



MORTALITY IN LOS ANGELES COUNTY 2012

Leading Causes of Death and Premature Death with Trends for 2003-2012

A PUBLICATION OF THE LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH



COUNTY OF LOS ANGELES
Public Health

Message from the Interim Director



Monitoring the health of a community is an essential function of a local public health department and measures of mortality are indicators that are frequently used. In Los Angeles County, we continuously review and analyze information collected from death certificates for residents of the County. Using information about the leading causes of death and premature death, we collaborate with our partners to educate the community about how to reduce the risk of certain conditions and adopt

healthier lifestyles, as well as ensure access to quality medical screenings and treatment. Together, we are creating communities that promote health.

This report, *Mortality in Los Angeles County 2012: Leading causes of death and premature death with trends for 2003-2012*, highlights some of the improvements being made throughout the County. The overall death rate continues to decline, and notable decreases in the death rate from some of the leading causes of death (such as coronary heart disease, stroke, and lung cancer) contributed to the decline.

Although there have been improvements, we face challenges in making certain that all Angelenos benefit equally. Some residents are at higher risk of death than others because of their health behaviors, the environment in which they live, their educational and employment opportunities, and their access to medical care. We continue to work with our partners to close these gaps.

While the death rates from many causes of death are decreasing, others have been more resistant to change. As the population ages, the number of deaths from Alzheimer's disease continues to increase, creating the need for sufficient support services for individuals and their caregivers. Intentional and unintentional injuries—such as homicide, suicide, motor vehicle crash, and drug overdose—often affect younger people, resulting in a dramatic impact on premature death; therefore, injury prevention initiatives in a community can help to increase life expectancy.

This report provides a comprehensive analysis and summary of the most recent year's finalized data. This resource can be used to help identify priorities for action and guide our efforts to improve the public's health. We hope the information in this report will empower communities and stakeholders, and help us work collaboratively to formulate local and state policies and implement programs to improve and enrich the lives of all Angelenos.

A handwritten signature in black ink that reads "Cynthia A. Harding". The signature is fluid and cursive.

Cynthia A. Harding, MPH
INTERIM DIRECTOR

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Data Highlights for 2012

Unless otherwise noted, rates are age-adjusted

- In 2012, there were 58,498 deaths in Los Angeles County (Figure 1). The death rate was 581 deaths per 100,000 population (Figure T18). Compared with 2011, the number of deaths *increased* less than 1% while the overall death rate *decreased* almost 3%.
- The number of deaths among men and women was nearly equal—29,610 men and 28,888 women (Figure 2). Overall, men died at a younger age than women. The median age at death was 74 years for men and 82 years for women. Similarly, the overall death rate was higher for men than for women—688 and 492 deaths per 100,000 population, respectively (Figure T18).
- The lowest death rates were among Asians and Latinos—400 and 486 deaths per 100,000 population, respectively (Figure T18).
- On an average day, 160 people died in the County, including 32 from coronary heart disease, 9 from injuries (homicide, suicide, and unintentional), and 9 from stroke. Typically, 4 of the 160 deaths (2.5%) occurred among children or young adults less than 25 years of age.
- One of every 5 deaths in 2012 was caused by coronary heart disease (11,677 deaths), the leading cause of death and premature death in the County (Figure 1).
- There were 14,139 deaths from all types of cancer combined. Of these, lung cancer was the most common (2,809 deaths), followed by colorectal cancer (1,397 deaths) and breast cancer (1,176 deaths) (Figure 1).
- Diabetes (2,204 deaths) remained an important cause of death and premature death for both men and women, and for all race/ethnic groups. The diabetes-specific death rates were highest for blacks and Latinos, and higher for men than for women (Figure T8).
- Among people aged 1 to 44 years, injuries caused 43% of the deaths (804 unintentional injuries, 464 homicides, and 325 suicides). The most common unintentional injuries were motor vehicle crash and drug overdose (Figure 9).
- Homicide was the leading cause of death for Latino and black men aged 15–44 years, and the leading cause of premature death for Latino and black men overall (Figures 5 and 10).
- Firearm use resulted in 712 deaths including 69% of 596 homicides and 38% of 757 suicides.
- Alzheimer's disease was the third-leading cause of death for women (1,652 deaths), but only the eighth-leading cause of death for men (824 deaths) (Figure 2).
- Death rates were higher for men than for women for every leading cause of death and premature death, except for Alzheimer's disease and breast cancer.
- For most of the leading causes of death and premature death, the highest death rate was seen in black men, and the lowest rate in Asian women and Latinas.
- For most of the leading causes of death and premature death, rates were higher in the Antelope Valley and South Service Planning Areas than in other areas of the County.
- There were 24,789 deaths among persons between the ages of 1 and 74 years of age, contributing more than 431,000 years of potential life lost before age 75 (Figure 9).

Trend Data Highlights for 2003-2012

Unless otherwise noted, rates are age-adjusted

- From 2003 through 2012, the overall death rate in the County decreased 21%, from 731 to 581 deaths per 100,000 population (Figure T18). During the same time period, the U.S. death rate decreased 13%, from 843 to 733 deaths per 100,000 population.
- During the last 10 years, the four leading causes of death have remained unchanged: coronary heart disease, stroke, lung cancer, and chronic obstructive pulmonary disease (Figure T1).
- Coronary heart disease was the leading cause of both death and premature death every year for the last 10 years (Figures T1 and T2).
- There was a notable decrease (42%) in the death rate from coronary heart disease from 199 deaths per 100,000 in 2003 to 115 in 2012 (Figure T7).
- Death rates from coronary heart disease among residents of the Antelope Valley and South Service Planning Areas were consistently higher than other areas (Figure T7).
- Stroke was the second-leading cause of death every year for the last 10 years (Figure T1).
- Death rates from stroke decreased 36% overall during the last 10 years. The largest decrease was among black men (50%). While the stroke-specific death rate for blacks overall decreased 40%, from 77 deaths per 100,000 population in 2003 to 46 in 2012, the 2012 rate still exceeded the Healthy People 2020 goal of 34.8 deaths per 100,000 population (Figure T16).
- Since 2003, the overall death rate from lung cancer decreased 26%. The rate was consistently highest for black men, and lowest for Latinas. In 2012, the lung cancer-specific death rate for black men remained above the Healthy People 2020 goal of 45.5 deaths per 100,000 population (Figure T13).
- From 2003 through 2012, the overall death rate from diabetes decreased 16%. The decrease was greater for women (21%) than for men (12%). Throughout the 10-year time period, black men consistently had the highest diabetes-specific death rate (Figure T8).
- Coronary heart disease and homicide were the two leading causes of premature death during the last 10 years. Motor vehicle crash has been the third-leading cause of premature death for 8 of the last 10 years (Figure T2).
- Since 2003, the number of deaths from Alzheimer's disease has nearly doubled from 1,285 in 2003 to 2,476 in 2012 (Figure T3).
- From 2003 through 2012, the number of homicides has decreased by almost half. In 2012, the homicide rate among black men (44 deaths per 100,000 population) was more than seven times higher than the overall County homicide rate (Figure T10).
- Drug overdose has been one of the leading causes of premature death every year for the past 10 years. From 2003 through 2012, the drug overdose death rate has fluctuated between 5 and 7 deaths per 100,000 population (Figure T9).
- While the number of suicide deaths peaked in 2008, the suicide rate itself has changed little during the past 10 years. The suicide rate was consistently highest for white men (Figure T17). Since 2009, the number of suicides has exceeded the number of homicides and motor vehicle crashes (Figures T10 and T14).
- While HIV has not been among the overall leading causes of death or premature death since 2004, it remained an important cause of premature death for some groups in 2012.

Background

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

When the certificate of death is complete, it is registered with the local registrar using the Electronic Death Registration System.¹ Then, the local registrar submits the document to the State Registrar of Vital Records. State records are then aggregated by the National Center for Health Statistics to create an annual national mortality database. There is a delay of about two years before the annual national mortality database is available for use, although the use of electronic death registration systems are helping to shorten this timeframe. Errors, omissions, and inaccuracies can occur when the certificate of death is completed, and later when it is processed.

This report summarizes information obtained from certificates of death (Appendix 1) for all Los Angeles County residents who died in 2012, and mortality trends for 2003 through 2012. While it cannot provide information about every cause of death, it lays the groundwork for future analyses and provides valuable information for public health and medical research, evaluation of prevention and intervention programs, community needs assessments, policy development, and program planning. Certificates of death data represent an important endpoint in the spectrum of disease and help us to better understand the burden of disease in our community. Because certificates of death are required by state law, they provide a readily available, and consistently and continuously collected, source of information on a wide range of health conditions.

PREMATURE DEATH: WHAT IS IT?

For this report, we defined premature death as deaths that occurred before 75 years of age, a standard cut-off used in public health. In 2012, 43% of the people who died were less than 75 years of age.

MEASURES

This report provides the numbers of deaths, death rates, and years of potential life lost before age 75 for the leading causes of death and premature death for 2012 and the 10-year period, 2003 through 2012, for Los Angeles County residents. The variables included in the analysis are age at death, gender, race/ethnicity, service planning area and health district of residence, and underlying cause of death. To protect the identity of decedents, the exact number of deaths was not provided if there were fewer than five deaths in a particular group.

If we expect everyone to live to at least 75 years of age, then people who die younger are considered to have died prematurely. For example, a person who died at 63 years of age lost 12 years of expected life, while a person who died at age 80 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. By adding up the total years of life lost for each cause of death, we identified those causes of death responsible for the greatest amount of premature death. Calculations of years of life lost were limited to persons who were at least 1 year of age at the time of death. Infants less than 1 year of age were excluded because prevention of infant mortality typically differs from prevention of other causes of early mortality.

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

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

the ICD 9th revision was used. To facilitate comparisons with earlier years, ICD 9th and 10th revision codes are provided for each of the leading causes of death and premature death included in this report.

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

Healthy People is a set of national health objectives for improving the health of all Americans. They are updated every 10 years. First released for 1990, Healthy People objectives were updated for 2000, 2010, and 2020. Some figures in this report include national goals established by Healthy People 2020.⁵ Changes from Healthy People 2010 to Healthy People 2020 may result in discontinuity with prior years for some causes of death, which is highlighted in the tables.

DEFINITIONS AND TECHNICAL NOTES

- **Death rate:** The number of deaths divided by the population at risk. Death rates make comparisons between different population groups more meaningful than frequencies alone. This type of rate is also called the crude death rate.
- **Age-specific death rate:** The number of deaths in a specific age group divided by the population at risk in that age group.
- **Age-adjusted death rate:** There are age-related differences in the rates at which most health conditions occur. Some conditions are more common among young people, while others are more common among older people.

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

- **Median:** The midpoint of a set of values; the point at which, when the values are put in numerical order, half of the values fall above and half fall below. The median of 25, 27, 28, 36, and 41 is 28.
- **Service Planning Area (SPA):** Health districts are aggregated to form service planning areas. The County is divided into eight service planning areas (Appendices 3 and 4).
- **Health District:** Using census tract boundaries, the County is divided into 26 health districts that are responsible for planning and providing public health services according to the health needs of the local communities (Appendix 3).

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

3 Instruction manual, Part 9. ICD-10 cause-of-death lists for tabulating mortality statistics (updated March 2011 to include WHO updates to ICD-10 for data year 2011). <http://www.cdc.gov/nchs/data/dvs/Part9InstructionManual2011.pdf>.

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

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

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

NOTES ABOUT THE POPULATION

The Census is conducted every 10 years and is the basis for the standard population used for age adjustment of mortality rates and annual estimates of the population of the County. Following the decennial Census, statistical methods are used to estimate the County population for the years between the censuses. Information about births, deaths, and the movement of people in and out of the County are used to inform the estimation process.

The decennial Census may not accurately count every resident of the County, and some groups may experience less accurate enumeration than others. The estimates may also result in inaccuracies that affect the crude and adjusted death rates.

In previous mortality reports, the annual population of the County for 2001-2009 was estimated based on the 2000 Census. The estimates suggested that the County population would *increase* each year from 2001 through 2009. In 2010, the Census enumeration resulted in a 5.7% *reduction* in the County population from 2009 to 2010, suggesting that the population for 2001-2009 was overestimated. Because the population estimates were used to calculate death rates, overestimation of the population would have resulted in underestimation of the true mortality rate. **The death rates for 2003-2009 have been revised using new population estimates based on the 2010 Census, therefore, they may differ from those previously published.**

ASCERTAINMENT OF RACE/ETHNICITY

Up to three races may be specified on a decedent's Certificate of Death. The information is provided by the funeral director or coroner who may not ascertain the decedent's race and/or ethnicity directly from the next of kin, which could lead to inaccuracies.

In addition to race, the Certificate of Death has a check box for indicating whether the decedent was Hispanic/Latino(a)/Spanish; a decedent of any race may be Hispanic. For this report, if Hispanic origin is indicated on the Certificate of Death, then the decedent's race is tabulated as Hispanic. Of the remaining non-Hispanic decedents, race is tabulated according to first race listed on the Certificate of Death, which may result in misclassification of race.

The Census also includes separate questions about Hispanic origin (Hispanic, Latino, or Spanish origin) and race. Respondents self-select their race from 15 categories, and can identify with more than one category. Population counts are available for persons who identify with a single race, and persons who identify with more than one race group.

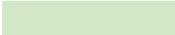
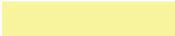
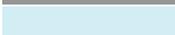
TABULATIONS BY RACE/ETHNICITY

For this report, race is tabulated and presented for 6 race/ethnic groups: white, Latino/a, black, Asian, Native Hawaiian and other Pacific Islander (NHOPI), and American Indian and Alaska Native (AIAN). This edition marks the first time this report has, beginning with 2012 data, separated the Asian/Pacific Islander race category into two categories: *Asian* and *Native Hawaiian and other Pacific Islander* (NHOPI). **Mortality trends for Asians should be interpreted with caution because the number of deaths and death rates before 2012 reflect Asian and NHOPI combined.**

The number of deaths among NHOPI and AIAN were too small to present annual leading causes of death and premature death tables or to determine stable annual death rates. Therefore, to present accurate and useful data for NHOPI and AIAN, we have added two pages—one for NHOPI (Page 14, Figure 7) and one for AIAN (Page 15, Figure 8)—that combine data for 2011 and 2012 to show the leading cause of death and premature death overall and by gender. See Appendix 5 (Page 73) for additional information about NHOPI and AIAN.

USER'S GUIDE TO COLOR

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

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

User's guide to cause of death and premature death figures

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

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

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

- 1 The cause of death group coded by color (see Page 5).
- 2 The number of deaths due to the specific cause; e.g., there were 11,677 deaths from coronary heart disease and 2,646 deaths from chronic obstructive pulmonary disease (COPD).
- 3 The premature death rank for this cause of death; e.g., liver disease/cirrhosis was the ninth-ranked cause of death (1,275 deaths), but was the fourth-ranked cause of premature death (20,788 years of life lost before age 75).
- 4 The cause of premature death group coded by color (see Page 5).
- 5 The total years of life lost before age 75 for the specific cause of death.
- 6 The death rank for this cause of premature death; e.g., stroke was the ninth-ranked cause of premature death, resulting in 14,855 years of life lost before age 75, but was the second-ranked cause of death (3,360 deaths).

A				B			
Leading causes of death			Leading causes of premature death				
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost	Death rank
1	Coronary heart disease	11,677	1.	1	Coronary heart disease	52,263	1.
2	Stroke	3,360	9.	2	Homicide	24,905	20.
3	Lung cancer	2,809	7.	3	Motor vehicle crash	22,895	17.
4	COPD	2,646	12.	4	Liver disease/cirrhosis	20,788	9.
5	Alzheimer's disease	2,476	41.	5	Suicide	20,683	15.
6	Diabetes	2,204	8.	6	Drug overdose	18,206	18.
7	Pneumonia/influenza	2,048	20.	7	Lung cancer	16,858	3.
8	Colorectal cancer	1,397	11.	8	Diabetes	16,041	6.
9	Liver disease/cirrhosis	1,275	4.	9	Stroke	14,855	2.
10	Hypertension	1,242	21.	10	Breast cancer	12,843	11.

Figure 1. Ten leading causes of death and premature death

Los Angeles County
58,498 total deaths
431,534 years of life lost*

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	11,677	1.	1.	Coronary heart disease	52,263	1.
2.	Stroke	3,360	9.	2.	Homicide	24,905	20.
3.	Lung cancer	2,809	7.	3.	Motor vehicle crash	22,895	17.
4.	COPD	2,646	12.	4.	Liver disease/cirrhosis	20,788	9.
5.	Alzheimer's disease	2,476	41.	5.	Suicide	20,683	15.
6.	Diabetes	2,204	8.	6.	Drug overdose	18,206	18.
7.	Pneumonia/influenza	2,048	20.	7.	Lung cancer	16,858	3.
8.	Colorectal cancer	1,397	11.	8.	Diabetes	16,041	6.
9.	Liver disease/cirrhosis	1,275	4.	9.	Stroke	14,855	2.
10.	Hypertension	1,242	21.	10.	Breast cancer	12,843	11.

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

**Death before age 75 years.

- There were 3.5 times more deaths from coronary heart disease (11,677 deaths) than from stroke (3,360 deaths), the second-leading cause of death.
- Together, all types of cancer (14,139 deaths) and all types of heart disease (15,786 deaths) were the underlying cause in half (51%) of all the deaths.
- Unintentional injuries (2,046 deaths), suicide (757 deaths), and homicide (596 deaths) caused 23% of the years of life lost, but only 6% of the deaths, highlighting the dramatic impact of injuries on younger people.
- Alzheimer's disease continued to be an important cause of death, although it had limited impact on premature death.

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

Males				Females			
29,610 total deaths				28,888 total deaths			
275,099 years of life lost*				156,435 years of life lost*			
Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	6,332	1.	1.	Coronary heart disease	38,955	1.
2.	Lung cancer	1,486	8.	2.	Homicide	22,007	14.
3.	Stroke	1,406	9.	3.	Motor vehicle crash	16,766	16.
4.	COPD	1,266	13.	4.	Suicide	15,771	11.
5.	Diabetes	1,151	7.	5.	Liver disease/cirrhosis	15,470	7.
6.	Pneumonia/influenza	975	20.	6.	Drug overdose	12,774	18.
7.	Liver disease/cirrhosis	875	5.	7.	Diabetes	10,250	5.
8.	Alzheimer's disease	824	36.	8.	Lung cancer	9,233	2.
9.	Colorectal cancer	737	10.	9.	Stroke	8,588	3.
10.	Prostate cancer	713	26.	10.	Colorectal cancer	6,958	9.

Males				Females			
29,610 total deaths				28,888 total deaths			
275,099 years of life lost*				156,435 years of life lost*			
Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	5,345	1.	1.	Coronary heart disease	13,308	1.
2.	Stroke	1,954	4.	2.	Breast cancer	12,798	6.
3.	Alzheimer's disease	1,652	39.	3.	Lung cancer	7,625	5.
4.	COPD	1,380	12.	4.	Stroke	6,267	2.
5.	Lung cancer	1,323	3.	5.	Motor vehicle crash	6,129	21.
6.	Breast cancer	1,170	2.	6.	Diabetes	5,791	8.
7.	Pneumonia/influenza	1,073	20.	7.	Drug overdose	5,432	22.
8.	Diabetes	1,053	6.	8.	Liver disease/cirrhosis	5,318	13.
9.	Hypertension	713	22.	9.	Colorectal cancer	5,071	10.
10.	Colorectal cancer	660	9.	10.	Suicide	4,912	25.

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

**Death before age 75 years.

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

White 29,123 total deaths 148,438 years of life lost*				Latino/a 14,467 total deaths 163,090 years of life lost*			
Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	6,298	1.	1.	Coronary heart disease	22,206	1.
2.	COPD	1,709	9.	2.	Drug overdose	9,651	17.
3.	Alzheimer's disease	1,606	38.	3.	Suicide	9,642	13.
4.	Lung cancer	1,563	4.	4.	Lung cancer	7,817	4.
5.	Stroke	1,543	11.	5.	Liver disease/cirrhosis	6,391	12.
6.	Pneumonia/influenza	965	15.	6.	Motor vehicle crash	5,833	23.
7.	Diabetes	736	8.	7.	Breast cancer	4,757	9.
8.	Colorectal cancer	606	10.	8.	Diabetes	4,322	7.
9.	Breast cancer	597	7.	9.	COPD	4,212	2.
10.	Hypertension	587	20.	10.	Colorectal cancer	4,146	8.

Latino/a 14,467 total deaths 163,090 years of life lost*				Latino/a 14,467 total deaths 163,090 years of life lost*			
Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	2,383	1.	1.	Coronary heart disease	13,969	1.
2.	Stroke	854	7.	2.	Homicide	13,745	12.
3.	Diabetes	824	5.	3.	Motor vehicle crash	12,392	10.
4.	Liver disease/cirrhosis	672	4.	4.	Liver disease/cirrhosis	11,577	4.
5.	Alzheimer's disease	423	46.	5.	Diabetes	7,292	3.
6.	Pneumonia/influenza	419	24.	6.	Suicide	6,502	19.
7.	Lung cancer	393	13.	7.	Stroke	5,767	2.
8.	COPD	368	27.	8.	Drug overdose	5,757	18.
9.	Colorectal cancer	345	10.	9.	Breast cancer	4,349	14.
10.	Motor vehicle crash	317	3.	10.	Colorectal cancer	4,006	9.

Black
7,644 total deaths
75,104 years of life lost*

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	1,583	1.	1.	Coronary heart disease	10,512	1.
2.	Stroke	418	6.	2.	Homicide	8,260	9.
3.	Lung cancer	414	3.	3.	Lung cancer	3,259	3.
4.	Diabetes	345	4.	4.	Diabetes	3,116	4.
5.	COPD	304	13.	5.	Motor vehicle crash	3,004	17.
6.	Pneumonia/influenza	245	17.	6.	Stroke	2,767	2.
7.	Colorectal cancer	221	7.	7.	Colorectal cancer	2,002	7.
8.	Alzheimer's disease	221	47.	8.	Drug overdose	1,960	18.
9.	Homicide	199	2.	9.	Breast cancer	1,945	11.
10.	Hypertension	186	14.	10.	Suicide	1,916	22.

