	269	291	334	359	338	584	618	719	755	957
<b>Hispanic</b>	18	29	33	37	38	84	84	73	93	161
<b>Black</b>	45	29	36	50	41	83	89	90	97	119
<b>Asian/Pacific Islander</b>	11	4	6	19	16	19	28	22	25	42
<b>Males</b>	108	98	101	115	98	189	203	238	246	295
<b>White</b>	7	10	9	14	14	27	24	30	37	46
<b>Hispanic</b>	16	10	15	22	16	34	29	34	28	37
<b>Black</b>	6	1	1	5	4	5	14	7	6	23
<b>Asian/Pacific Islander</b>	161	193	233	244	240	395	415	481	509	662
<b>Females</b>	11	19	24	23	24	57	60	43	56	115
<b>White</b>	29	19	21	28	25	49	60	56	69	82
<b>Hispanic</b>	5	3	5	14	12	14	14	15	19	19
<b>Black</b>	6	6	15	12	13	23	30	26	39	43
<b>Asian/Pacific Islander</b>	67	87	89	82	104	181	181	206	255	325
<b>SPA 1: Antelope Valley</b>	61	63	76	86	89	148	175	177	210	273
<b>SPA 2: San Fernando Valley</b>	45	39	41	45	48	90	86	101	102	119
<b>SPA 3: San Gabriel</b>	38	33	35	42	30	62	83	75	77	115
<b>SPA 4: Metro</b>	31	24	29	40	26	54	53	63	60	75
<b>SPA 5: West</b>	36	38	48	45	60	86	79	93	93	135
<b>SPA 6: South</b>	59	61	77	111	61	126	130	158	132	196
<b>SPA 7: East</b>										
<b>SPA 8: South Bay</b>										

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.  
-- Number of deaths is too small to calculate a reliable rate.

## Breast cancer at a glance

Number **11** cause of premature death  
Number **9** cause of death

*In 2003, breast cancer was the leading cause of premature death for Hispanic and Asian females, and the second leading cause of premature death for white and black females. Since 1994, the death rate from breast cancer decreased for white and black females and remained essentially unchanged for Hispanic and Asian females.*

### ***In simple terms . . .***

Cancer is the result of abnormal growth of the cells in a part of the body. Normal body cells grow, divide, and die. Cancer cells grow and divide as do normal cells, but they outlive normal cells and continue to form new abnormal cells. The abnormal cells begin to replace normal tissue. Cancer cells develop because of damage to DNA. DNA can be damaged by something in the environment or damaged DNA can be inherited. Most of the time when DNA becomes damaged the body is able to repair it. In cancer cells, the damaged DNA is not repaired. Breast cancer develops in the cells of the breast. Men can get breast cancer but it is much more common in women.

### ***Risk factors (for women)***

Age, genetics, family history of breast cancer, previous breast cancer, race, early radiation treatment to the chest area, menstruation before age 12 or menopause after age 55, treatment with the drug DES (diethylstilbestrol), not having children, excessive alcohol consumption, overweight, physical inactivity.

### ***Individual opportunities for prevention***

Limit alcohol consumption, maintain a healthy weight, increase physical activity, follow recommended screening guidelines.

### ***Los Angeles County deaths***

1,084 (1,074 females)

### ***Los Angeles County death rate***

22.2 deaths per 100,000 females

### ***Healthy People 2010 Objective 3-3***

22.3 deaths per 100,000 females

### ***ICD-9 codes***

174-175

### ***ICD-10 codes***

C50

### ***Resources***

- American Cancer Society at [www.cancer.org](http://www.cancer.org)

Mortality in Los Angeles County, 2003  
**Trends in breast cancer (female) mortality, 1994-2003**

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
<b>Los Angeles County</b>	<b>1,226</b>	<b>1,177</b>	<b>1,127</b>	<b>1,111</b>	<b>1,125</b>	<b>1,089</b>	<b>1,045</b>	<b>1,088</b>	<b>1,052</b>	<b>1,074</b>
<b>Females</b>										
White	822	751	705	668	673	635	606	621	612	570
Hispanic	171	154	182	186	192	196	169	213	176	242
Black	160	180	166	178	160	163	170	159	150	158
Asian/Pacific Islander	71	90	70	76	98	92	97	91	112	102
SPA 1: Antelope Valley	25	23	28	29	25	37	25	30	36	41
SPA 2: San Fernando Valley	272	297	249	224	280	259	244	253	242	238
SPA 3: San Gabriel	236	172	203	214	205	192	183	213	203	185
SPA 4: Metro	112	112	107	129	112	101	110	97	117	104
SPA 5: West	126	108	114	87	79	84	94	79	101	88
SPA 6: South	97	126	104	125	111	100	97	83	89	97
SPA 7: East	149	133	126	117	138	135	115	132	105	144
SPA 8: South Bay	207	199	195	185	172	180	176	193	159	171

*Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.*

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.

## **Colorectal cancer** at a glance

**Number 12** cause of premature death  
**Number 7** cause of death

*Colorectal cancer was the seventh leading cause of death since 1997. From 1994 to 2003, the death rate for colorectal cancer decreased. In 2003, it was the eighth leading cause of premature death for females and Asian/Pacific Islanders.*

### ***In simple terms . . .***

Cancer is the result of abnormal growth of the cells in a part of the body. Normal body cells grow, divide, and die. Cancer cells grow and divide as do normal cells, but they outlive normal cells and continue to form new abnormal cells. The abnormal cells begin to replace normal tissue. Cancer cells develop because of damage to DNA. DNA can be damaged by something in the environment or damaged DNA can be inherited. Most of the time when DNA becomes damaged the body is able to repair it. In cancer cells, the damaged DNA is not repaired. Colorectal cancer develops in the cells of the colon or the rectum.

### ***Risk factors***

Age, personal and family history of polyps or colorectal cancer, inflammatory bowel disease, physical inactivity, overweight, alcohol use, a diet that is high in fat and low in fruits and vegetables, smoking.

### ***Individual opportunities for prevention***

Maintain a healthy weight, increase physical activity, obtain routine medical care to detect and remove precancerous colorectal polyps, follow recommended screening guidelines for stool tests and special medical exams to detect colon cancer; eat plenty of fruits, vegetables, and whole grain foods; limit consumption of high-fat foods.

### ***Los Angeles County deaths***

1,450

### ***Los Angeles County death rate***

17.3 deaths per 100,000 population

### ***Healthy People 2010 Objective 3-5***

13.9 deaths per 100,000 population

### ***ICD-9 codes***

153-154

### ***ICD-10 codes***

C18-C21

### ***Resources***

• American Cancer Society at [www.CANCER.ORG](http://www.CANCER.ORG)

Mortality in Los Angeles County, 2003  
Trends in colorectal cancer mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
<b>Los Angeles County</b>	1,383	1,394	1,325	1,336	1,302	1,378	1,360	1,423	1,315	1,450
Males	650	721	645	653	649	696	676	722	655	710
Females	733	673	680	683	653	682	684	701	660	740
White	919	911	829	855	774	832	787	812	763	824
Hispanic	158	155	176	172	190	205	221	217	206	241
Black	187	199	184	188	196	196	204	227	192	211
Asian/Pacific Islander	118	127	135	115	141	144	142	164	148	170
<b>Males</b>	425	452	407	417	376	427	391	409	368	401
White	79	87	89	85	102	100	103	116	111	127
Hispanic	87	104	82	94	88	93	99	107	94	90
Black	59	78	67	55	82	75	80	88	79	90
Asian/Pacific Islander										
<b>Females</b>	494	459	422	438	398	405	396	403	395	423
White	79	68	87	87	88	105	118	101	95	114
Hispanic	100	95	102	94	108	103	105	120	98	121
Black	59	49	68	60	59	69	62	76	69	80
Asian/Pacific Islander										
<b>SPA 1: Antelope Valley</b>	38	30	39	35	41	45	36	45	43	60
<b>SPA 2: San Fernando Valley</b>	272	294	258	270	285	275	309	304	286	292
<b>SPA 3: San Gabriel</b>	283	261	260	263	241	254	250	266	255	278
<b>SPA 4: Metro</b>	140	145	130	152	148	150	157	176	149	163
<b>SPA 5: West</b>	120	125	104	110	99	104	103	115	95	110
<b>SPA 6: South</b>	130	158	122	135	135	127	135	133	133	137
<b>SPA 7: East</b>	181	165	196	164	148	168	163	157	149	159
<b>SPA 8: South Bay</b>	218	213	212	205	200	252	207	219	202	241

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.