Asian
6,783 total deaths
39,648 years of life lost*

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	1,301	1.	1.	Coronary heart disease	4,664	1.
2.	Stroke	513	3.	2.	Lung cancer	2,475	3.
3.	Lung cancer	411	2.	3.	Stroke	2,446	2.
4.	Pneumonia/influenza	395	20.	4.	Suicide	2,438	15.
5.	Diabetes	273	10.	5.	Colorectal cancer	1,747	7.
6.	COPD	241	30.	6.	Breast cancer	1,747	12.
7.	Colorectal cancer	216	5.	7.	Motor vehicle crash	1,344	21.
8.	Alzheimer's disease	216	47.	8.	Liver cancer	1,264	9.
9.	Liver cancer	180	8.	9.	Stomach cancer	1,095	13.
10.	Pancreatic cancer	159	12.	10.	Diabetes	1,066	5.

Note: The four largest race/ethnic groups (White, black, Latino/a, and Asian) are presented. Native Hawaiian and other Pacific Islander (NHOPI), and American Indian and Alaska Native (AIAN) cannot be presented separately because of small numbers. See Pages 14 and 15 for more information on these two race groups.

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

**Death before age 75 years.

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

Leading causes of death

Race/ethnicity Number of deaths Age-adjusted death rate	#1 cause Number of deaths Age-adjusted death rate	#2 cause Number of deaths Age-adjusted death rate	#3 cause Number of deaths Age-adjusted death rate	#4 cause Number of deaths Age-adjusted death rate	#5 cause Number of deaths Age-adjusted death rate
White 29,123 645 per 100,000	Coronary heart disease 6,298 132 per 100,000	COPD 1,709 37 per 100,000	Alzheimer's disease 1,606 31 per 100,000	Lung cancer 1,563 36 per 100,000	Stroke 1,543 32 per 100,000
Latino/a 14,467 486 per 100,000	Coronary heart disease 2,383 88 per 100,000	Stroke 854 32 per 100,000	Diabetes 824 29 per 100,000	Liver disease/cirrhosis 672 19 per 100,000	Alzheimer's disease 423 18 per 100,000
Black 7,644 847 per 100,000	Coronary heart disease 1,583 174 per 100,000	Stroke 418 46 per 100,000	Lung cancer 414 45 per 100,000	Diabetes 345 39 per 100,000	COPD 304 34 per 100,000
Asian 6,783 400 per 100,000	Coronary heart disease 1,301 74 per 100,000	Stroke 513 30 per 100,000	Lung cancer 411 24 per 100,000	Pneumonia/influenza 395 23 per 100,000	Diabetes 273 18 per 100,000
Los Angeles County Total 58,498 581 per 100,000	Coronary heart disease 11,677 115 per 100,000	Stroke 3,360 33 per 100,000	Lung cancer 2,809 29 per 100,000	COPD 2,646 27 per 100,000	Alzheimer's disease 2,476 24 per 100,000

Leading causes of premature death (before age 75 years)

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

Note: The four largest race/ethnic groups (White, black, Latino/a, and Asian) are presented. Native Hawaiian and other Pacific Islander (NHOPI), and American Indian and Alaska Native (AIAN) cannot be presented separately because of small numbers. See Pages 14 and 15 for more information on these two race groups.

Totals include NHOPI, AIAN, and persons of other or unknown race/ethnicity.

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

Males: Leading causes of death

Race/ethnicity	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause
Number of deaths Age-adjusted death rate	Number of deaths Age-adjusted death rate	Number of deaths Age-adjusted death rate	Number of deaths Age-adjusted death rate	Number of deaths Age-adjusted death rate	Number of deaths Age-adjusted death rate
White 14,378 746 per 100,000	Coronary heart disease 3,411 172 per 100,000	Lung cancer 783 40 per 100,000	COPD 763 39 per 100,000	Stroke 593 30 per 100,000	Alzheimer's disease 539 27 per 100,000
Latino 7,670 579 per 100,000	Coronary heart disease 1,271 110 per 100,000	Liver disease/cirrhosis 467 27 per 100,000	Diabetes 443 35 per 100,000	Stroke 386 33 per 100,000	Homicide 277 10 per 100,000
Black 3,857 1,038 per 100,000	Coronary heart disease 863 234 per 100,000	Lung cancer 225 60 per 100,000	Homicide 179 44 per 100,000	Diabetes 168 46 per 100,000	COPD 163 47 per 100,000
Asian 3,431 485 per 100,000	Coronary heart disease 707 98 per 100,000	Stroke 250 35 per 100,000	Lung cancer 241 34 per 100,000	Pneumonia/influenza 203 29 per 100,000	COPD 152 22 per 100,000
All males 29,610 688 per 100,000	Coronary heart disease 6,332 149 per 100,000	Lung cancer 1,486 35 per 100,000	Stroke 1,406 34 per 100,000	COPD 1,266 31 per 100,000	Diabetes 1,151 27 per 100,000

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

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

Note: The four largest race/ethnic groups (White, black, Latino/a, and Asian) are presented. Native Hawaiian and other Pacific Islander (NHOPI), and American Indian and Alaska Native (AIAN) cannot be presented separately because of small numbers. See Pages 14 and 15 for more information on these two race groups.

Totals include NHOPI, AIAN, and 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	#2 cause	#3 cause	#4 cause	#5 cause
Number of deaths Age-adjusted death rate	Number of deaths Age-adjusted death rate	Number of deaths Age-adjusted death rate	Number of deaths Age-adjusted death rate	Number of deaths Age-adjusted death rate	Number of deaths Age-adjusted death rate
White 14,745 554 per 100,000	Coronary heart disease 2,887 98 per 100,000	Alzheimer's disease 1,067 33 per 100,000	Stroke 950 33 per 100,000	COPD 946 36 per 100,000	Lung cancer 780 33 per 100,000
Latina 6,797 411 per 100,000	Coronary heart disease 1,112 71 per 100,000	Stroke 468 30 per 100,000	Diabetes 381 24 per 100,000	Alzheimer's disease 269 18 per 100,000	Breast cancer 268 14 per 100,000
Black 3,787 702 per 100,000	Coronary heart disease 720 130 per 100,000	Stroke 261 47 per 100,000	Lung cancer 189 35 per 100,000	Diabetes 177 33 per 100,000	Breast cancer 163 31 per 100,000
Asian 3,352 336 per 100,000	Coronary heart disease 594 56 per 100,000	Stroke 263 26 per 100,000	Pneumonia/influenza 192 18 per 100,000	Lung cancer 170 18 per 100,000	Alzheimer's disease 154 14 per 100,000
All females 28,888 492 per 100,000	Coronary heart disease 5,345 87 per 100,000	Stroke 1,954 33 per 100,000	Alzheimer's disease 1,652 26 per 100,000	COPD 1,380 24 per 100,000	Lung cancer 1,323 24 per 100,000

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

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

Note: The four largest race/ethnic groups (White, black, Latino/a, and Asian) are presented. Native Hawaiian and other Pacific Islander (NHOPI), and American Indian and Alaska Native (AIAN) cannot be presented separately because of small numbers. See Pages 14 and 15 for more information on these two race groups.

Totals include NHOPI, AIAN, and persons of other or unknown race/ethnicity.

Figure 7. Leading causes of death and premature death for Native Hawaiian and other Pacific Islanders (NHOPI), 2011-2012
 Because of the small number of deaths among NHOPI, 2011 and 2012 were combined. See Appendix 5 (Page 73) for additional information.

NHOPI 347 total deaths 4,508 years of life lost*				Leading causes of premature** death			
Leading causes of death		No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	84	1.	1.	Coronary heart disease	904	1.
2.	Stroke	26	2.	2.	Stroke	281	2.
3.	Lung cancer	21	5.	3.	Motor vehicle crash	267	7.
4.	Diabetes	19	6.	4.	Homicide	228	11.
5.	Pneumonia/influenza	13	12.	5.	Lung cancer	212	3.
6.	Nephritis	9	14.	6.	Diabetes	192	4.
7.	Motor vehicle crash	7	3.	7.	Uterine cancer	131	8.
8.	Uterine cancer	7	7.	8.	Suicide	125	15.
9.	Colorectal cancer	6	9.	9.	Colorectal cancer	108	9.
10.	Alzheimer's disease	6	39.	10.	Pancreatic cancer	99	11.

NHOPI Male 176 total deaths 2,244 years of life lost*				Leading causes of premature** death			
Leading causes of death		No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	56	1.	1.	Coronary heart disease	591	1.
2.	Lung cancer	14	5.	2.	Homicide	228	7.
3.	Stroke	12	3.	3.	Stroke	127	3.
4.	Diabetes	9	8.	4.	Motor vehicle crash	127	9.
5.	Pneumonia/influenza	8	11.	5.	Lung cancer	106	2.

NHOPI Female 171 total deaths 2,264 years of life lost*				Leading causes of premature** death			
Leading causes of death		No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	28	1.	1.	Coronary heart disease	313	1.
2.	Stroke	14	2.	2.	Stroke	154	2.
3.	Diabetes	10	5.	3.	Motor vehicle crash	140	9.
4.	Uterine cancer	7	4.	4.	Uterine cancer	131	4.
5.	Lung cancer	7	6.	5.	Diabetes	126	3.

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

**Death before age 75 years.

Figure 8. Leading causes of death and premature death for American Indian and Alaska Natives (AIAN), 2011–2012
Because of the small number of deaths among AIAN, 2011 and 2012 were combined. See Appendix 5 (Page 73) for additional information.

AIAN 344 total deaths 3,633 years of life lost*				Leading causes of premature** death			
Leading causes of death		No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	68	1.	1.	Coronary heart disease	447	1.
2.	Diabetes	23	6.	2.	Liver disease/cirrhosis	259	7.
3.	Stroke	21	11.	3.	Drug overdose	214	10.
4.	Lung cancer	19	7.	4.	Motor vehicle crash	211	11.
5.	COPD	15	9.	5.	Suicide	167	14.
6.	Pneumonia/influenza	14	16.	6.	Diabetes	165	2.
7.	Liver disease/cirrhosis	12	2.	7.	Lung cancer	159	4.
8.	Hypertension	11	12.	8.	Birth defect	150	16.
9.	Alzheimer's disease	9	32.	9.	COPD	131	5.
10.	Drug overdose	8	3.	10.	Homicide	119	16.

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

**Death before age 75 years.

AIAN Male 177 total deaths 1,948 years of life lost*				Leading causes of premature** death			
Leading causes of death		No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	40	1.	1.	Coronary heart disease	334	1.
2.	Stroke	13	7.	2.	Motor vehicle crash	193	7.
3.	Lung cancer	12	4.	3.	Drug overdose	128	9.
4.	Diabetes	10	11.	4.	Lung cancer	110	3.
5.	COPD	7	10.	5.	Suicide	98	14.

AIAN Female 167 total deaths 1,685 years of life lost*				Leading causes of premature** death			
Leading causes of death		No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	28	4.	1.	Liver disease/cirrhosis	181	3.
2.	Diabetes	13	3.	2.	Birth defect	150	11.
3.	Liver disease/cirrhosis	8	1.	3.	Diabetes	116	2.
4.	COPD	8	7.	4.	Coronary heart disease	113	1.
5.	Stroke	8	17.	5.	Drug overdose	86	11.

Figure 9. Comparison of the leading causes of death, by age group

Leading causes of death

Age group Number of deaths Age-specific death rate	#1 cause Number of deaths Age-specific death rate	#2 cause Number of deaths Age-specific death rate	#3 cause Number of deaths Age-specific death rate	#4 cause Number of deaths Age-specific death rate	#5 cause Number of deaths Age-specific death rate
<1 year old 567 443 per 100,000	Low birthweight/prematurity 84 66 per 100,000	SIDS* 45 35 per 100,000	Heart defect 43 34 per 100,000	Complication of Placenta/Cord 23 18 per 100,000	Maternal complication 18 —
1-4 years old 95 19 per 100,000	Birth defect 19 —	Motor vehicle crash[§] 11 —	Homicide[§] 11 —	Drowning 6 —	Perinatal period condition <5 —
5-14 years old 115 9 per 100,000	Motor vehicle crash 14 —	Birth defect 9 —	Leukemia 9 —	Homicide 7 —	Brain/CNS[†] cancer 6 —
15-24 years old 674 45 per 100,000	Homicide 189 13 per 100,000	Motor vehicle crash 124 8 per 100,000	Suicide 78 5 per 100,000	Drug overdose 50 3 per 100,000	Leukemia 18 —
25-44 years old 2,789 96 per 100,000	Homicide 257 9 per 100,000	Motor vehicle crash 245 8 per 100,000	Suicide 245 8 per 100,000	Drug overdose 220 8 per 100,000	Liver disease/cirrhosis 145 5 per 100,000
45-64 years old 11,882 483 per 100,000	Coronary heart disease 2,110 86 per 100,000	Liver disease/cirrhosis 702 29 per 100,000	Lung cancer 626 25 per 100,000	Diabetes 538 22 per 100,000	Stroke 503 20 per 100,000
65-74 years old 9,234 1,462 per 100,000	Coronary heart disease 1,797 285 per 100,000	Lung cancer 839 133 per 100,000	Stroke 479 76 per 100,000	Diabetes 468 74 per 100,000	COPD 446 71 per 100,000
75+ years old 33,140 6,080 per 100,000	Coronary heart disease 7,623 1,399 per 100,000	Alzheimer's disease 2,348 431 per 100,000	Stroke 2,302 422 per 100,000	COPD 1,914 351 per 100,000	Pneumonia/influenza 1,598 293 per 100,000
Los Angeles County Total 58,498 581 per 100,000**	Coronary heart disease 11,677 115 per 100,000	Stroke 3,360 33 per 100,000	Lung cancer 2,809 29 per 100,000	COPD 2,646 27 per 100,000	Alzheimer's disease 2,476 24 per 100,000

Note: Total includes persons of unknown age.

*SIDS=Sudden Infant Death Syndrome.

§=Motor vehicle crash and homicide each resulted in 11 deaths and 802 years of life lost for 1-4-year-olds, and were tied for the second-leading cause of death.

†CNS=Central Nervous System.

**Age-adjusted rate.

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

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

		Race/ethnicity Deaths from all causes	#1 Cause Number of deaths	#2 Cause Number of deaths	#3 Cause Number of deaths
Males	0-14 years 440 deaths	White 62	Perinatal period condition 27	Birth defect 14	Drowning <5
		Latino 262	Perinatal period condition 98	Birth defect 77	Motor vehicle crash 10
		Black 71	Perinatal period condition 26	Birth defect 8	Homicide 6
		Asian 45	Perinatal period condition 17	Birth defect 11	Anemia <5
	15-24 years 511 deaths	White 97	Motor vehicle crash 24	Drug overdose 21	Suicide 12
		Latino 291	Homicide 114	Motor vehicle crash 50	Suicide 29
		Black 92	Homicide 53	Motor vehicle crash 11	Suicide 5
		Asian 27	Suicide 6	Motor vehicle crash 6	Drug overdose <5
	25-44 years 1,850 deaths	White 497	Suicide 93	Drug overdose 75	Motor vehicle crash 44
		Latino 911	Homicide 130	Motor vehicle crash 109	Liver disease/cirrhosis 69
		Black 287	Homicide 82	Motor vehicle crash 22	Suicide 21
		Asian 136	Suicide 14	Coronary heart disease 13	Stroke 9
	45-64 years 7,386 deaths	White 3,083	Coronary heart disease 727	Liver disease/cirrhosis 174	Lung cancer 170
		Latino 2,287	Coronary heart disease 390	Liver disease/cirrhosis 293	Diabetes 167
		Black 1,233	Coronary heart disease 291	Lung cancer 71	Stroke 57
		Asian 696	Coronary heart disease 152	Lung cancer 52	Stroke 46

65-74 years 5,178 deaths	White 2,483	Coronary heart disease 581	Lung cancer 239	COPD 150
	Latino 1,266	Coronary heart disease 239	Diabetes 98	Stroke 78
	Black 813	Coronary heart disease 206	Lung cancer 70	Prostate cancer 41
	Asian 552	Coronary heart disease 110	Lung cancer 55	Stroke 40
75+ years 14,244 deaths	White 8,156	Coronary heart disease 2,072	COPD 519	Alzheimer's disease 507
	Latino 2,653	Coronary heart disease 592	Stroke 181	Diabetes 150
	Black 1,361	Coronary heart disease 349	COPD 85	Prostate cancer 82
	Asian 1,975	Coronary heart disease 432	Pneumonia/influenza 175	Stroke 154

Note: The four largest race/ethnic groups (White, black, Latino/a, and Asian) are presented. Native Hawaiian and other Pacific Islander (NHOPI), and American Indian and Alaska Native (AIAN) cannot be presented separately because of small numbers. See Pages 14 and 15 for more information on these two race groups.

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

Figure 11. Leading causes of death for females, by age group and race/ethnicity

		Race/ethnicity Deaths from all causes	#1 Cause Number of deaths	#2 Cause Number of deaths	#3 Cause Number of deaths
Females	0-14 years 337 deaths	White 55	Perinatal period condition 20	Birth defect 12	Homicide <5
		Latina 204	Birth defect 63	Perinatal period condition 61	Motor vehicle crash 13
		Black 51	Perinatal period condition 20	Birth defect 6	Homicide <5
		Asian 25	Perinatal period condition 12	Birth defect 7	Insufficient number
	15-24 years 163 deaths	White 39	Motor vehicle crash 8	Suicide 7	Drug overdose 5
		Latina 75	Motor vehicle crash 17	Suicide 8	Homicide 8
		Black 29	Suicide 6	Motor vehicle crash 5	Homicide <5
		Asian 15	Suicide <5	Homicide <5	Insufficient number
	25-44 years 939 deaths	White 260	Drug overdose 45	Suicide 20	Breast cancer 18
		Latina 391	Breast cancer 35	Motor vehicle crash 30	Liver disease/cirrhosis 19
		Black 175	Breast cancer 13	Drug overdose 12	Coronary heart disease 10
		Asian 96	Suicide 12	Breast cancer 11	Motor vehicle crash 5
45-64 years 4,496 deaths	White 1,693	Coronary heart disease 193	Breast cancer 179	Lung cancer 125	
	Latina 1,309	Coronary heart disease 144	Breast cancer 134	Liver disease/cirrhosis 81	
	Black 923	Coronary heart disease 147	Breast cancer 66	Lung cancer 59	
	Asian 506	Breast cancer 63	Lung cancer 39	Stroke 37	

65-74 years 4,056 deaths	White 1,843	Coronary heart disease 282	Lung cancer 226	COPD 150
	Latina 1,096	Coronary heart disease 169	Diabetes 96	Stroke 67
	Black 660	Coronary heart disease 123	Lung cancer 75	Stroke 42
	Asian 421	Coronary heart disease 58	Lung cancer 44	Breast cancer 32
75+ years 18,896 deaths	White 10,854	Coronary heart disease 2,402	Alzheimer's disease 1,031	Stroke 810
	Latina 3,722	Coronary heart disease 790	Stroke 316	Alzheimer's disease 256
	Black 1,949	Coronary heart disease 440	Stroke 165	Alzheimer's disease 144
	Asian 2,289	Coronary heart disease 501	Stroke 192	Pneumonia/influenza 173

Note: The four largest race/ethnic groups (White, black, Latino/a, and Asian) are presented. Native Hawaiian and other Pacific Islander (NHOPI), and American Indian and Alaska Native (AIAN) cannot be presented separately because of small numbers. See Pages 14 and 15 for more information on these two race groups.

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

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

Antelope Valley (SPA 1)					San Fernando (SPA 2)										
2,267 deaths					12,731 deaths										
21,453 years of life lost					84,622 years of life lost										
Leading causes of death				Leading causes of premature** death				Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank	Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	423	1.	1.	Coronary heart disease	2,555	1.	1.	Coronary heart disease	2,657	1.	1.	Coronary heart disease	10,586	1.
2.	COPD	176	9.	2.	Motor vehicle crash	1,867	8.	2.	Stroke	700	10.	2.	Suicide	5,258	13.
3.	Stroke	122	10.	3.	Diabetes	1,018	5.	3.	Lung cancer	658	5.	3.	Motor vehicle crash	4,929	16.
4.	Lung cancer	120	6.	4.	Drug overdose	956	13.	4.	Alzheimer's disease	657	39.	4.	Drug overdose	4,404	18.
5.	Diabetes	102	3.	5.	Suicide	939	13.	5.	COPD	563	13.	5.	Lung cancer	3,907	3.

San Gabriel (SPA 3)					Metro (SPA 4)										
11,049 deaths					6,153 deaths										
70,344 years of life lost					46,067 years of life lost										
Leading causes of death				Leading causes of premature** death				Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank	Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	2,168	1.	1.	Coronary heart disease	8,022	1.	1.	Coronary heart disease	1,333	1.	1.	Coronary heart disease	5,917	1.
2.	Stroke	660	11.	2.	Liver disease/cirrhosis	3,691	9.	2.	Stroke	341	8.	2.	Drug overdose	2,796	14.
3.	COPD	542	12.	3.	Suicide	3,654	15.	3.	Diabetes	273	6.	3.	Homicide	2,757	19.
4.	Lung cancer	525	5.	4.	Diabetes	2,978	6.	4.	Pneumonia/influenza	272	14.	4.	Liver disease/cirrhosis	2,181	9.
5.	Alzheimer's disease	516	43.	5.	Lung cancer	2,842	4.	5.	Lung cancer	261	9.	5.	Suicide	2,123	16.

West (SPA 5)

4,050 deaths

20,267 years of life lost

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	822	1.	1.	Coronary heart disease	2,542	1.
2.	Stroke	236	9.	2.	Suicide	1,819	10.
3.	Alzheimer's disease	225	36.	3.	Drug overdose	1,386	19.
4.	Lung cancer	207	4.	4.	Lung cancer	1,189	4.
5.	COPD	156	19.	5.	Liver disease/cirrhosis	934	13.

South (SPA 6)

5,449 deaths

59,354 years of life lost

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	1,031	2.	1.	Homicide	7,731	7.
2.	Stroke	317	6.	2.	Coronary heart disease	7,215	1.
3.	Lung cancer	266	7.	3.	Motor vehicle crash	3,495	13.
4.	Diabetes	265	5.	4.	Liver disease/cirrhosis	2,899	8.
5.	COPD	206	13.	5.	Diabetes	2,513	4.

East (SPA 7)

7,107 deaths

55,035 years of life lost

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	1,345	1.	1.	Coronary heart disease	5,823	1.
2.	Stroke	436	5.	2.	Motor vehicle crash	3,428	15.
3.	COPD	309	16.	3.	Homicide	2,987	18.
4.	Diabetes	304	7.	4.	Liver disease/cirrhosis	2,866	8.
5.	Lung cancer	290	9.	5.	Stroke	2,154	2.

South Bay (SPA 8)

9,645 deaths

73,626 years of life lost

Leading causes of death				Leading causes of premature** death			
Rank	Cause of death	No. of deaths	Premature death rank	Rank	Cause of death	Years of life lost*	Death rank
1.	Coronary heart disease	1,896	1.	1.	Coronary heart disease	9,585	1.
2.	Stroke	545	7.	2.	Homicide	4,836	18.
3.	Lung cancer	478	8.	3.	Motor vehicle crash	3,684	17.
4.	COPD	458	12.	4.	Suicide	3,536	15.
5.	Pneumonia/influenza	361	21.	5.	Liver disease/cirrhosis	3,479	10.

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

**Death before age 75 years.

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 Age-adjusted death rate	#1 cause Number of deaths Age-adjusted death rate	#2 cause Number of deaths Age-adjusted death rate	#3 cause Number of deaths Age-adjusted death rate	#4 cause Number of deaths Age-adjusted death rate	#5 cause Number of deaths Age-adjusted death rate
SPA 1: Antelope Valley 2,267 739 per 100,000	Coronary heart disease 423 142 per 100,000	COPD 176 62 per 100,000	Stroke 122 43 per 100,000	Lung cancer 120 39 per 100,000	Diabetes 102 33 per 100,000
SPA 2: San Fernando 12,731 554 per 100,000	Coronary heart disease 2,657 113 per 100,000	Stroke 700 31 per 100,000	Lung cancer 658 29 per 100,000	Alzheimer's disease 657 28 per 100,000	COPD 563 25 per 100,000
SPA 3: San Gabriel 11,049 558 per 100,000	Coronary heart disease 2,168 107 per 100,000	Stroke 660 33 per 100,000	COPD 542 27 per 100,000	Lung cancer 525 27 per 100,000	Alzheimer's disease 516 25 per 100,000
SPA 4: Metro 6,153 546 per 100,000	Coronary heart disease 1,333 117 per 100,000	Stroke 341 30 per 100,000	Diabetes 273 25 per 100,000	Pneumonia/influenza 272 24 per 100,000	Lung cancer 261 24 per 100,000
SPA 5: West 4,050 480 per 100,000	Coronary heart disease 822 94 per 100,000	Stroke 236 27 per 100,000	Alzheimer's disease 225 24 per 100,000	Lung cancer 207 26 per 100,000	COPD 156 18 per 100,000
SPA 6: South 5,449 720 per 100,000	Coronary heart disease 1,031 142 per 100,000	Stroke 317 44 per 100,000	Lung cancer 266 37 per 100,000	Diabetes 265 36 per 100,000	COPD 206 29 per 100,000
SPA 7: East 7,107 577 per 100,000	Coronary heart disease 1,345 109 per 100,000	Stroke 436 36 per 100,000	COPD 309 26 per 100,000	Diabetes 304 25 per 100,000	Lung cancer 290 24 per 100,000
SPA 8: South Bay 9,645 618 per 100,000	Coronary heart disease 1,896 120 per 100,000	Stroke 545 35 per 100,000	Lung cancer 478 31 per 100,000	COPD 458 30 per 100,000	Pneumonia/influenza 361 23 per 100,000
Los Angeles County Total 58,498 581 per 100,000	Coronary heart disease 11,677 115 per 100,000	Stroke 3,360 33 per 100,000	Lung cancer 2,809 29 per 100,000	COPD 2,646 27 per 100,000	Alzheimer's disease 2,476 24 per 100,000

Note: Total includes persons of unknown residence.

Leading causes of premature death (before age 75 years)

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

Note: Total includes persons of 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 (before age 75 years)

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

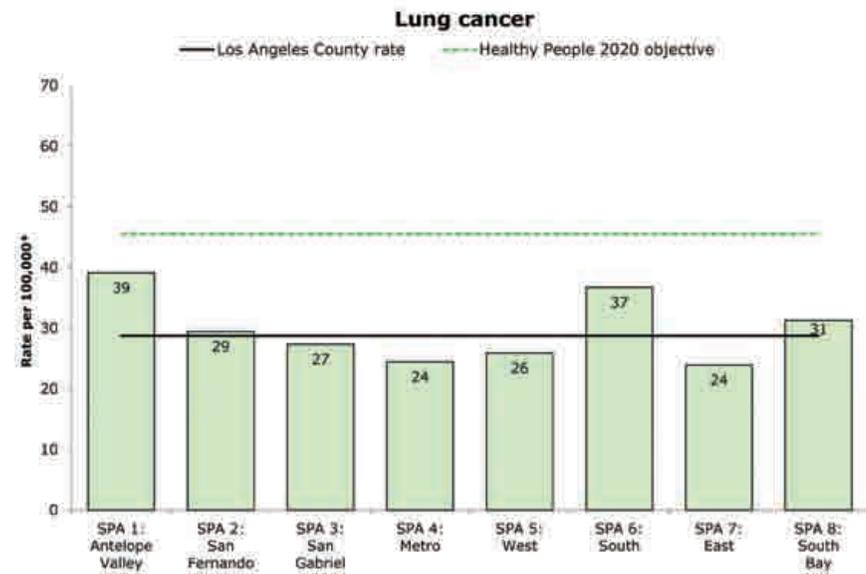
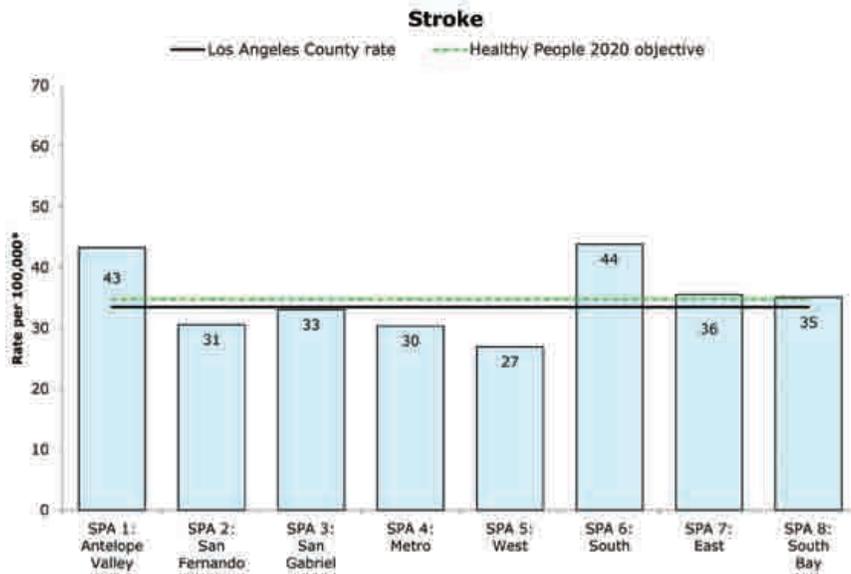
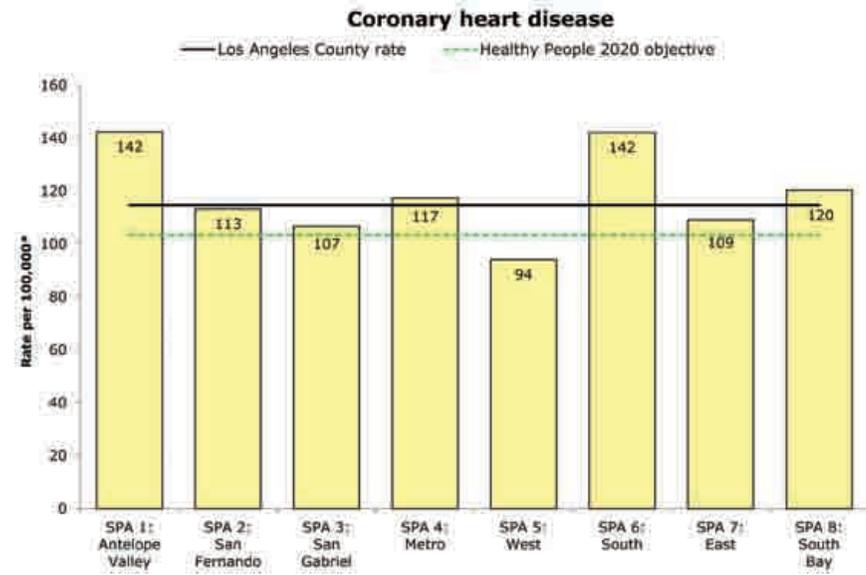
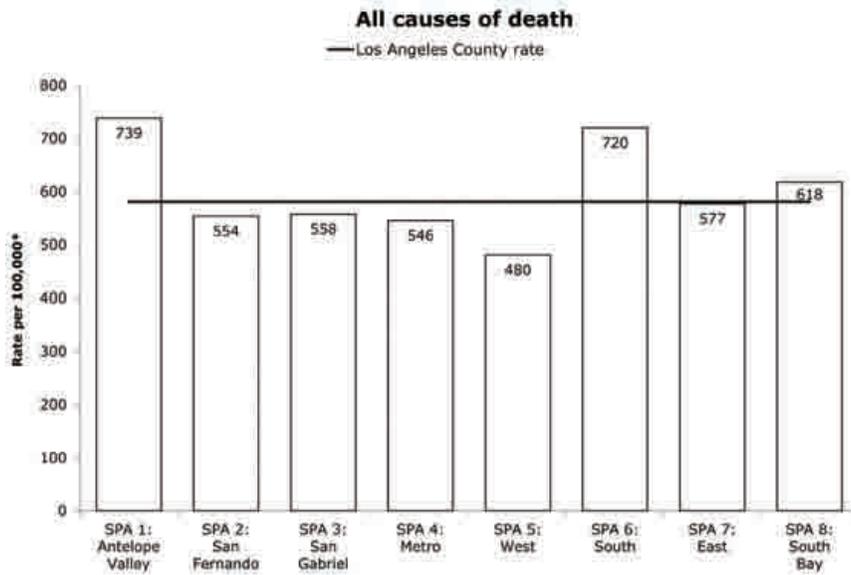
Note: Total includes persons of unknown residence.

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

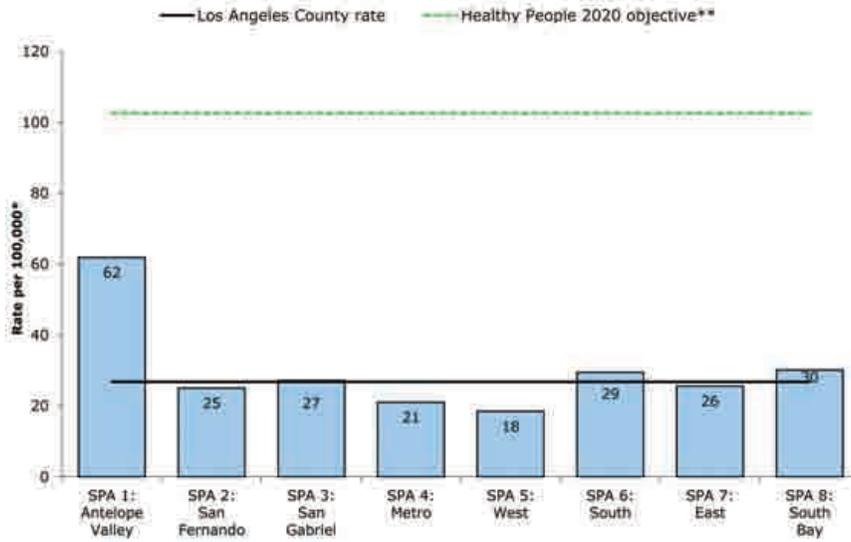
Service Planning Area	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause
SPA 1: Antelope Valley	Coronary heart disease	Breast cancer	Motor vehicle crash	Lung cancer	Diabetes
SPA 2: San Fernando	Breast cancer	Coronary heart disease	Lung cancer	Drug overdose	Motor vehicle crash
SPA 3: San Gabriel	Breast cancer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

Note: Total includes persons of unknown residence.

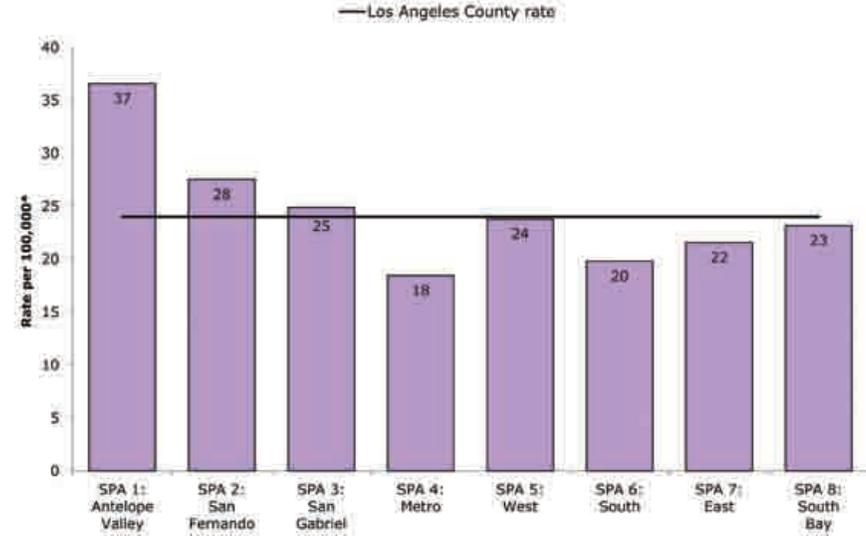
Figure 15. Death rates for selected causes of death, by service planning area (SPA) of residence



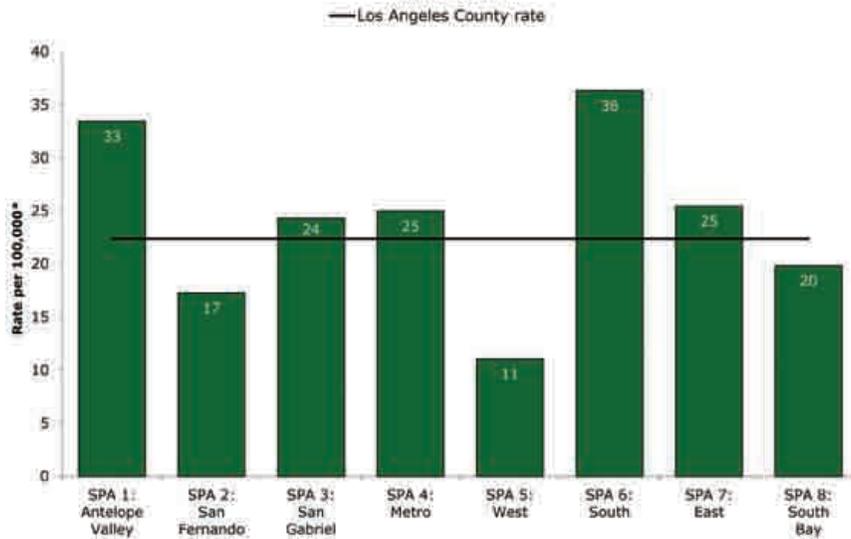
Chronic obstructive pulmonary disease



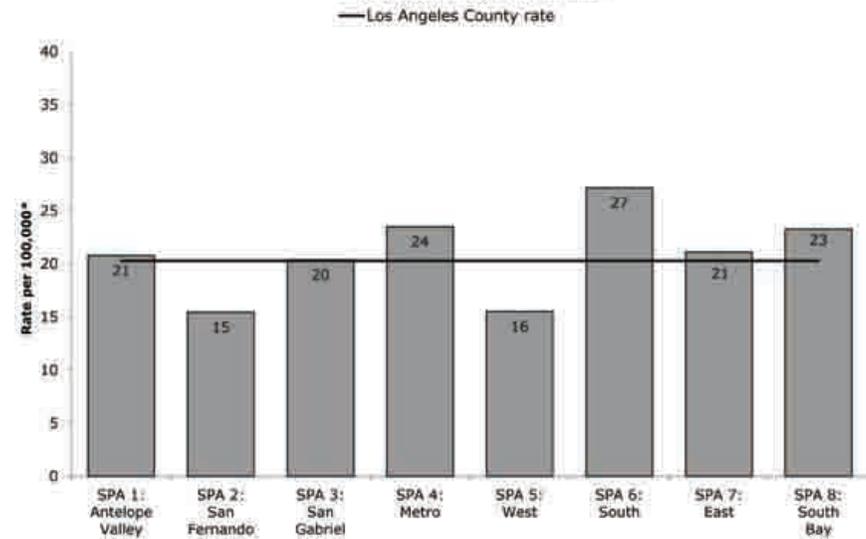
Alzheimer's disease



Diabetes



Pneumonia/influenza



*Age-adjusted.

**The Healthy People 2020 goal for chronic obstructive pulmonary disease was 102.6 deaths per 100,000 population aged 45 years and over. The overall County rate for chronic obstructive pulmonary disease was 26.8 deaths per 100,000 population, and 76.6 for those aged 45 years and over.

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

Leading causes of death

Health District Number of deaths Age-adjusted death rate	#1 cause Number of deaths	#2 cause Number of deaths	#3 cause Number of deaths	#4 cause Number of deaths	#5 cause Number of deaths
Alhambra 2,407 491 per 100,000	Coronary heart disease 483	Stroke 143	Lung cancer 131	Pneumonia/influenza 127	COPD 121
Antelope Valley 2,267 739 per 100,000	Coronary heart disease 423	COPD 176	Stroke 122	Lung cancer 120	Diabetes 102
Bellflower 2,229 619 per 100,000	Coronary heart disease 419	Stroke 134	COPD 113	Lung cancer 112	Alzheimer's disease 95
Central 1,810 560 per 100,000	Coronary heart disease 380	Stroke 104	Pneumonia/influenza 97	Diabetes 84	COPD 72
Compton 1,390 714 per 100,000	Coronary heart disease 239	Stroke 91	Lung cancer 84	Diabetes 77	COPD 53
East LA 1,086 544 per 100,000	Coronary heart disease 241	Diabetes 68	Stroke 67	Pneumonia/influenza 43	Liver disease/cirrhosis 40
East Valley 2,369 583 per 100,000	Coronary heart disease 506	Stroke 133	Alzheimer's disease 106	Lung cancer 105	COPD 105
El Monte 2,170 549 per 100,000	Coronary heart disease 384	Stroke 140	Diabetes 120	Lung cancer 96	Alzheimer's disease 88
Foothill 2,166 594 per 100,000	Coronary heart disease 466	Stroke 113	COPD 111	Alzheimer's disease 110	Lung cancer 103
Glendale 2,388 528 per 100,000	Coronary heart disease 480	Stroke 135	Alzheimer's disease 134	Lung cancer 130	COPD 111
Harbor 1,358 546 per 100,000	Coronary heart disease 213	Stroke 74	Alzheimer's disease 71	COPD 68	Pneumonia/influenza 50
Hollywood-Wilshire 2,776 545 per 100,000	Coronary heart disease 634	Stroke 136	Lung cancer 129	Diabetes 111	Pneumonia/influenza 111
Inglewood 2,289 629 per 100,000	Coronary heart disease 439	Stroke 132	Lung cancer 111	COPD 104	Diabetes 91

Long Beach 2,917 707 per 100,000	Coronary heart disease 631	Stroke 160	Lung cancer 143	COPD 140	Alzheimer's disease 102
Northeast 1,567 530 per 100,000	Coronary heart disease 319	Stroke 101	Diabetes 78	Pneumonia/influenza 64	Alzheimer's disease 64
Pasadena 1,009 575 per 100,000	Coronary heart disease 230	Stroke 64	COPD 54	Pneumonia/influenza 44	Lung cancer 43
Pomona 3,297 591 per 100,000	Coronary heart disease 605	Stroke 200	COPD 168	Alzheimer's disease 166	Diabetes 154
San Antonio 1,653 540 per 100,000	Coronary heart disease 306	Stroke 114	COPD 82	Diabetes 78	Pneumonia/influenza 65
San Fernando 2,605 552 per 100,000	Coronary heart disease 529	Stroke 157	Lung cancer 154	COPD 117	Alzheimer's disease 110
South 952 809 per 100,000	Coronary heart disease 174	Stroke 63	Diabetes 53	Homicide 46	Lung cancer 41
Southeast 597 593 per 100,000	Coronary heart disease 98	Stroke 34	Liver disease/cirrhosis 28	Diabetes 27	Pneumonia/influenza 22
Southwest 2,510 727 per 100,000	Coronary heart disease 520	Stroke 129	Lung cancer 124	Diabetes 108	COPD 101
Torrance 3,081 569 per 100,000	Coronary heart disease 613	Lung cancer 183	Stroke 179	COPD 146	Pneumonia/influenza 134
West 4,050 480 per 100,000	Coronary heart disease 822	Stroke 236	Alzheimer's disease 225	Lung cancer 207	COPD 156
West Valley 5,369 553 per 100,000	Coronary heart disease 1,142	Alzheimer's disease 307	Stroke 275	Lung cancer 269	COPD 230
Whittier 2,139 592 per 100,000	Coronary heart disease 379	Stroke 121	Alzheimer's disease 106	Lung cancer 87	COPD 86
Los Angeles County Total 58,498 581 per 100,000	Coronary heart disease 11,677	Stroke 3,360	Lung cancer 2,809	COPD 2,646	Alzheimer's disease 2,476

Note: Total includes persons of unknown residence.