## Coronary heart disease at a glance

Number 1 cause of premature death  
Number 1 cause of death

Coronary heart disease was the leading cause of death every year for the past ten years and the leading cause of premature death since 1996. In 2003, it was the leading cause of death for males and females, all race/ethnic groups, those over 44 years of age, and in every health district and service planning area. Since 1994, the death rate from coronary heart disease decreased 29%. The decrease for black males and females was smaller than for other race/ethnic groups.

### ***In simple terms . . .***

Coronary heart disease is a condition in which the flow of blood to the heart muscle is reduced. Blood carried by the coronary arteries provide the heart with a constant supply of necessary oxygen and nutrients. When coronary arteries become blocked or clogged by cholesterol and fat deposits they cannot supply enough oxygen-carrying blood to the heart. The result is coronary heart disease. When the flow of blood to the heart is cut off a heart attack results and the heart muscle is permanently damaged from the lack of oxygen.

### ***Risk factors***

Diabetes, high blood cholesterol, high blood pressure, cigarette smoking, overweight, physical inactivity, previous heart attack or angina, family history of early heart disease.

### ***Community and individual opportunities for prevention***

Community efforts to prevent coronary heart disease include promoting physical activity by providing access to safe places like parks to walk, play, and exercise; and encouraging people to quit smoking by restricting smoking in public places and worksites, media campaigns, and access to smoking cessation programs. Individuals should control high blood pressure, increase physical activity, maintain a healthy weight, eat a reduced fat diet, stop smoking, manage diabetes and high blood cholesterol, and get regular medical check-ups.

### ***Los Angeles County deaths***

16,320

### ***Los Angeles County death rate Healthy People 2010 Objective 12-1***

196 deaths per 100,000 population  
166 deaths per 100,000 population

### ***ICD-9 codes ICD-10 codes***

402, 410-414, 429.2  
I11, I20-I25

### ***Resources***

- American Heart Association at [WWW.AMERICANHEART.ORG](http://WWW.AMERICANHEART.ORG)
- National Heart, Lung, and Blood Institute at [WWW.NHLBI.NIH.GOV](http://WWW.NHLBI.NIH.GOV)
- The Guide to Community Preventive Services at [WWW.THECOMMUNITYGUIDE.ORG](http://WWW.THECOMMUNITYGUIDE.ORG)

Mortality in Los Angeles County, 2003  
Trends in coronary heart disease mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
<b>Los Angeles County</b>	18,385	17,487	17,153	17,448	17,163	17,394	16,903	16,828	16,293	16,320
<b>Males</b>	8,850	8,359	8,327	8,592	8,468	8,328	8,200	8,343	8,029	8,131
<b>Females</b>	9,535	9,128	8,826	8,856	8,695	9,066	8,703	8,485	8,264	8,189
<b>White</b>	12,744	11,999	11,667	11,678	11,339	11,220	10,967	10,592	10,016	10,003
<b>Hispanic</b>	2,136	2,154	2,184	2,315	2,340	2,512	2,376	2,571	2,600	2,632
<b>Black</b>	2,426	2,251	2,235	2,310	2,293	2,429	2,261	2,308	2,262	2,269
<b>Asian/Pacific Islander</b>	1,044	1,051	1,035	1,099	1,158	1,198	1,255	1,319	1,365	1,352
<b>Males</b>	5,978	5,598	5,540	5,619	5,483	5,222	5,135	5,162	4,878	4,880
<b>White</b>	1,108	1,104	1,131	1,175	1,211	1,296	1,238	1,338	1,323	1,382
<b>Hispanic</b>	1,163	1,059	1,064	1,150	1,089	1,134	1,095	1,124	1,084	1,093
<b>Black</b>	584	581	580	625	673	660	712	701	714	739
<b>Asian/Pacific Islander</b>	6,766	6,401	6,129	6,059	5,856	5,998	5,832	5,430	5,138	5,123
<b>Females</b>	1,028	1,050	1,053	1,140	1,129	1,216	1,138	1,233	1,277	1,250
<b>White</b>	1,263	1,192	1,171	1,160	1,204	1,295	1,166	1,184	1,178	1,176
<b>Hispanic</b>	460	470	455	474	485	538	543	618	651	613
<b>Black</b>	421	436	467	460	448	488	461	471	500	496
<b>Asian/Pacific Islander</b>	3,802	3,617	3,510	3,618	3,537	3,615	3,603	3,577	3,550	3,520
<b>SPA 1: Antelope Valley</b>	3,256	3,364	3,104	3,275	3,293	3,334	3,188	3,175	2,972	2,949
<b>SPA 2: San Fernando Valley</b>	2,414	2,025	2,103	2,070	2,061	2,060	1,935	1,890	1,855	1,826
<b>SPA 3: San Gabriel</b>	1,416	1,323	1,349	1,352	1,304	1,194	1,273	1,135	1,056	1,089
<b>SPA 4: Metro</b>	1,895	1,778	1,718	1,702	1,649	1,711	1,558	1,644	1,606	1,562
<b>SPA 5: West</b>	2,169	2,139	2,047	2,024	2,020	2,103	2,073	2,053	1,976	1,949
<b>SPA 6: South</b>	2,953	2,716	2,771	2,845	2,755	2,795	2,721	2,754	2,704	2,758
<b>SPA 7: East</b>	288	260	262	263	252	252	230	234	220	215
<b>SPA 8: South Bay</b>										

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.

# Diabetes at a glance

Number 9 cause of premature death  
Number 6 cause of death

Since 1996, diabetes was the sixth leading cause of death. The death rate from diabetes has increased from 20 deaths per 100,000 in 1994 to 26 deaths per 100,000 in 2003. In 2003, the death rate was highest for black males and in the South service planning area. For black and Hispanic females, diabetes was the third leading causes of death and the fourth leading cause of premature death in 2003.

## ***In simple terms . . .***

Diabetes is when the body is unable to control the level of sugar in the bloodstream. A high level of sugar in the blood can damage the eyes, kidneys, nerves, heart, and blood vessels, and reduce the body's ability to fight infections.

## ***Risk factors***

Family history of diabetes, overweight, physical inactivity, age.

## ***Individual opportunities for prevention***

Increase physical activity, maintain a healthy weight, eat a healthy diet low in fat.

## ***Los Angeles County deaths***

2,178

## ***Los Angeles County death rate Healthy People 2010 Objective 5-5***

26 deaths per 100,000 population  
45 deaths per 100,000 population

## ***ICD-9 codes***

250

## ***ICD-10 codes***

E10-E14

## ***Resources***

• American Diabetes Association at [www.DIABETES.ORG](http://www.diabetes.org)



Mortality in Los Angeles County, 2003  
Trends in diabetes mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Los Angeles County	No. of deaths 1,431	No. of deaths 1,533	No. of deaths 1,647	No. of deaths 1,746	No. of deaths 1,753	No. of deaths 1,820	No. of deaths 1,879	No. of deaths 1,890	No. of deaths 2,122	No. of deaths 2,178
	Death rate* 20	Death rate* 22	Death rate* 23	Death rate* 24	Death rate* 24	Death rate* 25	Death rate* 24	Death rate* 24	Death rate* 26	Death rate* 26
Males										
Females	643	697	773	818	879	829	876	886	996	1,053
	19	20	21	22	21	23	22	22	24	23
White	667	635	716	744	708	739	797	775	840	835
Hispanic	365	425	445	526	545	567	579	639	678	719
Black	296	318	344	309	327	321	325	308	374	378
Asian/Pacific Islander	100	146	135	158	166	187	171	164	212	233
	14	20	17	18	19	21	17	16	19	20
Males										
White	307	300	351	359	378	358	384	380	400	424
Hispanic	155	182	203	245	269	258	265	279	319	339
Black	130	148	143	139	140	131	141	144	164	158
Asian/Pacific Islander	50	64	72	70	87	81	83	83	107	124
	15	20	20	19	22	20	19	18	22	24
Females										
White	360	335	365	385	330	381	413	395	440	411
Hispanic	210	243	242	281	276	309	314	360	359	380
Black	166	170	201	170	187	190	184	164	210	220
Asian/Pacific Islander	50	82	63	88	79	106	88	81	105	109
	13	20	14	18	17	21	16	14	17	17
SPA 1: Antelope Valley	40	41	45	35	32	39	43	54	71	69
SPA 2: San Fernando Valley	226	245	277	301	316	309	330	330	335	395
SPA 3: San Gabriel	230	260	287	269	305	305	354	306	395	361
SPA 4: Metro	194	192	211	224	220	245	220	269	276	271
SPA 5: West	90	78	102	76	80	80	80	76	101	113
SPA 6: South	214	251	235	210	234	248	247	237	286	289
SPA 7: East	214	226	233	317	312	315	315	337	350	336
SPA 8: South Bay	221	234	253	310	249	277	285	274	303	337
	20	21	22	27	21	24	23	22	23	25

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.

## Drug overdose at a glance

Number 6 cause of premature death  
Number 18 cause of death

*In 2003, drug overdose was the sixth leading cause of premature death overall, the fourth leading cause of premature death for whites, and the second leading cause of premature death in the West service planning area. It was the leading cause of death for whites 25-44 years of age. The death rate from drug overdoses changed very little during the last ten years.*

### ***In simple terms . . .***

For this report, drug overdose refers to any death from accidental poisoning. It includes illegal drugs, prescription and non-prescription medication, alcohol, vapors, gases, and chemicals. Vapors, gases, and chemicals account for only 1% of the overdose deaths in Los Angeles County. Drug overdose does not include any drug or substance taken with homicidal or suicidal intent.

### ***Risk factors***

Youth are at increased risk for drug abuse if they lack positive, consistent adult role models, are doing poorly in school, are involved in delinquent behavior or belong to gangs, live with substance-abusing parents or have parents in the criminal justice system. For adults, risk factors include a family history of alcohol or substance abuse, or a social environment where illegal substances or alcohol are used excessively.

Among those who use drugs, the risk of death from an overdose is increased when drugs are injected rather than other ways of taking drugs, alcohol and drugs are mixed, a combination of drugs are used, or there is a history of drug overdose.

### ***Community and individual opportunities for prevention***

Drug abuse prevention programs require a comprehensive approach involving the family, schools, community and media. Prevention programs should be geared for a particular setting such as the home, school, or community; and a specific population such as adults, children, those at risk for drug use, or the general population. School-based prevention programs can begin as early as preschool. Effective prevention programs are long-term with follow-up programs to provide periodic reinforcement. Early recognition of a potential problem with drugs is important because effective treatment and support programs are available.

***Los Angeles County deaths*** 628

***Los Angeles County death rate  
Healthy People 2010 Objective***

6.4 deaths per 100,000 population  
Not comparable

***ICD-9 codes***

E850-E869, E924.1  
X40-X49

***ICD-10 codes***

### ***Resources***

- The National Institute on Drug Abuse at [www.nida.nih.gov](http://www.nida.nih.gov)
- Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention at [www.prevention.samhsa.gov](http://www.prevention.samhsa.gov)

Mortality in Los Angeles County, 2003  
Trends in drug overdose mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
<b>Los Angeles County</b>	560	578	591	467	534	601	505	492	620	628
<b>Males</b>	428	451	449	359	386	464	390	358	450	444
<b>Females</b>	132	127	142	108	148	137	115	134	170	184
<b>White</b>	265	271	291	239	276	306	257	249	305	328
<b>Hispanic</b>	175	182	183	132	155	198	157	141	172	180
<b>Black</b>	114	109	110	87	93	92	83	97	133	106
<b>Asian/Pacific Islander</b>	4	9	4	6	6	2	4	5	9	11
	--	--	--	--	--	--	--	--	--	--
<b>Males</b>	198	205	211	176	183	228	188	172	202	207
<b>White</b>	152	156	161	115	132	175	136	118	147	153
<b>Hispanic</b>	76	77	72	63	62	58	58	64	94	74
<b>Black</b>	1	8	3	2	6	1	4	4	6	7
<b>Asian/Pacific Islander</b>										
	--	--	--	--	--	--	--	--	--	--
<b>Females</b>	67	66	80	63	93	78	69	77	103	121
<b>White</b>	23	26	22	17	23	23	21	23	25	27
<b>Hispanic</b>	38	32	38	24	31	34	25	33	39	32
<b>Black</b>	3	1	1	4	0	1	0	1	3	4
<b>Asian/Pacific Islander</b>										
	--	--	--	--	--	--	--	--	--	--
<b>SPA 1: Antelope Valley</b>	11	11	12	11	10	20	19	17	27	30
<b>SPA 2: San Fernando Valley</b>	106	107	109	73	88	100	86	83	128	97
<b>SPA 3: San Gabriel</b>	51	70	62	66	74	83	72	66	75	63
<b>SPA 4: Metro</b>	89	94	98	79	90	94	91	66	77	107
<b>SPA 5: West</b>	47	32	34	32	43	43	25	32	49	56
<b>SPA 6: South</b>	76	71	80	62	67	59	48	44	71	59
<b>SPA 7: East</b>	74	76	76	55	63	80	62	71	55	71
<b>SPA 8: South Bay</b>	69	88	84	66	74	94	74	77	101	101
	5	6	6	5	5	7	5	5	7	6

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.  
-- Number of deaths is too small to calculate a reliable rate.

## **Emphysema** at a glance

**Number 13** cause of premature death  
**Number 4** cause of death

Since 1994, emphysema was the fourth, fifth, or sixth leading cause of death but was not a leading cause of premature death. Overall, the death rate from emphysema changed little since 1994 with the exception of black males for whom the rate increased from 43 deaths per 100,000 in 1994 to 63 deaths per 100,000 in 2003. The death rate also increased in the Antelope Valley service planning area.

### ***In simple terms . . .***

Emphysema is a condition in which the air sacs within the lungs lose their ability to stretch and recoil causing them to become weak and break. When lung tissue loses its elasticity it is difficult to exhale and air becomes trapped in the air sacs. When this happens carbon dioxide in the blood cannot be exchanged for oxygen resulting in shortness of breath. Damage to the lungs caused by emphysema is permanent.

### ***Risk factors***

Cigarette smoking.

### ***Community and individual opportunities for prevention***

Communities should encourage and assist people to quit smoking by restricting smoking in public places and worksites, through media campaigns, and access to smoking cessation programs. Individuals should quit smoking.

### ***Los Angeles County deaths***

2,796

### ***Los Angeles County death rate***

34 deaths per 100,000 population

83 deaths per 100,000 adults aged 45 years and older

60 deaths per 100,000 adults aged 45 years and older. The Healthy People 2010 objective is for all chronic obstructive pulmonary disease, which includes emphysema and chronic bronchitis. In Los Angeles County, emphysema caused 94% of the deaths from chronic obstructive pulmonary disease.