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

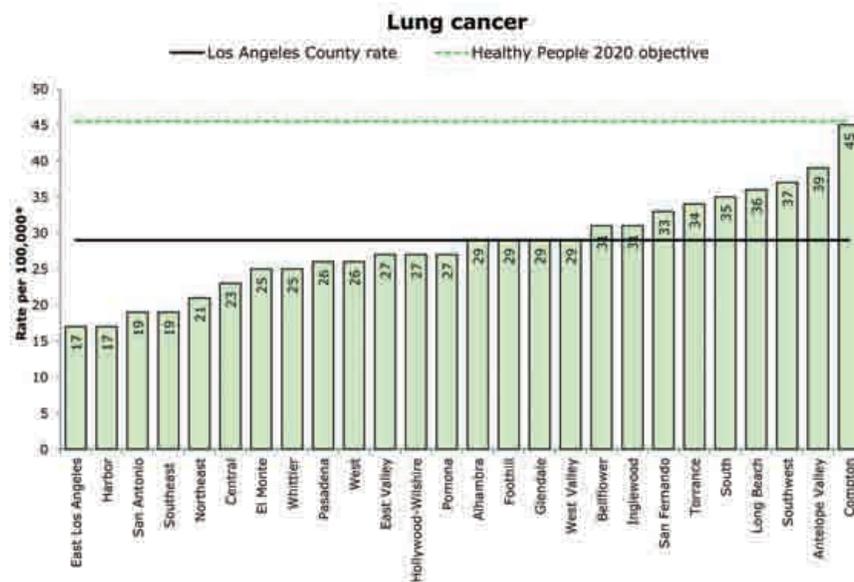
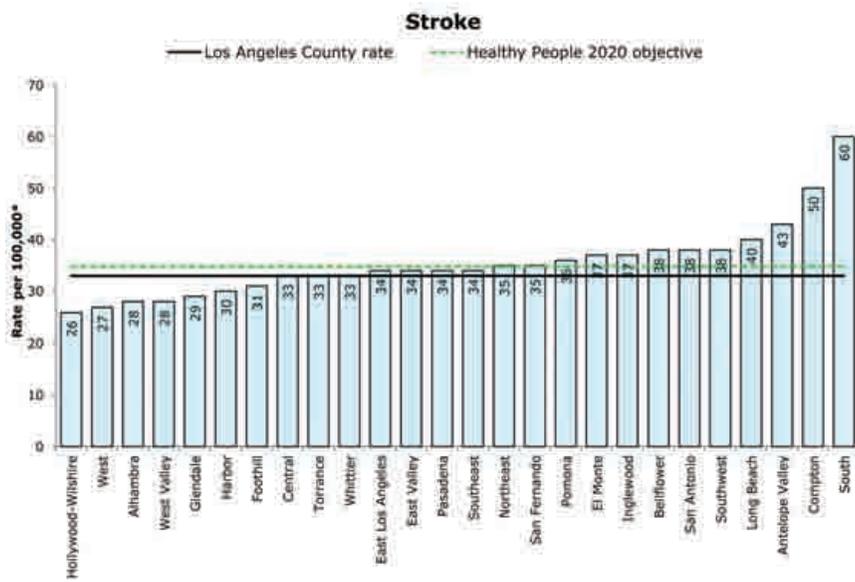
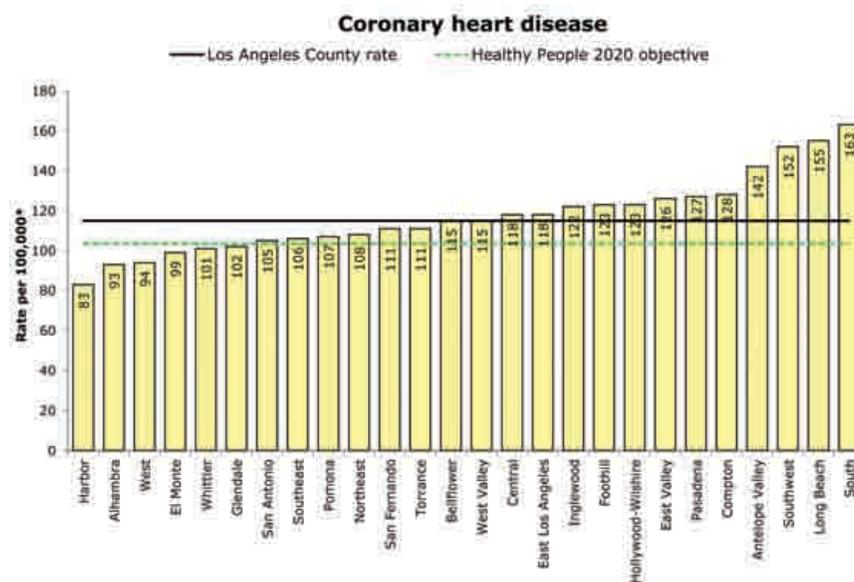
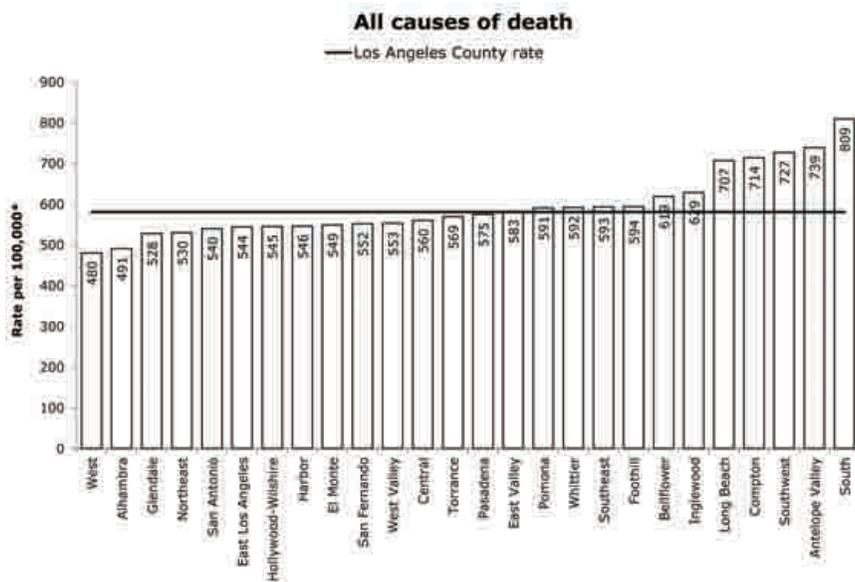
Leading causes of premature death (before age 75 years)

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

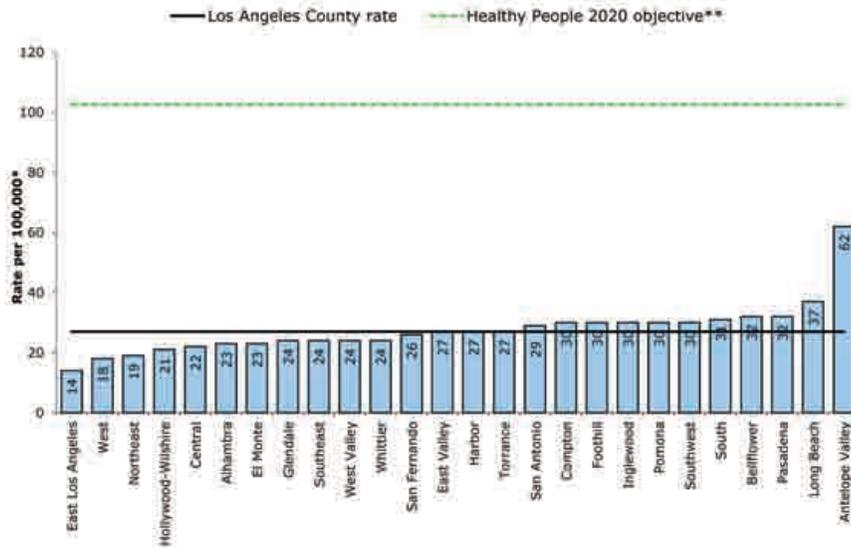
Long Beach	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Liver disease/cirrhosis
Northeast	Coronary heart disease	Homicide	Liver disease/cirrhosis	Motor vehicle crash	Drug overdose
Pasadena	Coronary heart disease	Liver disease/cirrhosis	Drug overdose	Lung cancer	Motor vehicle crash
Pomona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

Note: Total includes persons of unknown residence.

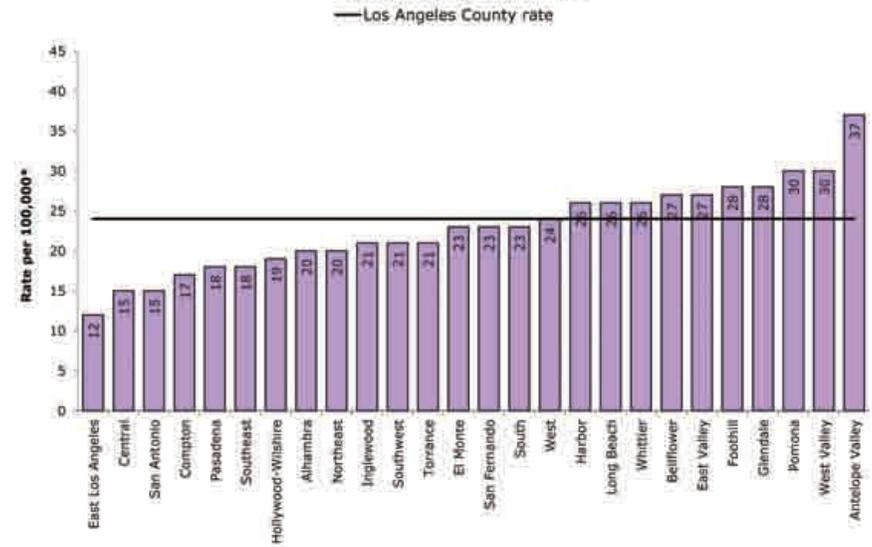
Figure 18. Death rates for selected causes of death, by health district of residence



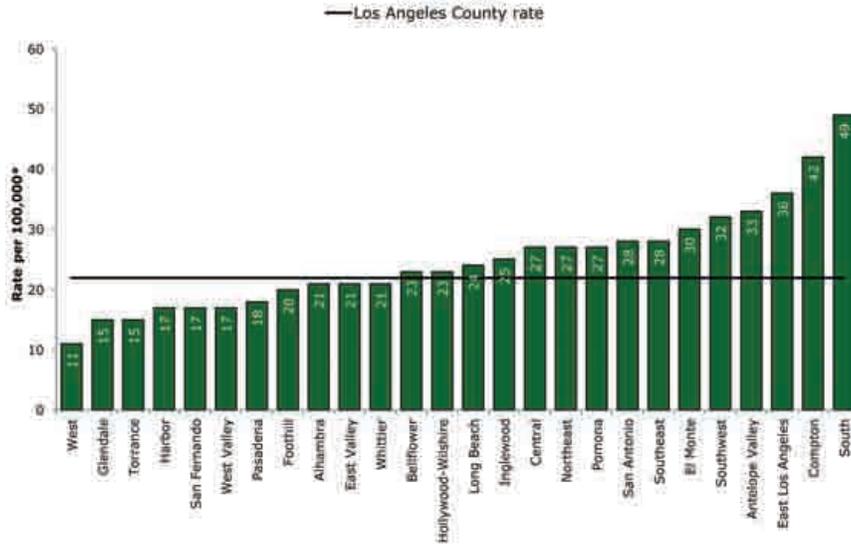
Chronic obstructive pulmonary disease



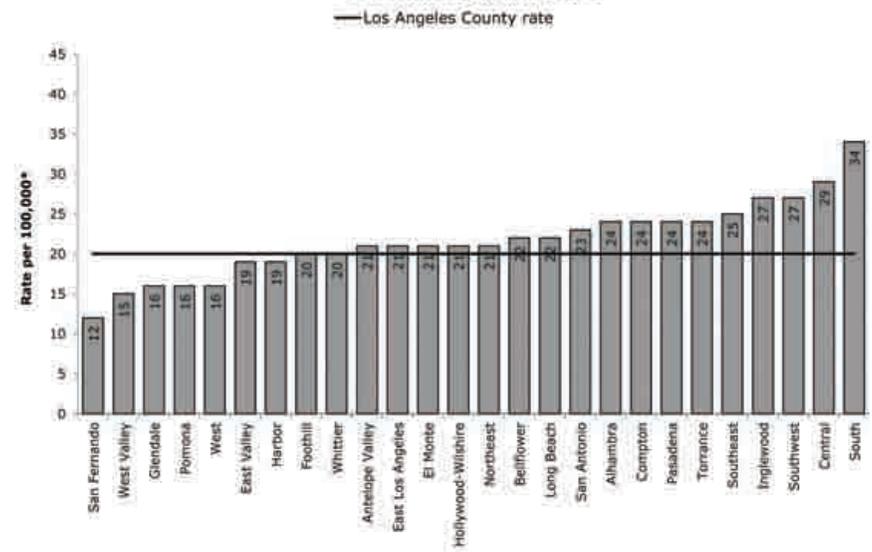
Alzheimer's disease



Diabetes



Pneumonia/influenza



*Age-adjusted.

**The Healthy People 2020 goal for chronic obstructive pulmonary disease was 102.6 deaths per 100,000 population aged 45 years and over. The overall County rate for chronic obstructive pulmonary disease was 26.8 deaths per 100,000 population, and 76.6 for those aged 45 years and over.

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

Leading causes of death

Year	#1 cause No. of deaths	#2 cause No. of deaths	#3 cause No. of deaths	#4 cause No. of deaths	#5 cause No. of deaths	#6 cause No. of deaths	#7 cause No. of deaths	#8 cause No. of deaths	#9 cause No. of deaths	#10 cause No. of deaths
2012	Coronary heart disease 11,677	Stroke 3,360	Lung cancer 2,809	COPD 2,646	Alzheimer's disease 2,476	Diabetes 2,204	Pneumonia/ influenza 2,048	Colorectal cancer 1,397	Liver disease/ cirrhosis 1,275	Hypertension 1,242
2011	Coronary heart disease 11,913	Stroke 3,256	Lung cancer 2,908	COPD 2,874	Alzheimer's disease 2,346	Diabetes 2,196	Pneumonia/ influenza 2,062	Colorectal cancer 1,400	Liver disease/ cirrhosis 1,246	Breast cancer 1,153
Because of changes to the criteria for categorizing some causes of death, 2003-2010 may not be comparable to 2011-2012.*										
2010	Coronary heart disease 12,635	Stroke 3,278	Lung cancer 2,941	COPD 2,622	Alzheimer's disease 2,242	Pneumonia/ influenza 1,964	Diabetes 1,894	Colorectal cancer 1,285	Liver disease/ cirrhosis 1,171	Breast cancer 1,116
2009	Coronary heart disease 12,725	Stroke 3,301	Lung cancer 2,958	COPD 2,904	Alzheimer's disease 2,125	Pneumonia/ influenza 2,097	Diabetes 1,964	Colorectal cancer 1,388	Liver disease/ cirrhosis 1,246	Breast cancer 1,173
2008	Coronary heart disease 13,428	Stroke 3,280	Lung cancer 2,910	COPD 2,889	Diabetes 2,190	Pneumonia/ influenza 2,171	Alzheimer's disease 2,121	Colorectal cancer 1,365	Liver disease/ cirrhosis 1,134	Breast cancer 1,079
2007	Coronary heart disease 13,890	Stroke 3,323	Lung cancer 2,950	COPD 2,625	Pneumonia/ influenza 2,184	Diabetes 2,127	Alzheimer's disease 1,780	Colorectal cancer 1,323	Breast cancer 1,139	Liver disease/ cirrhosis 1,133
2006	Coronary heart disease 14,842	Stroke 3,662	Lung cancer 3,021	COPD 2,665	Pneumonia/ influenza 2,283	Diabetes 2,188	Alzheimer's disease 1,551	Colorectal cancer 1,362	Liver disease/ cirrhosis 1,102	Breast cancer 1,071
2005	Coronary heart disease 15,154	Stroke 3,775	Lung cancer 3,036	COPD 2,770	Pneumonia/ influenza 2,333	Diabetes 2,305	Alzheimer's disease 1,546	Colorectal cancer 1,409	Breast cancer 1,174	Homicide 1,066
2004	Coronary heart disease 15,296	Stroke 4,121	Lung cancer 3,034	COPD 2,641	Pneumonia/ influenza 2,272	Diabetes 2,201	Colorectal cancer 1,414	Alzheimer's disease 1,340	Breast cancer 1,166	Homicide 1,069
2003	Coronary heart disease 16,320	Stroke 4,249	Lung cancer 3,150	COPD 2,796	Pneumonia/ influenza 2,419	Diabetes 2,178	Colorectal cancer 1,450	Alzheimer's disease 1,285	Breast cancer 1,084	Homicide 1,066

*See Pages 41, 43, 45, and 57 for information about changes to the ICD-codes for chronic obstructive pulmonary disease (COPD), colorectal cancer, coronary heart disease, and lung cancer.

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

Leading causes of premature death (before age 75 years)

Year	#1 cause	#2 cause	#3 cause	#4 cause	#5 cause	#6 cause	#7 cause	#8 cause	#9 cause	#10 cause
2012	Coronary heart disease	Homicide	Motor vehicle crash	Liver disease/cirrhosis	Suicide	Drug overdose	Lung cancer	Diabetes	Stroke	Breast cancer
2011	Coronary heart disease	Homicide	Suicide	Liver disease/cirrhosis	Motor vehicle crash	Drug overdose	Lung cancer	Diabetes	Stroke	Breast cancer
Because of changes to the criteria for categorizing some causes of death, 2003-2010 may not be comparable to 2011-2012.*										
2010	Coronary heart disease	Homicide	Suicide	Motor vehicle crash	Liver disease/cirrhosis	Drug overdose	Lung cancer	Stroke	Breast cancer	Diabetes
2009	Coronary heart disease	Homicide	Motor vehicle crash	Liver disease/cirrhosis	Suicide	Drug overdose	Lung cancer	Stroke	Diabetes	Breast cancer
2008	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Liver disease/cirrhosis	Drug overdose	Lung cancer	Diabetes	Stroke	Breast cancer
2007	Coronary heart disease	Homicide	Motor vehicle crash	Drug overdose	Liver disease/cirrhosis	Suicide	Lung cancer	Stroke	Diabetes	Breast cancer
2006	Coronary heart disease	Homicide	Motor vehicle crash	Liver disease/cirrhosis	Suicide	Lung cancer	Stroke	Drug overdose	Diabetes	Breast cancer
2005	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Lung cancer	Liver disease/cirrhosis	Diabetes	Stroke	Drug overdose	Breast cancer
2004	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Lung cancer	Liver disease/cirrhosis	Drug overdose	Stroke	Diabetes	HIV
2003	Coronary heart disease	Homicide	Motor vehicle crash	Suicide	Lung cancer	Drug overdose	Liver disease/cirrhosis	Stroke	Diabetes	HIV

*See Pages 41, 43, 45, and 57 for information about changes to the ICD-codes for chronic obstructive pulmonary disease (COPD), colorectal cancer, coronary heart disease, and lung cancer.

Alzheimer's Disease

41st cause of premature death
5th cause of death

***ALZHEIMER'S DISEASE** has been the fifth-leading cause of death since 2009, moving up from the seventh-leading cause of death in 2008. In 2012, it was the third-leading cause of death for women and the eighth-leading cause of death for men. The highest overall Alzheimer's disease death rate, 33 deaths per 100,000 population, was among white women. Among all women older than 74 years of age, the Alzheimer's disease death rate was 484 deaths per 100,000 population.*

In simple terms . . .

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

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

Risk factors

Age, family history, genetics

Community opportunities for prevention

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

Individual opportunities for prevention

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

LOS ANGELES COUNTY

Deaths 2,476
Death Rate 24 deaths per 100,000 population

Healthy People 2020 Objective None

ICD-9 codes (1979-1998) 331.0

ICD-10 codes (1999-2012) G30

References **Alzheimer's Association**
www.alz.org
"Alzheimer's Disease: An Emerging Public Health Concern"
http://publichealth.lacounty.gov/ha/reports/LAHealthBrief2007/Alzheimer's_Disease.pdf

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

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

Figure T3. Trends in Alzheimer's disease mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	1,285	16	1,340	16	1,546	18	1,551	18	1,780	20	2,121	23	2,125	22	2,242	25	2,346	24	2,476	24
Male	405	14	399	13	450	15	477	15	586	18	676	20	694	20	751	22	732	20	824	21
Female	880	17	941	18	1,096	20	1,074	20	1,194	21	1,445	24	1,431	23	1,491	26	1,614	26	1,652	26
White	957	19	975	20	1,132	23	1,105	23	1,297	26	1,487	29	1,480	28	1,509	31	1,525	29	1,606	31
Latino/a	161	11	143	9	168	10	217	12	239	12	310	15	349	17	376	20	412	19	423	18
Black	119	17	155	22	176	24	151	21	159	22	204	26	184	23	186	25	226	28	221	26
Asian†	42	4	65	6	69	6	76	7	80	6	116	8	108	8	167	12	176	11	216	12
Males																				
White	295	17	289	16	319	18	336	19	417	23	478	25	497	25	510	28	465	24	539	27
Latino	46	9	46	8	53	9	71	11	71	10	91	12	108	14	133	19	135	17	154	17
Black	37	18	40	17	55	23	45	19	63	25	58	22	51	19	55	22	67	24	64	21
Asian†	23	6	24	5	23	5	25	5	33	6	47	9	36	7	52	9	62	10	62	9
Females																				
White	662	21	686	22	813	26	769	25	880	28	1,009	31	983	29	999	32	1,060	32	1,067	33
Latina	115	12	97	10	115	11	146	13	168	14	219	17	241	18	243	20	277	20	269	18
Black	82	17	115	24	121	25	106	22	96	19	146	28	133	26	131	26	159	29	157	27
Asian†	19	--	41	7	46	7	51	7	47	6	69	8	72	8	115	13	114	11	154	14
SPA 1: Antelope Valley	43	24	43	24	60	31	50	25	70	32	74	32	72	30	86	39	75	30	95	37
SPA 2: San Fernando	325	19	343	19	409	22	407	22	490	25	595	29	568	27	606	29	618	27	657	28
SPA 3: San Gabriel	273	17	268	16	307	18	313	19	384	22	381	21	399	21	422	23	473	23	516	25
SPA 4: Metro	119	11	120	12	137	13	142	13	131	12	189	16	169	14	190	19	222	20	219	18
SPA 5: West	115	15	133	17	161	20	116	15	167	21	198	23	216	25	210	24	188	20	225	24
SPA 6: South	75	13	108	18	101	17	99	16	89	14	128	19	128	19	96	17	139	22	135	20
SPA 7: East	135	13	144	14	148	14	194	18	170	15	240	20	262	22	293	27	263	22	269	22
SPA 8: South Bay	196	16	175	14	222	17	221	17	272	20	309	22	311	21	339	24	367	24	359	23

Before 2012, Asian included NHOPI**. Therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPi= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPi. In 2012, Asian and NHOPi were separated into different race categories. Trends for Asians should be interpreted with caution.