### ***ICD-9 codes***

492, 496

### ***ICD-10 codes***

J43-J44

### ***Resources***

- American Lung Association at [www.LUNGUSA.ORG](http://www.LUNGUSA.ORG)
- The Guide to Community Preventive Services at [www.THECOMMUNITYGUIDE.ORG](http://www.THECOMMUNITYGUIDE.ORG)

Mortality in Los Angeles County, 2003  
Trends in emphysema mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
Los Angeles County	2,369	2,255	2,307	2,565	2,553	2,836	2,660	2,723	2,604	2,796
Males	1,145	1,145	1,123	1,232	1,246	1,384	1,299	1,301	1,246	1,377
Females	1,224	1,110	1,184	1,333	1,307	1,452	1,361	1,422	1,358	1,419
White	1,890	1,752	1,777	1,928	1,939	2,099	1,979	1,992	1,887	1,989
Hispanic	180	163	169	219	206	254	231	261	249	311
Black	199	210	231	256	292	307	263	281	293	287
Asian/Pacific Islander	100	123	127	158	113	170	178	184	164	198
<b>Males</b>										
White	868	854	822	862	867	966	892	887	855	896
Hispanic	100	81	91	123	124	139	125	125	126	175
Black	106	124	120	138	171	171	151	153	149	169
Asian/Pacific Islander	71	82	89	107	82	106	127	133	111	131
<b>Females</b>										
White	1,022	898	955	1,066	1,072	1,133	1,087	1,105	1,032	1,093
Hispanic	80	82	78	96	82	115	106	136	123	136
Black	93	86	111	118	121	136	112	128	144	118
Asian/Pacific Islander	29	41	38	51	31	64	51	51	53	67
SPA 1: Antelope Valley	83	85	101	109	102	133	119	138	125	140
SPA 2: San Fernando Valley	455	414	435	533	510	577	538	529	519	575
SPA 3: San Gabriel	407	425	438	500	473	540	487	484	494	529
SPA 4: Metro	208	226	230	263	243	254	234	259	236	246
SPA 5: West	197	171	144	167	142	176	187	179	191	178
SPA 6: South	192	161	173	186	231	245	199	201	212	195
SPA 7: East	346	296	304	322	367	385	359	356	335	402
SPA 8: South Bay	478	466	472	476	481	521	527	558	489	521

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.

## **HIV** at a glance

**Number 10** cause of premature death  
**Number 23** cause of death

*HIV was the leading cause of premature death in 1994 and 1995; in 2003 it was the tenth leading cause of premature death. From 1994-1997, the death rate from HIV decreased dramatically although the rate among black males remained well above the County overall. In recent years, the rate remained stable. The rates were highest in the Metro service planning area. In 2003, HIV was the third leading cause of premature death for black males and was a leading cause of premature death in the Central, Hollywood-Wilshire, Long Beach, and Southwest health districts.*

### **In simple terms . . .**

HIV (human immunodeficiency virus) is the virus that causes AIDS. HIV affects the body's ability to fight infections and certain cancers by damaging the immune system. It is a contagious disease that can be passed from person-to-person when infected blood, semen, or vaginal secretions come in contact with an uninfected person's blood or mucous membranes. This can happen through sexual contact, sharing needles or syringes, or transfusions of infected blood (this is rare because all blood used for transfusion in the U.S. is screened for the presence of HIV). The virus also can be passed from an infected pregnant woman to her baby during pregnancy or delivery, or through breast milk. There is no scientific evidence to suggest that HIV can be transmitted in other ways.

### **Risk factors**

Sharing drug needles and syringes, having unprotected sex with an HIV-infected person or a person whose HIV status is unknown.

### **Individual opportunities for prevention**

Do not share drug needles. Do not have unprotected sex with partners whose HIV status is unknown. Male latex condoms or female polyurethane condoms provide some protection during sex. Individuals can learn their HIV status by being tested for antibodies to HIV. It takes about three months following infection for HIV antibodies to be detectable by standard blood tests. HIV-infected persons should take precautions to avoid infecting their sexual partners. Drug therapies are available to reduce the risk of transmitting HIV from an infected woman to her baby.

### **Los Angeles County deaths**

497

### **Los Angeles County death rate**

5.1 deaths per 100,000 population

### **Healthy People 2010 Objective 13-14**

0.7 deaths per 100,000 population

### **ICD-9 codes**

042-044

### **ICD-10 codes**

B20-B24

### **Resources**

- National Institutes of Health, National Institute of Allergy and Infectious Diseases at [www.NIAID.NIH.GOV](http://www.NIAID.NIH.GOV)
- Centers for Disease Control and Prevention, National Center for HIV, STD, and TB Prevention, Divisions of HIV/AIDS Prevention at [www.CDC.GOV/HIV](http://www.CDC.GOV/HIV)

Mortality in Los Angeles County, 2003  
Trends in HIV mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
<b>Los Angeles County</b>	2,431	2,342	1,505	680	552	581	506	558	502	497
Males	2,255	2,164	1,366	596	468	506	442	485	428	438
Females	176	178	139	84	84	75	64	73	74	59
White	1,215	1,099	624	262	218	236	187	195	151	167
Hispanic	635	686	490	218	186	178	155	182	187	170
Black	526	505	354	186	139	155	150	170	148	145
Asian/Pacific Islander	53	45	35	12	8	12	8	9	14	10
<b>Males</b>										
White	1,172	1,059	592	245	205	212	172	180	140	161
Hispanic	581	629	436	186	155	164	140	156	165	143
Black	451	428	303	152	100	120	118	138	109	121
Asian/Pacific Islander	49	41	33	11	7	10	7	9	12	9
<b>Females</b>										
White	43	40	32	17	13	24	15	15	11	6
Hispanic	54	57	54	32	31	14	15	26	22	27
Black	75	77	51	34	39	35	32	32	39	24
Asian/Pacific Islander	4	4	2	1	1	2	1	0	2	1
SPA 1: Antelope Valley	26	25	23	15	14	8	9	19	11	10
SPA 2: San Fernando Valley	375	335	224	83	85	80	63	74	68	53
SPA 3: San Gabriel	215	242	129	81	62	62	45	47	51	39
SPA 4: Metro	885	830	502	211	184	183	171	155	133	167
SPA 5: West	135	134	75	33	17	22	16	19	16	20
SPA 6: South	264	276	179	94	67	85	83	90	87	96
SPA 7: East	175	168	125	45	48	43	32	42	42	38
SPA 8: South Bay	347	316	240	115	74	91	83	97	85	67

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in *Mortality in Los Angeles County, 2002*.  
-- Number of deaths is too small to calculate a reliable rate.

# Homicide at a glance

Number 2 cause of premature death  
Number 10 cause of death

*Homicide was the second leading cause of premature death every year for the past ten years. In 2003, homicide was the leading cause of premature death for blacks and Hispanics, and in the South service planning area; and the leading cause of death for 15-44 year olds. From 1994 to 1998, the homicide rate decreased 41% from 17 per 100,000 to 10 per 100,000 but remained relatively stable for the past five years.*

## ***In simple terms . . .***

Homicide is the killing of one person by another, including terrorism. Some homicides are committed in self-defense, but the vast majority of homicides do not involve self-defense. Homicide may be the result of an attack with a weapon such as a gun, knife, or blunt object. Other methods of homicide include strangulation, drowning, poisoning, burning, or pushing the victim from a high place. Homicide also may be the result of neglect, abandonment, or abuse. War-related deaths and deaths caused by law enforcement officers are not considered homicide.

## ***Risk factors***

The causes of violence and homicide are many and complex. Factors associated with violence and homicide include poverty, lack of education, lack of employment opportunities, youth with excessive unstructured free time, alcohol and substance abuse, media portrayal of violent behavior, witnessing and experiencing violence, mental illness, and access to firearms. The risk of homicide is greatest for males, blacks, and Hispanics; the risk is especially high for minority youth. Gang affiliation is associated with increased violent behavior. Keeping firearms in the home increases the risk of a homicide in the home.

## ***Community and individual opportunities for prevention***

Strategies to reduce homicide must include both the social and physical environment. Prevention programs should include education of the community about the risks of violence, and ways to identify and reduce violent behavior through non-violent conflict resolution. Legislation and law enforcement can reduce access to firearms and ammunition. Firearms should be removed from the home. If firearms are kept in the home they should be stored locked and unloaded.

## ***Los Angeles County deaths***

1,066

## ***Los Angeles County death rate***

10.3 deaths per 100,000 population

## ***Healthy People 2010 Objective 15-32***

3.0 deaths per 100,000 population

## ***ICD-9 codes***

E960-E969

## ***ICD-10 codes***

X85-Y09, Y87.1

## ***Resources***

- Violence Policy Center at [www.vpc.org](http://www.vpc.org)
- Centers for Disease Control and Prevention, National Center for Injury Prevention and Control at [www.cdc.gov/ncipc/dvp/DVP.HTM](http://www.cdc.gov/ncipc/dvp/DVP.HTM)



Mortality in Los Angeles County, 2003  
Trends in homicide mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
Los Angeles County	1,752	1,716	1,449	1,232	984	896	992	1,099	1,148	1,066
Males	1,557	1,494	1,233	1,079	826	751	847	937	990	931
Females	195	222	216	153	158	145	145	162	158	135
White	222	223	197	171	141	101	127	142	133	119
Hispanic	841	900	721	624	498	465	486	527	567	520
Black	616	503	452	379	296	276	343	361	393	369
Asian/Pacific Islander	66	86	73	48	45	53	35	47	51	57
Males	173	175	139	135	97	72	86	97	98	93
White	786	808	656	569	441	411	437	473	501	471
Hispanic	537	436	378	329	246	230	302	315	352	324
Black	55	71	55	39	38	37	22	37	36	42
Asian/Pacific Islander										
Females	49	48	58	36	44	29	41	45	35	26
White	55	92	65	55	57	54	49	54	66	49
Hispanic	79	67	74	50	50	46	41	46	41	45
Black	11	15	18	9	7	16	13	10	15	15
Asian/Pacific Islander										
SPA 1: Antelope Valley	33	32	34	25	22	16	18	21	27	36
SPA 2: San Fernando Valley	129	152	131	125	107	101	99	142	139	120
SPA 3: San Gabriel	201	220	157	143	112	112	97	114	111	106
SPA 4: Metro	239	277	210	179	116	110	132	140	145	126
SPA 5: West	53	44	53	32	32	20	22	43	38	24
SPA 6: South	579	513	438	314	258	268	311	337	355	315
SPA 7: East	195	217	172	161	146	112	106	107	129	117
SPA 8: South Bay	276	226	229	221	182	144	193	175	190	192

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.  
-- Number of deaths is too small to calculate a reliable rate.

## Liver disease at a glance

Number 7 cause of premature death  
Number 11 cause of death

*Liver disease was a leading cause of death from 1997 to 2002, and a leading cause of premature death each year since 1994. The death rate from liver disease changed very little since 1994 and was highest for Hispanic males. In 2003, liver disease was the third leading cause of death for Hispanic males.*

### ***In simple terms . . .***

Many things can affect the liver including viral infections, cirrhosis, and liver cancer. Cirrhosis means scarring of the liver. In this report, liver disease refers to cirrhosis, not viral infections that cause liver disease or liver cancer. The liver stores vitamins and nutrients from food. It also breaks down harmful substances like alcohol, and it removes waste products from the body. When normal liver cells are damaged they are replaced by scar tissue. The scar tissue interferes with the normal flow of blood through the liver and interferes with its ability to carry out its normal functions. When cirrhosis occurs, large parts of the liver are damaged.

### ***Risk factors***

Excessive alcohol consumption, prolonged exposure to certain chemicals and medications including carbon tetrachloride (a common solvent) and acetaminophen (a common over-the-counter pain and fever remedy).

### ***Individual opportunities for prevention***

Limit alcohol intake and always follow manufacturer's instructions when using household and industrial chemicals, and doctor's instructions when taking prescription and non-prescription drugs.

### ***Los Angeles County deaths***

1,053

### ***Los Angeles County death rate***

11.7 deaths per 100,000 population

### ***Healthy People 2010 Objective 26-2***

3.0 deaths per 100,000 population

### ***ICD-9 codes***

571

### ***ICD-10 codes***

K70, K73-K74

### ***Resources***

• American Liver Foundation at [WWW.LIVERFOUNDATION.ORG](http://WWW.LIVERFOUNDATION.ORG)

Mortality in Los Angeles County, 2003  
Trends in liver disease mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
<b>Los Angeles County</b>	1,116	1,014	1,050	1,041	1,019	1,047	1,121	1,010	1,085	1,053
Males	761	681	699	709	713	712	760	695	741	727
Females	355	333	351	332	306	335	361	315	344	326
White	513	495	482	477	424	471	461	416	432	403
Hispanic	426	375	414	425	452	423	499	458	504	498
Black	128	96	110	86	86	104	102	97	100	92
Asian/Pacific Islander	43	39	40	46	45	41	46	32	39	42
Males	327	312	302	312	280	296	298	265	277	253
White	317	281	301	316	343	319	361	343	381	377
Hispanic	89	60	70	52	57	68	64	63	51	62
Black	26	23	23	26	27	23	30	19	25	26
Asian/Pacific Islander										
Females	186	183	180	165	144	175	163	151	155	150
White	109	94	113	109	109	104	138	115	123	121
Hispanic	39	36	40	34	29	36	38	34	49	30
Black	17	16	17	20	18	18	16	13	14	16
Asian/Pacific Islander										
SPA 1: Antelope Valley	24	22	29	36	29	30	40	40	35	48
SPA 2: San Fernando Valley	190	177	169	165	157	174	187	144	168	180
SPA 3: San Gabriel	196	181	202	204	164	190	191	187	178	177
SPA 4: Metro	157	149	136	149	159	138	151	136	159	134
SPA 5: West	55	58	62	54	49	54	56	45	55	55
SPA 6: South	132	118	122	115	102	106	117	110	119	106
SPA 7: East	180	155	172	160	189	174	197	161	185	177
SPA 8: South Bay	170	139	148	144	162	174	165	154	162	155

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.  
-- Number of deaths is too small to calculate a reliable rate.

## Lung cancer at a glance

Number 5 cause of premature death  
Number 3 cause of death

Lung cancer was the third leading cause of death for eight of the last ten years, and the fourth, fifth or sixth leading cause of premature death for each of the last ten years. Since 1994, death rates from lung cancer decreased 20% from 48 deaths per 100,000 in 1994 to 38 deaths per 100,000 in 2003. The death rates were highest for black males.

### *In simple terms . . .*

Cancer is the result of abnormal growth of the cells in a part of the body. Normal body cells grow, divide, and die. Cancer cells grow and divide as do normal cells, but they outlive normal cells and continue to form new abnormal cells. The abnormal cells begin to replace normal tissue. Cancer cells develop because of damage to DNA. DNA can be damaged by something in the environment or damaged DNA can be inherited. Most of the time when DNA becomes damaged the body is able to repair it. In cancer cells, the damaged DNA is not repaired. Most lung cancers start in the lining of the tubes called the bronchi.

### *Risk factors*

Cigarette smoking and breathing the smoke of others, exposure to asbestos fibers, prior lung cancer.

### *Community and individual opportunities for prevention*

Communities should encourage and assist people to quit smoking by restricting smoking in public places and worksites, through media campaigns, and access to smoking cessation programs. Individuals should stop smoking and avoid people who do, and reduce exposure to cancer causing substances.