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

Breast Cancer (Female)

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

IN 2012, BREAST CANCER was the leading cause of premature death for Latinas and Asian women, and the second-leading cause of premature death for white and black women. The median age at death from breast cancer was 58 years for Latinas, compared with 64 years for Asians, 65 years for blacks, and 72 years for whites. In 2012, the breast cancer death rates for Latinas and Asian women were below the Healthy People 2020 objective.

In simple terms . . .

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

Risk factors (for women)

Age, family or personal history of breast cancer, having a BRCA1 or BRCA2 gene mutation, history of radiation treatment to the chest area, early menstruation (before age 12), late menopause (after age 55), never giving birth, excessive alcohol consumption, long-term use of combined hormone replacement therapy, being overweight, lack of physical activity

Community opportunities for prevention

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

Individual opportunities for prevention

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

LOS ANGELES COUNTY

Deaths 1,170*
Death Rate 21.1 deaths per 100,000 females

Healthy People 2020 Objective C-3 20.7 deaths per 100,000 females

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

ICD-10 codes (1999-2012) C50

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

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

*In 2012, there were 6 additional breast cancer deaths among males.

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

Figure T4. Trends in breast cancer (female) mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	1,074	23	1,157	24	1,168	24	1,063	21	1,127	22	1,071	21	1,166	23	1,109	21	1,143	21	1,170	21
Females																				
White	570	26	613	27	631	28	557	25	571	25	560	24	593	26	532	24	552	24	594	27
Latina	242	18	222	16	223	16	237	15	249	16	221	14	262	17	247	15	267	15	268	14
Black	158	33	199	40	181	37	164	33	194	39	180	36	187	36	187	36	196	38	163	31
Asian†	102	14	120	16	132	17	101	13	112	14	108	13	120	15	137	15	123	13	142	15
SPA 1: Antelope Valley	41	30	30	23	51	36	40	26	39	26	38	24	34	22	42	26	53	30	52	29
SPA 2: San Fernando	238	23	241	23	261	24	264	24	249	22	240	21	235	20	251	21	240	20	271	22
SPA 3: San Gabriel	185	20	209	22	204	21	192	20	202	21	187	19	233	23	230	22	213	20	228	21
SPA 4: Metro	104	20	130	23	117	21	104	19	120	21	108	19	92	16	86	15	115	20	105	18
SPA 5: West	88	24	97	26	99	25	85	22	84	21	98	23	96	23	83	20	83	21	78	19
SPA 6: South	97	26	113	29	113	30	110	28	100	25	104	26	121	30	120	29	115	27	94	22
SPA 7: East	144	24	130	22	130	21	122	20	142	23	117	18	153	24	118	18	129	19	148	21
SPA 8: South Bay	171	23	201	26	192	25	143	18	185	23	176	22	202	25	178	21	194	23	194	22

Before 2012, Asian included NHOPI**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000 females. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPI. In 2012, Asian and NHOPI were separated into different race categories. Trends for Asians should be interpreted with caution.

COPD (Chronic Obstructive Pulmonary Disease)

12th cause of premature death
4th cause of death

COPD has been the fourth-leading cause of death overall for each of the last 10 years. In 2012, the median age at death from COPD was 82 years, and it was not among the leading causes of premature death. Since 2003, the COPD death rate decreased 23%, from 35 to 27 deaths per 100,000 population; the greatest decrease was among Latino men, and the rate for Latino men has been consistently lower than for the other race/ethnic groups.

In simple terms . . .

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

Risk factors

Tobacco smoking; exposure to lung irritants like breathing in the smoke of others (secondhand smoke), exposure to air pollution, chemical fumes, and dust; asthma

Community opportunities for prevention

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

Individual opportunities for prevention

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

LOS ANGELES COUNTY

Deaths 2,646
Death Rate 26.8 deaths per 100,000 population
76.6 deaths per 100,000 adults aged 45 years and over*

Healthy People 2020 Objective RD-10 102.6 deaths per 100,000 adults aged 45 years and over

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

ICD-10 codes (1999-2012) J40-J44 (2011-2012)
J43-J44 (before 2011)

References **American Lung Association**
www.lungusa.org
National Heart, Lung, and Blood Institute
www.nhlbi.nih.gov

It's Quitting Time L.A.
www.laquits.com

"Adult Smoking on the Decline, but Disparities Remain"
www.publichealth.lacounty.gov/ha/reports/LAHealthBrief2011/Smoking/Smoking2012_finalS.pdf

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

*Shown for comparability with Healthy People 2020 Objective.

Figure T5. Trends in COPD mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	2,796	35	2,641	32	2,770	33	2,665	32	2,625	30	2,889	32	2,904	32	2,622	30	2,874	30	2,646	27
Male	1,377	43	1,278	39	1,348	40	1,275	38	1,286	37	1,398	39	1,420	39	1,246	35	1,342	35	1,266	31
Female	1,419	29	1,363	28	1,422	28	1,390	28	1,339	26	1,491	28	1,484	27	1,376	26	1,532	27	1,380	24
White	1,989	45	1,835	42	1,840	42	1,771	41	1,801	41	1,955	43	1,895	41	1,743	40	1,843	40	1,709	37
Latino/a	311	19	305	18	344	19	346	18	299	15	343	16	392	19	345	17	383	17	368	15
Black	287	38	297	39	331	43	329	43	265	34	318	39	337	41	289	35	349	41	304	34
Asian†	198	19	192	18	238	21	213	18	247	19	258	19	267	19	229	16	287	18	241	14
Males																				
White	896	50	830	46	823	46	793	45	823	46	894	48	887	47	762	42	799	42	763	39
Latino	175	29	162	25	177	25	167	23	155	20	175	21	194	24	172	21	186	20	176	18
Black	169	59	154	53	184	61	170	58	144	48	157	50	176	57	161	50	181	54	163	47
Asian†	131	31	125	28	154	32	141	28	155	30	162	29	158	28	138	24	167	27	152	22
Females																				
White	1,093	42	1,005	38	1,017	38	978	38	978	38	1,061	40	1,008	37	981	38	1,044	39	946	38
Latina	136	14	143	14	167	15	179	15	144	12	168	13	198	15	173	14	197	14	192	12
Black	118	25	143	32	147	31	159	34	121	25	161	32	161	31	128	26	168	32	141	28
Asian†	67	11	67	11	84	13	72	10	92	12	96	12	109	13	91	10	120	12	89	8
SPA 1: Antelope Valley	140	69	120	58	159	74	150	67	148	63	184	74	202	78	172	70	204	76	176	62
SPA 2: San Fernando	575	33	613	29	563	31	578	32	562	30	527	27	572	28	539	27	596	28	563	25
SPA 3: San Gabriel	529	34	615	32	537	33	536	33	504	29	614	35	631	36	534	30	625	33	542	27
SPA 4: Metro	246	25	234	24	270	27	247	25	236	23	260	24	251	23	189	19	206	20	235	21
SPA 5: West	178	25	166	23	158	22	139	19	140	19	195	25	182	23	146	19	180	21	156	18
SPA 6: South	195	33	205	34	219	35	197	31	185	29	214	33	216	33	202	33	217	33	206	29
SPA 7: East	402	40	372	36	316	30	330	31	366	33	381	34	359	32	339	32	325	28	309	26
SPA 8: South Bay	521	42	497	39	542	42	479	37	475	35	501	38	488	34	496	36	521	35	458	30

Because of changes to the ICD-10 codes for this cause of death, 2003-2010 may not be comparable to 2011-2012.

Before 2012, Asian included NHOPI**. Therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPI. In 2012, Asian and NHOPI were separated into different race categories. Trends for Asians should be interpreted with caution.

Colorectal Cancer

11th cause of premature death
8th cause of death

COLORECTAL CANCER has been the eighth-leading cause of death overall since 2005. In 2012, it was the 11th-leading cause of premature death overall, but it was the fifth-leading cause of premature death for Asians. The colorectal cancer death rates were consistently higher for black males than for other race/ethnic groups. The median age at death from colorectal cancer was 66 years for Latinos, 69 years for blacks, 71 years for Asians, and 75 years for whites.

In simple terms . . .

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

Risk factors

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

Community opportunities for prevention

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

Individual opportunities for prevention

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

LOS ANGELES COUNTY

Deaths 1,397
Death Rate 13.9 deaths per 100,000 population

Healthy People 2020 Objective C-5 14.5 deaths per 100,000 population

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

ICD-10 codes (1999-2012) C18-C21, C26.0 (2011-2012)
C18-C21 (before 2011)

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

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

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

Figure T6. Trends in colorectal cancer mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	1,450	18	1,414	17	1,409	17	1,362	16	1,323	15	1,365	15	1,388	15	1,285	14	1,400	14	1,397	14
Male	710	21	674	19	708	20	686	19	686	18	703	18	710	18	663	17	715	17	737	17
Female	740	15	740	15	701	14	676	14	637	13	662	13	678	13	622	12	685	13	660	12
White	824	19	767	18	737	17	689	16	689	16	660	15	696	16	619	15	613	14	606	14
Latino/a	241	12	230	12	270	12	275	12	264	11	306	12	286	11	296	11	359	13	345	11
Black	211	27	237	29	213	26	223	26	181	22	196	23	209	25	195	23	194	22	221	24
Asian†	170	15	177	15	184	15	171	13	184	14	197	14	195	14	173	11	228	14	216	13
Males																				
White	401	22	358	20	365	20	350	20	352	19	325	17	345	18	317	17	312	16	313	16
Latino	127	15	116	15	154	17	134	15	146	15	167	15	169	17	157	14	192	16	191	14
Black	90	28	111	34	102	30	110	34	88	27	96	28	95	27	97	28	94	27	114	31
Asian†	90	18	87	17	82	15	89	16	98	17	111	18	101	16	91	14	113	16	116	16
Females																				
White	423	17	409	16	372	15	339	14	337	14	335	13	351	14	302	13	301	13	293	12
Latina	114	10	114	10	116	9	141	10	118	9	139	10	117	8	139	9	167	11	154	9
Black	121	25	126	26	111	23	113	23	93	19	100	20	114	23	98	20	100	19	107	20
Asian†	80	12	90	13	102	15	82	11	86	11	86	11	94	11	82	9	115	12	100	10
SPA 1: Antelope Valley	60	27	59	26	56	24	30	13	35	14	36	14	52	19	49	17	39	12	52	16
SPA 2: San Fernando	292	16	322	18	327	18	306	16	306	16	301	15	294	14	281	14	312	14	288	13
SPA 3: San Gabriel	278	17	248	15	286	17	267	16	239	14	251	14	263	15	250	14	267	14	268	14
SPA 4: Metro	163	17	146	15	148	15	151	15	149	14	154	15	149	14	133	13	152	14	173	16
SPA 5: West	110	16	89	13	103	14	89	13	108	15	98	13	102	13	92	12	99	13	83	10
SPA 6: South	137	22	149	24	134	21	143	22	112	17	128	19	140	21	117	17	119	17	135	19
SPA 7: East	159	15	159	15	148	14	161	15	160	14	163	15	152	13	149	13	176	15	186	15
SPA 8: South Bay	241	19	230	18	204	15	213	16	208	15	229	16	235	16	213	15	235	16	211	13

Because of changes to the ICD-10 codes for this cause of death, 2003-2010 may not be comparable to 2011-2012.

Before 2012, Asian included NHOPI**. Therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPI. In 2012, Asian and NHOPI were separated into different race categories. Trends for Asians should be interpreted with caution.

Coronary Heart Disease

1st cause of premature death

1st cause of death

CORONARY HEART DISEASE has been the leading cause of death and premature death every year for the past 10 years. Since 2003, the overall coronary heart disease death rate has decreased by 42%. In 2012, the highest coronary heart disease death rate, 234 deaths per 100,000 population, which was among black men, was more than double the Healthy People 2020 objective.

In simple terms . . .

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

Artery narrowing can cause chest pain or discomfort (angina) when the heart muscle does not get enough blood, or can result in a heart attack, which occurs when plaque completely blocks an artery carrying blood to the heart. This can happen when plaque deposits break off and clog a coronary artery.

Risk factors

Age (over 45 years for men and over 55 years for women), family history of early heart disease, previous heart attack or angina, tobacco use, high cholesterol, high blood pressure, excessive alcohol consumption, diabetes, being overweight, lack of physical activity

Community opportunities for prevention

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

- Provide access to affordable smoking-cessation programs
- Provide greater access to community screening for undiagnosed hypertension and management of this risk factor through programs that use community health workers or community pharmacists

Individual opportunities for prevention

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

LOS ANGELES COUNTY

Deaths 11,677
Death Rate 114.7 deaths per 100,000 population

Healthy People 2020 Objective HDS-2 103.4 deaths per 100,000 population

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

ICD-10 codes (1999-2012) I20-I25 (2011-2012)
I11, I20-I25 (before 2011)

References **American Heart Association**
www.americanheart.org
Centers for Disease Control and Prevention
www.cdc.gov/heartdisease
The Million Hearts Initiative
www.millionhearts.hhs.gov

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

Figure T7. Trends in coronary heart disease mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	16,320	199	15,296	183	15,154	178	14,842	173	13,890	156	13,428	146	12,725	135	12,635	138	11,913	122	11,677	115
Male	8,131	246	7,662	226	7,613	220	7,541	216	7,082	195	7,001	185	6,638	171	6,651	175	6,237	154	6,332	149
Female	8,189	163	7,634	149	7,541	145	7,301	139	6,808	125	6,427	114	6,087	106	5,984	108	5,676	96	5,345	87
White	10,003	218	9,236	201	8,953	194	8,653	191	7,994	173	7,596	160	6,980	145	6,845	151	6,475	135	6,298	132
Latino/a	2,632	153	2,626	143	2,766	143	2,675	133	2,475	114	2,536	113	2,428	105	2,555	111	2,404	96	2,383	88
Black	2,269	295	2,085	269	2,045	260	2,053	263	1,936	239	1,804	218	1,878	221	1,721	208	1,571	179	1,583	174
Asian†	1,352	126	1,292	115	1,344	114	1,409	115	1,452	110	1,437	103	1,387	97	1,451	98	1,396	87	1,301	74
Males																				
White	4,880	271	4,505	248	4,362	240	4,299	239	4,030	219	3,905	205	3,598	186	3,566	192	3,342	171	3,411	172
Latino	1,382	190	1,415	184	1,465	180	1,414	167	1,319	142	1,349	141	1,333	135	1,372	138	1,323	124	1,271	110
Black	1,093	359	1,012	330	1,044	332	1,053	343	950	293	940	285	957	279	898	273	817	228	863	234
Asian†	739	158	696	143	717	141	748	142	761	136	770	132	718	119	776	128	706	106	707	98
Females																				
White	6,123	175	4,731	162	4,591	157	4,354	151	3,964	136	3,691	123	3,382	111	3,279	116	3,133	105	2,887	98
Latina	1,250	125	1,211	114	1,301	116	1,261	108	1,156	92	1,187	91	1,095	82	1,183	90	1,081	75	1,112	71
Black	1,176	247	1,073	224	1,001	207	1,000	206	986	199	864	171	921	178	823	163	754	141	720	130
Asian†	613	102	596	93	627	93	661	94	691	90	667	81	669	79	675	77	690	72	594	56
SPA 1: Antelope Valley	496	237	488	232	467	214	463	205	468	192	459	176	476	180	499	188	404	142	423	142
SPA 2: San Fernando	3,520	198	3,419	189	3,377	184	3,262	176	3,071	159	3,081	152	2,828	135	2,852	137	2,702	121	2,657	113
SPA 3: San Gabriel	2,949	184	2,704	165	2,781	167	2,666	159	2,541	145	2,486	137	2,304	126	2,270	124	2,219	112	2,168	107
SPA 4: Metro	1,826	184	1,662	166	1,724	169	1,673	163	1,478	140	1,469	135	1,414	130	1,495	148	1,350	125	1,333	117
SPA 5: West	1,089	148	1,036	138	980	129	1,004	135	912	120	882	111	854	104	817	98	823	94	822	94
SPA 6: South	1,562	260	1,443	234	1,404	223	1,422	224	1,295	199	1,222	183	1,271	187	1,112	173	1,063	155	1,031	142
SPA 7: East	1,949	192	1,847	175	1,854	173	1,836	169	1,660	147	1,588	139	1,488	128	1,463	134	1,401	119	1,345	109
SPA 8: South Bay	2,758	219	2,529	196	2,493	189	2,360	177	2,332	168	2,143	149	2,029	137	2,064	144	1,936	127	1,896	120

Because of changes to the ICD-10 codes for this cause of death, 2003-2010 may not be comparable to 2011-2012.

Before 2012, Asian included NHOPI**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPI. In 2012, Asian and NHOPI were separated into different race categories. Trends for Asians should be interpreted with caution.

Diabetes

8th cause of premature death
6th cause of death

DIABETES has been a leading cause of death and premature death for each of the past 10 years. In 2012, it was the sixth-leading cause of death overall, but it was the third-leading cause of death for Latinos, and the eighth-leading cause of death for women. The diabetes death rates were higher in the South and Antelope Valley Service Planning Areas than in other areas of the County.

In simple terms . . .

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

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

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

Risk factors

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

Community opportunities for prevention

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

- Offer incentives for employers to provide, and employees to participate in, workplace wellness programs and lifestyle change programs such as the National Diabetes Prevention Program
- Improve access to nutritious foods, and make it easier for the public to find and choose healthier foods

Individual opportunities for prevention

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

LOS ANGELES COUNTY

Deaths 2,204
Death Rate 22 deaths per 100,000 population

Healthy People 2020 Objective D-3 Not comparable

ICD-9 codes (1979-1998) 250

ICD-10 codes (1999-2012) E10-E14

References **American Diabetes Association**
www.diabetes.org
National Diabetes Education Program
www.ndep.nih.gov
"Carbohydrates and the Glycemic Load"
www.hsph.harvard.edu/nutrition-source/carbohydrates-and-the-glycemic-load/
"Trends in Diabetes: Time for Action"
www.publichealth.lacounty.gov/ha/reports/LAHealthBrief2011/Diabetes/Diabetes_2012_FinalS.pdf

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

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

**The lower a food's glycemic load, the less it affects blood sugar and insulin levels.

Figure T8. Trends in diabetes mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	2,178	27	2,201	26	2,305	27	2,188	26	2,127	24	2,190	24	1,964	21	1,894	21	2,196	23	2,204	22
Male	1,053	30	1,063	30	1,140	32	1,099	30	1,040	28	1,084	28	1,024	26	993	26	1,170	28	1,151	27
Female	1,125	24	1,138	24	1,165	24	1,089	22	1,087	21	1,106	21	940	18	901	17	1,026	19	1,053	19
White	835	20	863	20	897	21	806	19	751	17	801	18	672	15	667	16	783	18	736	17
Latino/a	719	37	741	37	773	37	774	36	754	32	764	32	694	28	690	29	799	30	824	29
Black	378	48	339	42	389	49	367	46	357	44	359	43	340	40	294	35	316	36	345	39
Asian†	233	21	251	22	236	19	230	18	257	20	257	18	248	18	237	16	278	17	273	16
NHOPi																				
White	424	24	446	25	455	25	412	23	385	21	429	23	364	19	365	20	453	24	402	21
Latino	339	43	347	41	390	43	371	40	378	37	371	36	361	35	356	34	430	36	443	35
Black	158	50	158	49	181	56	178	55	147	45	157	46	161	46	144	43	150	43	168	46
Asian†	124	26	109	22	109	20	132	24	127	23	126	21	131	22	124	20	129	19	122	18
NHOPi																				
White	411	17	417	17	442	18	394	16	366	14	372	15	308	12	302	13	330	13	334	14
Latina	380	34	394	34	383	32	403	32	376	29	393	29	333	24	334	24	369	24	381	24
Black	220	47	181	38	208	44	189	39	210	43	202	41	179	35	150	30	166	32	177	33
Asian†	109	18	142	22	127	18	98	14	130	17	131	16	117	14	113	13	149	16	151	15
NHOPi																				
SPA 1: Antelope Valley	69	29	73	35	78	32	106	43	81	31	106	39	113	40	85	31	109	37	102	33
SPA 2: San Fernando	395	22	396	22	411	22	377	20	349	18	408	20	337	16	343	17	391	18	390	17
SPA 3: San Gabriel	361	23	423	26	438	27	389	23	387	23	405	23	375	21	330	19	400	21	475	24
SPA 4: Metro	271	28	257	26	277	28	245	24	281	28	241	23	212	20	230	23	276	26	273	25
SPA 5: West	113	16	115	16	103	14	91	13	95	13	100	13	75	10	90	12	83	10	88	11
SPA 6: South	289	46	258	41	294	46	256	39	275	42	262	39	247	36	218	33	245	35	265	36
SPA 7: East	336	33	356	34	381	36	366	34	310	28	352	31	323	29	302	28	350	30	304	25
SPA 8: South Bay	337	26	310	23	320	24	343	25	339	24	309	21	282	19	293	21	336	22	307	20

Before 2012, Asian included NHOPi**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPi= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPi. In 2012, Asian and NHOPi were separated into different race categories. Trends for Asians should be interpreted with caution.

Drug Overdose (Unintentional)

6th cause of premature death
18th cause of death

UNINTENTIONAL DRUG OVERDOSE has been one of the leading causes of premature death for each of the past 10 years. The majority of drug overdose deaths were among men, and in 2012, the highest drug overdose death rate was among white men (14 deaths per 100,000 population). Drug overdose was the leading cause of death for 25-44-year-old white women and the second-leading cause of death for 15-24- and 25-44-year-old white men.

In simple terms . . .

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

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

Risk factors

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

Community opportunities for prevention

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

- Promote community activities that encourage positive choices to reduce acceptance and change norms around AOD use
- Use social media and work with local experts to raise awareness and perception of harm of AOD use, including medication misuse
- Provide opportunities for prescription medication disposal
- Increase access to naloxone hydrochloride to reverse opioid overdose

Individual opportunities for prevention

- Keep track of prescription and OTC medications at home, don't share medications, and dispose of all unused/expired medications properly
- Increase youth strengths and assets to support the ability to refuse the use of AOD and engage in prosocial activities
- Seek help for AOD abuse from a health care provider, or call the Substance Abuse Prevention and Control Helpline: 1-800-564-6600

LOS ANGELES COUNTY

Deaths 609
Death Rate 6 deaths per 100,000 population

Healthy People 2020 Objective SA-12 Not comparable

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

ICD-10 codes (1999-2012) X40-X45

- References**
- Opioid Overdose Toolkit**
http://store.samhsa.gov/shin/content//SMA14-4742/Overdose_Toolkit.pdf
 - Prevention of Drug Use in Children and Adolescents**
www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents/introduction
 - Addressing Prescription Drug Abuse in the United States**
www.cdc.gov/drugoverdose/pdf/hhs_prescription_drug_abuse_report_09.2013.pdf
- Referral**
- Los Angeles County Department of Public Health, Substance Abuse Prevention and Control Helpline**
1-800-564-6600
 - Sheriff's Department Safe Drug Drop-off Program**
<http://shq.lasdnews.net/content/uoa/SHB/SafeDrugDropOff.pdf>

Figure T9. Trends in drug overdose mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	620	6	556	6	528	5	557	6	691	7	625	6	685	7	611	6	580	6	609	6
Male	437	9	388	8	377	8	372	8	501	10	431	9	471	10	435	9	407	8	428	8
Female	183	4	168	3	151	3	185	4	190	4	194	4	214	4	176	3	173	3	181	4
White	326	10	308	9	266	8	288	9	351	11	326	10	356	11	314	10	324	10	323	11
Latino/a	178	5	155	4	137	4	172	4	232	6	195	5	219	5	194	4	167	4	184	4
Black	102	11	80	9	113	12	81	9	92	10	87	9	93	10	90	10	71	8	77	8
Asian†	11	--	6	--	5	--	10	--	13	--	13	--	13	--	9	--	15	--	17	--
Males																				
White	206	12	204	12	180	11	181	11	229	14	204	13	229	14	209	13	216	14	217	14
Latino	151	8	128	6	114	6	134	7	200	10	164	8	181	9	163	8	133	6	150	7
Black	70	17	47	11	73	18	46	11	61	14	53	13	53	13	56	13	45	10	42	9
Asian†	7	--	<5	--	5	--	6	--	9	--	7	--	6	--	<5	--	12	--	13	--
Females																				
White	120	7	104	6	86	5	107	6	122	7	122	7	127	8	105	7	108	7	106	7
Latina	27	1	27	1	23	1	38	2	32	2	31	2	38	2	31	1	34	1	34	2
Black	32	6	33	7	40	8	35	7	31	6	34	7	40	8	34	7	26	5	35	7
Asian†	<5	--	<5	--	<5	--	<5	--	<5	--	6	--	7	--	6	--	<5	--	<5	--
SPA 1: Antelope Valley	30	9	31	10	19	--	31	9	33	9	24	7	27	8	38	10	32	8	35	9
SPA 2: San Fernando	97	5	101	5	114	5	104	5	113	5	133	6	146	7	122	5	146	6	133	6
SPA 3: San Gabriel	63	4	65	4	64	4	75	4	89	5	70	4	91	5	70	4	69	4	87	5
SPA 4: Metro	107	9	84	7	67	6	73	6	97	8	91	8	89	8	89	7	80	7	98	8
SPA 5: West	54	8	41	6	29	4	33	5	47	7	46	6	41	6	42	6	33	5	44	6
SPA 6: South	56	7	45	5	68	8	49	6	70	9	63	8	69	9	57	6	52	6	52	6
SPA 7: East	68	6	60	5	51	4	75	6	77	6	62	5	70	6	56	5	42	3	63	5
SPA 8: South Bay	101	7	90	6	79	5	81	5	105	7	110	7	108	7	102	6	121	8	96	6

Before 2012, Asian included NHOPI**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPI. In 2012, Asian and NHOPI were separated into different race categories. Trends for Asians should be interpreted with caution.

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

Homicide

2nd cause of premature death
20th cause of death

***HOMICIDE** has been the second-leading cause of premature death every year for the past 10 years. In 2012, it was the leading cause of premature death for Latino and black men. The median age at death from homicide in 2012 was 29 years, highlighting the dramatic impact of homicide on premature death. Most homicides in 2012 were committed with a firearm: 73% of homicides among men and 43% of homicides among women.*

In simple terms . . .

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

Risk factors

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

Community opportunities for prevention

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

- Participate in community-based youth violence prevention approaches such as Striving To Reduce Youth Violence Everywhere (STRYVE) and Urban Networks to Increase Thriving Youth (UNITY) (see References for links)
- Develop policies that reduce access to firearms and promote their safe storage
- Support community policing and gang intervention
- Build communities that discourage street violence with well-lit streets and promote increased biking and walking

Individual opportunities for prevention

- Build healthy relationships and develop conflict resolution skills to handle tough social situations and resolve problems without using violence
- Participate in mentoring programs that pair positive role models with young people
- Seek help for drug or alcohol abuse
- Unload and lock firearms in the home with the ammunition stored and locked separately

LOS ANGELES COUNTY

Deaths 596
Death Rate 5.8 deaths per 100,000 population

Healthy People 2020 Objective IVP-29 5.5 deaths per 100,000 population

ICD-9 codes (1979-1998) E960-E969
ICD-10 codes (1999-2012) *U01-*U02, X85-Y09, Y87.1

References **VETO Violence-STRYVE**
<http://vetoviolence.cdc.gov>
Prevention Institute UNITY
<http://preventioninstitute.org/unity>
CDC National Center for Injury Prevention and Control
www.cdc.gov/ncipc/dvp/dvp.htm
Violence Prevention Coalition of Greater Los Angeles
www.vpcgla.org

Referral **TeenLine**
www.teenlineonline.org
1-800-TLC-TEEN
Los Angeles County Department of Public Health, Substance Abuse Prevention and Control Helpline
1-800-564-6600

[†]Legal intervention=ICD-10 code Y35.

Figure T10. Trends in homicide mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	1,066	10	1,069	10	1,066	10	1,043	10	869	8	838	8	723	7	651	6	609	6	596	6
Male	931	18	940	18	940	18	916	18	751	15	710	14	618	12	545	10	512	10	515	10
Female	135	3	129	3	126	3	127	3	118	2	128	3	105	2	106	2	97	2	81	2
White	119	4	105	4	101	3	97	3	92	3	83	3	64	2	76	2	61	2	69	2
Latino/a	520	10	531	10	570	11	545	10	474	9	458	9	397	8	328	6	333	6	305	6
Black	369	39	388	41	362	39	344	38	272	29	250	27	227	24	219	25	192	22	199	23
Asian†	57	4	42	3	33	2	50	4	30	2	43	3	32	2	24	2	21	1	19	--
Males																				
White	93	6	77	5	69	5	76	5	71	5	62	4	43	3	51	3	45	3	44	3
Latino	471	18	481	18	528	19	491	18	420	16	407	15	344	13	288	11	285	11	277	10
Black	324	73	348	80	320	74	298	69	240	55	214	49	207	46	186	45	168	41	179	44
Asian†	42	6	33	5	23	3	46	7	20	3	24	4	23	3	18	--	13	--	11	--
Females																				
White	26	1	28	2	32	2	21	1	21	1	21	1	21	1	25	2	16	--	25	2
Latina	49	2	50	2	42	2	54	2	54	2	51	2	53	2	40	2	48	2	28	1
Black	45	9	40	8	42	9	46	9	32	6	36	8	20	4	33	7	24	5	20	5
Asian†	15	--	9	--	10	--	<5	--	10	--	19	--	9	--	6	--	8	--	8	--
SPA 1: Antelope Valley	36	11	33	10	37	11	46	13	37	10	26	6	31	7	23	6	26	7	17	--
SPA 2: San Fernando	120	6	101	5	104	5	98	5	81	4	91	4	79	4	71	3	54	2	74	3
SPA 3: San Gabriel	106	6	131	7	103	6	116	6	106	6	108	6	69	4	71	4	66	4	59	3
SPA 4: Metro	126	10	115	9	118	10	112	10	110	10	102	9	82	7	73	6	62	5	69	6
SPA 5: West	24	4	24	4	26	4	25	5	14	--	18	--	14	--	12	--	17	--	10	--
SPA 6: South	315	30	356	33	372	35	310	29	245	23	233	22	194	18	189	17	184	17	180	17
SPA 7: East	117	8	108	8	130	9	126	9	108	8	99	7	101	7	88	6	82	6	72	5
SPA 8: South Bay	192	12	177	11	161	10	179	12	145	9	140	9	144	9	120	8	117	8	113	7

Before 2012, Asian included NHOPI**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPI. In 2012, Asian and NHOPI were separated into different race categories. Trends for Asians should be interpreted with caution.

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

HIV (Human Immunodeficiency Virus)

16th cause of premature death

38th cause of death

HIV remained an important cause of death and premature death among some groups even though it has not been one of the overall leading causes of death or premature death in the County since 2004. In 2012, the HIV death rate among black men, 12 deaths per 100,000 population, was six times higher than the overall County HIV death rate. Since 2003, both the number of deaths and the death rate from HIV decreased more than 50%.

In simple terms . . .

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

Risk factors

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

Community opportunities for prevention

- Educate the community about how HIV is transmitted and how to avoid getting infected

- Provide routine HIV screening as part of a regular medical visit
- Provide access to pre-exposure prophylaxis (PrEP) for high-risk persons
- Provide access to drug treatment programs, and sexually transmitted disease testing and treatment
- Screen pregnant women for HIV infection and use drug therapies to reduce the transmission of HIV from mother to baby

Individual opportunities for prevention

- Use latex condoms consistently and correctly with HIV-infected sexual partners or those whose HIV status is unknown
- Do not share drug needles and syringes
- Learn your HIV status by getting tested for antibodies to HIV. Approximately 60,000 people are estimated to be living with HIV in Los Angeles County, 14% of whom are believed to be unaware of their infection
- If you test positive for HIV, seek medical care immediately since getting treatment can save your life and protect others

LOS ANGELES COUNTY

Deaths 225
Death Rate 2.2 deaths per 100,000 population

Healthy People 2020 Objective HIV-12 3.3 deaths per 100,000 population

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

ICD-10 codes (1999-2012) B20-B24

References **National Institute of Allergy and Infectious Diseases**
www.niaid.nih.gov/topics/hivaids
CDC HIV/AIDS Prevention
www.cdc.gov/hiv
"Los Angeles County Five-Year Comprehensive HIV Plan"
www.publichealth.lacounty.gov/aids/docs/LAC_FiveYear_ComprehensiveHIVPlan2013-2017.pdf

Referral **Erase Doubt**
www.erasedoubt.org
California HIV/AIDS Service Referrals and Hotline
1-800-367-2437 (AIDS)
www.aidshotline.org
www.LAcondom.org for free condoms and information

Figure T11. Trends in HIV mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	497	5	498	5	438	5	414	4	391	4	371	4	313	3	274	3	243	2	225	2
Male	438	9	436	9	378	8	355	7	338	7	310	6	256	5	232	5	199	4	196	4
Female	59	1	62	1	60	1	59	1	53	1	61	1	57	1	42	1	44	1	29	1
White	167	5	174	5	139	4	155	4	119	3	96	3	84	2	74	2	72	2	72	2
Latino/a	170	5	177	5	158	4	139	4	132	3	137	4	108	3	114	3	84	2	78	2
Black	145	16	136	15	131	14	108	12	125	14	113	12	109	12	80	9	77	9	65	7
Asian†	10	--	7	--	6	--	8	--	11	--	21	1	11	--	5	--	8	--	7	--
Males																				
White	161	9	159	9	126	7	139	8	112	6	86	5	74	4	65	4	60	3	68	4
Latino	143	8	159	9	140	7	121	6	119	6	114	6	91	5	98	5	70	4	69	3
Black	121	29	109	26	102	25	87	22	94	23	90	22	79	19	64	15	61	15	51	12
Asian†	9	--	6	--	6	--	6	--	10	--	16	--	11	--	<5	--	7	--	7	--
Females																				
White	6	--	15	--	13	--	16	--	7	--	10	--	10	--	9	--	12	--	<5	--
Latina	27	1	18	--	18	--	18	--	13	--	23	1	17	--	16	--	14	--	9	--
Black	24	5	27	5	29	6	21	4	31	6	23	5	30	6	16	--	16	--	14	--
Asian†	<5	--	<5	--	<5	--	<5	--	<5	--	5	--	<5	--	<5	--	<5	--	0	--
SPA 1: Antelope Valley	10	--	<5	--	9	--	6	--	11	--	5	--	10	--	10	--	6	--	7	--
SPA 2: San Fernando	53	3	67	3	68	3	53	2	51	2	45	2	34	1	37	2	37	2	29	1
SPA 3: San Gabriel	39	2	49	3	30	2	47	3	30	2	30	2	32	2	30	2	24	1	26	1
SPA 4: Metro	167	15	133	11	129	11	132	11	112	10	93	8	81	7	71	6	71	6	48	4
SPA 5: West	20	3	23	3	14	--	17	--	10	--	11	--	11	--	7	--	7	--	7	--
SPA 6: South	96	12	106	13	76	9	57	7	76	9	85	10	63	8	41	5	34	4	38	4
SPA 7: East	38	3	35	3	35	3	31	3	28	2	27	2	23	2	34	3	20	2	24	2
SPA 8: South Bay	67	4	71	5	69	5	65	4	70	5	72	5	56	4	41	3	42	3	45	3

Before 2012, Asian included NHOPI**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPI. In 2012, Asian and NHOPI were separated into different race categories. Trends for Asians should be interpreted with caution.

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

Liver Disease/Cirrhosis

4th cause of premature death
9th cause of death

***LIVER DISEASE/CIRRHOSIS** has been a leading cause of premature death every year for the past 10 years and a leading cause of death since 2006. It was the ninth-leading cause of death overall in 2012, but it was the second-leading cause of death among Latino men. Death rates from liver disease have been consistently higher for men than for women, with Latino men having the highest rates.*

In simple terms . . .

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

Risk factors

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

Community opportunities for prevention

- Provide access to alcohol treatment programs

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

Individual opportunities for prevention

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

LOS ANGELES COUNTY

Deaths 1,275
Death Rate 12.4 deaths per 100,000 population

Healthy People 2020 Objective SA-11 8.2 deaths per 100,000 population

ICD-9 codes (1979-1998) 571

ICD-10 codes (1999-2012) K70, K73-K74

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

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

Figure T12. Trends in liver disease/cirrhosis mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	1,053	12	1,035	12	1,061	12	1,102	12	1,133	12	1,134	12	1,246	13	1,171	12	1,246	12	1,275	12
Male	727	17	698	17	759	18	758	17	792	18	773	17	837	18	787	17	818	17	875	18
Female	326	7	337	7	302	6	344	7	341	7	361	7	409	8	384	7	428	8	400	7
White	403	11	428	11	397	10	386	10	396	10	398	10	419	11	416	11	436	11	422	11
Latino/a	498	19	458	17	501	18	554	19	586	20	594	19	645	21	587	18	637	19	672	19
Black	92	10	98	11	102	11	98	11	86	10	69	7	112	12	97	10	104	11	103	11
Asian†	42	3	46	4	48	4	49	4	55	4	59	4	58	4	55	4	56	4	71	4
Males																				
White	253	14	295	16	267	14	263	14	260	14	268	14	272	14	262	14	269	14	299	16
Latino	377	30	308	24	383	30	397	28	439	31	413	28	448	30	423	29	455	27	467	27
Black	62	18	62	18	68	18	59	15	51	13	45	11	75	18	54	12	54	12	61	14
Asian†	26	5	29	5	31	5	29	5	35	6	39	6	37	5	38	5	34	5	44	6
Females																				
White	150	7	133	7	130	6	123	6	136	7	130	6	147	7	154	8	167	8	123	6
Latina	121	10	150	12	118	8	157	11	147	10	181	12	197	13	164	10	182	11	205	12
Black	30	6	36	7	34	7	39	8	35	7	24	5	37	7	43	8	50	10	42	8
Asian†	16	--	17	--	17	--	20	3	20	3	20	3	21	3	17	--	22	2	27	3
SPA 1: Antelope Valley	48	17	40	13	39	13	43	14	50	16	45	14	53	17	47	13	55	15	47	14
SPA 2: San Fernando	180	9	190	10	199	10	200	10	189	9	207	10	200	9	192	9	218	10	243	10
SPA 3: San Gabriel	177	11	173	10	197	12	207	12	179	10	194	11	217	12	191	11	215	11	240	12
SPA 4: Metro	134	13	131	13	127	12	136	13	144	13	147	13	163	15	151	14	156	14	147	13
SPA 5: West	55	8	40	6	41	6	41	6	44	6	40	5	55	7	45	6	61	8	60	8
SPA 6: South	106	15	118	17	102	14	120	16	122	17	112	15	130	17	141	18	150	18	152	18
SPA 7: East	177	18	173	18	176	18	163	14	199	17	198	17	226	19	210	18	193	18	194	18
SPA 8: South Bay	155	11	139	10	159	11	156	11	184	12	174	11	176	11	181	12	196	12	191	12

Before 2012, Asian included NHOPI**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPI. In 2012, Asian and NHOPI were separated into different race categories. Trends for Asians should be interpreted with caution.

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

Lung Cancer

7th cause of premature death
3rd cause of death

LUNG CANCER has been the third-leading cause of death and a leading cause of premature death each year for the past 10 years. In 2012, the highest lung cancer death rate, 60 deaths per 100,000 population, was among black men while the lowest, 11 deaths per 100,000 population, was among Latinas. Overall, the median age at death from lung cancer was 73 years.

In simple terms . . .

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

Risk factors

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

Community opportunities for prevention

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

Individual opportunities for prevention

- If you smoke, get help to quit: 1-800-NO-BUTTS
- If you don't smoke, don't start
- Avoid being near people who are smoking
- Reduce exposure to cancer-causing substances
- Follow recommended guidelines* for lung cancer screening of high-risk individuals

LOS ANGELES COUNTY

Deaths 2,809
Death Rate 28.7 deaths per 100,000 population

Healthy People 2020 Objective C-2 45.5 deaths per 100,000 population

ICD-9 codes (1979-1998) 162
ICD-10 codes (1999-2012) C34 (2011-2012)
C33-C34 (before 2011)

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

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

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

Figure T13. Trends in lung cancer mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	3,150	39	3,034	37	3,036	36	3,021	36	2,950	34	2,910	33	2,958	33	2,941	33	2,908	31	2,809	29
Male	1,713	50	1,710	49	1,608	46	1,719	48	1,568	43	1,568	42	1,650	43	1,602	41	1,596	40	1,486	35
Female	1,437	31	1,324	28	1,428	30	1,302	27	1,382	28	1,342	26	1,308	25	1,339	26	1,312	24	1,323	24
White	1,942	47	1,825	44	1,830	44	1,788	43	1,700	41	1,687	39	1,702	40	1,655	40	1,578	37	1,563	36
Latino/a	381	20	366	19	370	18	384	18	398	18	433	19	408	17	441	18	452	18	393	14
Black	451	57	452	56	457	57	480	60	464	56	377	45	432	51	433	51	431	49	414	45
Asian†	367	32	379	31	368	30	359	28	378	28	406	29	412	29	400	27	428	27	411	24
Males																				
White	989	55	974	54	921	51	941	53	860	47	850	46	892	47	855	47	846	45	783	40
Latino	237	30	231	30	210	24	236	28	233	26	253	28	243	25	260	26	253	24	217	19
Black	267	83	263	79	243	75	286	88	245	73	200	60	247	72	228	66	225	63	225	60
Asian†	215	43	235	45	228	44	250	45	224	39	261	44	266	44	249	39	258	38	241	34
Females																				
White	953	41	851	36	909	39	847	36	840	36	837	35	810	34	800	35	732	31	780	33
Latina	144	13	135	12	160	13	148	12	165	12	180	13	165	12	181	13	199	13	176	11
Black	184	39	189	40	214	45	194	41	219	45	177	36	185	37	205	41	206	39	189	35
Asian†	152	23	144	21	140	20	109	15	154	20	145	18	146	18	151	18	170	19	170	18
SPA 1: Antelope Valley	120	53	114	50	122	53	123	51	134	52	128	48	118	42	123	44	110	38	120	39
SPA 2: San Fernando	695	39	643	36	683	36	675	37	637	34	620	31	664	33	625	31	638	30	658	29
SPA 3: San Gabriel	563	36	531	33	596	37	562	34	550	33	564	33	573	33	566	32	575	31	525	27
SPA 4: Metro	313	33	290	30	285	30	267	28	274	27	294	29	265	28	302	31	267	26	261	24
SPA 5: West	216	32	222	33	220	31	217	31	204	29	212	29	216	29	226	31	191	25	207	26
SPA 6: South	286	47	297	48	293	47	271	43	280	44	242	38	275	42	268	41	277	40	266	37
SPA 7: East	356	35	366	35	332	32	325	31	341	32	346	32	300	27	299	28	337	30	290	24
SPA 8: South Bay	580	45	544	41	496	37	564	42	520	38	494	35	541	38	529	38	511	34	478	31

Because of changes to the ICD-10 codes for this cause of death, 2003-2010 may not be comparable to 2011-2012.

Before 2012, Asian included NHOPI**. therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPI. In 2012, Asian and NHOPI were separated into different race categories. Trends for Asians should be interpreted with caution.

Motor Vehicle Crash

3rd cause of premature death
17th cause of death

MOTOR VEHICLE CRASHES were the 3rd-leading cause of premature death for 8 of the last 10 years. In 2012, they were a leading cause of death for people between the ages of 1 and 44 years. The highest motor vehicle crash death rate, 14 deaths per 100,000 population, was in the Antelope Valley Service Planning Area and was double the overall County rate. Nearly one-third of those who died in motor vehicle crashes were pedestrians.

In simple terms . . .

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

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

Risk factors

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

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

Community opportunities for prevention

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

- Use media and educational campaigns to reduce alcohol-impaired driving, and to improve child passenger and teen driving safety
- Provide safely designed streets with sidewalks, bike lanes, and crosswalks; traffic calming measures and signal timing; and good lighting
- Support national efforts for safe car design features such as antilock brakes and electronic stability control systems

Individual opportunities for prevention

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

LOS ANGELES COUNTY

Deaths 692 (668 traffic-related)
Death Rate 6.8 deaths per 100,000 population
6.5 deaths per 100,000 population for traffic-related deaths only*

Healthy People 2020 Objective IVP 13.1 12.4 deaths per 100,000 population for traffic-related deaths only

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

ICD-10 codes (1999-2012) V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2 (codes are for all motor vehicle crashes)

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

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

*Shown for comparability with Healthy People 2020 Objective.