### *Los Angeles County deaths*

3,150

### *Los Angeles County death rate Healthy People 2010 Objective 3-2*

37.9 deaths per 100,000 population

44.9 deaths per 100,000 population

### *ICD-9 codes*

162

### *ICD-10 codes*

C33-C34

### *Resources*

- American Cancer Society at [www.cancer.org](http://www.cancer.org)
- The Guide to Community Preventive Services at [www.thecommunityguide.org](http://www.thecommunityguide.org)

Mortality in Los Angeles County, 2003  
Trends in lung cancer mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
<b>Los Angeles County</b>	3,368	3,372	3,302	3,316	3,150	3,243	3,150	3,232	3,081	3,150
Males	1,882	1,930	1,847	1,880	1,722	1,814	1,765	1,797	1,702	1,713
Females	1,486	1,442	1,455	1,436	1,428	1,429	1,385	1,435	1,379	1,437
White	2,373	2,413	2,231	2,227	2,104	2,082	2,018	2,039	1,950	1,942
Hispanic	279	270	317	300	323	347	341	348	363	381
Black	489	468	506	526	463	494	476	482	455	451
Asian/Pacific Islander	222	219	243	252	256	314	308	356	306	367
<b>Males</b>										
White	1,250	1,322	1,172	1,185	1,074	1,082	1,079	1,056	1,034	989
Hispanic	176	178	194	179	207	220	211	219	217	237
Black	306	291	336	341	278	293	271	289	258	267
Asian/Pacific Islander	147	139	143	169	161	217	201	229	188	215
<b>Females</b>										
White	1,123	1,091	1,059	1,042	1,030	1,000	939	983	916	953
Hispanic	103	92	123	121	116	127	130	129	146	144
Black	183	177	170	185	185	201	205	193	197	184
Asian/Pacific Islander	75	80	100	83	95	97	107	127	118	152
SPA 1: Antelope Valley	104	104	99	124	117	117	119	117	109	120
SPA 2: San Fernando Valley	656	701	693	702	688	718	657	710	665	695
SPA 3: San Gabriel	595	574	552	568	528	535	554	597	544	563
SPA 4: Metro	353	325	336	336	291	313	316	318	294	313
SPA 5: West	263	284	255	251	242	250	230	236	255	216
SPA 6: South	343	373	353	353	303	358	300	310	300	286
SPA 7: East	433	434	411	391	354	404	397	360	339	356
SPA 8: South Bay	615	554	599	581	614	539	569	569	567	580

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.

## Motor vehicle crash at a glance

Number 3 cause of premature death  
Number 12 cause of death

Since 1997, motor vehicle crashes were the third leading cause of premature death. In 2003, they were the leading cause of death for children 5-14 years of age, and the second leading cause of death for persons 15-44 years of age. The motor vehicle crash death rate changed very little since 1993. The death rates for men were approximately twice those for women.

### In simple terms . . .

Motor vehicle crashes can occur on any public roadway including streets, alleys, or highways; or they can occur on non-public areas such as parking lots or driveways. Motor vehicle crashes that occur on public roadways are referred to as traffic collisions. Any type of vehicle can be involved in a motor vehicle crash including a car, truck, bus, or motorcycle. The person injured in a motor vehicle crash may be the driver or passenger of the vehicle that caused the crash or of the vehicle that was hit. The injured person may also be a pedestrian or bicyclist.

### Risk factors

Driving under the influence of alcohol or drugs, not using a seat belt or other appropriate safety restraint such as a child safety seat or booster seat, lack of driving practice and experience, older age.

### Community and individual opportunities for prevention

Community interventions include distribution and education programs to increase the use of child safety seats, enforcement of seat belt laws, sobriety checkpoints, and media campaigns to reduce alcohol-impaired driving. For the individual, do not drive while impaired by alcohol or drugs, always wear a seat belt pulled low and snug across the hips; always place children in an appropriate, properly installed child safety seat or booster seat; do not allow young children to ride in the front seat of a car with an airbag; and teach children pedestrian and bicycle safety, and model safe behavior.

### Los Angeles County deaths

967

### Los Angeles County death rate

9.9 deaths per 100,000 population

### Healthy People 2010 Objective 15-15

9.2 deaths per 100,000 population (rate for traffic-related deaths only)

### ICD-9 codes

E810-E825

### ICD-10 codes

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

### Resources

- The Guide to Community Preventive Services at [www.thecommunityguide.org](http://www.thecommunityguide.org)
- Centers for Disease Control and Prevention, National Center for Injury Prevention and Control at [www.cdc.gov/ncipc/cmprfact.htm](http://www.cdc.gov/ncipc/cmprfact.htm)

Mortality in Los Angeles County, 2003  
Trends in motor vehicle crash mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
<b>Los Angeles County</b>	1,132	1,095	996	885	782	751	811	890	851	967
<b>Males</b>	773	763	677	601	528	517	564	598	578	697
<b>Females</b>	359	332	319	284	254	234	247	292	273	270
<b>White</b>	433	384	356	335	302	247	297	304	292	343
<b>Hispanic</b>	437	446	400	360	292	330	324	359	373	418
<b>Black</b>	145	142	126	89	89	96	99	129	108	107
<b>Asian/Pacific Islander</b>	114	118	108	98	96	75	88	95	75	95
<b>Males</b>	286	266	241	220	205	172	205	216	190	246
<b>White</b>	313	321	281	258	204	237	241	242	270	317
<b>Hispanic</b>	103	102	89	66	61	63	63	82	77	71
<b>Black</b>	71	70	62	56	56	43	54	56	40	60
<b>Asian/Pacific Islander</b>										
<b>Females</b>	147	118	115	115	97	75	92	88	102	97
<b>White</b>	124	125	119	102	88	93	83	117	103	101
<b>Hispanic</b>	42	40	37	23	28	33	36	47	31	36
<b>Black</b>	43	48	46	42	40	32	34	39	35	35
<b>Asian/Pacific Islander</b>										
<b>SPA 1: Antelope Valley</b>	71	71	65	41	68	49	45	64	69	71
<b>SPA 2: San Fernando Valley</b>	205	233	185	200	169	151	167	196	172	203
<b>SPA 3: San Gabriel</b>	179	190	148	156	123	121	137	140	140	138
<b>SPA 4: Metro</b>	157	122	123	114	93	85	81	98	78	99
<b>SPA 5: West</b>	48	56	42	42	43	32	47	32	35	40
<b>SPA 6: South</b>	136	154	121	87	79	85	93	121	110	106
<b>SPA 7: East</b>	139	121	142	109	92	103	96	91	114	110
<b>SPA 8: South Bay</b>	165	128	138	119	96	106	123	123	114	114

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.

# **Pneumonia and influenza** at a glance

Number **18** cause of premature death  
Number **5** cause of death

*Pneumonia and influenza was the third, fourth, or fifth leading cause of death since 1994 but was not a leading cause of premature death. The death rate from pneumonia and influenza decreased slightly since 1999. The largest decrease was for Hispanic males. The death rate for black males increased from 41 deaths per 100,000 in 1999 to 56 deaths per 100,000 in 2003. For persons 75 years of age or older, pneumonia and influenza was the third leading cause of death in 2003.*

## ***In simple terms . . .***

Pneumonia is an inflammation of the lungs caused by an infection that can result in difficulty breathing. The infection can be caused by bacteria, viruses, or fungi. Pneumonia is a common illness that is often mild but can be quite severe, even fatal. The severity of the infection depends on the organism that caused it and the person's age and health.

Influenza, often call "the flu," is a respiratory disease caused by influenza viruses. Influenza can cause mild to severe illness that can result in death. Bacterial pneumonia can be a complication of influenza.

## ***Risk factors***

Young children and the elderly, underlying chronic medical conditions such as diabetes and asthma.

## ***Individual opportunities for prevention***

Hands should be washed frequently with soap and water, stop smoking; get vaccinated against pneumococcal pneumonia, influenza (required annually), and *Haemophilus influenzae* type b (for children); stay away from people who are sick; avoid touching your eyes, nose, or mouth.