Figure T14. Trends in motor vehicle crash mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	967	10	947	10	925	10	965	10	908	9	822	8	677	7	625	6	620	6	692	7
Male	697	15	647	14	650	14	681	14	669	14	623	13	484	10	428	9	427	9	499	10
Female	270	5	300	6	275	6	284	6	239	5	199	4	193	4	197	4	193	4	193	4
White	343	10	340	11	287	9	312	10	272	8	253	8	220	7	200	6	189	6	214	7
Latino/a	418	10	374	9	428	10	425	10	436	10	367	9	312	7	290	7	291	7	317	7
Black	107	12	120	13	106	12	115	13	110	12	107	12	74	8	71	8	70	8	91	10
Asian†	95	7	107	8	95	7	110	8	86	7	92	7	69	5	62	4	63	4	61	4
Males																				
White	246	15	218	14	201	13	220	14	191	12	198	13	169	10	136	8	132	8	158	10
Latino	317	15	270	13	304	14	321	16	334	16	290	14	223	11	213	10	204	9	228	10
Black	71	17	85	20	83	21	82	21	84	21	77	19	52	13	54	13	47	11	66	17
Asian†	60	10	71	12	58	10	55	9	57	9	56	9	39	6	25	4	42	6	41	6
Females																				
White	97	6	122	7	86	5	92	6	81	5	55	3	51	3	64	4	57	3	56	3
Latina	101	5	104	5	124	6	104	5	102	5	77	4	89	4	77	4	87	4	89	4
Black	36	7	35	7	23	5	33	7	26	5	30	6	22	4	17	—	23	5	25	5
Asian†	35	5	36	5	37	5	55	7	29	4	36	5	30	4	37	4	21	3	20	2
SPA 1: Antelope Valley	71	22	83	27	80	25	73	22	51	15	44	12	45	13	35	10	45	12	54	14
SPA 2: San Fernando	203	10	180	9	197	10	197	10	156	8	167	8	142	7	127	6	118	5	151	7
SPA 3: San Gabriel	138	8	153	9	179	10	147	8	153	9	124	7	109	6	100	6	102	6	90	5
SPA 4: Metro	99	9	84	8	91	8	82	7	87	8	76	7	65	6	75	7	53	5	57	5
SPA 5: West	40	6	37	6	35	6	41	6	39	6	32	5	31	4	30	5	32	4	33	5
SPA 6: South	106	12	106	11	99	11	118	13	119	13	112	13	94	10	70	7	89	9	96	10
SPA 7: East	110	9	105	8	106	8	110	9	124	10	111	9	85	7	88	7	87	7	92	7
SPA 8: South Bay	114	8	112	7	117	8	137	9	113	7	113	7	89	6	83	5	89	6	118	8

Before 2012, Asian included NHOPI**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPI. In 2012, Asian and NHOPI were separated into different race categories. Trends for Asians should be interpreted with caution.

Pneumonia/Influenza

20th cause of premature death
7th cause of death

PNEUMONIA/INFLUENZA was the seventh-leading cause of death in 2012, but it had less impact on premature death. In 2012, the overall death rate from pneumonia/influenza was 20 deaths per 100,000 population, but for seniors 75 years of age or older, the pneumonia/influenza death rate was 293 deaths per 100,000 population. The overall death rate from pneumonia/influenza has decreased 32% in the last 10 years.

In simple terms . . .

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

Risk factors (for complications)

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

Community opportunities for prevention

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

Individual opportunities for prevention

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

LOS ANGELES COUNTY

Deaths 2,048
Death Rate 20 deaths per 100,000 population

Healthy People 2020 None

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

ICD-10 codes (1999-2012) J09-J18

- References **American Lung Association**
www.lungusa.org
- Centers for Disease Control and Prevention**
www.cdc.gov/flu
- U.S. Department of Health and Human Services**
www.flu.gov
- California Department of Public Health**
[www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza\(Flu\).aspx](http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza(Flu).aspx)
- Referral **Los Angeles County Info Line for free or low-cost immunization clinics**
2-1-1, or 1-800-427-8700

Figure T15. Trends in pneumonia/influenza mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	2,419	30	2,272	27	2,333	28	2,283	27	2,184	25	2,171	24	2,097	22	1,964	22	2,062	21	2,048	20
Male	1,121	36	1,013	32	1,055	33	1,083	33	1,018	30	990	28	1,016	28	910	26	962	25	975	24
Female	1,298	26	1,259	24	1,278	24	1,200	23	1,166	21	1,181	21	1,081	19	1,054	19	1,100	19	1,073	18
White	1,475	31	1,330	28	1,338	28	1,314	28	1,198	25	1,203	24	1,076	22	1,011	22	982	20	965	20
Latino/a	411	25	408	24	448	25	429	22	418	21	430	20	492	21	399	19	509	21	419	16
Black	271	37	257	35	238	32	246	33	259	34	232	29	223	27	247	31	242	29	245	28
Asian†	250	25	265	25	300	26	284	24	305	24	297	22	290	21	296	21	319	20	395	23
Males																				
White	659	37	613	34	580	32	612	35	532	29	541	29	528	28	480	26	475	24	465	23
Latino	189	29	174	27	208	30	198	27	197	25	192	23	232	24	179	21	212	23	196	19
Black	139	51	100	37	103	37	117	43	134	47	119	40	100	32	91	30	93	30	99	29
Asian†	130	31	118	26	161	34	152	31	154	30	135	25	148	26	155	27	174	27	203	29
Females																				
White	816	27	717	24	758	25	702	24	666	22	662	21	548	19	531	19	507	18	500	17
Latina	222	22	234	22	240	22	231	20	221	18	238	18	260	19	220	17	297	21	223	15
Black	132	28	157	33	135	28	129	27	125	26	113	23	123	24	156	31	149	28	146	26
Asian†	120	20	147	23	139	21	132	19	151	20	162	20	142	17	141	16	145	15	192	18
SPA 1: Antelope Valley	72	37	50	25	68	35	70	32	51	22	51	21	59	23	61	25	56	22	59	21
SPA 2: San Fernando	521	30	500	28	472	26	454	25	407	21	415	20	414	20	415	20	394	18	355	15
SPA 3: San Gabriel	467	29	488	30	477	29	409	24	454	26	449	25	404	22	390	21	422	21	413	20
SPA 4: Metro	350	35	293	29	319	31	302	29	294	27	255	23	256	23	229	23	257	24	272	24
SPA 5: West	212	28	184	24	188	24	188	24	184	24	218	27	162	19	158	19	166	18	140	16
SPA 6: South	183	31	183	30	181	29	202	32	195	31	188	28	178	26	181	30	201	30	189	27
SPA 7: East	253	25	262	25	256	24	284	26	239	21	248	22	263	23	216	20	216	19	257	21
SPA 8: South Bay	350	28	298	24	360	28	366	28	354	26	343	24	360	25	311	22	350	23	361	23

Before 2012, Asian included NHOPI**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPI. In 2012, Asian and NHOPI were separated into different race categories. Trends for Asians should be interpreted with caution.

STROKE has been the second-leading cause of death for each of the past 10 years, and it has been the seventh- to ninth-leading cause of premature death. The stroke death rates for blacks were consistently higher than for other race/ethnic groups. In 2012, the median age at death from stroke was 76 years for blacks, compared with 79 for Latinos, 81 for Asians, and 85 for whites.

In simple terms . . .

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

Risk factors

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

Community opportunities for prevention

- Promote community access to blood pressure screening and treatment of high blood pressure through programs that use community health workers or community pharmacists for medication management

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

Individual opportunities for prevention

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

LOS ANGELES COUNTY

Deaths	3,360
Death Rate	33.5 deaths per 100,000 population

Healthy People 2020 Objective HDS-3	34.8 deaths per 100,000 population
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ICD-9 codes (1979-1998)	430-434, 436-438
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ICD-10 codes (1999-2012)	I60-I69
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References	American Stroke Association www.strokeassociation.org National Institute of Neurological Disorders and Stroke www.ninds.nih.gov/disorders/stroke
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Referral	Los Angeles County Division of the American Heart Association 213-291-7000
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Figure T16. Trends in stroke mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	4,249	52	4,121	50	3,775	45	3,622	42	3,323	37	3,280	36	3,301	35	3,278	36	3,256	34	3,360	33
Male	1,754	54	1,718	52	1,554	46	1,501	43	1,409	39	1,373	37	1,399	37	1,405	38	1,370	34	1,406	34
Female	2,495	50	2,403	47	2,221	43	2,121	41	1,914	36	1,907	35	1,902	34	1,873	34	1,886	33	1,954	33
White	2,441	52	2,234	48	1,962	42	1,817	40	1,587	34	1,552	32	1,623	34	1,534	34	1,546	32	1,543	32
Latino/a	755	42	785	42	782	39	779	37	742	33	749	32	733	31	780	34	774	30	854	32
Black	584	77	572	75	530	68	495	62	516	64	469	58	433	52	446	54	423	49	418	46
Asian†	462	43	513	45	489	41	522	42	469	35	496	36	504	36	501	34	498	31	513	30
Males																				
White	918	51	881	49	770	43	704	40	645	36	603	32	668	35	629	35	596	31	593	30
Latino	342	45	364	47	360	44	356	39	338	35	343	34	325	31	346	35	344	31	386	33
Black	248	84	208	72	206	69	202	63	209	64	194	59	170	51	179	56	183	53	157	42
Asian†	242	52	260	54	216	43	235	45	211	37	223	39	235	40	243	40	237	36	250	35
Females																				
White	1,523	52	1,353	47	1,192	41	1,113	40	942	33	949	32	955	33	905	32	950	32	950	33
Latina	413	39	421	38	422	36	423	34	404	31	406	31	408	30	434	32	430	29	468	30
Black	336	70	364	77	324	67	293	61	307	62	275	55	263	52	267	53	240	46	261	47
Asian†	220	38	253	38	273	40	287	40	258	34	273	34	269	32	258	30	261	28	263	26
SPA 1: Antelope Valley	131	65	125	61	124	60	125	56	110	44	120	48	94	37	114	45	99	37	122	43
SPA 2: San Fernando	898	51	905	50	734	40	758	41	623	33	628	31	690	33	661	32	657	30	700	31
SPA 3: San Gabriel	822	51	756	46	729	44	679	41	608	35	629	35	694	36	650	36	616	32	660	33
SPA 4: Metro	453	45	426	42	374	37	400	40	358	34	367	35	344	32	311	31	345	32	341	30
SPA 5: West	342	45	321	42	332	44	258	35	251	33	262	33	232	29	253	30	242	28	236	27
SPA 6: South	401	86	407	86	376	60	349	54	377	57	355	53	323	48	307	48	311	45	317	44
SPA 7: East	479	47	499	47	460	43	421	39	435	38	378	33	411	35	426	39	432	37	436	36
SPA 8: South Bay	676	54	635	50	638	49	600	45	535	39	519	36	510	35	551	39	551	36	545	35

Before 2012, Asian included NHOPI**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPI. In 2012, Asian and NHOPI were separated into different race categories. Trends for Asians should be interpreted with caution.

***SUICIDE** has been a leading cause of premature death for each of the last 10 years. In 2012, most suicides were among men (79%), and among men, firearms were the most common method of suicide death (42%). Among women, suffocation/hanging was the most common method (36%). The highest suicide rate, 32 deaths per 100,000 population, was among men older than 74 years; in this group, firearms were used 68% of the time.*

In simple terms . . .

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

Risk factors

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

Community opportunities for prevention

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

Individual opportunities for prevention

- Limit access to lethal means of self-harm, including the stockpiling of prescription medications
- Remove firearms from the home, or store them unloaded and locked with the ammunition locked separately
- Seek help for substance abuse (drug or alcohol) from a health care provider, or call the Substance Abuse Prevention and Control helpline: 1-800-564-6600
- Seek mental health counseling for untreated mental illness or depression, or call the Department of Mental Health: 1-800-854-7711
- For suicidal thoughts, call the National Suicide Prevention Lifeline: 1-800-273-8255
- Respond to threats of self-harm and do not leave a suicidal person alone

LOS ANGELES COUNTY

Deaths 757
Death Rate 7.5 suicides per 100,000 population

Healthy People 2020 Objective MHMD-1 10.2 per 100,000 population

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

ICD-10 codes (1999-2012) *U03, X60-X84, Y87.0

References **National Institute of Mental Health**
www.nimh.nih.gov
U.S. Department of Health and Human Services
www.mentalhealth.gov
Know the Signs
www.suicideispreventable.org

Referral **Los Angeles County Department of Mental Health**
<http://dmh.lacounty.gov>
1-800-854-7771
Didi Hirsch Community Mental Health Center Suicide Prevention Center
1-877-727-4747
National Suicide Prevention Lifeline
1-800-273-8255

Figure T17. Trends in suicide mortality

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	727	8	696	7	695	7	662	7	667	7	802	8	775	8	792	8	766	8	757	7
Male	582	13	537	12	524	12	506	11	529	12	620	13	580	12	635	13	593	12	598	12
Female	145	3	159	3	171	3	156	3	138	3	182	4	195	4	157	3	173	3	159	3
White	442	13	379	11	388	11	367	11	374	11	478	14	449	13	420	13	412	12	421	13
Latino/a	163	4	182	4	172	4	165	4	161	4	160	4	173	4	203	4	206	4	182	4
Black	55	6	42	5	50	6	47	5	48	5	65	7	47	5	56	6	49	6	58	7
Asian†	65	5	92	7	81	6	82	6	80	6	93	6	101	7	107	7	97	6	90	6
Males																				
White	342	20	284	17	286	17	279	16	297	17	363	21	329	18	324	19	315	19	337	20
Latino	148	8	154	8	143	7	133	7	137	7	132	6	142	7	181	8	170	8	149	7
Black	45	11	32	8	37	9	40	10	38	9	52	12	33	8	46	11	40	10	44	11
Asian†	45	7	67	11	54	8	54	8	54	8	70	11	73	11	81	12	66	9	64	9
Females																				
White	100	6	95	6	102	6	88	5	77	4	115	7	120	7	96	6	97	6	84	5
Latina	15	--	28	1	29	1	32	1	24	1	28	1	31	2	22	1	36	1	33	1
Black	10	--	10	--	13	--	7	--	10	--	13	--	14	--	10	--	9	--	14	--
Asian†	20	3	25	4	27	4	28	4	26	4	23	3	28	4	26	3	31	4	26	3
SPA 1: Antelope Valley	37	13	35	11	34	12	37	11	27	8	48	14	29	8	53	15	47	13	35	10
SPA 2: San Fernando	162	8	159	8	154	7	145	7	168	8	193	9	192	9	169	8	190	9	207	9
SPA 3: San Gabriel	110	6	118	7	122	7	118	7	106	6	101	6	128	7	132	7	128	7	132	7
SPA 4: Metro	97	8	78	7	89	8	81	7	88	8	99	9	101	9	113	10	83	7	77	7
SPA 5: West	65	10	59	9	70	10	56	8	53	8	82	12	79	11	53	8	75	11	79	11
SPA 6: South	41	5	46	5	33	4	46	5	38	4	48	5	33	4	45	4	41	4	35	4
SPA 7: East	80	7	67	5	67	6	57	5	65	5	72	6	93	7	65	5	81	6	62	5
SPA 8: South Bay	114	8	112	8	113	8	105	7	105	7	143	9	109	7	147	10	118	8	128	8

Before 2012, Asian included NHOPI**, therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

†From 2003-2011, the number of deaths and death rates for Asians includes NHOPI. In 2012, Asian and NHOPI were separated into different race categories. Trends for Asians should be interpreted with caution.

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

Figure T18. Trends in mortality from all causes of death

	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012	
	No. of deaths	Death rate*																		
Los Angeles County	61,026	731	59,153	696	60,145	697	59,461	683	58,316	649	58,043	629	57,620	614	56,538	615	57,988	596	58,498	581
Male	30,907	878	29,839	834	30,308	833	30,035	818	29,630	782	29,402	754	29,342	739	28,772	739	29,191	707	29,610	688
Female	30,119	613	29,314	587	29,837	588	29,426	575	28,686	543	28,641	528	28,278	514	27,766	517	28,797	506	28,888	492
White	34,105	783	32,324	741	32,101	735	31,376	727	30,593	699	30,149	670	29,622	651	28,738	667	29,104	647	29,123	645
Latino/a	12,803	602	12,632	572	13,574	589	13,783	576	13,429	528	13,591	525	13,671	521	13,751	529	14,301	512	14,467	486
Black	8,517	1,073	8,372	1,044	8,413	1,043	8,185	1,016	8,023	976	7,697	918	7,825	918	7,438	891	7,623	875	7,644	847
Asian†	5,352	481	5,591	482	5,820	481	5,884	470	6,088	458	6,354	459	6,267	442	6,343	429	6,630	417	6,783	400
Males																				
White	16,454	923	15,615	872	15,336	857	15,182	857	14,872	826	14,768	796	14,553	771	14,184	783	14,232	751	14,378	746
Latino	7,100	740	6,950	704	7,517	731	7,440	695	7,370	643	7,316	630	7,433	636	7,448	644	7,591	612	7,670	579
Black	4,365	1,338	4,224	1,290	4,321	1,305	4,181	1,275	4,078	1,214	3,871	1,131	3,961	1,135	3,704	1,087	3,788	1,062	3,857	1,038
Asian†	2,846	587	2,919	581	3,012	577	3,106	576	3,205	565	3,301	563	3,276	546	3,277	532	3,386	509	3,431	485
Females																				
White	17,651	666	16,709	634	16,765	634	16,194	621	15,721	594	15,381	566	15,069	552	14,554	568	14,872	556	14,745	554
Latina	5,703	494	5,682	471	6,057	479	6,343	482	6,059	435	6,275	441	6,238	431	6,303	440	6,710	432	6,797	411
Black	4,152	874	4,148	865	4,092	848	4,004	829	3,945	802	3,826	763	3,864	759	3,734	748	3,835	737	3,787	702
Asian†	2,506	400	2,672	406	2,808	407	2,778	389	2,883	376	3,053	379	2,991	362	3,066	354	3,244	348	3,352	336
SPA 1: Antelope Valley	2,075	921	1,972	870	2,137	916	2,125	866	2,109	805	2,165	795	2,230	802	2,214	799	2,243	760	2,267	739
SPA 2: San Fernando	12,670	705	12,435	680	12,591	677	12,345	658	12,018	620	12,259	604	12,132	580	12,032	577	12,313	559	12,731	554
SPA 3: San Gabriel	10,895	675	10,582	643	11,074	663	10,736	637	10,569	607	10,616	595	10,636	590	10,457	580	10,758	560	11,049	558
SPA 4: Metro	6,866	683	6,516	643	6,687	651	6,540	633	6,340	598	6,210	576	6,032	557	5,982	585	6,098	565	6,153	546
SPA 5: West	4,290	600	4,098	565	4,135	565	4,039	556	4,026	544	4,112	533	3,967	500	3,943	497	4,040	485	4,050	480
SPA 6: South	6,063	928	6,058	908	6,019	888	5,853	859	5,731	826	5,614	795	5,638	794	5,234	762	5,477	759	5,449	720
SPA 7: East	7,428	711	7,240	675	7,359	675	7,370	667	7,153	628	7,130	620	7,184	620	6,914	622	7,161	604	7,107	577
SPA 8: South Bay	9,992	772	9,453	714	9,796	728	9,739	716	9,629	685	9,415	650	9,455	641	9,402	655	9,722	639	9,645	618

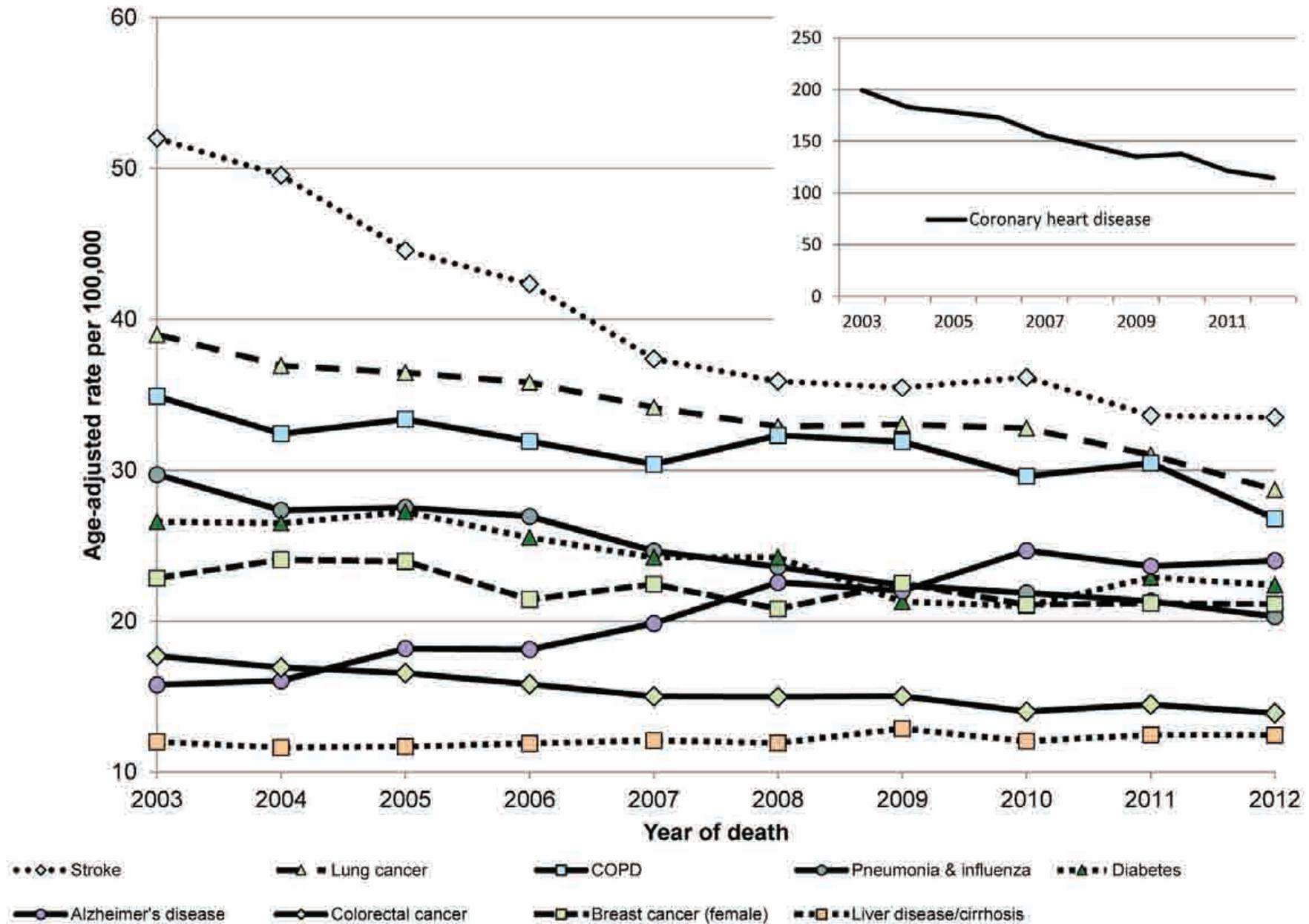
Before 2012, Asian included NHOPI**; therefore, trends should be interpreted with caution.

*Age-adjusted rate per 100,000. The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Note on Page 5 for additional information.

**NHOPI= Native Hawaiian and other Pacific Islander.

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



*The death rates for 2003-2009 were recalculated using new population estimates based on the 2010 Census, therefore, death rates in this report may differ from rates previously published. See Notes on Page 5 for additional information.

Appendix 1. Sample California Certificate of Death

CERTIFICATE OF DEATH
STATE OF CALIFORNIA
USE BLOCK INK ONLY / NO ERASERS, WHITEOUTS OR ALTERNATIVES
1511183.9081

LOCAL REGISTRATION NUMBER

STATE REGISTRAR					STATE OF CALIFORNIA				
A	B	C	D	E	126. SIGNATURE OF CORONER / DEPUTY CORONER				
CORONER'S USE ONLY					127. DATE mm/dd/yyyy				
125. LOCATION OF INQUIRY (Street and number, or location, and city, and zip)					128. TYPE NAME, TITLE OF CORONER / DEPUTY CORONER				
124. DESCRIBE HOW INQUIRY OCCURRED (Events which resulted in inquiry)					129. TYPE NAME, TITLE OF CORONER / DEPUTY CORONER				
123. PLACE OF INQUIRY (e.g., home, construction site, wooded area, etc.)					130. INQUIRED AT WORK? YES NO LINK				
122. LOCATION OF INQUIRY (Street and number, or location, and city, and zip)					131. INQUIRY DATE mm/dd/yyyy (22. HOUR (24 Hour))				
121. INQUIRY DATE mm/dd/yyyy					132. HOUR (24 Hour)				
120. INQUIRED AT WORK? YES NO LINK					133. FEMALE PRESENT IN LAST YEAR? YES NO LINK				
119. CERTIFY THAT IN MY OPINION DEATH OCCURRED AT THE HOUR, DATE, AND PLACE STATED FROM THE CAUSES STATED					140. USED IN DETERMINING CAUSE? YES NO				
118. MANNER OF DEATH: Natural Accidental Homicide Suicide Pending Investigation Could not be determined					141. BEAT NUMBER				
117. USUAL OCCUPATION - Type of work for most of life. DO NOT USE RETIRED					142. SIGNATURE OF LOCAL REGISTRAR				
116. TYPE OF ATTENDING PHYSICIAN'S NAME, MAILING ADDRESS, ZIP CODE					143. LICENSE NUMBER				
115. SIGNATURE AND TITLE OF CERTIFIER					144. DATE mm/dd/yyyy				
114. LICENSE NUMBER OF ANY KNOWN DEATH REGISTRAR					145. LICENSE NUMBER				
113. VITAL CERTIFICATION PERFORMED FOR ANY CERTIFICATE ITEM 107 OR 112? (If yes, will type of government seal used) AT THE HOUR, DATE, AND PLACE STATED FROM THE CAUSES STATED					146. SIGNATURE OF LOCAL REGISTRAR				
112. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RESULTING IN THE UNDERLYING CAUSE GIVEN IN 107					147. DATE mm/dd/yyyy				
111. CAUSE OF DEATH					148. BEAT NUMBER				
110. AUTOPSY PERFORMED? YES NO					149. BEAT NUMBER				
109. CAUSE OF DEATH					150. BEAT NUMBER				
108. CAUSE OF DEATH					151. BEAT NUMBER				
107. CAUSE OF DEATH					152. BEAT NUMBER				
106. COUNTY					153. BEAT NUMBER				
105. FACILITY ADDRESS OR LOCATION WHERE FOUND (Street and number, or location)					154. BEAT NUMBER				
104. COUNTY					155. BEAT NUMBER				
103. IF OTHER THAN HOSPITAL, SPECIFY ONE					156. BEAT NUMBER				
102. IF HOSPITAL, SPECIFY ONE					157. BEAT NUMBER				
101. PLACE OF DEATH					158. BEAT NUMBER				
100. COUNTY					159. BEAT NUMBER				
99. DISPERSED DATE mm/dd/yyyy					160. BEAT NUMBER				
98. DISPERSED PLACE					161. BEAT NUMBER				
97. TYPE OF DISPOSITION					162. BEAT NUMBER				
96. NAME OF FUNERAL ESTABLISHMENT					163. BEAT NUMBER				
95. NAME OF MOTHER/PARENT - FIRST					164. BEAT NUMBER				
94. NAME OF FATHER/PARENT - FIRST					165. BEAT NUMBER				
93. NAME OF SURVIVING SPOUSE/SRDP - FIRST					166. BEAT NUMBER				
92. MIDDLE					167. BEAT NUMBER				
91. MIDDLE					168. BEAT NUMBER				
90. LAST BIRTH NAME					169. BEAT NUMBER				
89. MIDDLE					170. BEAT NUMBER				
88. LAST BIRTH NAME					171. BEAT NUMBER				
87. LAST BIRTH NAME					172. BEAT NUMBER				
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30. MIDDLE					229. BEAT NUMBER				
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8. MIDDLE					251. BEAT NUMBER				
7. LAST BIRTH NAME					252. BEAT NUMBER				
6. MIDDLE					253. BEAT NUMBER				
5. LAST BIRTH NAME					254. BEAT NUMBER				
4. MIDDLE					255. BEAT NUMBER				
3. LAST BIRTH NAME					256. BEAT NUMBER				
2. MIDDLE					257. BEAT NUMBER				
1. LAST BIRTH NAME					258. BEAT NUMBER				

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

Los Angeles County population estimates, 2012

	Age Group (years)											All ages	
	Less than 1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+		
Males													
White	12,452	49,423	124,580	159,991	207,100	194,942	231,629	211,477	129,566	73,921	34,778	1,429,859	
Latino	41,295	165,311	403,861	436,536	391,062	361,508	286,071	171,831	81,114	38,925	13,231	2,390,745	
Black	5,102	20,207	53,039	66,178	53,579	50,148	61,124	47,069	26,069	13,545	4,316	400,376	
Asian	6,337	26,167	66,768	91,691	103,504	96,328	94,285	85,469	50,221	27,698	11,091	659,559	
NHOPI*	149	638	1,618	2,002	1,908	1,573	1,538	983	619	256	61	11,345	
American Indian/Alaska Native	76	326	941	1,282	1,202	1,341	1,664	1,359	720	367	121	9,399	
All races	65,411	262,072	650,807	757,680	758,356	705,840	676,311	518,188	288,309	154,712	63,598	4,901,283	
Females													
White	11,684	46,530	117,365	155,822	192,117	178,647	214,168	207,761	140,463	93,968	61,194	1,419,719	
Latina	39,544	158,885	388,201	414,780	364,915	354,482	290,740	195,851	104,203	58,983	24,596	2,395,180	
Black	5,042	19,689	50,861	66,843	60,513	58,695	70,508	56,880	35,142	20,511	9,760	454,444	
Asian	5,976	24,628	63,567	88,498	112,536	114,579	115,352	106,368	61,802	38,469	18,239	750,014	
NHOPI*	156	596	1,484	1,913	1,924	1,744	1,624	1,157	642	313	110	11,663	
American Indian/Alaska Native	95	342	923	1,204	1,289	1,427	1,643	1,563	878	418	200	9,982	
All races	62,497	250,670	622,401	729,060	733,294	709,574	694,035	569,580	343,130	212,662	114,099	5,041,002	
Los Angeles County													
White	24,136	95,953	241,945	315,813	399,217	373,589	445,797	419,238	270,029	167,889	95,972	2,849,578	
Latino/a	80,839	324,196	792,062	851,316	755,977	715,990	576,811	367,682	185,317	97,908	37,827	4,785,925	
Black	10,144	39,896	103,900	133,021	114,092	108,843	131,632	103,949	61,211	34,056	14,076	854,820	
Asian	12,313	50,795	130,335	180,189	216,040	210,907	209,637	191,837	112,023	66,167	29,330	1,409,573	
NHOPI*	305	1,234	3,102	3,915	3,832	3,317	3,162	2,140	1,261	569	171	23,008	
American Indian/Alaska Native	171	668	1,864	2,486	2,491	2,768	3,307	2,922	1,596	785	321	19,381	
All races	127,908	512,742	1,273,208	1,486,740	1,491,649	1,415,414	1,370,346	1,087,768	631,439	367,374	177,697	9,942,285	

*Native Hawaiian and other Pacific Islanders

Notes: July 1, 2012 population estimates prepared for LA County Internal Services Department, released May 26, 2014.

United States standard population, 2000⁶

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

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

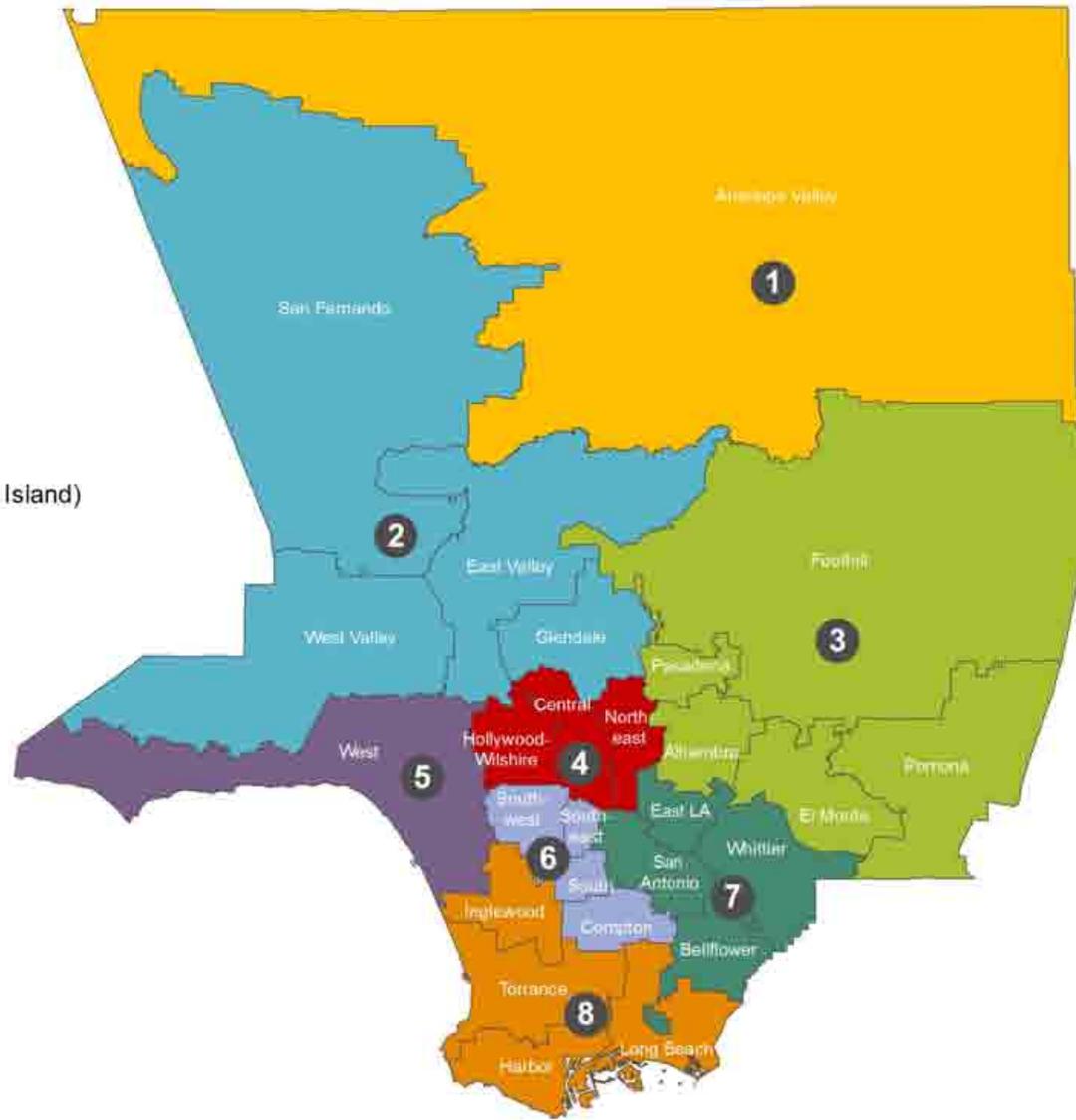
Appendix 3. Map of Los Angeles County: Service Planning Area (SPA) and Health District boundaries

Service Planning Areas

- 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

- (White labels)



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

SPA 1 Antelope Valley Pop. 388,817	SPA 2 San Fernando Pop. 2,183,819	SPA 3 San Gabriel Pop. 1,760,853	SPA 4 Metro Pop. 1,129,787	SPA 5 West Pop. 642,378	SPA 6 South Pop. 1,021,075	SPA 7 East Pop. 1,303,911	SPA 8 South Bay Pop. 1,533,645
Lancaster	Agoura Hills	Alhambra	Los Angeles	Beverly Hills	Compton	Artesia	Avalon
Palmdale	Burbank	Arcadia	West Hollywood	Culver City	Los Angeles	Bell	Carson
	Calabasas	Azusa		Los Angeles	Lynwood	Bell Gardens	El Segundo
	Glendale	Baldwin Park		Malibu	Paramount	Bellflower	Gardena
	Hidden Hills	Bradbury		Santa Monica		Cerritos	Hawthorne
	La Canada Flintridge	Claremont				Commerce	Hermosa Beach
	Los Angeles	Covina				Cudahy	Inglewood
	San Fernando	Diamond Bar				Downey	Lawndale
	Santa Clarita	Duarte				Hawaiian Gardens	Lomita
	Westlake Village	El Monte				Huntington Park	Long Beach
		Glendora				La Habra Heights	Los Angeles
		Industry				La Mirada	Manhattan Beach
		Irwindale				Lakewood	Palos Verdes Estates
		La Puente				Maywood	Rancho Palos Verdes
		La Verne				Montebello	Redondo Beach
		Monrovia				Norwalk	Rolling Hills
		Monterey Park				Pico Rivera	Rolling Hills Estates
		Pasadena				Santa Fe Springs	Torrance
		Pomona				Signal Hill	
		Rosemead				South Gate	
		San Dimas				Vernon	
		San Gabriel				Whittier	
		San Marino					
		Sierra Madre					
		South El Monte					
		South Pasadena					
		Temple City					
		Walnut					
		West Covina					

Notes: July 1, 2012 population estimates prepared for LA County Internal Services Department, released May 26, 2014.

Appendix 5. Additional information about race

Calculating stable mortality rates for AIAN and NHOPI has proven to be challenging. As described on Page 5, the death rate is derived from two sources: the Certificate of Death and the Census. Death certificates provide causes of death as well as demographic information on the deceased (gender, race, ethnicity, age); Census data provides demographic information on the population. While both sources provide information on race and Hispanic ethnicity, they obtain them in different ways. Race and ethnicity in Census data are based on self-report, whereas on the Certificate of Death they are completed by the funeral director or coroner, and both sources of data allow for the specification of multiple races.

The potential for racial misclassification may be greater for AIAN and NHOPI, compared with other race groups, because a larger proportion of their respective populations report two or more races and/or report Hispanic ethnicity. In the 2010 Census, 96% of all respondents reported only one race but the two smallest population groups, NHOPI and AIAN, reported multiple races more frequently than other race groups.

As shown in Table 1, 22% of NHOPI reported Hispanic ethnicity in the Census, but only 3% of NHOPI decedents were reported as Hispanic on the Certificate of Death. Similarly, Hispanic ethnicity was reported in 62% AIAN in Census data, but in only 22% of AIAN deaths (Table 2). Again, while 52% of NHOPI reported multiple races in the Census, only 17% of NHOPI decedents were reported with multiple races. In contrast, only 48% of AIAN reported being multiracial in the Census, while 60% of AIAN decedents were reported with multiple races. Caution then is advised when interpreting death rates for these two racial groups. Crude death rates might range from 293 per 100,000 for all AIAN (including those reporting Hispanic ethnicity and multiple races) to 699 per 100,000 for non-Hispanic, single-race AIAN (data not shown). Similarly, rates might range from 378 per 100,000 for all NHOPI (including those reporting Hispanic ethnicity and multiple races) to 743 per 100,000 for non-Hispanic, single-race NHOPI (data not shown).

Table 1. Deaths (2012) and population (2010) of NHOPI by ethnicity and multiple race status

Race and ethnicity	Deaths (%)	Population* (%)
Ethnicity		
<i>Hispanic</i>	6 (3%)	11,920 (22%)
<i>Non-Hispanic</i>	199 (97%)	42,249 (78%)
Race		
<i>Single race</i>	171 (83%)	26,094 (48%)
<i>Two or more races</i>	34 (17%)	28,075 (52%)
Total	205 (100%)	54,169 (100%)

*2010 Census Summary File 1 and 2

Table 2. Deaths (2012) and population (2010) of AIAN by ethnicity and multiple race status

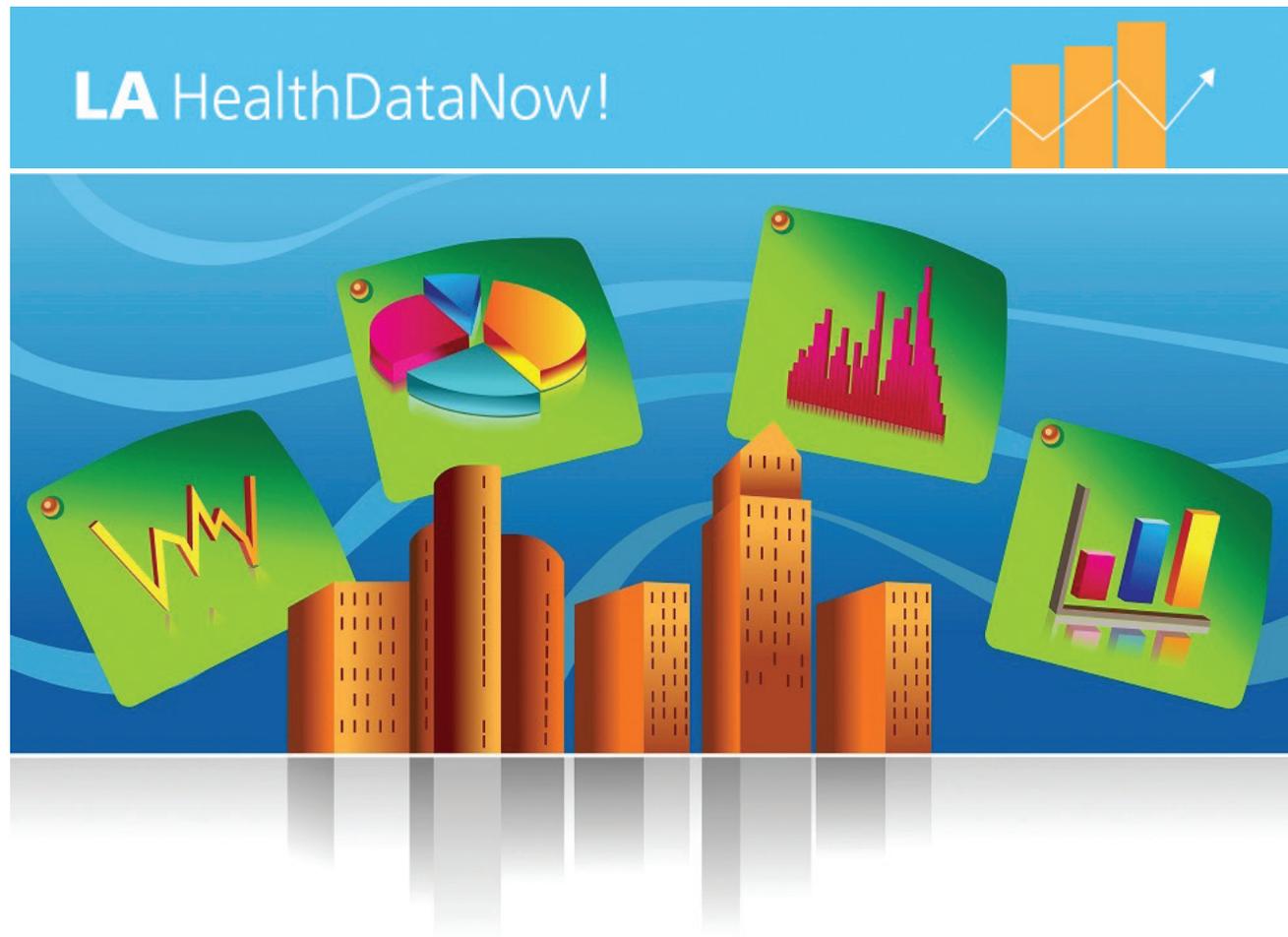
Race and ethnicity	Deaths (%)	Population* (%)
Ethnicity		
<i>Hispanic</i>	89 (22%)	87,201 (62%)
<i>Non-Hispanic</i>	324 (78%)	53,563 (38%)
Race		
<i>Single race</i>	167 (40%)	72,828 (52%)
<i>Two or more races</i>	246 (60%)	67,936 (48%)
Total	413 (100%)	140,764 (100%)

*2010 Census Summary File 1 and 2.

HOW TO GET MORE INFORMATION

L.A. HealthDataNow! is an online query system to facilitate access to County mortality data. Users can query the system to obtain custom mortality statistics by cause of death, demographic group, and geographic area within the County.

The system is available at: <https://dqs.publichealth.lacounty.gov/>



MORTALITY IN LOS ANGELES COUNTY 2012

Leading Causes of Death and Premature Death with Trends for 2003-2012

A PUBLICATION OF THE LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH

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Data are available online

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