## ***Los Angeles County deaths***

2,419

## ***Los Angeles County death rate Healthy People 2010 Objective***

29 deaths per 100,000 population  
None

## ***ICD-9 codes***

480-487

## ***ICD-10 codes***

J10-J18

## ***Resources***

- National Library of Medicine Medline Plus® at [www.nlm.nih.gov/medlineplus/encyclopedia.html](http://www.nlm.nih.gov/medlineplus/encyclopedia.html)
- Centers for Disease Control and Prevention at [www.cdc.gov/flu](http://www.cdc.gov/flu)



Mortality in Los Angeles County, 2003  
Trends in pneumonia and influenza mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
<b>Los Angeles County</b>	2,888	2,933	2,984	3,346	3,594	2,242	2,477	2,421	2,494	2,419
<b>Males</b>	1,262	1,264	1,357	1,473	1,621	964	1,063	1,065	1,155	1,121
<b>Females</b>	1,626	1,669	1,627	1,873	1,973	1,278	1,414	1,356	1,339	1,298
<b>White</b>	2,042	2,109	2,097	2,295	2,403	1,475	1,608	1,488	1,595	1,475
<b>Hispanic</b>	364	364	359	469	497	339	366	398	383	411
<b>Black</b>	300	257	301	326	415	238	255	270	269	271
<b>Asian/Pacific Islander</b>	177	197	221	247	272	189	239	259	236	250
<b>Males</b>	844	876	915	964	1,042	613	663	622	723	659
<b>White</b>	175	173	163	229	242	159	161	180	182	189
<b>Hispanic</b>	131	116	149	144	187	97	114	120	124	139
<b>Black</b>	109	98	125	132	149	94	119	140	120	130
<b>Asian/Pacific Islander</b>										
<b>Females</b>	1,198	1,233	1,182	1,331	1,361	862	945	866	872	816
<b>White</b>	189	191	196	240	255	180	205	218	201	222
<b>Hispanic</b>	169	141	152	182	228	141	141	150	145	132
<b>Black</b>	68	99	96	115	123	95	120	119	116	120
<b>Asian/Pacific Islander</b>										
<b>SPA 1: Antelope Valley</b>	61	63	52	64	79	45	53	61	69	72
<b>SPA 2: San Fernando Valley</b>	526	604	591	717	697	510	495	496	529	521
<b>SPA 3: San Gabriel</b>	601	620	601	661	711	407	515	529	483	467
<b>SPA 4: Metro</b>	358	387	412	407	444	330	344	335	344	350
<b>SPA 5: West</b>	270	261	264	312	331	218	239	206	230	212
<b>SPA 6: South</b>	243	230	225	265	327	158	212	204	192	183
<b>SPA 7: East</b>	336	324	354	401	412	232	292	259	262	253
<b>SPA 8: South Bay</b>	481	427	472	512	580	339	318	316	375	350

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.

## **Stroke** at a glance

**Number 8** cause of premature death  
**Number 2** cause of death

Since 1994, stroke was the second leading cause of death, and the seventh, eighth, or ninth leading cause of premature death. In recent years, the death rate from stroke decreased 18% from 62 deaths per 100,000 in 1999 to 51 per 100,000 in 2003. The death rate was highest for blacks.

### ***In simple terms . . .***

A stroke occurs when a blood vessel that carries oxygen and nutrients to the brain is blocked by fat deposits or bursts because of weakening. 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 die within minutes. When the nerve cells cannot function the part of the body controlled by these cells cannot function either.

### ***Risk factors***

High blood pressure, cigarette smoking, diabetes, high blood cholesterol, overweight, physical inactivity, excessive alcohol, increasing age, family history of stroke, prior stroke or heart attack.

### ***Individual opportunities for prevention***

Control high blood pressure, stop smoking, manage diabetes, maintain a healthy weight, increase physical activity, eat a diet low in fat and salt.

### ***Los Angeles County deaths***

4,249

### ***Los Angeles County death rate***

51 deaths per 100,000 population

### ***Healthy People 2010 Objective 12-7***

48 deaths per 100,000 population

### ***ICD-9 codes***

430-434, 436-438

### ***ICD-10 codes***

I60-I69

### ***Resources***

• American Stroke Association at [www.STROKEASSOCIATION.ORG](http://www.STROKEASSOCIATION.ORG)

Mortality in Los Angeles County, 2003  
Trends in stroke mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
<b>Los Angeles County</b>	4,186	4,073	4,061	4,160	3,928	4,435	4,410	4,259	4,169	4,249
<b>Males</b>	1,647	1,667	1,638	1,681	1,550	1,803	1,816	1,691	1,701	1,754
<b>Females</b>	2,539	2,406	2,423	2,479	2,378	2,632	2,594	2,568	2,468	2,495
<b>White</b>	2,731	2,557	2,478	2,565	2,376	2,611	2,599	2,483	2,382	2,441
<b>Hispanic</b>	506	534	610	623	621	704	717	708	711	755
<b>Black</b>	617	609	580	562	536	658	618	591	589	584
<b>Asian/Pacific Islander</b>	338	363	382	404	387	452	465	472	473	462
<b>Males</b>	989	966	907	985	861	1,004	1,005	923	932	918
<b>White</b>	237	251	290	272	297	315	343	322	326	342
<b>Hispanic</b>	249	269	252	223	210	262	247	232	227	248
<b>Black</b>	168	174	184	198	180	217	216	212	209	242
<b>Asian/Pacific Islander</b>	1,732	1,591	1,571	1,580	1,515	1,607	1,594	1,560	1,450	1,523
<b>Females</b>	269	283	320	351	324	389	374	386	385	413
<b>White</b>	368	340	328	339	326	396	371	359	362	336
<b>Hispanic</b>	170	189	198	206	207	235	249	260	264	220
<b>Black</b>	78	93	121	140	122	109	124	110	106	131
<b>Asian/Pacific Islander</b>	826	770	732	788	822	864	887	866	840	898
<b>SPA 1: Antelope Valley</b>	778	697	710	776	677	806	784	749	806	822
<b>SPA 2: San Fernando Valley</b>	503	480	499	501	474	525	485	475	462	453
<b>SPA 3: San Gabriel</b>	376	374	389	387	341	384	383	368	379	342
<b>SPA 4: Metro</b>	476	482	431	396	397	465	455	434	403	401
<b>SPA 5: West</b>	446	453	530	423	495	522	527	493	513	479
<b>SPA 6: South</b>	689	700	635	693	594	744	745	733	651	676
<b>SPA 7: East</b>										
<b>SPA 8: South Bay</b>										

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.

## **Suicide** at a glance

Number **4** cause of premature death  
Number **15** cause of death

Since 1994, suicide was the fourth, fifth, or sixth leading cause of premature death. The death rate from suicide remained stable in recent years. In 2003, it was the second leading cause of premature death for white males.

### ***In simple terms . . .***

Suicide is when a person intentionally takes his or her own life. A self-inflicted injury that does not result in death is referred to as a suicide attempt.

### ***Risk factors***

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

### ***Community and individual opportunities for prevention***

Increase public awareness that suicide is preventable, educate health care providers to identify and respond to persons at risk for suicide, improve access to mental health and substance abuse services, limit access to firearms or other lethal means of self-harm.

### ***Los Angeles County deaths***

727

### ***Los Angeles County death rate***

7.6 suicides per 100,000 population

### ***Healthy People 2010 Objective 18-1***

5.0 suicides per 100,000 population

### ***ICD-9 codes***

E950-E959

### ***ICD-10 codes***

X60-X84, Y87.0

### ***Resources***

• National Institute of Mental Health at [www.NIMH.NIH.GOV](http://www.NIMH.NIH.GOV)

• Substance Abuse and Mental Health Services Administration, Center for Mental Health Services at [WWW.MENTALHEALTH.SAMHSA.GOV](http://WWW.MENTALHEALTH.SAMHSA.GOV)

Mortality in Los Angeles County, 2003  
Trends in suicide mortality, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths	No. of deaths
	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*	Death rate*
<b>Los Angeles County</b>	902	954	873	776	794	732	711	762	727	727
<b>Males</b>	700	760	675	611	625	579	562	608	564	582
<b>Females</b>	202	194	198	165	169	153	149	154	163	145
<b>White</b>	559	610	537	473	510	449	434	443	401	442
<b>Hispanic</b>	199	188	181	166	157	154	155	188	171	163
<b>Black</b>	72	82	72	59	64	52	57	51	72	55
<b>Asian/Pacific Islander</b>	71	72	81	75	62	75	61	78	81	65
<b>Males</b>	421	471	402	369	396	343	337	350	297	342
<b>White</b>	176	167	158	136	130	132	130	161	151	148
<b>Hispanic</b>	51	71	55	46	52	44	44	40	55	45
<b>Black</b>	52	50	59	57	46	60	47	56	59	45
<b>Asian/Pacific Islander</b>										
<b>Females</b>	138	139	135	104	114	106	97	93	104	100
<b>White</b>	23	21	23	30	27	22	25	27	20	15
<b>Hispanic</b>	21	11	17	13	12	8	13	11	17	10
<b>Black</b>	19	22	22	18	16	15	14	22	22	20
<b>Asian/Pacific Islander</b>										
<b>SPA 1: Antelope Valley</b>	35	28	31	24	33	30	35	32	37	37
<b>SPA 2: San Fernando Valley</b>	198	240	176	172	184	167	165	177	148	162
<b>SPA 3: San Gabriel</b>	151	135	140	137	127	126	124	131	125	110
<b>SPA 4: Metro</b>	111	130	136	101	106	111	89	98	97	97
<b>SPA 5: West</b>	78	75	79	76	65	63	66	54	61	65
<b>SPA 6: South</b>	64	69	48	49	37	42	46	44	44	41
<b>SPA 7: East</b>	111	100	90	80	93	63	76	82	70	80
<b>SPA 8: South Bay</b>	133	162	154	123	137	121	101	134	131	114

Because of changes to the International Classification of Diseases (ICD), 1994-1998 may not be comparable to 1999-2003.

\*Per 100,000 adjusted by age (definition on Page 3). Population estimates were revised so death rates for 2001 and 2002 may differ from those in Mortality in Los Angeles County, 2002.  
-- Number of deaths is too small to calculate a reliable rate.

**Appendix 1. Los Angeles County population estimate and United States standard population (Rev. 12/18/06)**

**Los Angeles County population estimate, 2003\***

	Age Group (years)											
	Less than 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	All ages
<b>Males</b>												
White	13,184	57,092	168,287	163,854	198,589	270,382	257,799	183,675	114,076	81,463	23,959	1,532,360
Hispanic	50,622	193,162	484,517	401,007	436,917	368,100	222,471	112,417	58,911	29,636	8,957	2,366,717
Black	5,783	24,063	80,496	70,781	56,753	70,065	56,130	35,153	22,812	10,824	2,441	435,101
Asian/Pacific Islander	8,459	32,589	77,335	89,475	96,716	96,030	91,314	58,412	35,162	21,454	5,914	612,860
American Indian/Alaska Native	231	408	2,257	2,217	2,199	2,668	2,269	1,432	756	323	104	14,864
<b>All races</b>	<b>78,279</b>	<b>307,314</b>	<b>812,892</b>	<b>727,334</b>	<b>791,174</b>	<b>807,245</b>	<b>629,983</b>	<b>391,089</b>	<b>231,717</b>	<b>143,500</b>	<b>41,375</b>	<b>4,961,902</b>
<b>Females</b>												
White	12,375	53,574	158,686	157,278	191,928	247,807	246,514	188,285	129,981	119,676	53,211	1,559,315
Hispanic	49,107	186,252	464,811	372,788	400,377	346,227	238,007	131,510	78,618	45,967	17,587	2,331,251
Black	5,568	23,056	78,363	70,558	68,508	82,987	68,800	45,827	29,786	18,316	7,031	498,800
Asian/Pacific Islander	7,863	30,504	72,777	85,310	103,634	109,325	108,485	67,182	44,374	29,628	9,522	668,604
American Indian/Alaska Native	207	421	2,168	2,118	2,297	2,635	2,479	1,743	816	434	229	15,547
<b>All races</b>	<b>75,120</b>	<b>293,807</b>	<b>776,805</b>	<b>688,052</b>	<b>766,744</b>	<b>788,981</b>	<b>664,285</b>	<b>434,547</b>	<b>283,575</b>	<b>214,021</b>	<b>87,580</b>	<b>5,073,517</b>

**Los Angeles County**

	Age Group (years)											
	Less than 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	All ages
White	25,559	110,666	326,973	321,132	390,517	518,189	504,313	371,960	244,057	201,139	77,170	3,091,675
Hispanic	99,729	379,414	949,328	773,795	837,294	714,327	460,478	243,927	137,529	75,603	26,544	4,697,968
Black	11,351	47,119	158,859	141,339	125,261	153,052	124,930	80,980	52,598	28,940	9,472	933,901
Asian/Pacific Islander	16,322	63,093	150,112	174,785	200,350	205,355	199,799	125,594	79,536	51,082	15,436	1,281,464
American Indian/Alaska Native	438	829	4,425	4,335	4,496	5,303	4,748	3,175	1,572	757	333	30,411
<b>All races</b>	<b>153,399</b>	<b>601,121</b>	<b>1,589,697</b>	<b>1,415,386</b>	<b>1,557,918</b>	<b>1,596,226</b>	<b>1,294,268</b>	<b>825,636</b>	<b>515,292</b>	<b>357,521</b>	<b>128,955</b>	<b>10,035,419</b>

**United States standard population, 2000\*\***

	Age Group (years)											
	Less than 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	All ages
<b>United States</b>												
Less than 1	13,818	55,317	145,565	138,646	135,573	162,613	134,834	87,247	66,037	44,842	15,508	1,000,000
<b>All races</b>												

\*\*Anderson RN, Rosenberg HM. Age standardization of death rates: Implementation of the year 2000 standard. National Vital Statistics Reports, Vol. 47 No. 3. Hyattsville, Maryland: National Center for Health Statistics, 1998.  
 \*July 1, 2003 population estimate by WRMA released May 25, 2005.

Appendix 2. Incorporated cities in Los Angeles County

<u>SPA 1</u> ANTELOPE VALLEY Pop. 328,334*	<u>SPA 2</u> SAN FERNANDO VALLEY Pop. 2,088,024*	<u>SPA 3</u> SAN GABRIEL Pop. 1,822,807*	<u>SPA 4</u> METRO Pop. 1,217,878*	<u>SPA 5</u> WEST Pop. 640,883*	<u>SPA 6</u> SOUTH Pop. 1,007,955*	<u>SPA 7</u> EAST Pop. 1,354,393*	<u>SPA 8</u> SOUTH BAY Pop. 1,575,145*
Lancaster Palmdale	Agoura Hills Burbank Calabasas Glendale Hidden Hills La Canada Flintridge Los Angeles San Fernando Santa Clarita Westlake Village	Alhambra Arcadia Azusa Baldwin Park Bradbury Claremont Covina Diamond Bar Duarte El Monte Glendora Industry Irwindale La Puente La Verne Monrovia Monterey Park Pasadena Pomona Rosemead San Dimas San Gabriel San Marino Sierra Madre South El Monte South Pasadena Temple City Walnut West Covina	Los Angeles West Hollywood	Beverly Hills Culver City Los Angeles Malibu Santa Monica	Compton Los Angeles Lynwood Paramount	Artesia Bell Bell Gardens Bellflower Cerritos Commerce Cudahy Downey Hawaiian Gardens Huntington Park La Habra Heights La Mirada Lakewood Maywood Montebello Norwalk Pico Rivera Santa Fe Springs Signal Hill South Gate Vernon Whittier	Avalon Carson El Segundo Gardena Hawthorne Hermosa Beach Inglewood Lawndale Lomita Long Beach Los Angeles Manhattan Beach Palos Verdes Estate Rancho Palos Verde Redondo Beach Rolling Hills Rolling Hills Estate Torrance

\*July 1, 2003 population estimate by WRMA released May 25, 2005.



### **Los Angeles County Board of Supervisors**

Gloria Molina, *First District*  
Yvonne Brathwaite Burke, *Second District*  
Zev Yaroslavsky, *Third District*  
Don Knabe, *Fourth District*  
Michael D. Antonovich, *Fifth District*



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We thank the Data Collection and Analysis Unit staff for their assistance.

For additional information about public health in Los Angeles County go online to [www.lapublichealth.org](http://www.lapublichealth.org)